The World Bank's Role in and Use of the Low-Income Country Debt Sustainability Framework

IEG
Independent Evaluation Group

WORLD BANK GROUP
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1818 H Street NW
Washington, DC 20433
Telephone: 202-473-1000
Internet: www.worldbank.org

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EDITING AND PRODUCTION
Amanda O'Brien

GRAPHIC DESIGN
Luísa Ulhoa

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An Independent Evaluation

April 26, 2023

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Abbreviations

ADM	Accountability and Decision-Making Framework
CCDR	Country Climate and Development Report
CPF	Country Partnership Framework
CPIA	Country Policy and Institutional Assessment
DeMPA	Debt Management Performance Assessment
DMF	Debt Management Facility
DPO	development policy operation
DRS	Debtor Reporting System
DSA	Debt Sustainability Analysis
DSF	Debt Sustainability Framework
FY	fiscal year
GDP	gross domestic product
IDA	International Development Association
IDA20	20th Replenishment of IDA
IEG	Independent Evaluation Group
IMF	International Monetary Fund
LIC	low-income country
LIC-DSA	Low-Income Country Debt Sustainability Analysis
LIC-DSF	Low-Income Country Debt Sustainability Framework
MFMod	macroeconomic and fiscal model
PBA	performance-based allocation
PPA	performance and policy action
SDFP	Sustainable Development Finance Policy
SIDS	small island developing states
SOE	state-owned enterprise
WHR	Window for Host Communities and Refugees

All dollar amounts are US dollars unless otherwise indicated.

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The report was peer reviewed by Kalpana Kochhar (director of development policy and finance, Bill & Melinda Gates Foundation), Mark Plant (co-director of development finance, senior policy fellow, and chief operating officer of the Center for Global Development, Europe), and Gregory Smith (emerging markets fund manager, M&G Investments). The team appreciates the support received from the Global Macro and Debt Unit in the Equitable Growth, Finance, and Institutions Vice Presidency; country economists and practice managers in the Macroeconomics, Trade, and Investment Global Practice; the International Development Association team in the Development Finance Vice Presidency; and staff of the International Monetary Fund's Strategy, Policy, and Review Department during the preparation of the report, and the helpful comments from Independent Evaluation Group colleagues.

Overview

Background and Context for Evaluation

This evaluation, requested by the Committee on Development Effectiveness of the Executive Board of the International Development Association (IDA), is intended to provide input and insight into the upcoming World Bank–International Monetary Fund (IMF) review of the Low-Income Country Debt Sustainability Framework (LIC-DSF) currently planned for fiscal year 2023. Consistent with the mandate of the Independent Evaluation Group, it will assess only the World Bank's role in and use of the LIC-DSF. Collaboration with the IMF will be reviewed only to the extent that it informs the World Bank's role in and use of the LIC-DSF.

The sharp rise in debt stress among low-income countries and a changing global risk landscape leading up to and after the onset of the COVID-19 pandemic have pushed concerns with debt sustainability to the top of the global policy agenda. IDA-eligible countries increased external borrowing in the wake of the 2008 global economic and financial crisis, with much of the new borrowing from non–Paris Club members and from commercial creditors, often on nonconcessional terms or in the form of complex lending arrangements under opaque terms. The number of IDA-eligible countries at high risk of or in debt distress more than doubled between 2015 and 2019, increasing further since the start of the COVID-19 pandemic. This has been exacerbated by the war on Ukraine, which has contributed to increasing energy, food, and other commodity prices; as well as broader inflation; a tightening of financial conditions and increased volatility in global financial markets; and a global growth slowdown. As a result, many IDA-eligible countries are now facing or expected to face significant debt-related challenges in the near future at the same time as they need to support recovery from COVID-19 and finance investments to support longer-term development, including adaptation to climate change.

This evaluation assesses the World Bank's inputs into the LIC-DSF and how the World Bank uses LIC-DSF outputs to inform various corporate

and country-level decisions. In doing so, the evaluation seeks to identify opportunities for the World Bank to strengthen its role in the preparation and use of the LIC-DSF in a changing global landscape and to highlight issues that may need to be addressed in the upcoming joint review, including the extent to which the LIC-DSF meets the needs of IDA-eligible countries. Although the LIC-DSF is a joint framework elaborated, updated, and implemented by both the World Bank and the IMF, consistent with the Independent Evaluation Group's mandate, recommendations from this evaluation focus on aspects of the LIC-DSF that are more clearly within the World Bank's areas of responsibility.

The scope of the evaluation has been calibrated to focus on inputs into the LIC-DSF that the World Bank is either solely responsible for or has the lead in providing and on how the World Bank uses the consequent outputs. The structure of the underlying LIC-DSF model—which is a joint IMF–World Bank product—and assumptions therein (thresholds, interest rates, and so on) are not assessed.

The 2017 guidelines indicate that the World Bank "takes the lead on longer-term growth prospects, and when required on assessing the investment-growth relationship" (IDA and IMF 2017a, 18). As such, World Bank work to estimate long-term growth prospects is in scope, with "longer term" defined to be beyond five years. The scope also includes assumptions about the impact of climate change on growth given their relevance for long-term growth. In addition, this evaluation assesses the rigor and consistency with which data quality and debt data coverage issues are reflected in country-specific Debt Sustainability Analyses (DSAs). It also looks at the World Bank's use of LIC-DSF outputs in corporate decisions, with respect to the Sustainable Development Finance Policy (SDFP) and IDA grant allocation process, to inform country-specific engagement and policy advice.

Main Findings and Recommendations

The reforms to the LIC-DSF introduced in 2017, and for which the World Bank has a significant implementing role, have been implemented as planned. There has been increased use of country-specific stress tests covering market financing, contingent liabilities, natural disasters, and com-

modity price volatility. Application of judgment has also followed the revised guidelines. Presentation and discussion of coverage of debt data in the DSA have improved, although DSAs do not regularly discuss issues of data quality and do not consistently articulate concrete plans to address shortcomings, particularly with respect to state-owned enterprise debt data coverage.

The introduction of realism tools helped calibrate the degree of optimism in medium-term projections underpinning DSAs, but the realism of long-term projections in DSAs was not routinely assessed. Realism tools were applied almost exclusively to medium-term projections, with the exception of one tool showing 10-year debt forecasts across various DSA vintages. In recent years, there has been a minor reduction in the optimism of long-term gross domestic product growth forecasts. However, long-term forecasts of primary balances showed increased optimism compared with historical averages.

There is lack of clarity in the LIC-DSF guidelines on what is expected of World Bank staff in taking the lead on long-term growth prospects. Although the 2017 LIC-DSF guidelines assign the lead to the World Bank in producing long-term growth projections, there is significant variation from country to country in the extent and form of the World Bank's contribution to long-term projections. Only 10 percent of World Bank economists surveyed reported leading work in this area, and another 30 percent reported having significant or shared responsibility with the IMF.

There has been an increase in attention to the implications of climate change for debt sustainability, particularly for the most vulnerable economies. About 60 percent of all DSAs discuss climate change or natural disasters. For a subset of countries that are particularly vulnerable to climate shocks—Small Island Developing States—climate change considerations were incorporated in almost three-quarters of baseline projections and in over four-fifths of tailored stress tests. Country clients have expressed a desire to see greater attention to climate change considerations in DSAs.

There is close collaboration between World Bank and IMF staff working on DSAs, although recent changes to the World Bank internal clearance processes have lengthened processing times and, according to many World Bank staff, have stressed the relationship with the IMF. A majority of World Bank economists working on DSAs rated World Bank–IMF collaboration in the

preparation of DSAs as "good" or "very good." Not surprisingly, there were some differences of opinion between World Bank and IMF staff on assumptions in DSAs. This is to be expected as part of a robust process across institutions for an inherently complex analysis, but almost all these differences of opinion were resolved at the technical or managerial level. At the same time, changes to the World Bank guidelines on DSA clearance and approval have improved internal contestability and the quality of World Bank inputs. However, they have, on occasion, created some delays and stressed the relationship with the IMF. Although the World Bank's stronger engagement in DSA preparation is positive, it is important to ensure that clearance processes do not make the World Bank less agile in supporting DSA production.

For the most part, World Bank operational priorities are appropriately influenced by the level of debt distress determined by the LIC-DSF. This is reflected, for example, in the extent to which development policy operations for countries at higher risk of debt distress have a higher share of fiscal and debt-related prior actions. However, the share of fiscal and debt-related prior actions has decreased since 2017, despite a worsening in country risk ratings. At the same time, fiscal and debt-related prior actions and SDFP performance and policy actions often prioritize the major drivers of debt stress or debt reporting risks, but this is not always the case.

Based on the above findings, there is scope to strengthen the World Bank's contribution to the LIC-DSF and the extent to which the results of DSAs inform World Bank corporate and operational decisions:

1. Expectations of the World Bank in taking the lead on long-term growth prospects should be clarified. Given the World Bank's development mandate, the current guidance is appropriate but comes with the expectation that the World Bank systematically take the lead in highlighting the country-specific factors that influence long-term growth, which is not currently the case. To do this effectively, the World Bank will need to strengthen its capacity to systematically identify country-specific determinants of long-term growth and fiscal prospects in DSAs. These should be more explicitly identified in DSAs and used to inform realism tools and stress tests, the horizon for which should be extended into the long term.

Integrating long-term considerations into DSA projections will require enhanced awareness and use of tools to analyze long-term prospects.

2. The recently increased attention to debt data coverage should be sustained and extended; greater attention is needed to assess data quality. Although DSAs routinely include a clear and up-front assessment of the coverage of the data on which DSAs are based, they do not always articulate concrete plans (if any) to address specific data shortcomings, particularly with respect to state-owned enterprises and associated contingent liabilities. The LIC-DSF guidelines do not explicitly require an assessment in the DSA of data quality, including with respect to requirements for timeliness of reporting and accuracy and identification of data sources. Strengthening these aspects of DSAs would bolster country incentives for timely, accurate, and comprehensive reporting of debt data and help channel technical assistance to entities within countries responsible for debt reporting. The World Bank's stewardship of the Debtor Reporting System and its management of the Debt Management Performance Assessments suggest that it has the comparative advantage among development partners to lead on this issue and can draw on its convening power to work with other partners to foster stronger debt data quality and coverage.

3. The DSA should be more directly and consistently used to inform priorities for the identification of fiscally oriented prior actions in development policy operations and SDFP performance and policy actions. Drawing on the drivers of indebtedness and sources of risk identified therein, the DSA should be considered a core diagnostic that is routinely updated and systematically used to inform the articulation of priorities for World Bank Group–supported strategies and operations (including prior actions in relevant development policy operations and performance and policy actions under the SDFP).

4. The World Bank should continue to give increasing attention in the LIC-DSF to the long-term implications of climate change, in terms of both growth and fiscal requirements of adaptation and mitigation. The emergence of the Country Climate and Development Reports is a positive development, and efforts will be needed to ensure that the analysis they contain is adequately and systematically integrated into DSAs, with more

forward-looking assessments of vulnerability to climate change for both the medium and the long term. As part of this, the World Bank should consider extending the forecast horizon for DSAs to 20 years, at least for countries most vulnerable to climate change, to enable the incorporation of both medium and longer-term impacts of climate change.

The upcoming joint World Bank–IMF review of the LIC-DSF offers several opportunities for strengthening the LIC-DSF more broadly. Among issues that could be considered in the context of the joint review, this evaluation points to the following:

1. Although the World Bank has recently strengthened its participation in the LIC-DSF, the joint review provides an opportunity to review preparation and approval procedures to ensure that DSAs are produced on a timely basis.

2. Given the changes to the 20th Replenishment of IDA financing arrangements, how best to incorporate financing assumptions in DSAs should be reviewed.

The review could consider how to strengthen the use of realism tools for longer-term assumptions. In particular, the upcoming review offers the opportunity to assess how climate change impacts on long-term growth and finances can be better incorporated in the LIC-DSF, including with more forward-looking assessments of vulnerability to climate change.

Management Response

Management of the World Bank thanks the Independent Evaluation Group for the opportunity to comment on the report, *The World Bank's Role in and Use of the Low-Income Country Debt Sustainability Framework*. In an increasingly turbulent world with heightened debt risks, management considers this evaluation timely and relevant to improving the understanding of the role of the Low-Income Country Debt Sustainability Framework (LIC-DSF) in the World Bank's support to low-income countries (LICs) as they navigate multiple crises while addressing long-term development goals. Management thanks the Independent Evaluation Group for the constructive engagement throughout the process.

World Bank Management Comments

Overall

Management welcomes the report's recognition of the World Bank's progress in implementing the 2017 reforms of the LIC-DSF. The report finds that "there has been an increased use of country-specific stress tests covering market financing, natural disasters, commodity price volatility, and contingent liabilities. Application of judgment has followed agreed guidelines. The introduction of realism tools helped moderate the degree of optimism in medium-term growth projections underpinning DSAs [Debt Sustainability Analyses]" (70). The report also recognizes that debt data coverage in DSAs has improved, including the treatment of state-owned enterprises (SOEs) and contingent liabilities. Management appreciates the report's acknowledgment of increased attention to the implications of climate change for debt sustainability, stating that "about 60 percent of all DSAs discuss climate change or natural disasters, particularly for the most vulnerable economies" (70), with climate change considerations incorporated in three-quarters of baseline projections and over four-fifths of tailored stress tests in DSAs for Small Island Developing States. Management also welcomes the report's appreciation of the close collaboration between World Bank and the International Monetary Fund (IMF) staff working in

DSAs and the recognition that "DSAs regularly informed DPO [development policy operation] reforms and the large majority of [Sustainable Development Finance Policy] PPAs [Performance and Policy Actions]" (72). Management appreciates the report's suggestion that the World Bank has the comparative advantage among development partners and is best placed to take the lead in assessing debt data quality and coverage because of its stewardship of the Debtor Reporting System (DRS) and its management of the Debt Management Performance Assessments (DeMPA), while clarifying that the World Bank alone cannot be expected to tackle all possible data quality issues identified in DSAs.

Fiscal and Debt-Related Prior Actions

Management acknowledges the report's findings that the World Bank's operational priorities are, for the most part, appropriately influenced by the level of debt distress as determined by the LIC-DSF and emphasizes that it has maintained this focus over time. Management welcomes the finding that attention to debt vulnerabilities in World Bank Country Partnership Frameworks has increased for countries assessed at higher levels of debt stress. As the report mentions, this attention is also reflected in the fact that development policy operations for countries at high risk of debt distress have a larger share of fiscal and debt-related prior actions. Management is sobered by the observation that the share of fiscal and debt-related prior actions has decreased since 2017, given that the World Bank continues to pay strong attention to debt and fiscal stability in development policy financing, given the worsening in country risk ratings. The *World Bank Development Policy Financing Retrospective 2021* shows that during fiscal years 2016–21, DPOs with at least three fiscal and debt-related prior actions represented, on average, about 52 percent of DPOs in LICs at high risk of external debt distress (World Bank 2021c). That share increases to about 82 percent in countries at high risk of debt distress when considering DPOs with at least one prior action focusing on fiscal or debt sustainability. During the same period, about 21 countries affected by fragility, conflict, and violence had programs supporting fiscal and debt reforms, which accounted for about two-thirds of all DPOs in these countries—about twice the share average for all other countries. Although management has maintained a

strong use of fiscal and debt-related prior actions, it has also increasingly incorporated more climate-related and gender taggable prior actions to meet the corporate targets and priorities, which may explain the slight decline mentioned in the report. Moreover, the effectiveness of fiscal and debt-related prior actions cannot be adequately assessed only by their number but rather by their quality and complementarity with other policies and instruments. The risk of debt distress is also a key consideration in the International Development Association (IDA) performance–based allocation framework and for participation in the Debt Sustainability Enhancement Program of the Sustainable Development Finance Policy (SDFP).

Growth Projections and Debt Data

Management appreciates the report's recognition that the World Bank is well-positioned to inform long-term growth projections and believes that the World Bank's contributions in this realm are not adequately described in the report. In mentioning that staff often rely on extending historical trends when making long-term growth forecasts, the report understates the role played by the World Bank's growth analytics (for example, Country Economic Memorandums [CEMs], Country Climate and Development Reports [CCDRs], and Systematic Country Diagnostics), which articulate future growth trajectories that often deviate from historical trends. Such projections are based on key long-term growth drivers and growth scenario analysis. The report also notes the increasing need for long-term projections to account for climate change risks. It recommends extending the long-term growth projections to a 20-year horizon "at least for countries most vulnerable to climate change" (73). CCDRs already extend the time horizons of growth scenarios to 2050 to illustrate the paths to net zero carbon emissions and the long-term impact of climate change. Management also stresses that long-term growth projections are more challenging than medium-term growth forecasts.

Management agrees with the report's findings that there are gaps in data quality and coverage, and the World Bank will continue implementing plans to address shortcomings. As acknowledged in the evaluation, the IDA debt reporting heat map has been effective in directing more attention to this area. Management notes that the challenge of SOE debt reporting is linked to difficulties with domestic debt data; DSAs acknowledge that the external

obligations of SOEs are relatively well measured, but loans from domestic banks may not be. In addition, a sizeable portion of SOE debt includes arrears to suppliers or other government entities (for example, utilities) that are difficult to monitor. Besides conventional SOEs, ongoing analytical work by the Equitable Growth, Finance, and Institutions Practice Group is finding a significant role for other types of "businesses of the state," including cases of state ownership below 50 percent, indirect holdings in private companies via other SOEs, and companies owned by subnational layers of government. There is a broader agenda to pin down the financing and balance sheet aspects of these roles of the state that will take time to resolve. Management believes that careful calibration of contingent liability tests and continued efforts on debt reporting (as supported by Debt Management Facility [DMF]) can mitigate risks in this area. Management also agrees with the report finding that the World Bank needs to articulate concrete plans to improve debt data quality and notes that the World Bank has taken important steps to articulate such plans through other channels, including by issuing the debt transparency heat map, including a specific debt transparency pillar under the SDFP, and scaling up technical assistance to support the design and implementation of such plans under the DMF.

DSA Processing

While recognizing opportunities for continuous improvement, management highlights the progress made in DSA processing since the Accountability and Decision-Making (ADM) changes were first introduced. The reported delays in the DSA clearance processes are based on a small sample of DSAs at the early stages of the implementation of the ADM changes. The business standards for the various steps agreed in April 2021 are by now generally being adhered to, and delays arise when substantive issues in the review process warrant further discussion and are not resulting in a longer clearance time (or actions) than the parallel process followed in the IMF. Management is of the view that the changes to the DSA clearance process have resulted in a more structured World Bank review process and in improved internal contestability and quality of the World Bank's inputs. Management remains committed to further improving the processing of DSAs based on experience and feedback.

Recommendations

Management will continue strengthening the World Bank's leading role in long-term growth prospects, as mentioned in the first recommendation. One of the evaluation's findings is that the World Bank's leading role in providing long-term growth projections is uneven in practice. The report bases this finding on a survey of 67 World Bank country economists, 10 percent of which reported that they were leading long-term projections. Management would like to clarify that about 78 percent of survey respondents also reported that they contributed significantly to long-term growth projections, given the joint nature of this work with the IMF. Moving forward, management will ensure a more consistent role played by country economists in this process across countries. Management will also continue enhancing growth analytics, such as CEMs, to make this leading role even more effective. Staffing adjustments in the global team are being made to support regional teams preparing the improved CEM. Also, in the context of the upcoming LIC-DSF reform, management plans to introduce additional realism tools on long-term growth projections to ensure that growth and other key macro assumptions are robust.

Management agrees with the second recommendation on debt data quality and coverage to ensure that DSAs are based on comprehensive data. Management appreciates the report's finding that the 2021 adjustments to the ADM contributed to strengthening data quality and coverage. Regarding the debt data coverage, management is pleased to note that according to the 19th Replenishment of IDA results measurement framework, the share of IDA countries that make debt data available in line with best practices has increased by 20 percentage points during 2019–20. This will remain a priority under the 20th Replenishment of IDA, with regular reporting on progress. Further efforts were undertaken to improve debt data quality and coverage through reconciling data from creditors and DRSs under Japan's G7 Presidency in collaboration with the data group at the World Bank. These build on existing Paris Club calls to compare loan-by-loan creditor data with DRS. There would be continued efforts to improve data coverage and quality by providing DMF-funded technical assistance to LICs on debt reporting to improve debt transparency and tracking standards with the

debt transparency heat map. Besides the global efforts on debt reporting, the DMF finances country-specific debt reporting assessments; these can be conducted on a modular basis as needed and do not have to be part of a DeMPA or DSA.

Management agrees with the third recommendation about the benefits of more closely linking debt vulnerabilities identified in DSAs with DPOs and PPAs. Management notes that several actions have already been taken, and plans are underway to strengthen the link between the debt vulnerabilities of DSAs to DPOs and PPAs. This would be part of assessing the adequacy of the macroeconomic framework for DPOs and the SDFP review process for PPAs. The constraints on a more direct link from debt vulnerabilities to prior actions or PPAs or both often relate to institutional capacity, the social and distributional impacts of associated reforms, and government ownership of the needed reforms. Beyond DPOs, PPAs of countries with high debt vulnerabilities include debt and borrowing ceilings that directly address or prevent the build-up of additional debt vulnerabilities and, importantly, contribute to the adequacy of the macroeconomic framework.

Management agrees with the fourth recommendation on the need to strengthen the climate analytical content of DSAs. Management would like to stress the complementary role of CCDRs and CEM 2.0 in providing analytical content on the nexus between growth, climate, and debt vulnerabilities in DSAs. As noted, plans are underway to enhance CEM-based long-term growth analytics, including climate analytical components. In addition, the LIC-DSF guides the user to “carefully consider the social and political feasibility of fiscal adjustment plans in the context of a country’s development priorities, poverty reduction plans, and/or need to comply with standards of human rights or social protection” (IMF 2018, 22–23). Management believes this gives the flexibility to incorporate climate issues identified in CCDR and CEM 2.0 diagnostics. The report also notes that extending the forecast horizon to 20 years is helpful to appropriately assess the long-term effect of climate change on the risk of debt distress. Management would like to clarify that, since 2005, the forecast scenario of all LIC-DSAs is 20 years, and management is pleased to note that this has been incorporated in the assessment for 10 countries, of which 5 were classified as Small Island Developing States

by the United Nations, and 5 were classified as Small States by the World Bank, out of 67 countries with a LIC-DSA.

Management acknowledges the proposed areas for consideration in the context of the joint World Bank-IMF review of LIC-DSF. While it might still be early to review the joint approval processes, as the new ADM systems have been operational for only two years, the review will provide a stocktaking opportunity. In addition, management concurs that incorporating IDA financing assumptions in DSAs is an important issue, and technical work is already underway. The exercise will also be a good opportunity for the two institutions to review the long-term growth projections framework underpinning the LIC-DSF.

Report to the Board from the Committee on Development Effectiveness

The Committee on Development Effectiveness met to consider the report *The World Bank's Role in and Use of the Low-Income Country Debt Sustainability Framework* and the draft management response.

The committee commended Independent Evaluation Group for the timely and relevant evaluation, noting that the findings and recommendations were relevant to inform the upcoming World Bank–International Monetary Fund Low-Income Country Debt Sustainability Framework review (LIC-DSF), which they underscored as a core diagnostic that serves a wide range of purposes, including the use of Debt Sustainability Analyses (DSAs) as an important signaling function to creditors and investors. They also emphasized that DSAs are a core analytical product that will need to be assessed in the context of the World Bank Group Evolution Roadmap. They appreciated management's response and broad agreement with the report's recommendations and were pleased to learn about both the quality of collaboration between the World Bank and the International Monetary Fund on the LIC-DSF and the improvements in the World Bank's role in the assessment of long-term macroeconomic prospects.

Members took note of the progress on debt transparency, encouraged continued attention to debt data coverage and quality, and urged the World Bank to continue playing a crucial role in supporting debtors and creditors in these efforts. They stressed the need to ensure consistency of the analytical basis and related policy advice, and as such, welcomed management's plans to strengthen long-term growth projections by enhancing long-term growth analytics based on Country Economic Memorandums, and to increase attention to debt vulnerability and long-term sustainable growth determinants in Country Partnership Frameworks. They agreed that the DSAs should be fully used to inform the prior actions of development policy operations as well as performance and policy actions in the Sustainable Development Finance

Policy. Members also emphasized that forward-looking sustainability can no longer be separated from climate change, and urged increased focus on the analysis of the impact of climate change on debt sustainability, including ensuring alignment between DSAs and Country Climate and Development Reports.

1 Context and Motivation for the Evaluation

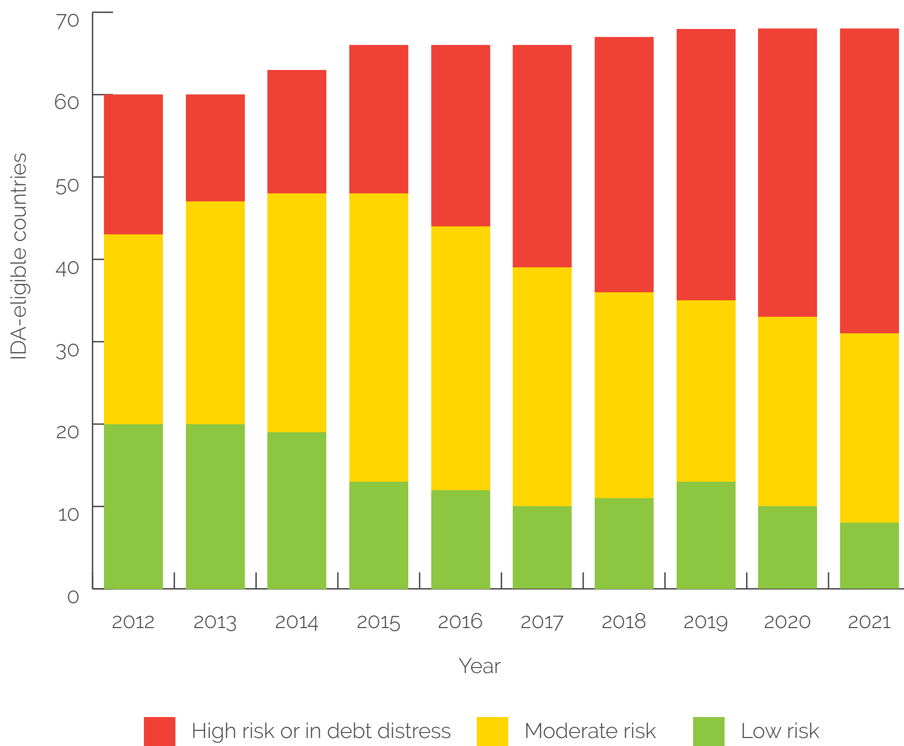
This evaluation is intended to provide input and insight into the upcoming World Bank–International Monetary Fund (IMF) review of the Low-Income Country Debt Sustainability Framework (LIC-DSF) currently planned for fiscal year (FY)23.[1] It was requested by the Committee on Development Effectiveness of the Executive Board of the International Development Association (IDA). Consistent with the mandate of the Independent Evaluation Group (IEG) of the World Bank Group, this evaluation will assess only the World Bank's role in and use of the LIC-DSF. Collaboration with the IMF will be reviewed only to the extent that it informs the World Bank's role in and use of the LIC-DSF.

Interest is high on this topic given the changing global risk landscape leading up to and after the onset of the COVID-19 pandemic. IDA-eligible countries increased external borrowing in the wake of the 2008 global economic and financial crisis; much of the new borrowing came from non–Paris Club members and from commercial creditors,[2] often on nonconcessional terms. Some of this new borrowing has been through complex lending arrangements under opaque terms, including collateralized debt, often reducing budget flexibility through the earmarking of revenues. Debt vulnerabilities increased further with the war on Ukraine, which contributed to a spike in energy and food prices, broader inflation, a tightening in global financial markets, and a global growth slowdown.

Between 2015 and the start of the COVID-19 pandemic, the number of IDA-eligible countries at high risk of or in debt distress more than doubled. More than one-third of IDA countries saw an increase in their debt vulnerability levels, and most of those countries have fallen into high risk of debt distress. Since the start of the COVID-19 pandemic, the number of countries at high risk of or in debt distress has increased further, from 33 in 2019 to 37 in 2021 (figure 1.1). This has been exacerbated by the war on Ukraine, which has contributed to increasing energy, food, and other commodity

prices; as well as broader inflation; a tightening of financial conditions and increased volatility in global financial markets; and a global growth slowdown. As a result, many IDA-eligible countries are now facing or expected to face significant debt-related challenges in the near future. At the same time, these countries will need to support economic recovery from COVID-19 and finance investments to support their longer-term development. This will include adaptation to climate change, which will increase the likelihood, severity, and costs of climate-related disasters.

Figure 1.1. Evolution of Debt Distress in International Development Association–Eligible Countries, 2012–21



Source: World Bank Debt Sustainability Analysis database.

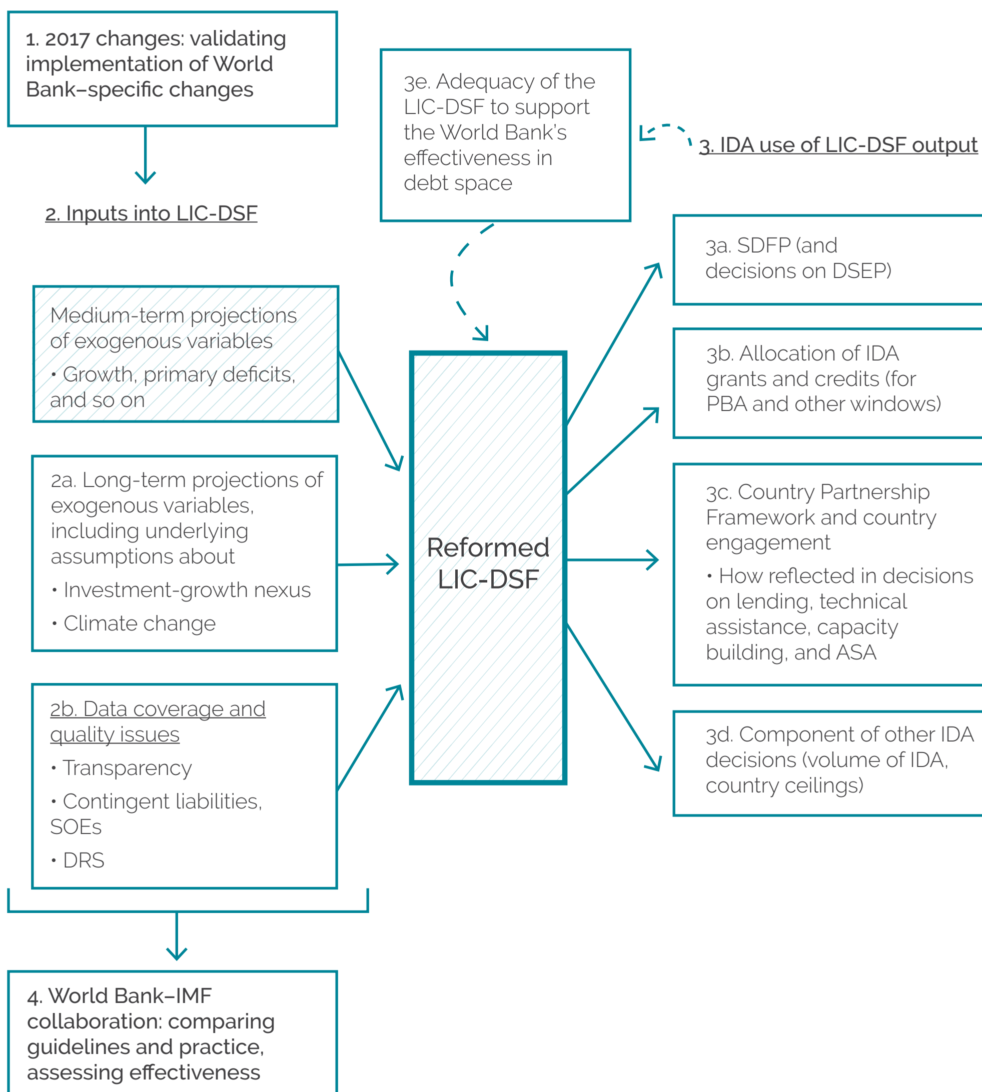
Note: IDA = International Development Association.

As the main instrument to assess the debt sustainability of IDA-eligible countries, the LIC-DSF is intended to guide the World Bank's advice and support to these countries. It also provides an important signal to current and potential private sector lenders and investors who are a potentially significant source of financing for development. Because of deteriorating debt sustainability indicators and the forthcoming review of the joint framework, an evaluation of the World Bank's contribution to and use of the LIC-DSF is both timely and important.

This evaluation assesses the World Bank's inputs into the LIC-DSF and how it uses LIC-DSF output to inform various corporate and country-level decisions in support of the debt sustainability of IDA-eligible client countries (figure 1.2). In doing so, the evaluation seeks to identify opportunities for the World Bank to strengthen its role in the preparation and use of the LIC-DSF; it also seeks to highlight potentially important issues that may need to be addressed in the upcoming joint review, including the extent to which the LIC-DSF meets the needs of IDA-eligible countries. Although the LIC-DSF is a joint framework elaborated, updated, and implemented by both the World Bank and the IMF, consistent with IEG's mandate, recommendations from this evaluation focus on aspects of the LIC-DSF that are more clearly within the World Bank's areas of responsibility.

The scope of the evaluation has been calibrated to focus on inputs into the LIC-DSF that the World Bank is either solely responsible for or has the lead in providing and on how the World Bank uses the consequent outputs. The structure of the LIC-DSF model—which is a joint IMF–World Bank product—and assumptions therein (thresholds, interest rates, and so on) are not assessed. Because official guidance for the LIC-DSF indicates that the IMF generally takes the lead on medium-term projections, these are also not in this evaluation's scope. As such, this evaluation should be seen as an input to, rather than a substitute for, the scheduled joint evaluation.

Figure 1.2. The World Bank's Role in and Use of the 2017 LIC-DSF: An Evaluation



Source: Independent Evaluation Group.

Note: Shaded boxes indicate aspects that are out of scope for this evaluation. ASA = advisory services and analytics; DRS = Debtor Reporting System; DSEP = Debt Sustainability Enhancement Program; IDA = International Development Association; IMF = International Monetary Fund; LIC-DSF = Low-Income Country Debt Sustainability Framework; PBA = performance-based allocation; SDFP = Sustainable Development Finance Policy; SOE = state-owned enterprise.

The guidance indicates that the World Bank leads on long-term growth prospects (and when required, on assessing the investment-growth relationship); therefore, the content and preparation of these projections are in the evaluation's scope.[3] Of necessity, long-term projections reflect, among other things, assumptions about the impact of climate change on growth and the investment-growth nexus. Moreover, confidence in the output of LIC-DSF Debt Sustainability Analyses (DSAs) requires an awareness of data quality and debt data coverage. As such, this evaluation will assess the rigor and consistency with which these issues are reflected in country-specific DSAs. In addition, the evaluation focuses on the World Bank's use of LIC-DSF outputs in corporate decisions, including those pertaining to the Sustainable Development Finance Policy (SDFP) and IDA grant allocation process, to inform country-specific engagement and policy advice with respect to lending, technical assistance, capacity building, and analytical work. Although the evaluation largely focuses on the period after the 2017 reforms were adopted, it includes some comparison with data and analyses before 2017.

The evaluation draws on a broad range of evidence to inform its findings. This includes a review of the most recent DSAs (through June 2022) for all IDA-eligible countries; a balanced panel data set drawn from 52 countries' DSAs over multiple DSA periods; a survey of World Bank country economists preparing DSAs, to which 67 economists working on 58 countries responded, representing an 87 percent response rate for countries that do Low-Income Country Debt Sustainability Analyses (LIC-DSAs); a survey of IDA clients for which DSAs are prepared; interviews with a range of stakeholders within the World Bank and the IMF; and a set of country cases studies. See appendix A for further details.

The main audience for this evaluation is the IDA Board of Executive Directors and World Bank staff and management. It may also be of interest to governments of IDA-eligible countries; multilateral, bilateral, and (potentially) private sector creditors; and nongovernmental organizations with an interest in the debt sustainability of developing economies.

This evaluation is organized as follows:

- » First, the evaluation describes the LIC-DSF, discusses how it has evolved over time, elaborates on the nature of the 2017 reforms, and assesses the extent to which the World Bank has implemented the relevant changes.
- » Second, the evaluation examines the World Bank's role in the preparation of individual country DSAs under the revised (2017) framework to assess the quality and consistency of the inputs for which the World Bank is responsible or has lead responsibility. These inputs include projections of long-term growth and fiscal deficits, and the evaluation assesses the extent to which these projections reflect consistent and credible assumptions about the investment-growth nexus and the impact of climate change. The evaluation also assesses how consistently and clearly the adequacy of data quality and coverage are assessed in DSAs, given their importance to the credibility of DSA findings.
- » Third, the evaluation takes stock of how the World Bank makes use of the LIC-DSF in corporate decision-making and, drawing on the case studies, how well DSA findings are used to inform country-level strategies and operational priorities.
- » Finally, the evaluation provides findings and recommendations, including to inform the upcoming joint review.

[1] A review of the Low-Income Country Debt Sustainability Framework is undertaken by the World Bank and the International Monetary Fund periodically.

[2] International Development Association–eligible countries using the Low-Income Country Debt Sustainability Framework are not exclusively low income but also include lower-middle-income countries and some upper-middle-income countries.

[3] The Guidance Note indicates that World Bank and International Monetary Fund country teams "should agree on the broad parameters and projections of the DSA [Debt Sustainability Analysis], including growth and new borrowing, before producing the DSA draft. In the case of large deviations between IMF [International Monetary Fund] and World Bank projections, teams are to revert to the dispute resolution mechanism described in appendix I [of the Guidance Note]" (IDA and IMF 2017a, 18).

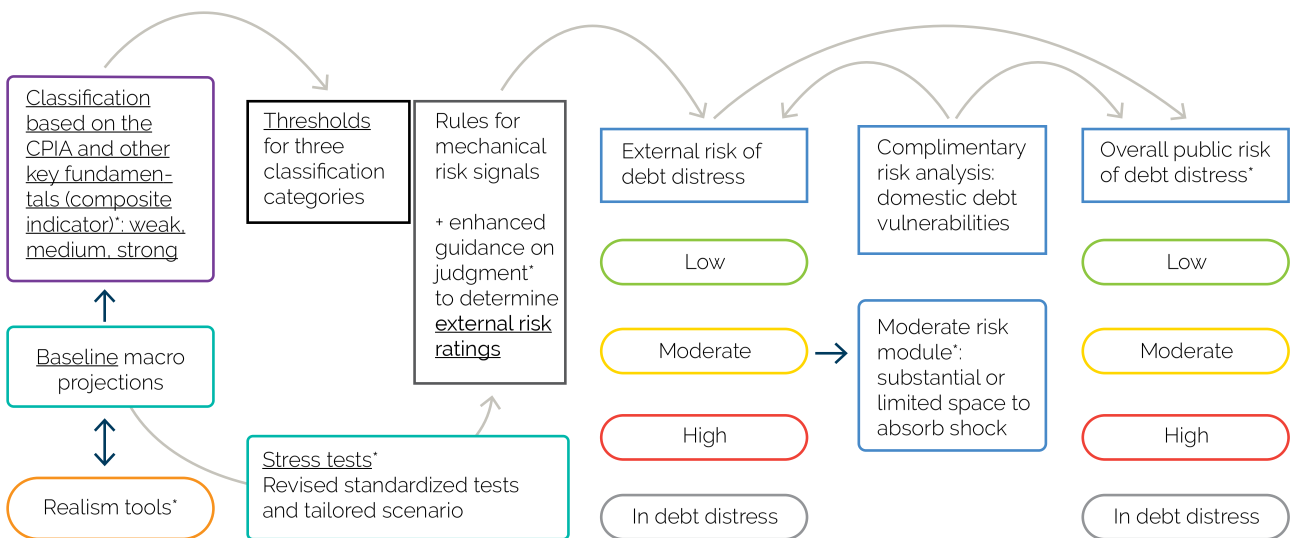
2 | The Low-Income Country Debt Sustainability Framework

Introduced in 2005 and most recently updated in 2017, the joint World Bank–IMF LIC-DSF has been a cornerstone of debt sustainability analysis in IDA-eligible countries.[1] The framework classifies countries based on their assessed debt-carrying capacity, estimates thresholds for selected debt burden indicators, formulates baseline projections and stress test scenarios relative to these thresholds, and then combines indicative rules and staff judgment to assign ratings for the risk of debt distress.

The economic context of many LIC-DSF countries had changed significantly between 2005 and 2017, which contributed to important gaps in the LIC-DSF. The financial landscape was evolving, with financing from non–Paris Club creditors, domestic markets, and international bond markets (particularly for "frontier" emerging economies) increasing in importance. As a result, LIC-DSF countries were increasingly exposed to a wider set of vulnerabilities, including from market volatility. As such, the 2017 review of the LIC-DSF maintained the basic structure of the Debt Sustainability Framework (DSF) but made modifications to ensure that the DSF remained relevant to the rapidly changing financing landscape facing low-income countries (LICs) and to improve the insights produced into debt vulnerabilities.

Reforms introduced in 2017 were intended to make the framework comprehensive, more transparent, and simpler to use, while enabling the DSF to better capture risks of debt distress (figure 2.1). As a result of the review, World Bank and IMF management (i) introduced realism tools; (ii) transitioned to a composite measure for debt-carrying capacity; (iii) improved the identification of debt distress episodes; (iv) introduced tailored scenario tests; (v) simplified debt indicators, thresholds, and standardized tests; (vi) expanded the assessment of risks; and (vii) enhanced guidance for the application of staff judgment (appendix B). A discussion of the aspects where the World Bank plays a role appears below.

Figure 2.1. Structure of the Low-Income Country Debt Sustainability Framework after 2017 Reforms



Source: International Development Association and International Monetary Fund 2017a.

Note: CPIA = Country Policy and Institutional Assessment.
* New features.

Process for Low-Income Country Debt Sustainability Analysis Preparation

The LIC-DSF Guidance Note describes the process for producing a DSA (IDA and IMF 2017a). The Guidance Note indicates that all LIC-DSAs should be produced jointly by IMF and World Bank staff and are expected to be submitted to both the IMF and the IDA Executive Boards, either for discussion or for information. A full LIC-DSA should be produced at least once every calendar year. For the World Bank, a DSA is needed for each IDA-eligible country every year to determine the IDA credit-grant allocation and to inform the application of the SDFP.[2]

A DSA is also required in some additional situations (even when an annual DSA has already been prepared). These circumstances include when an IMF-supported arrangement is prepared or when a modification is proposed to an associated performance criterion or waiver for noncompliance related to debt limits. For World Bank financing requests, an LIC-DSA is required when a country that is subject to IDA's Non-Concessional Borrowing Policy (replaced in 2020 by the SDFP) seeks to obtain nonconcessional borrowing or when a country experiences a significant change in economic circumstances or borrowing assumptions (including because of conflict or natural disaster).

The Guidance Note specifies how IMF and World Bank staff are to coordinate in producing a DSA, based on their respective areas of expertise. According to the Guidance Note, the IMF "generally" takes the lead on medium-term macroeconomic projections (three to five years), whereas the World Bank takes the lead on longer-term growth prospects and, when required, on assessing the investment-growth relationship (IDA and IMF 2017a, 18). World Bank and IMF staff are required to agree on the broad parameters of a DSA, including growth and new borrowing, before the DSA draft is produced. If there are significant differences between IMF and World Bank projections, a dispute resolution mechanism is specified and can be used.

World Bank procedures for participating in the preparation and approval of the LIC-DSAs were adjusted in April 2021 to clarify the role of the World Bank in LIC-DSA preparation and to ensure that the process undergoes a sufficiently rigorous review. The updated Accountability and Decision-

Making (ADM) framework guidelines clarified the relative roles of specific World Bank vice presidencies (Regions; Development Economics; Development Finance; Equitable Growth, Finance, and Institutions; and Operations Policy and Country Services) in the preparation and corporate review process and in coordination of the review with the IMF's DSA preparation and approval process. The revisions established a more formal structure for DSA preparation, approval, and clearance within the World Bank and were intended to support greater internal contestability and integration of guidance from World Bank management. They could also potentially help strengthen data coverage and quality.

Realism Tools

The 2017 LIC-DSF reforms introduced a suite of four realism tools, intended to encourage examination of baseline assumptions by flagging differences from a country's historical performance or cross-country experience. The tools include the following:

1. Drivers of debt dynamics to analyze changes in debt over the past five years compared with projections over the next five years, including (i) a chart showing the evolution of 10-year projections of external and public debt to gross domestic product (GDP) ratios for three DSA vintages—the current DSA, the previous year's DSA, and the DSA from five years past; (ii) decomposition of past (that is, previous five years) and projected (that is, over the next five years) drivers of external and public debt dynamics; and (iii) a breakdown of past debt forecast errors.
2. Realism of planned fiscal adjustment to show how a country's projected primary fiscal adjustment in the next three years compares with the distribution of observed primary fiscal balance adjustments over a three-year period for IMF-supported programs for LICs.
3. Fiscal adjustment–growth relationship, which assesses the consistency of fiscal and growth assumptions in the medium term by comparing the baseline growth projection with growth paths that include the fiscal impact on growth calculated under a range of plausible multipliers.

4. Public investment–growth relationship, which compares the contribution of public investment to growth over the historical period in the last DSA and in the current DSA for the next five years.

Realism tools signal when projections may require further justification or adjustment. Where projections in a DSA are significantly different from historical experience (for the specific country or similar countries), this should be discussed in the DSA write-up or motivate adjustments to the projection. All but two of the DSAs reviewed for this evaluation discussed the realism of planned fiscal adjustments. Realism tools are applied to medium-term projections; only the drivers of debt dynamics tool are applied over the longer term (that is, a 10-year horizon).

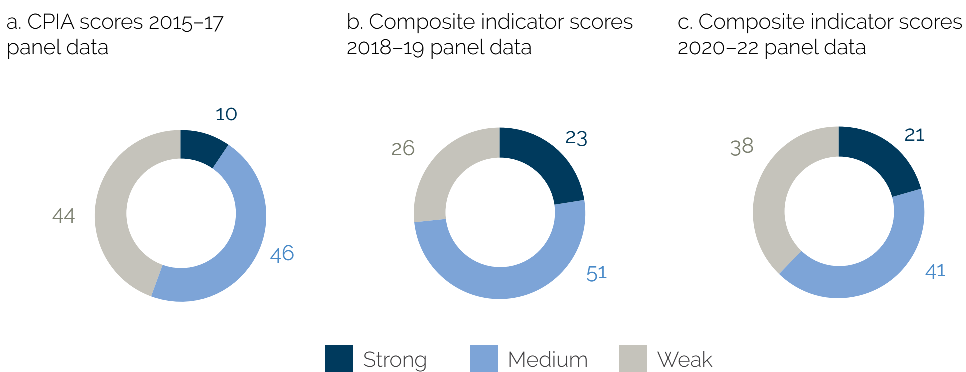
Country Classification and Debt-Carrying Capacity

The 2017 reform introduced a composite indicator score to classify countries according to their debt-carrying capacity into one of three categories (strong, medium, and weak). This classification represents the debt thresholds applied to the sustainability of debt under the baseline and stress tests. Before the 2017 reform, the LIC-DSF relied exclusively on the historical average of the country's World Bank Country Policy and Institutional Assessment (CPIA) score to determine debt-carrying capacity. The composite indicator score uses a weighted average of the country's CPIA score, real GDP growth, remittances, international reserves, and global economic growth. It captures both five-year historical averages and forward-looking five-year projections. Because the CPIA score is not projected, it is held constant for the purposes of the composite indicator.

There was an increase in the share of countries assessed as having strong carrying capacity immediately after the 2017 reforms. The share of countries classified as strong increased from 10 percent to 23 percent of the panel data set, whereas the share of those classified as weak decreased from 44 percent to 26 percent (figure 2.2). All things being equal, this suggests that the composite indicator approach—whereby real GDP growth, remittances, international reserves, and global economic growth are taken into account—presented a more favorable picture of the debt that LICs can bear

compared with the CPIA score alone. This is not surprising given the relatively favorable outlook for these variables in 2018. This is consistent with the finding from the comparison of DSAs completed before and after the onset of COVID-19. After the COVID-19 pandemic started, there was a deterioration in the borrowing capacity of IDA-eligible countries according to the composite indicator. The share of countries classified as weak increased from 26 percent to 38 percent, whereas those rated as medium fell by 10 percentage points from 51 percent to 41 percent.

Figure 2.2. Debt-Carrying Capacity over Time (percent)



Source: Independent Evaluation Group.

Note: CPIA = Country Policy and Institutional Assessment.

Tailored Tests and Customized Scenarios

As part of the 2017 reform, the DSF included three types of stress tests to gauge the sensitivity of projected debt indicators to changes in assumptions. The first type of test was a series of standardized stress tests that, through an adjustment to the DSA template, were automatically applied to all countries to assess the impact of temporary shocks on the evolution of debt burden indicators in both the external and the public DSAs. The second type of test is tailored stress tests, which consider risks that are common to only subsets of countries. The third type of test is an optional fully customized scenario that can capture idiosyncratic risks, if relevant.

Tailored tests are used for countries exposed to specific risks—for example, natural disasters, volatile commodity prices, and market-financing pressures. Although the DSA template provides a default shock, users can customize tailored stress test scenarios to the country context by considering the country's historical experience with the specific types of shocks:

- A natural disaster shock is applied to small states vulnerable to natural disasters and LICs that meet frequency criteria (two disasters every three years) and economic loss criteria (above 5 percent of GDP per year), based on the Emergency Events Database between 1950 and 2015.[3] Some 36 percent of countries in the panel data set performed the natural disaster test.[4]

- The commodity price test is applied to LIC-DSA countries for which commodities account for at least 50 percent of total goods and service exports over the previous three-year period. Some 42 percent of countries in the panel performed commodity price tailored tests.

- A market-financing shock is applied to LIC-DSA countries with market access, including those that either have outstanding Eurobonds or meet the market access criterion for graduation from the IMF's Poverty Reduction and Growth Trust but have not graduated because of serious short-term vulnerabilities. The market-financing shock assesses rollover risks resulting from a deterioration in global risk sentiment, temporary nominal depreciation, and shortening of maturities of new external commercial borrowing. Some 25 percent of countries in the panel applied the market-financing test.

The 2017 reform introduced use of customized stress tests to address specific risks not covered by the standardized tests. These tests allow users to fully customize debt paths for analyses that cannot be preprogrammed. This could include idiosyncratic risks, such as civil war or a major health crisis, large delays in investment projects that can adversely affect growth and fiscal revenues, contagion-related macroeconomic risks, or policy slippage, which could result in very different debt paths. Customized stress tests were used for 13 percent of countries in the sample panel data set.

Role of Judgment in Determining Risk of Debt Distress

The DSF guidelines allow for the use of judgment to arrive at a final risk rating. In particular, the guidelines note that judgment can help assess the gravity of threshold breaches and country-specific factors that are not fully accounted for in the model (IDA and IMF 2017a). They discuss several situations when judgment may be used, including in the interpretation of short-lived and marginal breaches; consideration of whether high-risk signals from

public debt distress may affect the external risk rating; examination of risk signals from the market-financing pressures tool; assessment of the implications of nonguaranteed, private, external debt; availability of liquid financial assets; fragility, conflict, and violence; reserve pooling arrangements; availability of insurance type arrangements and state-contingent debt instruments; and level of confidence in the macro baseline.

Judgment can also be applied to long-term considerations. Although threshold breaches projected to occur in projection years 11–20 do not normally give rise to a rating downgrade, in exceptional circumstances, breaches may provide a rationale for changing a risk rating when "(i) such breaches are expected to be large, persistent and thus resulting in significant differences relative to historical averages; and (ii) [they] occur with a high probability despite occurring in the distant future. Such a situation could arise from trends that are not easily amenable to policy interventions, such as climate change, population aging, known changes in donor financing frameworks, or expected exhaustion of natural resources" (IDA and IMF 2017a, 46).

The application of judgment followed the LIC-DSF guidelines in the most recent DSAs. Across the 66 most recent DSAs for IDA-eligible countries, 14 (21 percent) applied judgment to modify the mechanical risk rating from the model. Of these, 8 were downgrades and 6 were upgrades (table 2.1). For 5 of these cases, the projection horizon was extended from 10 to 20 years to account for issues that were expected to arise only in the longer term—the impact of climate change (Haiti, Samoa, and Tuvalu) and a projected shift in financing toward debt (Afghanistan)—and to account for the implications of an expected fiscal cliff in FY23 (the Federated States of Micronesia). Other downgrades were due to high overall public debt vulnerabilities (Togo and Guinea-Bissau, where there were also substantial downside risks to the baseline) and potential deterioration in security issues or other fiscal pressures (Mali). Upgrades were related to removing the impact of the pandemic from historical averages for stress tests (Cambodia and Moldova), a breach being only two years and small (Benin), hydropower debt being akin to foreign direct investment (Bhutan), remittances being the key foreign exchange earner rather than exports (Nepal), and liquid assets being available in the Petroleum Fund (Timor-Leste).

Table 2.1. Application of Judgment in Most Recent Country Debt Sustainability Analyses

Country	DSA Date	Application of Judgment Impact	Justification for Application of Judgment
Afghanistan	May 2021	Downgrade	Extended to 20-year horizon due to projected shift in financing mix toward debt.
Benin	December 2020	Upgrade	Breach is only two years and small (and given Benin's fiscal path).
Bhutan	April 2022	Upgrade	Majority of debt is linked to hydropower project loans from government of India akin to FDI, and the projected improvement of medium-term dynamics is because of hydro exports and revenues.
Cambodia	November 2021	Upgrade	Applies a customized stress scenario based on prepandemic stress test parameters to account for exceptional and transitory factors during 2020 related to the pandemic.
Guinea-Bissau	July 2021	Downgrade	Reflects vulnerabilities from high overall public debt and substantial downside risks to the baseline scenario.
Haiti	December 2019	Downgrade	Extended to 20-year horizon and considers high probability of protracted and substantial threshold breaches from FY34 of the baseline scenario as well as Haiti's institutional fragility and exceptional vulnerability to natural disasters.
Mali	February 2021	Downgrade	Customized scenario demonstrates Mali's vulnerability to a change in security conditions or other fiscal pressures that could lead to larger fiscal deficits financed on nonconcessional terms.
Micronesia, Fed. Sts.	October 2021	Downgrade	The forecast horizon informing mechanical risk signals is extended to 20 years to take account of the longer-term implications of a possible fiscal cliff in FY23.
Moldova	December 2021	Upgrade	Stress tests adjusted given the exceptional nature of the largely temporary impact of the pandemic, where 2020 was dropped from the calculations of historical average and variances.
Nepal	December 2021	Upgrade	Judgment applied due to low ratios of present value of PPG external debt to GDP and PPG external debt service to revenue and how remittances, rather than exports, are the major source of foreign exchange to balance the current account and service external debt.

(continued)

Country	DSA Date	Application of Judgment Impact	Justification for Application of Judgment
Samoa	March 2021	Downgrade	Extended the projection horizon to 20 years given the high probability of a large and protracted breach under the baseline over the long run due to Samoa's exposure to frequent natural disasters and the effects of climate change.
Timor-Leste	June 2021	Upgrade	Petroleum Fund is large relative to projected debt levels and debt service requirements, and its assets are liquid and accessible.
Togo	March 2020	Downgrade	Judgment was applied given high domestic debt vulnerabilities.
Tuvalu	July 2021	Downgrade	Projection horizon extended to 20 years to adequately capture Tuvalu's vulnerability to natural disasters and the effects of climate change.

Source: Independent Evaluation Group.

Note: DSA = Debt Sustainability Analysis; FDI = foreign direct investment; FY = fiscal year; GDP = gross domestic product; PPG = public and publicly guaranteed.

[1] The Low-Income Country Debt Sustainability Framework has been jointly reviewed by International Monetary Fund and World Bank staff four times: in 2006, 2009, 2012, and 2017. The 2017 review was informed by a broad external consultation process, including dialogue with country authorities, staff of multilateral banks, members of the Paris Club, and civil society organizations. For the 2017 review, see IDA and IMF 2017b.

[2] The Guidance Notes also indicate how the International Development Association credit-grant allocation is usually determined based on the latest approved Debt Sustainability Analysis available as of the end of June.

[3] Emergency Events Database: The International Disaster Database, prepared by the Centre for Research on the Epidemiology of Disasters; see http://www.emdat.be.

[4] See appendix A for further details on the panel data set.

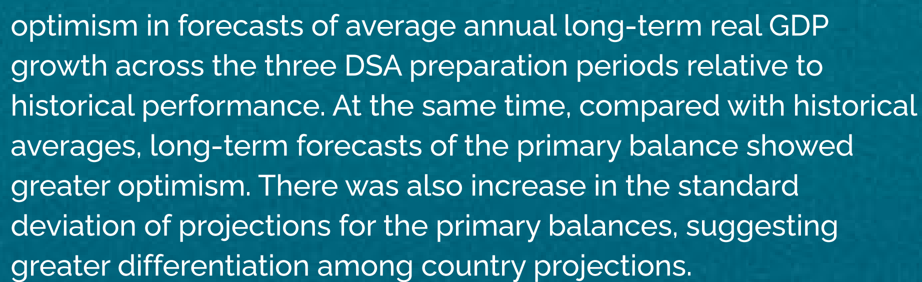
3 | The World Bank's Role in, and Contribution to, Long-Term Projections in Debt Sustainability Analyses

Highlights

As per the Low-Income Country Debt Sustainability Framework (LIC-DSF) guidelines, the World Bank is expected to take the lead in Debt Sustainability Analyses (DSAs) on longer-term growth prospects (and, when required, on assessing the investment-growth relationship). The extent to which this happens varied considerably across countries, with the International Monetary Fund (IMF) in the driver's seat for both medium- and long-term projections in the majority of DSAs (and countries). Only 10 percent of World Bank economists indicated that they led preparation of long-term macroeconomic forecasts, whereas another 31 percent indicated that they had significant contributions or shared responsibility with the IMF and 58 percent indicated they provided some comments and revisions.

Debt Sustainability Analyses for about half of the International Development Association (IDA)-eligible countries contained a substantive discussion of long-term growth and its drivers. The remainder had modest or no discussion of drivers of long-term growth. This is consistent with the finding that the majority of World Bank economists relied on historical trends (and, implicitly, past relationships between investment and growth) to project long-term growth rather than explicit assumptions about the future role of investment in driving long-term growth.

Similar to the broader sample, case studies illustrated a tendency for long-term growth assumptions to be largely consistent with historical averages, whereas fiscal assumptions were significantly more optimistic. There was a small increase in the degree of



optimism in forecasts of average annual long-term real GDP growth across the three DSA preparation periods relative to historical performance. At the same time, compared with historical averages, long-term forecasts of the primary balance showed greater optimism. There was also increase in the standard deviation of projections for the primary balances, suggesting greater differentiation among country projections.

This section analyzes the quality and coherence of inputs into the LIC-DSF for which the World Bank is responsible. In doing so, it focuses on aspects for which the World Bank has the designated lead, including with respect to long-term projections of GDP growth, the investment-growth nexus, long-term primary balances, the incorporation of climate change assumptions, and debt data quality.

Long-Term Forecasts of GDP Growth

The LIC-DSF guidelines are clear that the World Bank is expected to take the lead on longer-term growth prospects that form part of LIC-DSAs. Survey evidence and case studies undertaken for this evaluation suggest that the interpretation of what this implies for World Bank inputs into the LIC-DSA varies considerably across World Bank staff working on different countries. Only 10 percent of World Bank economists indicated that they led preparation of long-term macroeconomic forecasts in DSAs, and another 31 percent indicated that they made significant contributions to, or shared responsibility with, the IMF. A further 58 percent indicated that they provided some comments and revisions. Case study evidence followed a similar pattern. For case study countries, the World Bank played a leading role in the articulation of long-term growth projections in Bhutan and the Democratic Republic of Congo and contributed to the projections in several others.

Forecasting long-term growth is inevitably more difficult and imprecise than medium-term forecasting, and more fundamental structural factors come into play over the long term. Preparing medium-term projections is already fraught with challenges (see box 3.1), and long-term projections are even more so. Yet, the World Bank, given its development mandate, is well positioned to inform long-term projections. In addition to macroeconomic variables of savings, investment, and productivity, long-term growth is influenced by factors such as human capital accumulation, demographics, labor force participation, and the impact of climate change. Although modeling long-term projections is fraught with challenges, the World Bank can play a prominent and even leading role in identifying the country-specific factors that will influence long-term growth and related variables and postulate their potential impact on debt sustainability. World Bank inputs can also be informed by the World Bank's Long-Term Growth Model—an Excel-based

tool that has already supported work in more than 45 countries, often to inform the World Bank's Country Economic Memorandums and Systematic Country Diagnostics.

This evaluation does not assess the accuracy of the long-term growth projections (that is, greater than six years) used in LIC-DSAs. This would not be possible with only five years passed since the 2017 reform. Instead, it compares long-term GDP growth and primary balance projections used in LIC-DSAs with historical data. It draws on data from LIC-DSAs for 53 countries prepared over three different periods: 2015–17 (before the DSA reforms), 2018–19 (after the DSA reforms but before the COVID-19 pandemic), and 2020–22 (after the onset of the COVID-19 pandemic). Because COVID-19 had a severe effect on growth and fiscal variables in many countries, an additional iteration for 2020–22 DSAs was undertaken to exclude the COVID-19 pandemic from the calculation of historical averages.

Box 3.1. Historical Bias in Macroeconomic Projections Underpinning Debt Sustainability Analyses

The World Bank and the International Monetary Fund (IMF) have previously identified significant biases in projections used in Low-Income Country Debt Sustainability Analyses (LIC-DSA; IDA and IMF 2017b). Biases in annual projections can have a substantial compounding effect in the long term. For example, GDP growth that is overestimated by 1 percentage point over 20 years can lead to underestimation of the debt-to-GDP ratio by 22 percentage points, whereas overestimating growth by 2 percentage points per year can underestimate the debt-to-GDP ratio by 49.8 percentage points. The 2017 review of the Low-Income Country Debt Sustainability Framework found that (i) forecast errors for public and external debt tended to increase over time, with the average absolute error rising to approximately 20 percentage points after seven years for both the public and the external debt-to-GDP ratios; (ii) errors reflected a clear optimism bias, with over three-quarters of larger deviations (of more than 15 percentage points) beyond the medium term being on the optimistic side; (iii) for public debt, forecast errors were mainly related to unexpected fiscal needs, including the materialization of contingent liabilities, rather than growth or other shocks, and forecast errors for external debt were mainly driven by unexpected financial flows (IDA and IMF 2017b).

(continued)

Box 3.1. Historical Bias in Macroeconomic Projections Underpinning Debt Sustainability Analyses (cont.)

The existence of optimism bias has also been identified in public debt forecasts contained in DSAs (Flores et al. 2021). Debt projections in the IMF World Economic Outlook made over the 2002–14 period exhibited a median forecast error of approximately 8 percentage points after five years. Notably, this optimism bias appears to have emerged beginning about 2007, with forecasts made thereafter exhibiting much larger errors. The authors found that optimism bias was greater for lower-income countries, oil exporters, countries with high growth volatility, and countries with already high debt ratios. Moreover, optimism bias tended to be larger when initial forecasts were for a reduction in the debt-to-GDP ratio.

The Independent Evaluation Group previously highlighted optimism bias in debt forecasts used in DSAs (World Bank 2021a). The Independent Evaluation Group noted that overoptimism reflected frequent underestimation of downside risks related to contingent liabilities of state-owned (SOEs) enterprises, or to shocks that were correlated, with compounding results. The case studies for this evaluation also illustrated this tendency (for example, debt-to-GDP ratios in Mozambique and Papua New Guinea rose sharply as a result of the realization of SOE borrowing, and in Zambia, the debt-to-GDP ratio rose as a result of procyclical policies and an overestimation of the growth impact from large public investment projects).

Source: Independent Evaluation Group.

Forecasts of long-term growth changed modestly across the three DSA preparation periods relative to historical performance. The median forecast for long-term GDP growth declined from 4.9 percent to 4.5 percent between 2015–17 and 2018–19 before rising to 4.8 percent over 2020–22. At the same time, and despite the increase in uncertainty and volatility in the most recent period, the standard deviation of real GDP forecasts declined from 1.7 over 2015–17 to 1.5 over 2018–19 and 1.4 over 2020–22 (table 3.1 and figure 3.1).

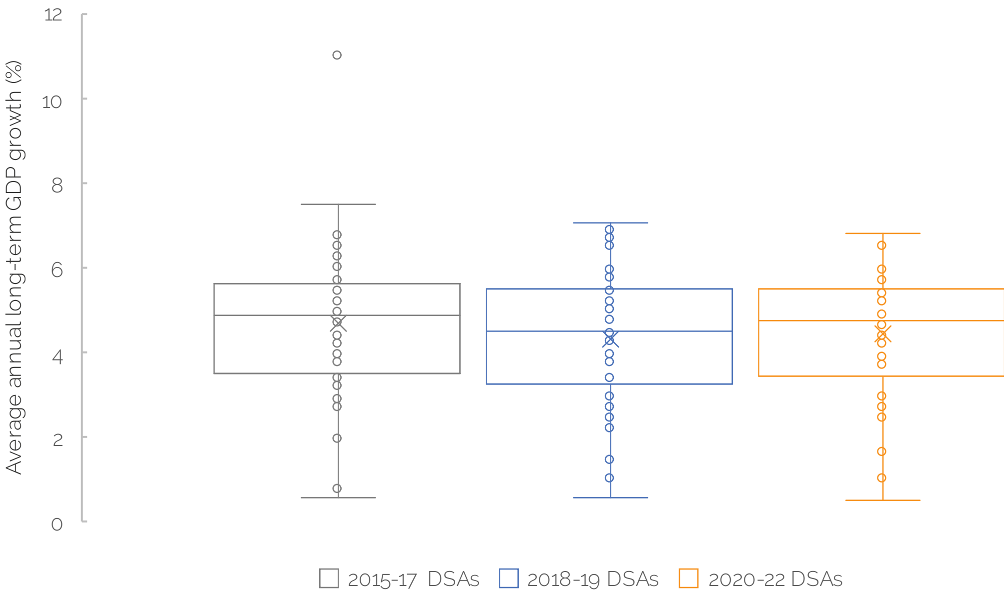
Table 3.1. GDP Growth over Different DSA Preparation Periods for IDA-Eligible Countries

GDP Growth Statistic	DSA Period									
	Historical			Medium-term projection				Long-term projection		
	2015–17	2018–19	2020–22	2020–22 (excl. COVID-19)	2015–17	2018–19	2020–22	2015–17	2018–19	2020–22
Mean	4.6	4.1	3.9	4.3	4.4	4.3	4.3	4.7	4.3	4.5
Median	4.7	4.4	3.8	4.2	4.7	4.7	4.4	4.9	4.5	4.8
SD	3.1	3.0	2.2	2.2	2.4	2.4	1.7	1.7	1.5	1.4

Source: Independent Evaluation Group.

Note: DSA = Debt Sustainability Analysis; excl. = excluding; GDP = gross domestic product; IDA = International Development Association; SD = standard deviation.

Figure 3.1. Distribution of Long-Term GDP Growth as Forecast for IDA-Eligible Countries over Different DSA Preparation Periods

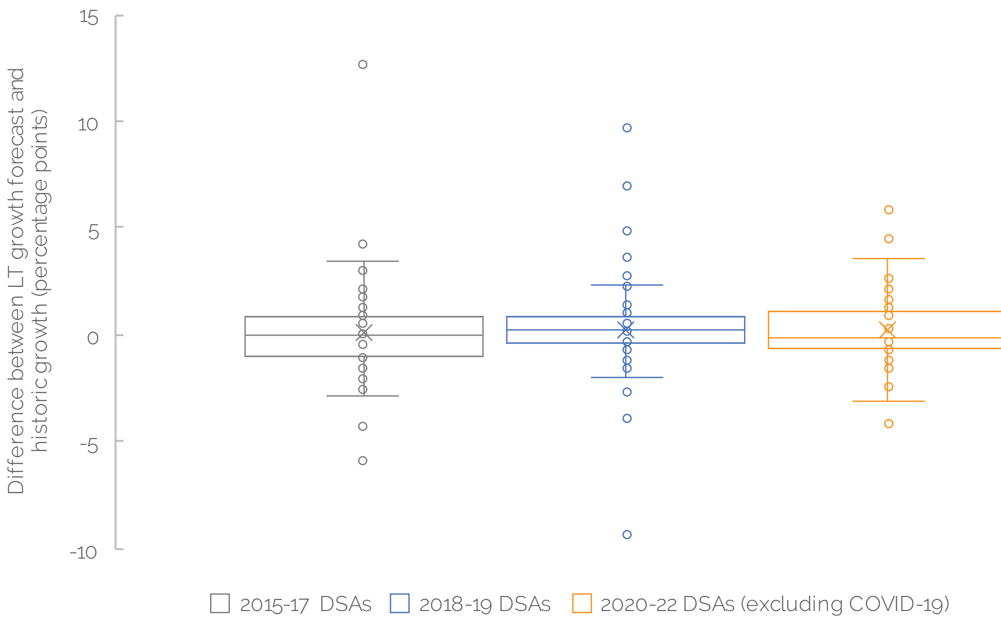


Source: Independent Evaluation Group.

Note: DSA = Debt Sustainability Analysis; IDA = International Development Association.

There was a small increase in the degree of optimism in average annual long-term growth projections relative to historical performance. There was some increase in the share of countries with long-term growth that was more than 1 percentage point more optimistic than average annual historical growth, from 21.2 percent over 2015–17 to 28.3 percent over 2020–22 (with COVID-19 years excluded from the historical average). The share of countries with long-term growth projections more optimistic than historical averages by more than 2 percentage points increased slightly from 11.5 percent to 13.2 percent (see figure 3.2, table 3.2, and appendix C for further details).

Figure 3.2. Distribution of Differences between Long-Term GDP Growth Forecasts and Historical Average Growth over DSA Preparation Periods



Source: Independent Evaluation Group.

Note: DSA = Debt Sustainability Analysis; LT = long term.

Table 3.2. Differences between Long-Term Projection and Historical Average GDP Growth over DSA Periods

GDP Growth Statistic	DSA Period			
	2015–17	2018–19	2020–22	2020–22 (excl. COVID-19)
Mean	0.1	0.3	0.6	0.2
Median	0.0	0.2	0.4	−0.2
SD	2.6	2.6	1.7	1.7
Share less optimistic by at least 1 percentage point	28.8	17.0	13.2	20.8
Share more optimistic by at least 1 percentage point	21.2	22.6	34.0	28.3
Share less optimistic by at least 2 percentage points	15.4	11.3	3.8	5.7
Share more optimistic by at least 2 percentage points	11.5	13.2	18.9	13.2

Source: Independent Evaluation Group.

Note: DSA = Debt Sustainability Analysis; excl. = excluding; GDP = gross domestic product; SD = standard deviation.

Long-Term Forecasts of the Primary Balance

There have been marginal improvements in long-term forecasts of the primary balance. Median long-term forecasts of the primary balance have improved marginally from a deficit of 0.8 percent to 0.7 percent of GDP over the three DSA periods, whereas mean forecasts of the primary deficit have worsened from 0.9 percent of GDP to 1.2 percent of GDP. On the other hand, the standard deviation has increased from 1.6 in 2015–17 to 3.6 in 2018–19 and 4.7 in 2020–22, reflecting greater differentiation among countries (table 3.3 and figure 3.3).

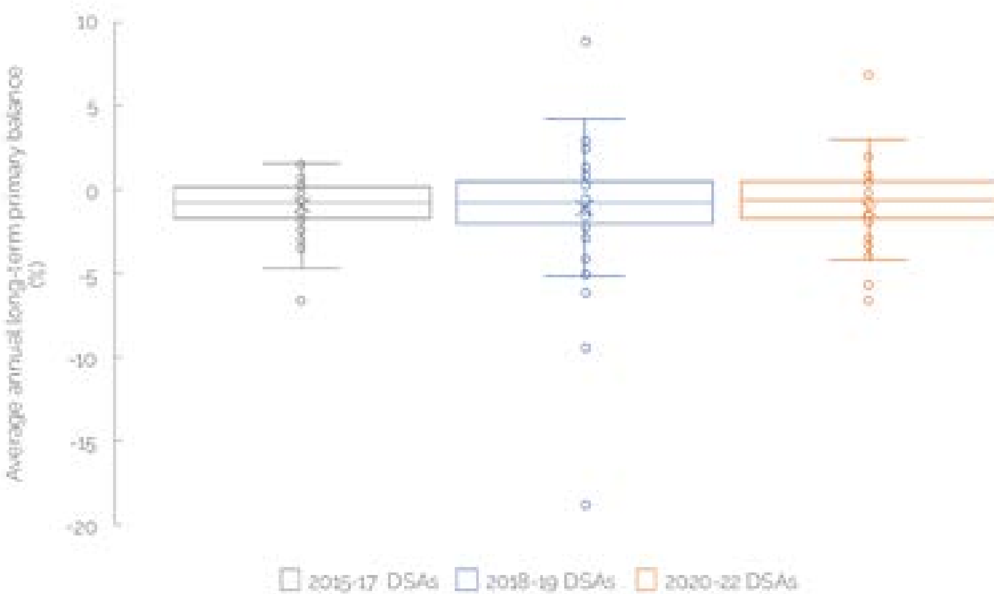
Table 3.3. Long-Term Projections of Primary Balance over Different DSA Periods

Primary Balance Statistic	DSA Period									
	Historical				Medium-term projection			Long-term projection		
	2015–17	2018–19	2020–22	2020–22 (excl. COVID-19)	2015–17	2018–19	2020–22	2015–17	2018–19	2020–22
Mean	−1.2	−1.6	−2.2	−2.2	−2.1	−1.3	−2.4	−0.9	−1.2	−1.2
Median	−1.2	−1.8	−2.0	−2.0	−1.4	−1.4	−1.7	−0.8	−0.8	−0.7
SD	3.5	3.0	4.9	5.2	5.8	3.6	6.0	1.6	3.6	4.7

Source: Independent Evaluation Group.

Note: DSA = Debt Sustainability Analysis; excl. = excluding; SD = standard deviation.

Figure 3.3. Distribution of Long-Term Primary Balance Forecasts over DSA Periods



Source: Independent Evaluation Group.

Note: DSA = Debt Sustainability Analysis.

However, compared with historical averages, long-term forecasts of the primary balance showed significantly greater optimism. Long-term forecasts of the primary balance over the three DSA preparation periods were compared with historical averages (see table 3.4, figure 3.4, and appendix C for further details). The share of countries for which long-term primary balance forecasts were more than 1 percentage point more optimistic than historical averages was relatively stable between 2015 and 2019 at about 43 percent but increased to 51 percent in 2020–22 DSAs (with COVID-19 years excluded from the historical average). The share of countries for which primary balance projections in DSAs were more than 2 percentage points more optimistic increased from 27 percent to 34 percent and then to 40 percent in 2015–17, 2018–19, and 2020–22 (with COVID-19 years excluded), respectively.

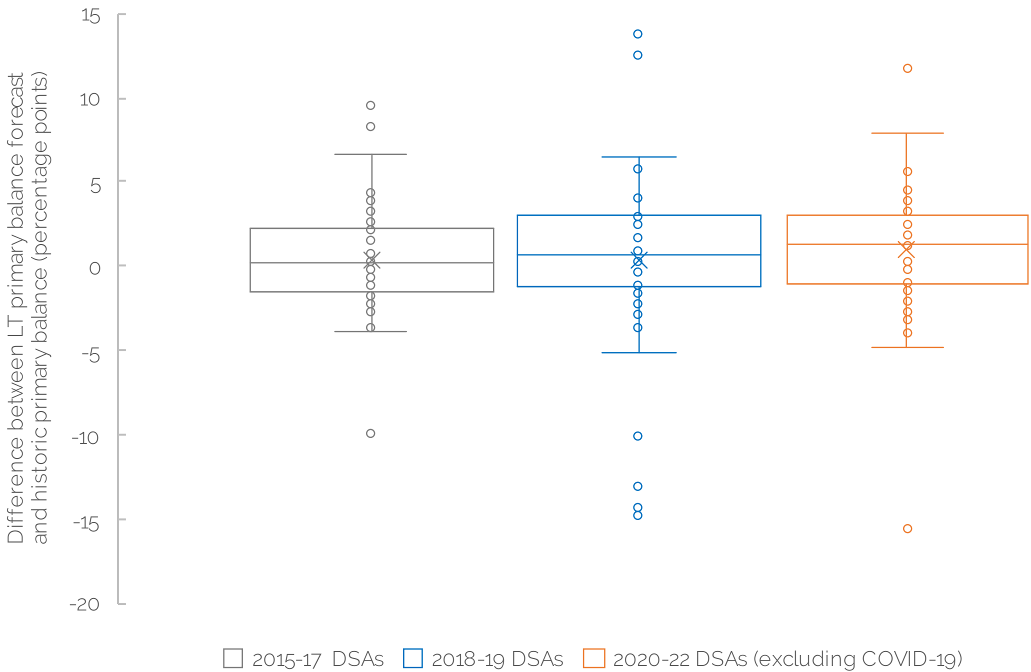
Table 3.4. Differences between Long-Term Projection and Historical Primary Balance over DSA Periods

Primary Balance Statistic	DSA Period			
	2015–17	2018–19	2020–22	2020–22 (excl. COVID-19)
Mean	0.3	0.4	1.0	1.0
Median	0.3	0.6	1.2	1.2
Standard deviation	3.5	5.1	3.7	3.9
Share less optimistic by at least 1 percentage point	32.7	28.3	20.8	24.5
Share more optimistic by at least 1 percentage point	42.3	43.4	52.8	50.9
Share less optimistic by at least 2 percentage points	19.2	15.1	13.2	15.1
Share more optimistic by at least 2 percentage points	26.9	34.0	37.7	39.6

Source: Independent Evaluation Group.

Note: DSA = Debt Sustainability Analysis; excl. = excluding; SD = standard deviation.

Figure 3.4. Distribution of Differences between Long-Term Primary Balance Forecast and Historical Averages over DSA Periods



Source: Independent Evaluation Group.

Note: DSA = Debt Sustainability Analysis; LT = long term.

Assumptions about Long-Term Growth and the Investment-Growth Nexus

Although much of the attention in DSAs is on medium-term macroeconomic projections, longer-term assumptions about investment plans and climate change, and their impact on growth, are critical to assessing debt sustainability. This is even more so because substantial public investment and associated borrowing is often justified by a belief that they will enhance growth (relative to a counterfactual) over the longer term, including by adapting to climate change. Without investment in adaptation, the transition to a lower-carbon economy will be slowed, while economies will become more susceptible to climate change–related natural disasters. In this light, the evaluation assessed the clarity and credibility of assumptions about the

drivers of longer-term growth in DSAs (particularly regarding the investment-growth nexus) and the expected impacts of climate change.

DSAs for about half of IDA-eligible countries contained a substantive discussion of long-term growth and its drivers. For each of the 66 LIC-DSA countries in the sample, the most recent DSA (through June 2022) was reviewed (five of these DSAs were one- to two-page streamlined reports for emergency operations during COVID-19 with limited discussion). An example of well-articulated assumptions includes Uganda's March 2022 DSA that has a clear discussion of the drivers of long-term growth:

> In the long-term, growth is also supported by other factors. Specifically, infrastructure constraints are addressed (e.g., there are currently major investments to improve transport connectivity, expand access to power, and enhance digital connectivity), agricultural productivity improves, and agro-processing trade and industries are further developed. Finally, Uganda is entering a demographic transition, which has great potential for accelerating growth in per capita terms and reducing poverty. Although fertility rates and the dependency ratio are still high, Uganda's declining fertility rate and growing working-age population are gradually increasing the share of the working-age population and reducing the child dependency ratio. (IMF 2022e, 8)

Another example is Dominica's January 2022 DSA:

> In the long term, after 2026, the output growth is projected to gradually decline and to converge to a potential growth rate of 1.5 percent based largely on the implementation of the public investment program and resultant increased resilience, improved built infrastructure, a new international airport, and geothermal developments, all of which should support improved [long-term] growth potential. (IMF 2022b, 6)

On the other hand, about a third of the 66 DSAs had only modest discussions of drivers of long-term growth or had no discussion at all. Twelve DSAs only briefly mentioned long-term growth, without a discussion of drivers. DSAs for another 11 countries discussed medium-term drivers of growth but did not discuss drivers of long-term growth.

A survey of World Bank country economists indicated that historical growth trends were the most common method for determining long-term growth forecasts. When asked if explicit assumptions about the relationship between public and private investment and growth were articulated alongside long-term macroeconomic projections, 19 percent of respondents indicated "yes" and 48 percent indicated "somewhat." When citing the basis for assumptions about long-term growth, just under three-quarters of respondents indicated that they had used historical trends, whereas 24 percent used a quantitative model to derive their long-term projections and 20 percent used analysis from a Country Economic Memorandum.

Interviews with World Bank staff in the context of country case studies similarly highlighted various means for forecasting long-term growth. About half of the nine country case studies mentioned using quantitative models. The remainder relied on historical averages. Several mentioned how the standard World Bank country macroeconomic modeling tool (the macroeconomic and fiscal model [MFMod]) projects only for the medium term and was therefore of limited use for the purposes of long-term projections.

4 | Debt Data—Quality, Coverage, and Transparency

Highlights

The World Bank plays a leading role in promoting and tracking the coverage and quality of debt data. This is manifest in the World Bank's stewardship of the Debtor Reporting System (DRS), which requires countries with outstanding obligations to the International Bank for Reconstruction and Development and the International Development Association to report external public and public debt liabilities on a quarterly and annual basis. The World Bank also administers the Debt Management Performance Assessment (DeMPA), which evaluates the adequacy of a country's debt reporting and recording.

The credibility of the Low-Income Country Debt Sustainability Framework (LIC-DSF) depends on the assumption that data on the stock of public and publicly guaranteed debt are timely and accurate and include all debt-producing liabilities. However, Debt Sustainability Analyses (DSAs) do not clearly and routinely assess the degree of confidence World Bank and International Monetary Fund staff have in the data on which their analysis is based.

LIC-DSF guidelines require that the DSA document identify gaps, note risks, and discuss possible remedial measures to improve data collection. Where coverage of state-owned enterprise (SOE) debt is limited, the DSA needs to flag this omission and identify steps to enhance coverage. Since 2017, discussion of debt data coverage in the DSA has improved, including with respect to SOE activities and contingent liabilities. However, DSAs do not consistently articulate concrete plans to address shortcomings in debt data coverage.

Until recently (spring 2021), the data contained in the DRS were not consistently consulted in preparation of DSAs. Moreover, the views of World Bank staff managing the Debtor Reporting System, particularly on the quality and coverage of data reported to the World Bank, were not routinely sought in DSA preparation and review.

DeMPA scores on dimensions related to recording and reporting debt are not regularly reported or reflected in DSAs, even when a country does not meet the minimum standard for debt reporting. Indeed, despite recent efforts to improve debt transparency, many low-income countries fail to meet minimum standards of public debt recording and reporting (according to the DeMPA).

Shortcomings in reporting often arise from challenges associated with monitoring increasingly diverse portfolios and contingent fiscal risks associated with state-owned enterprises and public-private partnerships. This is often more the result of inadequate capacity to classify and report increasingly complex debt transactions than of deliberate omission.

The Role of the World Bank

The credibility of the LIC-DSF depends on the assumption that data on the stock of public debt and contingent liabilities underpinning the assessment of debt sustainability are timely and accurate and reflect adequate coverage of debt and debt-producing liabilities. The LIC-DSF guidelines set out the perimeter of debt data coverage, and the DSA includes a table and explanatory paragraph to indicate conformity with, or deviations from, the guidelines. The guidelines also require that the DSA documents identify gaps, note risks, and discuss possible remedial measures to improve data collection. Case studies suggest varying degrees of detail and compliance with this requirement, such that the degree of confidence in the coverage and quality of the data on which DSAs are based was not always clearly stated.

The World Bank has a lead role in promoting and tracking the coverage and quality of debt data. Bank stewardship in this area is reflected in two particular initiatives: the World Bank–designed Debt Management Performance Assessment (DeMPA) and the Debtor Reporting System (DRS) housed at the World Bank. Among other things, the DeMPA assesses country performance relative to international best practice in debt recording and reporting of public and publicly guaranteed debt.

The DeMPA provides a widely recognized diagnostic framework for evaluating a country's debt management processes and institutions against sound international practice. A DeMPA identifies strengths and weaknesses in key dimensions of debt management to signal where capacity and institutions need to be strengthened. Launched in 2007, the DeMPA was updated most recently in 2021 to take account of changes in borrowing pattern and instruments and other dynamics of public debt management.[1]

DeMPA scores indicate whether a country meets a "minimum standard" for a particular dimension of debt management. This includes the adequacy of debt recording, monitoring, and reporting (box 4.1). Adequate debt monitoring requires the debt management office to regularly monitor that all created debts have been recorded. All contracts should be monitored in close coordination with creditors and disbursing units.

Box 4.1. Challenges in Reporting Accurate and Comprehensive Data

A government's ability to report debt liabilities accurately and transparently has been increasingly complicated by an expansion in sources for debt financing and increasingly complex and opaque mechanisms for mobilizing debt financing. Although borrowing from Paris Club creditors and international financial institutions is generally subject to strict transparency requirements, the share of debt owed to Paris Club creditors and international financial institutions has decreased over time and given way to greater use of market-based borrowing (or contingent liabilities) from bondholders, capital markets, commercial banks, private sector partners in performance and policy actions, and non–Paris Club bilateral creditors. Loan instruments themselves may include confidentiality clauses or involve collateralization of specific assets or revenue streams. These can complicate assessment of underlying fiscal risks.

There has also been, over the past decade or so, a proliferation of borrowing by public and private entities involving public sector guarantees (both explicit and implicit) through state-owned enterprises, special purpose vehicles, off-budget arrangements, joint ventures, and public-private partnerships, with potentially significant implications for public debt and fiscal risks. These risks are generally higher for lower-income countries, many of which have limited capacity for debt management and generation of domestic revenue to service debt.

For many low-income countries, full and accurate disclosure of information on the value and composition of public liabilities can be challenging even with the best of efforts. The increased complexity of public debt portfolios impedes compilations of comprehensive public debt data that conform to international standards and definitions. Accurate debt reporting requires adherence to rule-based, identifiable borrowing processes and the availability of comprehensive and timely data on public debt and contingent liabilities. The capacity to meet these criteria requires a sound and enforceable legal framework governing all public sector borrowing and an effective institutional and operational framework for debt management staffed by qualified, experienced, and adequately compensated officials. However, in many cases, the effectiveness of debt management offices is undermined by weak staff capacity, high turnover, low staff remuneration, inadequate cooperation between debt management and public financial management functions, weak public investment management, and a lack of attention to back-office functions.

Source: Independent Evaluation Group.

For external debt, the World Bank maintains the DRS to track the timeliness and quality of mandated reporting by sovereign borrowers. The DRS captures loan-by-loan information for all public and publicly guaranteed external debt. It is governed by the World Bank Policy on External Debt Reporting and Financial Statements, which requires countries with outstanding obligations to the International Bank for Reconstruction and Development and IDA to report external public and publicly guaranteed debt and private nonguaranteed debt on a quarterly and annual basis (box 4.2). This includes regular, detailed reports on long-term external debt owed by a public agency or by a private agency with a public guarantee. Borrowers are also required to report in aggregate on long-term external debt owed by the private sector with no public guarantee.

Currently, approximately 125 countries report to the DRS, including all countries eligible for loans from IDA. Data reported to the DRS contain basic information on new loans contracted, including creditor, amount of the loan and repayment terms, loan-by-loan debt outstanding, undisbursed balance, and arrears and flows (disbursements, repayments of principal and interest, and any principal and interest in arrears, restructured or forgiven) within three months of the close of the reporting year. These data provide a detailed account of the borrowers' external public and publicly guaranteed debt liabilities. The provision of both loan terms and related transactions provides a mechanism for validation of accuracy and enables a detailed reconciliation with creditor records if disaggregated data from the creditor are available.

Since 2018, efforts to improve the timeliness of reporting to the DRS and to ensure that DRS reports include all external public debt have intensified in line with heightened concerns over debt vulnerabilities. The expansion in coverage of data reported to the DRS reflects enhanced focus on the fiscal risks of contingent liabilities of state-owned enterprises (SOEs) and SDFP-related measures to incentivize debt transparency. The effort to close reporting gaps has also included the use of other data to validate and complement DRS reports (for example, creditor annual reports, market sources, and work by academic researchers). However, most data on SOE debt liabilities are available only in aggregate, and incorporating the loan-by-loan record into national recording and reporting systems will take time.

Box 4.2 The World Bank's Debtor Reporting System

The World Bank's Debtor Reporting System (DRS) is the most comprehensive source of cross-country information on the external debt liabilities of low- and middle-income countries. The World Bank Policy on External Debt Reporting and Financial Statements states that "as a condition of Board presentation of loans and financings, each Member Country must submit a complete report (or an acceptable plan of action for such reporting) on its foreign debt" (World Bank 2017, 2). However, the World Bank has been reluctant to withhold lending for failure to meet debt reporting requirements, but it could do so. The Independent Evaluation Group was unable to find any instance of loans or financing being withheld because of incomplete reporting under the DRS.

Most countries now submit DRS reports electronically, and borrowers submit using debt management software provided by the Commonwealth Secretariat and the United Nations Conference on Trade and Development. Countries that have the most difficulty reporting to the DRS are poorer countries and fragile states or countries in conflict. Occasionally, implementation of the DRS reporting requirement may be deferred because of specific country circumstances, as was the case for Iraq.

The most significant gap in data reported to the DRS relates to borrowing by state-owned enterprises (SOEs; particularly SOE borrowing without a government guarantee). There have been cases of deliberate underreporting of external public debt liabilities, but these are rare. Most data omissions reflect the absence of systems to collect data at the national level and limitations on the authority of the national debt office. In many countries, including most high-income countries, public debt is defined as the direct borrowing of the general government and borrowing of a public or private sector entity with a state guarantee. As such, recording and reporting on debt outside of these parameters are beyond the remit of the national debt office. The DRS definition of public debt extends to external borrowing by a nonfinancial SOE in which the government holds more than a 50 percent share of the debt, but historically this information was rarely reported.

The ongoing work program for the DRS includes revisions of the reporting requirements that incorporate all borrowing instruments, loans, and deposits and require more information on loan guarantees and proposals to extend the scope of the DRS to all public debt liabilities, domestic and external.

Sources: Independent Evaluation Group; World Bank 2017.

Over the past decade, debt management capacity in IDA-eligible countries has improved, often with technical assistance financed by a Debt Management Facility (DMF) from the World Bank, IMF, and other development partners. But many LICs still fail to meet minimum standards of public debt recording and reporting (according to DeMPAs), even before confronting the demands of monitoring increasingly complex portfolios and contingent fiscal risks associated with SOEs and public-private partnerships. Recurrent problems identified in DeMPAs are weak domestic legal and institutional frameworks required to comprehensively control and monitor debt risks. There may also be differences in debt definitions that can complicate reconciling data across debtor and creditor records and databases, thereby impeding cross-country comparison. A recent World Bank analysis found that public debt data disclosed in different publications have discrepancies of up to 30 percent of GDP across sources (World Bank 2021b).

A recent World Bank report found that 40 percent of LICs have not published any data about their sovereign debt for more than two years. However, many of these countries did meet DRS obligations to report detailed loan-by-loan data on external public debt. Nevertheless, even when debt is routinely reported, interpreting the data and assessing its quality can be challenging. In 30 percent of LICs, no information is published on sovereign guarantees (World Bank 2021b). Information on contingent liabilities linked to SOEs, special purpose vehicles, joint ventures, and public-private partnerships is rarely included in public debt data. Expenditure arrears, typically converted to debt through securitization, are often hard to quantify in the absence of well-performing accounting systems, which many LICs lack.

Over the past five years, an upward revision to debt data occurred in more than 60 percent of DRS reporting countries (Horn, Mihalyi, and Nickol 2022). On average, the public and publicly guaranteed external debt stock was revised up by 5.3 percent from 2016 to 2020. Revisions in many countries were modest; however, for 20 countries, the upward revision was more than 10 percent of the initially reported debt stock, with revisions to lending by both bilateral and commercial creditors, often to SOEs. As in earlier episodes of underreporting, the largest number of revisions occurred in LICs where capacity for debt reporting and recording was weak. Public and publicly guaranteed external debt stock was revised upward by more than 10 percent

for 12 LICs, of which 9 were in Sub-Saharan Africa and 5 were classified as fragile and conflict-affected states.

Debt Data Quality since the 2017 Guidelines

The 2017 reforms to the LIC-DSF underscored the importance of basing DSAs on full and accurate coverage of public debt. The aim was to ensure comparability across countries and to minimize unexpected increases in debt and related risks from sources outside the defined perimeter. According to the guidelines "the debt definition covers both external and domestic debt: (i) of the public sector, defined as central, state and local governments, social security funds and extra budgetary funds, the central bank, and public enterprises (the latter subsuming all enterprises that the government controls…); and (ii) private sector debt guaranteed by the public sector" (IDA and IMF 2017a, 14). Public financial corporations were excluded, but the DSF tool kit offers options to consider them as contingent risks.

The LIC-DSF guidelines do not explicitly require an assessment in the DSA of data quality, including with respect to requirements for timeliness of reporting, accuracy, and identification of data sources. The LIC-DSF guidelines state that a full LIC-DSA should be produced at least once every calendar year but have no requirement for the periodicity of the debt data on which the assessment should be based. Most DSAs provide only general information on debt data sources; they do not state which national authority(ies) provided the data, the vintage of the data, and the basis for and extent of staff estimates, or how data used in the DSA correlate to information published in debt reports and bulletins or other official documents by the borrower or the external debt information reported to the World Bank DRS.

The LIC-DSF guidelines set a standardized format for presenting debt in a DSA. When a subsector is not included, or only a portion of the subsector is captured (for example, nonguaranteed SOE debt), the guidelines require the exclusion to be explicitly flagged in the DSA. Recent DSAs provide explicit information on debt coverage in a standardized table that specifies each subcategory of debt included. Most recent DSAs—and all the case study countries—have at least a one-paragraph explanation on coverage of public debt, with varying degrees of detail.

DSAs were largely in compliance with the LIC-DSF guidelines in explicitly identifying and discussing shortcomings in reporting and particularly exclusion of SOE debt; however, there are exceptions. The LIC-DSF guidelines allow for exclusion of a public enterprise from the DSA if the enterprise poses limited fiscal risk (that is, can borrow without a guarantee from the government, does not carry out uncompensated quasi-fiscal activities, and has an established track record of positive operating balances). The DSA is required to provide a justification for omitting any fiscally important public enterprises. For example, Ethiopia's DSA states that the public debt data include data for Ethiopian Airlines, but the DSA excludes Ethiopian Airlines because the airline is run on commercial terms; has a sizable profit margin, as reflected in audited accounts published annually; enjoys managerial independence; and borrows without government guarantee (IMF 2019a, 2020a). The DSA includes the debt of Ethio-Telecom, which is not guaranteed by the government, because it is deemed not to meet the guideline criteria for exclusion (although the authorities have a contrary view). Ghana's DSA excludes the debt of Cocobod (the cocoa marketing board and one of Ghana's largest SOEs), which is estimated at 2.5 percent of GDP at year-end 2020, although Cocobod operates on noncommercial terms and engages in quasi-fiscal activity (IMF 2021b). The explanation offered in the DSA is the authorities' objection to Cocobod's inclusion in public sector debt and a contention that it is primarily a commercial operation that is not loss making. Most DSAs incorporated SOE debt through contingent liability shocks, with seven of nine case studies using a customized contingent liability estimate to account for underreporting.

Although the LIC-DSF guidelines specify that the DSA should discuss possible remedial measures to improve data collection pertaining to the debt and contingent liabilities of SOEs when there are gaps, most case study DSAs referred to this only in general terms.[2] Although almost all of the nine case studies contained a general statement about SOE debt quality and coverage, only a few referred to specific steps to address shortcomings (for example, referring to policy actions for the SDFP [Bhutan] or following up on recommendations from IMF technical assistance [the Democratic Republic of Congo]). Others contained general statements such as "the government intends to improve debt coverage through enhanced SOE oversight and im-

proved financial reporting, which is supported under plans for SNPSF [Société Nationale des Postes et des Services Financiers; postal bank] reforms" (the Comoros; IMF 2021f, 2) or "the government is working, with the support of development partners, to improve its financial and debt management systems, and to enhance the accounting and timely reporting of public debt, including those of [SOEs] and self-accounting-bodies" (Sierra Leone; IMF 2021c, 2).

Just under three-quarters of World Bank country economists believed that debt data coverage and quality were sufficient for the DSA. Seventy-three percent of surveyed economists felt that debt data coverage was sufficient for the DSA. However, 25 percent felt this was only "somewhat" the case. Similar results were found for debt data quality, with 68 percent feeling that it was sufficient and 30 percent feeling that it was only "somewhat" sufficient. Concerns about debt data coverage and quality were often driven by limited coverage of SOE debt and contingent liabilities.

Recent World Bank–Supported Initiatives to Improve Debt Data Quality and Coverage

In 2018, the IMF and the World Bank adopted the multipronged approach to addressing emerging debt vulnerabilities. This approach focused on improving the availability of accurate and timely debt data and strengthening capacity to record and report public debt and contingent fiscal risk liabilities. It contains actions to (i) strengthen debt transparency by working with borrowing countries and creditors to compile and make better public sector debt data available, (ii) strengthen country capacity to manage public debt management to mitigate debt vulnerabilities, (iii) provide suitable tools to analyze debt developments and risks, and (iv) adapt IMF and World Bank surveillance and lending policies to address debt risks and promote efficient resolution of debt crises (IMF 2020d).

In 2020, the World Bank and IMF adapted the multipronged approach to addressing emerging debt vulnerabilities to address increasing debt risks from the pandemic and to support postpandemic recovery. Recent enhancements focused on developing customized advice to address pandemic-related debt and fiscal risks and adapting the modalities of capacity development delivery

to the pandemic environment; supporting more comprehensive borrower reporting to international statistical databases; strengthening international financial institution policies on debt reporting and data dissemination; enhancing outreach to creditors, including IMF and World Bank support to implementation of the Group of Twenty's Common Framework; and releasing new analytical tools, most notably the IMF's sovereign risk debt sustainability framework for market-access countries, which provides a clearer signal on sovereign debt risks.

In July 2020, IDA adopted the SDFP to incentivize countries to move toward more transparent and sustainable financing. The SDFP replaced the Non-Concessional Borrowing Policy, which had sought to support debt policies and long-term external debt sustainability in IDA-eligible nongap countries. The SDFP's first pillar—the Debt Sustainability Enhancement Program—is directly relevant to the LIC-DSF in that countries determined to be at moderate and elevated risk of debt distress under the LIC-DSA are required to adopt concrete performance and policy actions (PPAs) to address the drivers of their country-specific debt vulnerabilities.[3, 4]

The implementation of the SDFP has prioritized increasing attention to the disclosure and publication of public debt data. In the first year of the policy's implementation (FY21), 33 countries subject to the Debt Sustainability Enhancement Program produced and published annual debt reports and/or quarterly debt bulletins, 6 strengthened their public investment management regulations, and 10 started to perform annual fiscal risk assessments to inform fiscal policy decisions. In SDFP's second year (FY22), two-thirds of IDA countries had at least one PPA focusing on public debt transparency. Forty-two PPAs on debt transparency included comprehensive publications of public and publicly guaranteed debt data, with about 73 percent focusing on expanding the coverage of debt to SOEs' debt reporting. The SDFP early-stage evaluation, carried out after the first year of SDFP implementation, recommended institutionalizing the requirement for publication through legislative changes, government orders, or decrees (World Bank 2021d).

[1] The Debt Management Performance Assessment covers all public and publicly guaranteed debt, domestic and external. In addition, the subnational Debt Management Performance Assessment and the fiscal risk assessment tools offer tailored diagnostic frameworks for assessing the debt management capacity of local government institutions and the fiscal risks stemming from borrowing by state-owned enterprises.

[2] According to the guidelines, "If data constraints limit coverage of SOE [state-owned enterprise] debt, the DSA [Debt Sustainability Analysis] needs to flag this as an omission and identify steps to enhance the coverage of SOE debt in the next DSA" (IDA and IMF 2017a, 15).

[3] In addition, as per the Sustainable Development Finance Policy implementation guidelines, all countries under the Debt Sustainability Analysis for Market-Access Countries will have performance and policy actions established for the subsequent fiscal year unless the country team requests an exemption by March 31 of each year and management determines based on this request that the country's debt vulnerabilities are limited.

[4] *The International Development Association's Sustainable Development Finance Policy: An Early-Stage Evaluation* concluded that a low risk of debt stress should not be the sole criterion to exempt a country from the requirement to implement performance and policy actions given the speed at which many countries had experienced a significant deterioration of their level of debt stress (World Bank 2021d).

5 | The Impact of Climate Change on Long-Term Growth and Debt Sustainability

Highlights

Just under two-thirds of Debt Sustainability Analyses (DSAs) mentioned climate change or natural disasters as relevant to debt stress over the long term. This share is expected to increase with the introduction of Country Climate and Development Reports as a new core diagnostic, integrating climate change and development considerations.

The implications of climate change and natural disasters on debt sustainability were discussed in DSAs for almost all Small Island Developing States, a group particularly vulnerable to climate change.

Just under two-thirds of the most recent DSAs discussed climate change, as did four of nine case studies. Of 18 Small Island Developing States, 13 included climate change or natural disasters in their baseline assumptions and 15 incorporated climate change or natural disasters in tailored tests.

Climate shocks are increasingly affecting global growth, and the frequency and intensity of climate shocks are expected to increase, including in the form of acute events (such as wildfires, storms, and floods) and chronic ones (such as drought, rising temperatures, and rising sea levels). Climate shocks reduce macroeconomic performance (due to slowed growth from disruption to business activities) and the fiscal costs associated with recovery and reconstruction. Vulnerability to climate change can also increase the cost of government borrowing. Recent IMF analysis suggests that an increase of 10 percentage points in climate change vulnerability is associated with an increase of over 150 basis points in long-term government bond spreads for emerging markets and developing economies (Cevik and Jalles 2021). For these and other reasons, it is imperative that the impact of climate change be taken into account in DSAs.

The impact of climate change on long-term growth and debt prospects was discussed in DSAs for four of nine case studies—Bhutan, the Comoros, Dominica, and Papua New Guinea—to varying degrees, including all cases where the impact of climate change on debt vulnerabilities is particularly prominent.

- Climate change was discussed throughout Dominica's DSA (IMF 2022b), after back-to-back natural disasters in 2015 and 2017, which put public debt on an upward trajectory. The country is establishing resilience funds, and the DSA includes a "catastrophic climate event" scenario, which assumes the reoccurrence of a Category 5 hurricane that impacts real GDP, exports, and revenues similar to those after Hurricane Maria, and a considerable increase in expenditure in rehabilitation, albeit with a slower pace of recovery to account for more binding financing constraints.
- The Comoros's DSA included discussion of 2019 Cyclone Kenneth and how potential growth was revised down to reflect the impact of natural disasters that are increasingly frequent because of climate change; it also discussed incorporating a tailored test (IMF 2021f).

Bhutan's and Papua New Guinea's DSAs had fewer mentions of climate change. Bhutan's DSA simply mentioned how the country could be vulnerable to climate-related shocks, considering how climate-induced changes to glacier-fed rivers and adverse weather patterns could reduce hydropower generation and exports (IMF 2022a). It did not include climate

change in the baseline or a natural disaster tailored test. Similarly, for Papua New Guinea, the DSA mentioned how the country is vulnerable to natural disasters (flooding, landslides, and earthquakes) and the impact of climate change through droughts and sea-level rises (IMF 2022d). It also did not include climate change in baseline projections or a natural disaster tailored test.

Small Island Developing States (SIDS)[1] are considered to be among the most vulnerable to climate change. SIDS typically have less diversified economies and are more reliant on industries that are susceptible to climate change. Climate risks for SIDS include a rise in sea levels, an increase in tropical and extratropical cyclones, rising air and sea surface temperatures, and changing rainfall patterns (CDKN 2014). Higher exposure to disasters translates to lower GDP per capita, higher poverty, and a more volatile stream of fiscal revenue (IMF 2016). On average, the annual cost of disasters for SIDS is 2 percent of GDP, over four times higher than for larger countries. The cost of rising sea levels as a percentage of GDP is highest for SIDS in the Pacific.[2] The expectation was that if climate change was rigorously incorporated into DSAs, it would most likely show up for this group of countries.

Climate change and natural disasters were incorporated into DSAs for all but 1 of 18 SIDS. This compares favorably with the DSAs for all countries, where only 61 percent mentioned climate change or natural disasters, and for case study countries, where 4 of 9 countries discussed climate change. Of the most recent DSAs for 18 SIDS, 17 mentioned climate change or natural disasters in their analysis; only Cabo Verde (September 2020) did not. Of the 18 countries, 13 included climate change and natural disasters in their baseline assumptions,[3] and 15 incorporated climate change and natural disasters in tailored tests.[4] Most DSAs, including Haiti (April 2020), Kiribati (January 2019), Samoa (March 2021), Tonga (February 2021), Tuvalu (August 2021), and Vanuatu (September 2021), assumed that there would be no major climate events or disasters in the medium term and included them in the baseline scenario for the long term, given the likelihood over the long term for disasters, recovery and reconstruction needs, and resilience-building demands. Of the 18 countries with this analysis, 4—Haiti, the Federated States of Micronesia, Samoa, and Tuvalu—used an extended projection period of 20 years, rather than the standard 10 years.

For the most part, DSAs for SIDS include a robust analysis on the impact of climate change on debt sustainability (box 5.1). However, the most recent DSAs for some SIDS include only minimal discussion of climate change. For example, in the DSA for Maldives, climate change and natural disasters receive only a brief mention; the DSA states that the natural disaster tailored test is relevant to Maldives and that the country is susceptible to rising sea levels (IMF 2020b).

Box 5.1. Example Climate Change Analysis in Debt Sustainability Analyses

In the Debt Sustainability Analysis (DSA) for the Comoros (IMF 2021f), staff revised potential growth down by 0.3 percentage points to reflect the likely impact of natural disasters that are becoming more frequent because of climate change.

The Solomon Islands' DSA notes that Emergency Events Database data show that, historically, the largest damage from natural disasters in the Pacific Island countries during 1980–2016 was estimated at 14 percent of GDP. On the basis of this analysis, the natural disaster shock was adjusted to a 14 percent of GDP shock to GDP, associated with reductions in real GDP growth and exports by 2.67 percentage points and 8.12 percentage points, respectively (IMF 2021d).

For Tonga's DSA, Emergency Events Database data show that damage from natural disasters during 1980–2016 was 28.2 percent of GDP. Thus, the DSA assumes a one-off shock of 14 percentage points to the debt-to-GDP ratio in fiscal year 2021, which is lower than the historical average, as infrastructure resilience is continually improving in Tonga and the average effect on natural disasters is already reflected in the growth forecast after fiscal year 2025 under the baseline forecasts. Real GDP growth and exports are lowered by 3 percentage points and 7 percentage points, respectively, in the year of the shock (IMF 2020c).

The DSA for Haiti considers the effects of debt on a one-off major natural disaster, using Hurricane Matthew (which occurred in 2016) as a benchmark. The shock assumes damages of 25 percent of GDP, similar to the impact of Hurricane Matthew. The DSA does not use costs of the 2010 earthquake to benchmark (which cost 120 percent of GDP) because earthquakes are not as statistically frequent as hurricanes (IMF 2019b).

Sources: Independent Evaluation Group; IMF 2019b, 2020c, 2021d, 2021f.

According to the LIC-DSF guidelines, small states vulnerable to natural disasters and LICs that meet frequency criteria (of two disasters every three years) and economic loss criteria (above 5 percent of GDP per year)[5] require a natural disaster tailored shock test. If assumptions about the impact of natural disasters are already embedded in the baseline scenario, DSA users should adjust the default shock parameters. For example, the Solomon Islands is automatically subject to the standard natural disaster shock, and the parameter setting is customized based on national data on natural disasters from the Emergency Events Database. In the DSA for the Federated States of Micronesia, the increasing severity of natural disasters was cited as the reason for a tailored stress test. The DSA noted that the country is highly vulnerable to natural disaster shocks, which would raise the present value of the external debt-to-GDP ratio above the threshold five years earlier than in the baseline and lead to an "explosive debt path" (IMF 2021a, 6).

DSAs for some SIDS treat financing for climate adaptation as both a source of fiscal stress and a necessity to maintain debt sustainability in the long term. In the medium term, the fiscal resources required to finance rehabilitation from recent shocks and resilient infrastructure for the future are projected to widen deficits. However, generally, DSAs suggest that this is a good use of resources, given it will reduce costly damages later. Some illustrative examples are presented below:

» In Vanuatu, the baseline primary deficit is expected to deteriorate as a result of increasing infrastructure spending associated with Tropical Cyclone Harold. However, the DSA results also indicate that building fiscal buffers and enhancing resilience from natural disasters are a precondition for debt sustainability (IMF 2021g).

» In Grenada, long-term growth forecasts incorporate the negative impacts of climate change and the positive impact of adaptation, specifically implementation of the national Disaster Resilience Strategy (IMF 2022c).

» In Tuvalu, a cyclone similar to Tropical Cyclone Pam (in 2015) was projected to hit the island in 2022 and cause damage amounting to 30 percent of GDP. Recovery and rehabilitation programs are projected to take five years and widen the fiscal deficit to 11 percent of GDP in 2031 (compared with a 6 percent of GDP baseline) and add approximately 1 percent to the deficit in

2032–36, but they are imperative for strengthening longer-term resilience (IMF 2021e).

The World Bank has recently introduced Country Climate and Development Reports (CCDRs) as a core diagnostic integrating climate change and development considerations. They were designed to help countries prioritize the most impactful actions that can reduce greenhouse gas emissions and boost adaptation, while delivering on broader development goals. CCDRs build on data and rigorous research and identify pathways to reduce greenhouse gas emissions and climate vulnerabilities, including the costs, challenges, benefits, and opportunities from doing so. They articulate priority actions to support a low-carbon, resilient transition. The first CCDR was published in June 2022, and they are expected to be rolled out to all World Bank countries within four years.

As part of the analysis underlying CCDRs, the World Bank's macroeconomic and fiscal model (MFMod) has incorporated a forecasting instrument that can simulate a range of climate and policy scenarios. Models cover greenhouse gas emissions from five sources and economic damages from climate change derived from the literature. Such damage includes physical damage from extreme weather events and the impacts of higher temperatures and increased rain variability on economic activity (for example, effects on competitiveness of sectors such as tourism, reduced labor and agricultural productivity, and declines in health and labor supply; World Bank 2022). MFMod also incorporates co-benefits from mitigation. These cobenefits include reduced pollution, which results in improved health outcomes, lower health spending, and increased labor productivity and supply, as well as interactions with other country-level externalities, such as those coming from excess informality or the elimination of tax distortions. The standard model includes a basic adaptation module that can be supplemented with country-specific data and estimates. MFMod is particularly beneficial for exploring economic dynamics after economic shocks (for example, natural disasters or material price changes; World Bank 2022).

[1] Cabo Verde, Dominica, Grenada, Haiti, Kiribati, Maldives, the Marshall Islands, the Federated States of Micronesia, Papua New Guinea, Samoa, São Tomé and Príncipe, the Solomon Islands, St. Vincent and the Grenadines, Timor-Leste, Tonga, Tuvalu, and Vanuatu.

[2] The Fifth Assessment Report does not provide data for all small island developing states given that long-term, quality-controlled climate data are sparse in most small island developing states.

[3] Exceptions were Cabo Verde, Maldives, the Federated States of Micronesia, Papua New Guinea, and São Tomé and Príncipe.

[4] Exceptions were Cabo Verde, the Marshall Islands, and Papua New Guinea.

[5] Based on the Emergency Events Database during 1950–2015.

6 | Collaboration of World Bank and International Monetary Fund Staff in Preparing Debt Sustainability Analyses

Highlights

Despite the inherent difficulties in coordinating across institutions, collaboration in preparing Debt Sustainability Analyses (DSAs) between International Monetary Fund (IMF) and World Bank staff was strong. At the same time, almost half of surveyed World Bank country economists had some level of disagreement on underlying assumptions, most often for short- and medium-term macroeconomic forecasts (over which the IMF has the lead responsibility).

Disagreements are to be expected as part of a robust preparation process for a complex, cross-institution analysis, and almost all were resolved at the technical or managerial level. Long-term International Development Association financing projections were periodically contested and needed to be resolved at a managerial level.

More than two-thirds of surveyed World Bank economists indicated that the new DSA clearance procedures either significantly or moderately improved several aspects of the World Bank's participation and inputs into DSAs. However, over half of respondents indicated that the new processes either moderately or significantly slowed DSA processing and approvals within the World Bank. A number of World Bank respondents considered the new processes to be overly bureaucratic, requiring substantial additional time to review a DSA, with negative implications for collaboration with the IMF.

The LIC-DSF guidelines indicate that all LIC-DSAs should be produced jointly by IMF and World Bank staff and submitted to both the IMF and the IDA Executive Boards (IDA and IMF 2017a). Guidelines call on World Bank and IMF staff to build in sufficient time for consultation and review between the two institutions to avoid last-minute disagreements and requests for changes. As part of this process, the teams should hold a preliminary meeting during preparation to discuss the macroeconomic assumptions and coverage of the DSA. Where disagreements cannot be resolved at the technical level, a dispute settlement mechanism has been articulated that requires the involvement of the managements of the two institutions.

> IMF and World Bank staff should coordinate closely in producing DSAs, based on their respective areas of expertise . . . . Bank and Fund country teams should agree on the broad parameters and projections of the DSA, including growth and new borrowing, prior to producing the DSA draft. In the case of large deviations between IMF and World Bank projections, teams are to revert to the dispute resolution mechanism. (IDA and IMF 2017a, 18)

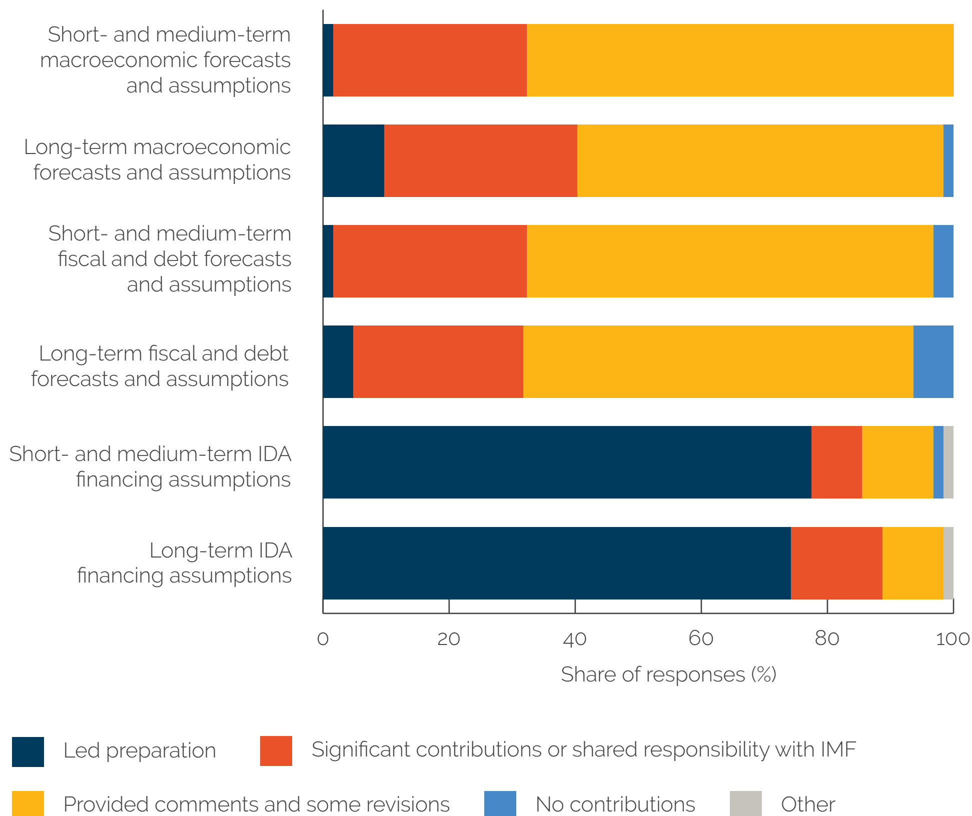
IEG sought to assess the extent to which the de facto role of World Bank staff in the preparation of country-specific LIC-DSAs was consistent with the agreed 2017 guidelines. IEG carried out a survey from June to August 2022 of all current World Bank country economists who participated in the preparation of the most recent LIC-DSAs. Responses were received from economists working on over 85 percent of LIC-DSA countries (see appendix D).

Despite the inherent difficulties in coordinating across institutions, a majority of World Bank respondents considered that cooperation with IMF counterparts in preparation of DSAs was strong. Approximately 90 percent of country economists rated the quality of collaboration between IMF and World Bank staff in the preparation of LIC-DSAs as "very good" or "good." The guidelines indicate that IMF and World Bank teams should begin to jointly prepare a draft DSA and hold a preliminary meeting to discuss the macroeconomic assumptions and coverage of the DSA. This appears to hold in practice in two-thirds of cases: in the survey of World Bank country economists, 65 percent responded "yes" that the World Bank and IMF teams discuss and agree on the LIC-DSA's underlying macroeconomic framework

and assumptions at the pre-mission stage of preparation. Just under a third of respondents considered this to be the case only "somewhat."

In terms of World Bank inputs to the DSA, about one-third of World Bank respondents indicated that they made "significant contributions or had shared responsibility with the IMF" for short-, medium-, and long-term macroeconomic, fiscal, and debt forecasts (figure 6.1). Ten percent of World Bank respondents indicated that they led preparation of the long-term macroeconomic projections, and 5 percent led preparation of the long-term fiscal and debt projections. The majority (about two-thirds) indicated that they "provided comments and some revisions" to these projections. On the other hand, about three-quarters indicated that they had led the preparation of both short- and long-term IDA financing assumptions.

Figure 6.1. Responsibility for LIC-DSA Inputs Reported by World Bank Country Economists



Source: Independent Evaluation Group.

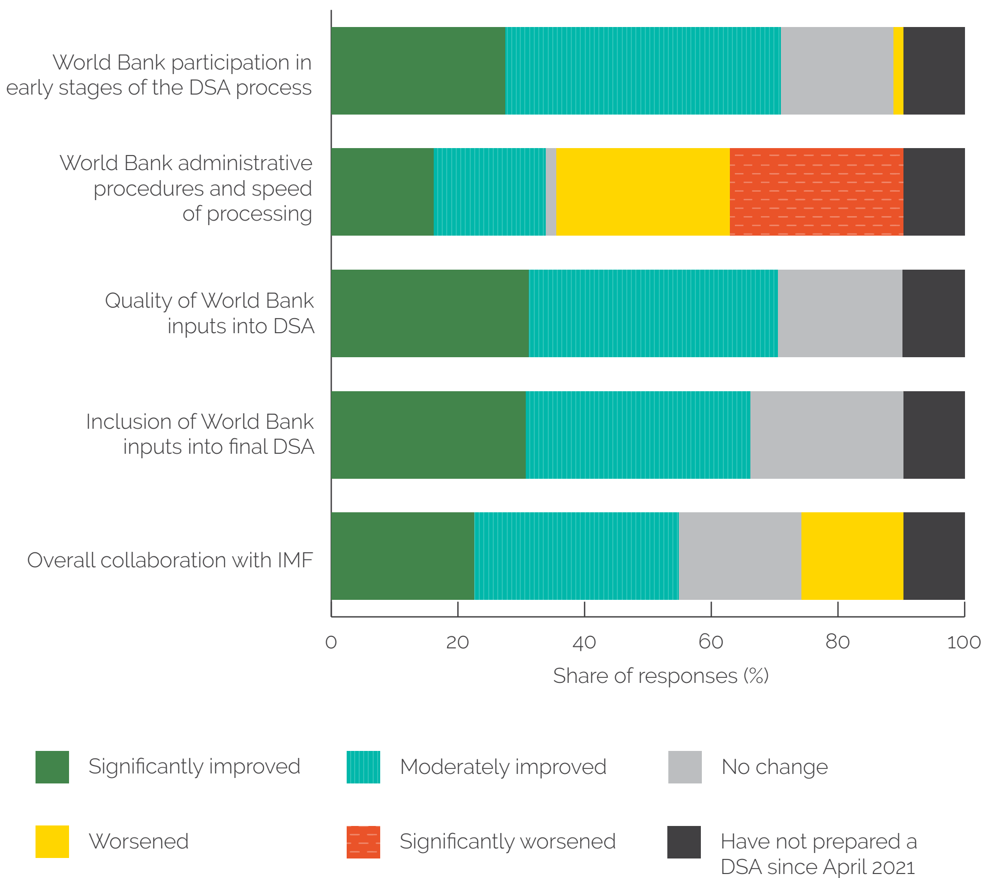
Note: IDA = International Development Association; IMF = International Monetary Fund; LIC-DSA = Low-Income Country Debt Sustainability Analysis.

A large majority of World Bank staff reported no significant disagreements with risk ratings. Some 89 percent of country economists surveyed did not have significant disagreements with the risk ratings assigned to countries, with a further 8 percent disagreeing "somewhat" with the ratings. However, some disagreement over underlying assumptions is an inherent part of a robust process to produce a complex analysis across institutions. Almost half of surveyed World Bank country economists had some level of disagreement with projections and assumptions for key variables. Although few respondents reported "significant disagreements," 40 percent indicated that they had "somewhat" significant disagreements. Of those who disagreed on assumptions or projections, the most frequent disagreements (45 percent) were over (short-, medium-, and long-term) macroeconomic forecasts, followed by 28 percent indicating disagreement over short- and medium-term IDA financing assumptions. In addition, 24 percent of respondents had disagreements with IMF counterparts over short- and medium-term fiscal and debt assumptions, whereas 17 percent had disagreements over long-term fiscal and debt assumptions. Almost all disagreements were resolved at the technical level (76 percent of respondents) or managerial level (10 percent). Only 7 percent went to the director level or above. In one-third of case studies, there was at least one issue related to an assumption that was resolved at the managerial level. For two of the cases, the issue was related to macroeconomic forecasts, and for another, it was with respect to IDA financing assumptions.

Respondents from the World Bank reported that, while the changes introduced in the World Bank's internal processes for DSA review and clearance in April 2021 (see chapter 2) had improved several aspects of World Bank participation in the DSA process, the new procedures had slowed DSA preparation and were administratively burdensome, negatively affecting collaboration with the IMF. The survey was carried out from June 30 to August 18, 2022, with 78 percent of responses discussing DSAs processed in FY22, which was the first year of the new ADM's implementation when the new processes were first being implemented. More than two-thirds of surveyed World Bank economists indicated that the new ADM either significantly or moderately improved several aspects of World Bank participation in the DSA, including World Bank participation in the early stages of the DSA process, the quality of World Bank inputs into the DSA, and inclusion of World Bank inputs into

the final DSA (figure 6.2). However, just over half (55 percent) of respondents indicated that the new processes either significantly or moderately worsened World Bank administrative procedures and the speed of processing. Some concern was also expressed that the new internal processes had had a negative impact on collaboration with the IMF: whereas 55 percent found that the new ADM significantly or moderately improved collaboration with the IMF, 16 percent signaled that it had worsened it.

Figure 6.2. World Bank Economist Views on Impact of April 2021 Debt Sustainability Analysis Review Processes



Source: Independent Evaluation Group.

Note: DSA = Debt Sustainability Analysis; IMF = International Monetary Fund.

The question on the updated ADM received more written comments from World Bank economists than any other question on the survey (about one-third of respondents included written comments). There were a few positive

views; for example, "the new ADM procedures have gradually improved our IMF colleagues' estimation of the World Bank to junior partner from procedural annoyance (if not outright obstacle)" or simply "improved the quality of DSAs." However, more than half of the written responses reflected frustration with overly bureaucratic procedures and the substantial time required under the new ADM to process and review a DSA, negatively impacting interactions with the IMF. Some comments noted that the new World Bank processes were not well aligned with IMF preparation schedules and clearance processes, creating additional frustration for both sides, and that there was a need for a more concerted effort to communicate and coordinate World Bank and IMF clearance processes. Similar results were reflected in case study interviews. Of the nine case study countries, seven described the new ADM as a significant administrative burden, often straining relations with the IMF. However, most economists who were interviewed agreed that it had improved the World Bank's quality of inputs and participation in the process.

7 | How the Low-Income Country Debt Sustainability Framework Informs World Bank Corporate and Operational Decisions

Highlights

The World Bank's country-level operational priorities appear to be clearly influenced by the level of debt distress as determined by the Low-Income Country Debt Sustainability Framework. Risk of debt distress plays a key role in determining the grant allocation framework and participation in the Debt Sustainability Enhancement Program of the Sustainable Development Finance Policy (SDFP). Attention to debt vulnerabilities in World Bank–supported strategies (as reflected in Country Partnership Frameworks) increased for countries assessed at higher levels of debt stress.

Development policy operations (DPOs) for countries at higher risk of debt distress had a higher share of fiscal and debt-related prior actions. However, the share of fiscal and debt-related prior actions has decreased more recently, despite a worsening in countries' debt risk ratings.

DPO–supported reforms and the majority of SDFP and performance and policy actions (PPAs) addressed debt vulnerabilities raised in Debt Sustainability Analyses (DSAs). However, some PPAs on debt transparency were included even when the DSA did not point to problems with debt coverage or reporting shortcomings. As a result, PPAs were underused to address higher priority drivers of debt stress and vulnerability identified in DSAs.

When nonconcessional borrowing was identified as a significant driver of debt stress in the DSA, there were generally subsequent

PPAs requiring implementation of a nonconcessional borrowing ceiling. However, this was also sometimes the case when non-concessional borrowing was not identified in DSAs as a significant driver of debt stress. This suggests that the identification of risks and debt drivers in DSAs was frequently not the major determinant of operational follow-up to country-level debt stress through the SDFP (and DPO prior actions).

A majority of country authorities surveyed for this evaluation believe that DSAs could better assess climate change and its impact on long-term growth in their countries.

This section assesses how the LIC-DSF informs World Bank corporate and operational decisions and priorities. LIC-DSAs influence the IDA grant allocation framework for performance-based allocations (PBAs) and affect country access to IDA special financing windows and participation in the Debt Sustainability Enhancement Program of the SDFP. At the level of country operations, DSAs are expected to inform the content and priorities of World Bank–supported country strategies (Country Partnership Frameworks; CPFs) and decisions on the composition of IDA lending and nonlending support to client countries, including for development policy financing and DMF support. The following section assesses how the LIC-DSA informs World Bank operations at these various levels.

International Development Association Grant Allocation Framework

Debt risk ratings produced by the LIC-DSF play a critical role in determining IDA resource allocations for individual countries, particularly in determining the availability of grants. The size of a country's PBA is marginally influenced by the LIC-DSF risk rating. The rating for the risk of debt stress informs the debt policy and management score of the CPIA (which determines a country's PBA). However, on its own, it is only a minor aspect of the PBA formula.

Of greater significance is how the risk of external debt distress assessed by the LIC-DSF determines the provision of grants to IDA-only countries. Debt distress risk ratings are translated into "traffic lights," which in turn determine the share of IDA grants and more concessional credits for each country. In IDA19, countries at high risk of or in debt distress (red light) receive 100 percent grants, those at medium risk of debt distress (yellow light) receive 50 percent of their allocation in the form of grants and 50 percent as concessional credits, and countries at low risk of debt distress (green light) receive only concessional credits (that is, no grants).

Recent increases in the share of IDA-eligible countries at high risk of debt distress have important implications for IDA resource requirements. With the share of countries at high risk of debt stress having increased from 24 percent in 2013 to 51 percent in 2019 and 57 percent as of June 2022, this increases the share of IDA financing that is not repaid under IDA19. To con-

tain this, under IDA20, harder financing terms were introduced starting July 2022 to enable IDA to prioritize grants to countries at the highest risk of debt distress (figure 7.1). IDA-only countries at low risk of debt distress (green light) continue to receive concessional resources mostly on regular credit terms (38-year credits with a 6-year grace period with a grant element of 53 percent), along with a small portion in shorter-maturity loans that are 12-year credits with a 6-year grace period (with a grant element of 35 percent). IDA-only countries at moderate risk of debt distress (yellow light) receive 50-year credits (with a grant element of 73 percent) and a small portion in shorter-maturity loans. IDA-only countries at high risk of debt distress (red light) continue to receive IDA allocations fully on grant terms, with a ceiling of $1 billion per fiscal year per country (IDA 2022). Shorter-maturity loans are expected to account for no more than 14 percent of IDA20 country allocations, with the share higher for IDA-only green light countries and gap and blend countries.

Access to IDA resources through IDA special windows is also affected by a country's risk of debt distress under the LIC-DSF. Access to the Fragility, Conflict, and Violence Envelope is on the same financing terms as a country's PBA. Financing terms for the Window for Host Communities and Refugees (WHR) are also determined by risk of debt distress. The WHR provides 100 percent grant financing for LIC-DSF countries at high risk of debt distress. Eligible IDA-only countries at moderate risk of debt distress receive 50 percent of WHR financing as grants and 50 percent as 50-year concessional credits. Those at low risk, and gap and blend countries at moderate risk, receive 50 percent of WHR financing as IDA grants and 50 percent as IDA concessional credits. Access to the IDA Scale-Up Facility is available only to countries at low or moderate risk of external debt distress.

Figure 7.1. Overview of IDA20 Financing Terms

Lending group	Risk of external debt distress	Financing terms[a]: Non-small states	Financing terms[a]: Small states
IDA-only countries	High risk or in debt distress	• Grants	• Grants
IDA-only countries	Moderate risk	• 50-year credits (new) • 12-year concessional SMLs	• Half grants and half 40-year credits (small economy) • 12-year concessional SMLs
IDA-only countries	Low risk	• 38-year credits (regular) • 12-year concessional SMLs	• 40-year credits (small economy) • 12-year concessional SMLs
Gap countries Blend countries		• 30-year credits (blend) • 12-year concessional SMLs	• 40-year credits (small economy) • 12-year concessional SMLs[b]

Source: IDA 2022.

Note: a. Some of the financing terms are adjusted under IDA windows. This includes the following: (i) softer terms for most country lending groups under the Window for Host Communities and Refugees, (ii) flexibility to adjust terms in case of natural disasters under the Crisis Response Window, (iii) provisions to offer credits and grants to regional organizations under the Regional Window, (iv) credits at the International Bank for Reconstruction and Development terms and SMLs under the Scale-Up Window, and (v) the International Finance Corporation and the Multilateral Investment Guarantee Agency financing terms under the Private Sector Window.
b. Except for red light small states.
IDA = International Development Association; IDA20 = 20th Replenishment of IDA; SML = shorter-maturity loan.

The LIC-DSF risk rating therefore has a substantial impact on the terms of financing available to countries. For example, in their 2020 DSAs, Rwanda and Senegal both had an increase in their risk of debt stress from low to moderate. As a result, under IDA19, their financing terms changed from full credit to half grant and half credit from FY20. For Tajikistan, the risk of debt distress improved from high to low between FY14 and FY16 before rising to moderate in FY17 and high in FY19. The Completion and Learning Review for Tajikistan's Country Partnership Strategy for FY15–18 noted that the changes "affected the [g]overnment's borrowing decisions, which, in turn, had an impact on project delivery and implementation. Several non-revenue-generating projects were dropped or delayed as the [g]overnment was reluctant to borrow to fund these activities" (World Bank 2019, 61).

Did Debt Sustainability Analyses Inform Country Partnership Frameworks?

World Bank CPFs lay out the main development objectives that the Bank Group seeks to help a country achieve and propose a set of interventions to help achieve the objectives. CPF objectives reflect government priorities, main constraints identified through a Systematic Country Diagnostic, and the Bank Group's comparative advantage. For countries where debt distress is increasing, CPFs would be expected to prioritize efforts to help contain the drivers of debt distress given the implications of debt stress for access to financing and the availability of budget resources to support development needs. Using the case studies, this section assesses the extent to which vulnerabilities explicitly identified in DSAs have informed CPF content and priorities (appendix F).

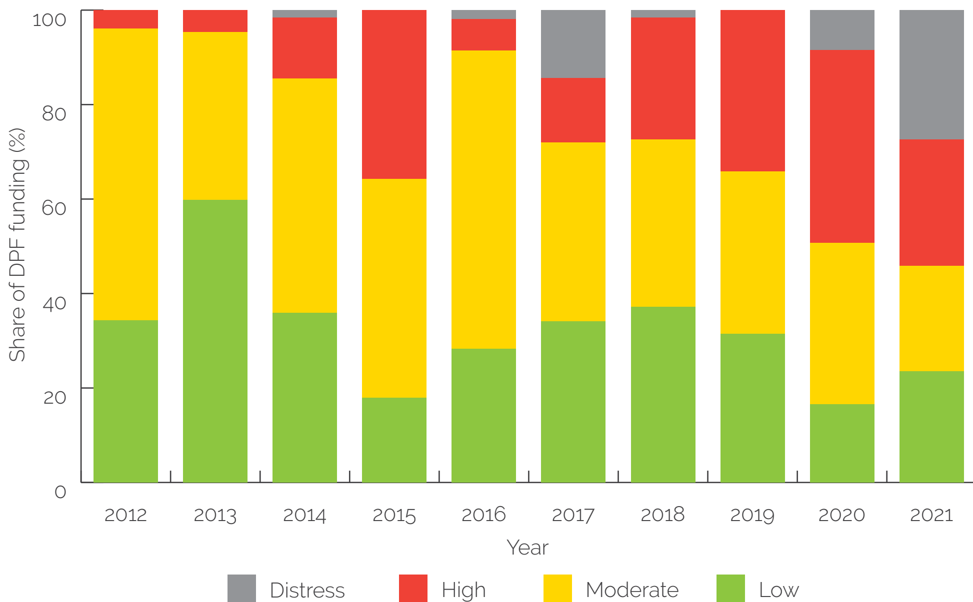
All but one of the nine case study countries (Nicaragua) had an objective that directly targeted reducing debt vulnerabilities explicitly discussed in DSAs (see tables F.1 and F.2).[1] The Bank Group strategy of support to Dominica is embodied in the regional partnership framework, which contains an objective to improve fiscal, debt, and public financial management. All but two CPFs (Dominica and Nicaragua) sought to improve domestic resource mobilization or revenue administration. Various aspects of public financial management and debt management were often addressed in CPFs, appearing

in six of nine case studies. Strengthening SOE governance and addressing contingent liabilities was a feature of at least four CPFs.

Did Debt Sustainability Analyses Inform the Content of Development Policy Financing Prior Actions and Areas for Reform?

This evaluation also assessed the extent to which the LIC-DSA influenced the prior actions in development policy operations (DPOs) for countries found to be at higher levels of debt stress.[2] Across IDA-eligible countries, the share of development policy financing lending to countries at high risk of debt distress and in debt distress has been increasing gradually, reflecting in part how the overall share of IDA countries in this category has also been increasing (figure 7.2). Between 2012 and 2017, the average share of development policy financing to countries with high risk or in debt distress risk ratings was 14 percent and reached 54 percent in 2021. The share of IDA countries at high risk of or in debt distress increased from 30 percent to 58 percent between 2012 and 2021.

Figure 7.2. Share of Development Policy Financing Funding Committed to IDA-Eligible Countries by External Debt Distress Rating

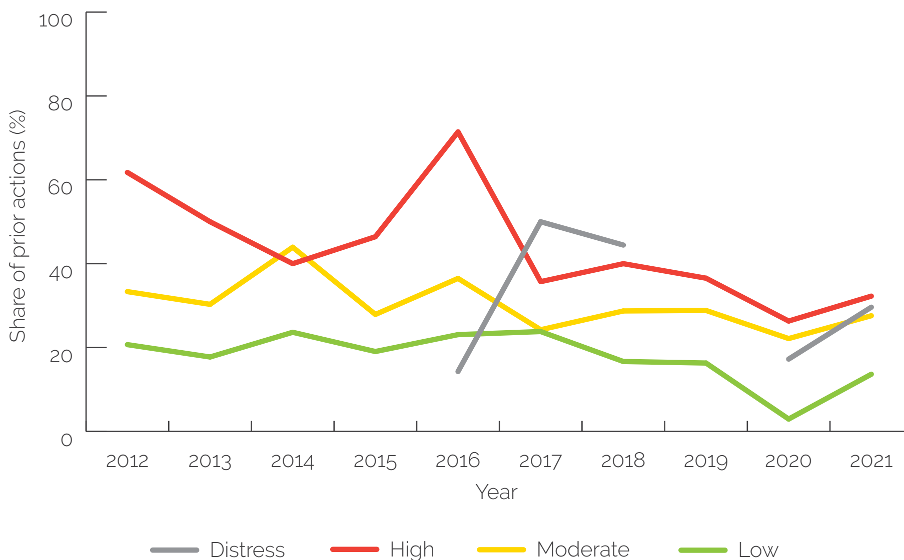


Source: Independent Evaluation Group.

Note: DPF = development policy financing; IDA = International Development Association.

Countries at higher risk of debt distress had a higher share of fiscal and debt-related prior actions in their budget support operations, but this share has declined over time, particularly for countries at high risk of debt distress.[3] Over time and across IDA-eligible countries, approximately 30 percent of all prior actions focused on fiscal and debt reforms. Countries at high risk of debt distress had a higher share of fiscal and debt-related prior actions (figure 7.3). Some 38 percent of prior actions in countries at high risk of debt distress were fiscal and debt reforms, whereas for those at moderate risk, the figure was 30 percent, and 18 percent for those at low risk. For the relatively few DPOs approved for countries in debt distress, the share of fiscal and debt-related prior actions was 29 percent.[4] Although the number of DPOs with at least three fiscal or debt-related prior actions has increased since 2019, they have declined as a share of DPOs (figure 7.4).[5] The median number of fiscal or debt-related prior actions per DPO approved each FY decreased from 2 from 2012 to 2019 (except 2014 at 3) to 1 in 2020 and 2021. The mean number of fiscal or debt-related prior actions decreased from a peak of 3.0 in 2014, before falling to 2.1 in 2015, then rising steadily to 2.5 in 2018, declining to 2.1 in 2019 and falling to 1.5 for operations approved during COVID-19.

Figure 7.3. Share of Fiscal and Debt-Related Prior Actions for LIC-DSA Countries by Risk of Debt Distress



Source: Independent Evaluation Group.

Note: LIC-DSA = Low-Income Country Debt Sustainability Analysis.

Figure 7.4. Development Policy Operations with and without Fiscal or Debt-Related Prior Actions for LIC-DSA Countries

Source: Independent Evaluation Group.

Note: DPO = development policy operation; LIC-DSA = Low-Income Country Debt Sustainability Analysis.

Among fiscal and debt-related prior actions, expenditure management and domestic revenue administration reforms represented the largest share. From 2018 to 2021, expenditure management prior actions made up 26 percent of all prior actions, domestic revenue administration 25 percent, debt management 14 percent, and tax policy 13 percent. Across risk rating levels, countries at low risk of debt distress have fewer fiscal and debt-related prior actions. In FY21, about 25 SDFP PPAs were included in development policy financing, largely related to debt management, accounting for more than one-third of fiscal and debt-related prior actions in that year.

Six of the nine case study countries had DPOs approved during the evaluation period.[6] Prior actions in these DPOs addressed the drivers of debt vulnerabilities identified in DSAs to varying degrees, although all the DPOs had at least one prior action that could be linked to a driver of debt vulnerabilities discussed in DSAs (see appendixes F and G for further details). Prior actions included fiscal and debt management, public financial management, procurement, domestic resource mobilization, debt and SOE transparency, and public investment management. Similar to the SDFP, some debt transparency prior actions did not address a problem or debt driver identified in DSAs. See appendix F for further elaboration of prior actions that addressed debt vulnerabilities.

Sustainable Development Finance Policy

A major way in which the LIC-DSF feeds into operations is through the SDFP. Amid rising debt distress among IDA-eligible countries, the deputies for IDA19 requested options for expanding and adapting IDA's allocation and financing policies to better support countries' development agendas while incentivizing actions that could reduce the risks of debt distress. The result was the SDFP, which replaced IDA's Non-Concessional Borrowing Policy and was intended to create incentives for countries to implement policies and actions to enhance the transparency and sustainability of borrowing and investment practices.

IDA-eligible countries rated at moderate risk or higher for external debt distress under the LIC-DSF are required to implement PPAs each year. If countries do not successfully implement the PPAs, a portion of the country's IDA allocation may be "set aside" until successful completion.[7] The LIC-DSF debt stress rating also determines the size of the set-aside of the country's IDA allocation. For countries at high risk of, or experiencing, external debt distress, the set-aside is 20 percent of the country's annual country allocation, whereas it is 10 percent for countries at moderate risk of external debt distress (for countries using the Debt Sustainability Analysis for Market-Access Countries, the set-aside is 10 percent).[8]

With assessed debt risk levels rising among IDA countries, the number of countries undertaking PPAs has also risen. In the first year of the SDFP, 55 countries undertook PPAs, whereas in FY22, the number increased to 57. In FY21, 51 countries satisfactorily implemented PPAs, with 4 countries subject to set-asides until satisfactory completion (the Comoros, Djibouti, Maldives, and Pakistan). Over FY22, 51 countries satisfactorily implemented PPAs; 5 countries faced a set-aside of a portion of their IDA allocation.

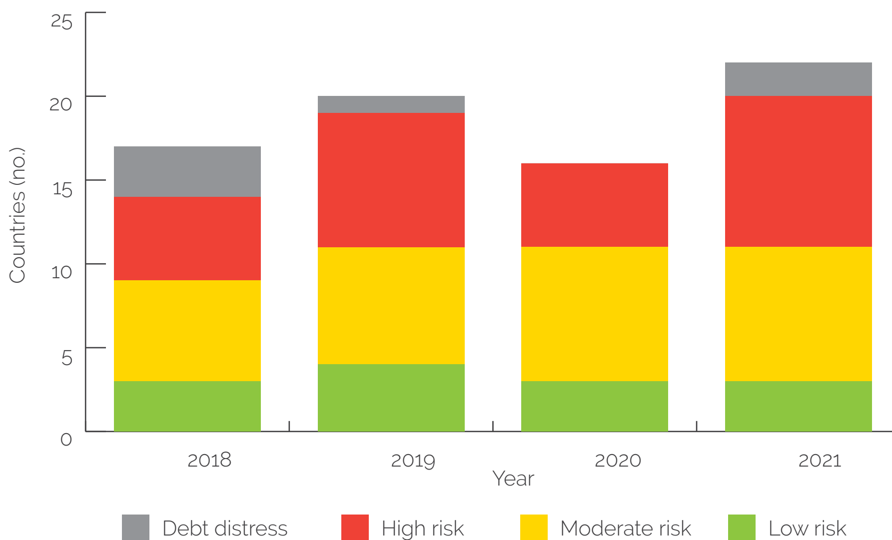
Most SDFP PPAs in case study countries directly addressed debt vulnerabilities explicitly identified in DSAs. Countries for which PPAs addressed the main drivers of debt distress identified in DSAs included the Comoros, the Democratic Republic of Congo, Ghana, Nicaragua, Papua New Guinea, and Sierra Leone (see appendixes F and G for further details). Several PPAs for Bhutan, Dominica, and Zambia focused on issues (mostly aspects of debt transparency and nonconcessional borrowing ceilings) that had not been

identified as a problem or a major driver of debt distress in DSAs. Several PPAs repeated DPO prior actions, drawing into question their value added in addressing problems or the drivers of debt distress. The 2021 early-stage evaluation of the SDFP found that about one-third of PPAs had limited additionality or value added and may have crowded out more critical reforms (World Bank 2021d).

Support through the Debt Management Facility

The DMF is a multidonor trust fund that was established in 2008 and that provides technical assistance to more than 85 countries to strengthen debt management capacity, processes, and institutions.[9] The DMF has been managed jointly with the IMF since 2014 and has implementing partners around the world. The DMF funds technical assistance, including training, advisory services, and peer-to-peer learning in the area of debt management. IDA-eligible countries benefit from DMF-funded support regardless of level of debt distress (figure 7.5). That said, there has recently been a significant increase in DMF support to countries at high risk of or in debt distress.

Figure 7.5. Countries Receiving Debt Management Facility–Funded Technical Assistance, by Debt Distress Risk Rating, 2018–21



Source: Debt Management Facility annual reports.

Client Country Views on the Low-Income Country Debt Sustainability Framework

Surveys indicated that country authorities broadly agreed with projections in DSAs and DSA assessments of country risk of debt distress. Between August and September 2022, IEG carried out a survey of the debt management units of ministries of finance in all LIC-DSF countries. Nineteen countries responded—a response rate of about 25 percent (see appendix E for survey results).

Most country authorities reported being directly involved in discussions of the long-term projections of growth and fiscal variables that feed into the DSA prepared by World Bank and IMF staff. Just under two-thirds of respondents indicated that they had been involved (58 percent) or somewhat involved (11 percent) in these discussions. Of the respondents, 53 percent were in agreement with the projections and 24 percent were somewhat in agreement. For those who indicated that they were fully involved, 82 percent indicated full agreement with the projections, with the remainder indicating that they were somewhat in agreement. Surveyed country authorities found the most recent DSA prepared by IMF and World Bank staff to be reflective (76 percent) or somewhat reflective (12 percent) of the current debt risk situation in their countries.

Survey results indicated room to improve the extent to which DSAs reflected the impact of climate change on long-term growth. Over half of country authorities were not comfortable with the degree to which climate change and its impact on long-term growth in their countries were reflected in the most recent DSA.

The majority of respondents were comfortable or somewhat comfortable with the degree to which public and private investment and its impact on growth was reflected in the DSA (32 percent were fully comfortable, 53 percent were somewhat comfortable, and 16 percent were not comfortable). Most respondents were comfortable with the degree to which long-term concessional finance for their country was reflected in the DSA (58 percent were fully comfortable, 26 percent were somewhat comfortable, and 16 percent were not comfortable).

[1] Nicaragua's fiscal year 2018–22 Country Partnership Framework included two objectives, which touched on debt vulnerability, but only indirectly, including one on improved data availability and public sector management capacity. Another objective targeted improved resilience to macroeconomic volatility, with an indicative pipeline targeting geothermal resource risk mitigation, a disaster risk management project, and potential advisory services and analytics on macroeconomic volatility and budget risks. Nonetheless, new World Bank lending to Nicaragua was restricted from 2018 after various countries placed sanctions on the government.

[2] This analysis was informed by *Development Policy Financing Retrospective 2021: Facing Crisis, Fostering Recovery* (World Bank 2021c).

[3] Prior actions are classified as fiscal and debt sustainability if they are associated with the following theme codes in the development policy financing prior action database: fiscal sustainability, public expenditure policy, debt policy, tax policy, subnational fiscal policies, public expenditure management, domestic revenue administration, debt management, public assets and investment management, and state-owned enterprise reform and privatization.

[4] Fifteen development policy operations (DPOs) were approved for seven countries in debt distress between 2014 and 2021: Chad, The Gambia, Grenada (seven DPOs, including one catastrophe deferred drawdown option), Mozambique, São Tomé and Príncipe (two DPOs), Somalia (two DPOs), and Sudan.

[5] Although the share of fiscal prior actions has decreased, attention in development policy financing operations to other reform areas (notably, environmental and resource management, human development and gender, and urban and rural development) has increased.

[6] No DPOs were approved for Ghana, Nicaragua, or Zambia during the evaluation period.

[7] The country can recover the set-aside if it satisfactorily implements the missed performance and policy action(s) the following fiscal year; if not, the set-aside will become a discount.

[8] The influence of the Sustainable Development Finance Policy has also been leveraged by other multilateral development banks adopting similar policies. Both the African Development Bank and the Asian Development Bank have adopted a form of the Sustainable Development Finance Policy.

[9] See https://www.dmfacility.org.

8 | Findings and Recommendations

The reforms to the LIC-DSF introduced in 2017 have been implemented as planned. There has been an increased use of country-specific stress tests covering market financing, natural disasters, commodity price volatility, and contingent liabilities. Application of judgment has followed agreed guidelines. The introduction of realism tools helped moderate the degree of optimism in medium-term growth projections underpinning DSAs.

The realism of long-term projections in DSAs was not routinely assessed. Realism tools were applied almost exclusively to medium-term projections, with the exception of one tool showing 10-year debt forecasts across various DSA vintages. At the same time, there has been some minor reduction in the optimism of long-term growth forecasts in recent years. On the other hand, long-term forecasts of primary balances showed increased optimism compared with historical averages. Case studies indicated a tendency for DSAs, since the implementation of the reforms in 2017, to have long-term growth assumptions more in line with historical averages but more optimistic primary balance forecasts.

Although the 2017 LIC-DSF guidelines assign the lead to the World Bank in producing long-term growth projections, there is significant variation from country to country in the extent and form of the World Bank's contribution to long-term projections. Only 10 percent of World Bank economists who were surveyed reported leading work in this area, and another 30 percent reported having significant or shared responsibility with the IMF.

There has been an increase in attention to the implications of climate change for debt sustainability in DSAs, particularly for the most vulnerable economies. About 60 percent of all DSAs discuss climate change or natural disasters. For a subset of countries particularly vulnerable to climate shocks—Small Island Developing States (SIDS)—climate change considerations were incorporated in 13 of 18 baseline projections and in 15 of 18 tailored stress tests. Climate change was discussed in four of nine case study countries, but it was incorporated only in long-term growth assumptions for

two countries. Country clients have expressed a desire to see greater attention to climate change impacts on long-term growth in DSAs.

Since the 2017 LIC-DSF reform, discussion of debt data coverage in the DSA has improved, and shortcomings are mentioned, including with respect to contingent liabilities and the activities of SOEs. However, DSAs do not regularly discuss data quality and do not consistently articulate concrete plans to address shortcomings in debt data coverage. There may be scope for DSAs to draw more directly on diagnostic tools such as the DeMPA in assessing the adequacy of debt reporting and recording and of related dimensions of debt management (for example, cash management and control of guarantee issuance).

Until recently, World Bank staff preparing DSAs did not consistently draw on the data contained in the World Bank–managed DRS or seek the views of the DRS unit on DSAs. DRS data, although having their own limitations, nevertheless form a valuable debt data resource, and compliance is legally required of World Bank borrowers. It was only in April 2021 that a formal requirement was introduced to have the staff overseeing the DRS comment on data quality and coverage in DSAs. Efforts to systematically draw on the data in the DRS and the expertise of the DRS unit in DSA preparation have helped improve the awareness of potential gaps in data coverage and should be sustained if not enhanced.

There is close collaboration between World Bank and IMF staff working on DSAs, although recent changes to World Bank internal clearance processes have slowed processing times, which (as World Bank staff have reported) stressed the relationship with the IMF. A majority of World Bank economists working on DSAs rated World Bank–IMF collaboration in the preparation of DSAs as "good" or "very good." There were some differences of opinion between World Bank and IMF staff on assumptions in DSAs, which is to be expected as part of a robust process for an inherently complex analysis prepared across institutions, and almost all of these differences of opinion were resolved at the technical or managerial level. World Bank economists reported that the World Bank's recent ADM, which formalized World Bank clearance and approval processes for DSAs, had strengthened the internal LIC-DSA preparation process and improved internal contestability and the

quality of the World Bank's inputs. However, they also indicated that the new ADM processes had created delays, stressed the relationship with the IMF, and made the World Bank less agile in reviewing and clearing DSAs. Although the World Bank's stronger engagement in LIC-DSA preparation is positive, it is important to ensure that clearance processes do not make the World Bank less agile in supporting DSA production.

For the most part, World Bank operational priorities are appropriately influenced by the level of debt distress as determined by the LIC-DSF. This is reflected, for example, in the extent to which DPOs for countries at higher risk of debt distress have a higher share of fiscal and debt-related prior actions. However, the share of fiscal and debt-related prior actions has decreased since 2017, despite a worsening in country risk ratings. At the same time, fiscal and debt-related prior actions and SDFP PPAs often prioritize the major drivers of debt stress or reporting risks, but this is not always the case. Case studies indicate that DSAs regularly informed DPO reforms and the majority of SDFP PPAs. However, some SDFP PPAs targeted debt issues that had not been identified as problematic in DSAs.

Based on the above findings, there is scope to strengthen the World Bank's contributions to the DSA and the extent to which the results of LIC-DSAs inform World Bank corporate and operational decisions:

1. Expectations of the World Bank in taking the lead on long-term growth prospects should be clarified. Given the World Bank's development mandate, current guidance is appropriate but comes with the expectation that the World Bank systematically take the lead in highlighting the country-specific factors that influence long-term growth, which is not currently the case. To do this effectively, the World Bank will need to strengthen its capacity to systematically identify country-specific determinants of long-term growth and fiscal prospects in DSAs. These should be more explicitly identified in DSAs and used to inform realism tools and stress tests, the horizon for which should be extended into the long term. Integrating long-term considerations into DSA projections will require enhanced awareness and use of tools to analyze long-term prospects.

2. The recently increased attention to debt data coverage should be sustained and extended; greater attention is needed to assess data

quality. Although DSAs routinely include a clear and up-front assessment of the coverage of the data on which DSAs are based, they do not always articulate concrete plans (if any) to address specific data shortcomings, particularly with respect to SOEs and associated contingent liabilities. The LIC-DSF guidelines do not explicitly require an assessment in the DSA of data quality, including with respect to requirements for timeliness of reporting and accuracy and identification of data sources. Strengthening these aspects of DSAs would bolster country incentives for timely, accurate, and comprehensive reporting of debt data and help channel technical assistance to entities within countries responsible for debt reporting. The World Bank's stewardship of the DRS and its management of the DeMPA suggest that it has the comparative advantage among development partners to lead on this issue and can draw on its convening power to work with other partners to foster stronger debt data quality and coverage.

3. The DSA should be more directly and consistently used to inform priorities for the identification of fiscally oriented prior actions in DPOs and SDFP PPAs. Drawing on the drivers of indebtedness and sources of risk identified therein, the DSA should be considered a core diagnostic that is routinely updated and systematically used to inform the articulation of priorities for Bank Group–supported strategies and operations (including prior actions in relevant DPOs and PPAs under the SDFP).

4. The World Bank should continue to give increasing attention in the LIC-DSF to the long-term implications of climate change, in terms of both growth and fiscal requirements of adaptation and mitigation. The emergence of the CCDRs is a positive development, and efforts will be needed to ensure that the analysis they contain is adequately and systematically integrated into DSAs, with more forward-looking assessments of vulnerability to climate change for both the medium and long term. As part of this, the World Bank should consider extending the forecast horizon for DSAs to 20 years, at least for countries most vulnerable to climate change, to enable the incorporation of both medium- and longer-term impacts of climate change.

The upcoming joint World Bank–IMF review of the LIC-DSF offers several opportunities for strengthening the LIC-DSF more broadly. Among issues

that could be considered in the context of the joint review, this evaluation points to the following:

1. Although the World Bank has recently strengthened its participation in the LIC-DSF, the joint review provides an opportunity to review preparation and approval procedures to ensure that DSAs are produced on a timely basis.

2. Given the changes to IDA20 financing arrangements, how best to incorporate financing assumptions in DSAs should be reviewed.

3. The review could consider how to strengthen the use of realism tools for longer-term assumptions. In particular, the upcoming review offers the opportunity to assess how climate change impacts on long-term growth and finances can be better incorporated into the LIC-DSF, including with more forward-looking assessments of vulnerability to climate change.

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APPENDIXES

Independent Evaluation Group

The World Bank's Role in and Use of the Low-Income Country Debt Sustainability Framework

Appendix A. Methodological Annex

Review of the Most Recent Debt Sustainability Analyses

This evaluation reviewed the most recent publicly available Low-Income Country Debt Sustainability Analyses that were on the International Monetary Fund or World Bank website through June 2022 as follows:

Afghanistan (May 2021), Bangladesh (February 2022), Benin (December 2020), Bhutan (April 2022), Burkina Faso (October 2020), Cabo Verde (September 2020), Cambodia (November 2021), Cameroon (February 2022), the Central African Republic (December 2020), Chad (November 2021), the Comoros (October 2021), Côte d'Ivoire (June 2021), the Democratic Republic of Congo (February 2021), Djibouti (April 2020), Dominica (January 2022), Ethiopia (April 2020), The Gambia (November 2021), Ghana (July 2021), Grenada (April 2022), Guinea (June 2021), Guinea-Bissau (July 2021), Guyana (July 2019), Haiti (December 2019), Honduras (August 2021), Kenya (December 2021), Kiribati (December 2018), the Kyrgyz Republic (May 2021), the Lao People's Democratic Republic (July 2019), Lesotho (May 2022), Liberia (December 2020), Madagascar (February 2022), Malawi (November 2021), Maldives (April 2020), Mali (February 2021), the Marshall Islands (May 2021), Mauritania (August 2020), the Federated States of Micronesia (October 2021), Moldova (December 2021), Mozambique (April 2020), Myanmar (December 2020), Nepal (December 2021), Nicaragua (November 2020), Niger (November 2021), Papua New Guinea (December 2021), the Republic of Congo (January 2022), Rwanda (December 2021), Samoa (March 2021), São Tomé and Príncipe (March 2022), Senegal (December 2021), Sierra Leone (July 2021), the Solomon Islands (December 2021), Somalia (November 2020), South Sudan (October 2021), St. Vincent and the Grenadines (July 2021), Sudan (June 2021), Tajikistan (January 2022), Tanzania (August 2021), Timor-Leste (June 2021), Togo (March 2020), Tonga (December 2020), Tuvalu (July 2021), Uganda (February 2022), Uzbekistan (April 2021), Vanuatu (August 2021), Zambia (July 2019), and Zimbabwe (March 2022).

Panel Data Set

The panel data set was based on Debt Sustainability Analyses from the 66 countries included in the Low-Income Country Debt Sustainability Framework (LIC-DSF) over the three time periods: 2015–17, before the LIC-DSF reforms were implemented; 2018–19, after the LIC-DSF reforms were implemented but before the COVID-19 outbreak; and 2020–22, after the COVID-19 pandemic had started. See tables A.1 and A.2 for a description of LIC-DSF availability by country. The three time periods enabled analysis of how country assessments have changed after the LIC-DSF 2017 reform and also after the start of the COVID-19 pandemic. Because not all countries had Debt Sustainability Analyses available for all three periods, the panel data set was limited to the 52 countries for which Debt Sustainability Analyses were available for all three periods. Data was collected from publicly available Low-Income Country Debt Sustainability Analysis PDF files and Excel templates (when available).

Table A.1. Low-Income Country Debt Sustainability Framework by Country

Country	2015-17	2018-19	2020-22	Total
Afghanistan	1	1	1	3
Bangladesh	1	1	1	3
Benin	1	1	1	3
Bhutan	1		1	2
Burkina Faso	1	1	1	3
Cabo Verde	1	1	1	3
Cambodia	1	1	1	3
Cameroon	1	1	1	3
Central African Republic	1	1	1	3
Chad	1	1	1	3
Comoros	1	1	1	3
Congo, DR	1	1	1	3
Congo, Republic of	1	1	1	3
Cote d'Ivoire	1	1	1	3
Djibouti	1	1	1	3
Dominica	1		1	2
Ethiopia	1	1	1	3
Gambia, The	1	1	1	3
Ghana	1	1	1	3
Grenada	1	1	1	3
Guinea	1	1	1	3
Guinea-Bissau	1		1	2
Guyana	1	1		2
Haiti	1	1		2
Honduras	1	1	1	3
Kenya	1		1	2
Kiribati	1	1		2
Kyrgyz Republic	1	1	1	3
Lao PDR	1	1		2
Lesotho	1	1	1	3
Liberia	1	1	1	3
Madagascar	1	1	1	3
Malawi	1	1	1	3
Maldives	1	1	1	3
Mali	1	1	1	3
Marshall Islands	1		1	2
Mauritania	1	1	1	3
Micronesia	1	1	1	3
Moldova	1	1	1	3
Mozambique	1	1	1	3
Myanmar	1	1	1	3
Nepal	1	1	1	3
Nicaragua	1	1	1	3
Niger	1	1	1	3
Papua New Guinea	1	1	1	3
Rwanda	1	1	1	3
Samoa	1	1	1	3
Sao Tome & Principe	1	1	1	3
Senegal	1	1	1	3
Sierra Leone	1	1	1	3
Solomon Islands	1	1	1	3
Somalia		1	1	2
South Sudan	1	1	1	3
St. Vincent & the Grenadine	1	1	1	3
Sudan	1	1	1	3
Tajikistan	1	1	1	3
Tanzania	1		1	2
Timor-Leste	1	1	1	3
Togo	1	1	1	3
Tonga	1		1	2
Tuvalu	1		1	2
Uganda	1	1	1	3
Uzbekistan	1	1	1	3
Vanuatu	1	1	1	3
Zambia	1	1		2
Zimbabwe	1	1	1	3
Total	65	58	61	184

Source: Independent Evaluation Group.

Country Case Studies

Country case studies were chosen from LIC-DSF countries that were at moderate or higher risk of debt distress in 2018 and 2019. To more easily assess the extent to which Low-Income Country Debt Sustainability Analyses informed subsequent World Bank–supported strategies and operations, the set of countries was narrowed to those that had a Country Partnership Framework approved after the LIC-DSF reform was adopted. Case study countries were selected to reflect representation across regions and relevant country characteristics. Countries selected were Bhutan, the Comoros, the Democratic Republic of Congo, Dominica, Ghana, Nicaragua, Papua New Guinea, Sierra Leone, and Zambia.

Table A.2. Evaluation Design Matrix

Key Questions	Information Sources	Data Collection and Analysis Methods
1. How well has the World Bank implemented the relevant changes to the LIC-DSF adopted in the 2017 reform? Have these changes resulted in a framework that effectively meets the needs of IDA in supporting IDA-eligible countries?	DSA reports and Excel files	Review of DSAs to assess if particular stress tests, other potential risk factors, and judgment were applied

(continued)

Key Questions	Information Sources	Data Collection and Analysis Methods
2. To what extent are inputs into the LIC-DSF for which the World Bank is responsible coherent and based on sound country-specific analytics and diagnostics? Do they adequately capture the impact of expected long-term developments (for example, climate change and its expected impact on growth)? » This section will include an assessment of assumptions underpinning the investment-growth nexus, the expected impact of climate change over the longer term, and how IDA lending projections are incorporated into the DSA. Given the considerable impact of climate change on small island economies in particular, the evaluation will undertake a focused assessment of how climate change is reflected in the DSAs for these economies.	DSA reports and Excel files; recent evaluations, guidance, and research on investment and long-term growth and climate change; DPOs; and interviews with country teams	Review of DSAs to assess what assumptions are being made for long-term projections; semistructured interviews with World Bank and IMF economists and the Macro and Debt unit of the World Bank on long-term projections Case studies on small island states vulnerable to climate change risk to assess what extent to which climate change factors incorporated into long projections
3. How well does the World Bank consider data quality, coverage, and transparency in its use of the LIC-DSF, particularly because of rapidly changing global risk dynamics? This question will have two parts: » To what extent do country-specific LIC-DSAs include an adequate assessment of the quality and coverage of the data used, and how does that assessment influence World Bank staff's use of the resulting DSA output on the level of debt distress? » What progress has the World Bank made in improving debt data quality, transparency, and coverage in the LIC-DSF, including with respect to contingent liabilities and state-owned enterprises?	DSA reports and Excel files; recent evaluations, assessments, and research on data quality and coverage; DPO program documents; and interviews with country teams	Analysis of recent DSAs, research and evaluations on debt transparency, contingent liabilities, state-owned enterprises, and the Debtor Reporting System to assess implications for the DSA Case studies on countries where new or nontraditional lending increased, "hidden" debt was uncovered, transparency improved, risk rating worsened, and so on

(continued)

Key Questions	Information Sources	Data Collection and Analysis Methods
4. How have the World Bank's strategic and operational decisions and policies, both institutionally and at the country level, been influenced by LIC-DSAs prepared over the past decade? How have rapidly changing debt risks and increasing climate risks affected the adequacy of the LIC-DSF to support the World Bank's work in the debt space?	CPFs, SDFP reports, DPOs program documents and ICRRs, DMF reports, DeMPA reports, interviews with country teams, and IEG evaluations	Review of CPFs, SDFP reports, DPOs, and DMF reports to assess how risk ratings were influenced by engagement with country clients Case studies on a cross-section of countries, particularly those at high level or where risk rating has worsened Semistructured interviews with country teams, DFI, SDFP committee, and MTI debt unit
5. Is World Bank–IMF collaboration on the LIC-DSF consistent with the agreed guidelines? How well have the guidelines on collaboration worked in supporting the objectives of the LIC-DSF?	IMF–World Bank LIC-DSF Guidance Notes; interviews with World Bank MTI economists and relevant IMF staff	Review of relevant World Bank and IMF documentation, assessing how the collaboration worked in practice Semistructured interviews with World Bank colleagues from the Macro and Debt unit and country economists on a cross-section of countries for insight into how collaboration has worked in practice

Source: Independent Evaluation Group.

Note: CPF = Country Partnership Framework; DeMPA = Debt Management Performance Assessment; DFI = development finance institution; DMF = Debt Management Facility; DPO = development policy operation; DSA = Debt Sustainability Analysis; ICRR = Implementation Completion and Results Report Review; IDA = International Development Association; IEG = Independent Evaluation Group; IMF = International Monetary Fund; LIC-DSA = Low-Income Country Debt Sustainability Analysis; LIC-DSF = Low-Income Country Debt Sustainability Framework; MTI = Macroeconomics, Trade, and Investment; SDFP = Sustainable Development Finance Policy.

Appendix B. Reform of the Low-Income Country Debt Sustainability Framework

Table B.1. 2017 Reform of the Low-Income Country Debt Sustainability Framework

Reforms	2012 DSF	2017 DSF	Comment
Realism tools		» To support stronger baseline projections and implementation of new classification (for example, realism of projected fiscal adjustment and the investment-growth nexus)	» Implemented in standardized fashion in all DSAs. Largely applied to medium-term projections.
Core debt distress model	» Identifies only severe debt distress episodes » Few country-specific explanatory variables	» Enhanced methodology to identify all debt distress episodes » Expanded specification including key country-specific fundamentals to improve predictive capacity	» Included as part of underlying model to identify thresholds.
Country classification (debt-carrying capacity)	» Relies exclusively on the CPIA » Backward-looking classification	» Based on a composite measure covering the CPIA, growth, reserve coverage, remittances, and world growth » Incorporate forward-looking elements (enhancing engagement with country authorities)	» Adoption of composite indicator may have increased the share of countries with stronger debt-carrying capacity than suggested by use of CPIA alone. Carrying capacity declined with the onset of COVID.

(continued)

Reforms	2012 DSF	2017 DSF	Comment
Debt indicators and thresholds	» Complex: 5 debt indicators and 24 thresholds » Thresholds are derived individually without regard to the information of other debt indicators to predict debt distress (introducing conservative bias)	» Significant simplification: 4 debt indicators and 12 thresholds » Thresholds are derived jointly in line with the DSF's aggregation rule (eliminating a source of conservative bias)	» Standard for all post-reform DSAs.
Standardized stress tests	» Sixteen stress tests; uncommon testing across the external and public DSA	» Seven common recalibrated and redesigned stress tests across the external and public DSA, with improved macrolinkages	» Standard for all post-reform DSAs.
Tailored stress tests		» To better evaluate scenario risks of relevance for some countries (for example, natural disasters)	» One-quarter to one-half of DSAs included market financing, natural disaster, and commodity price tailored tests for moderate risk countries, 64% of DSAs had limited space to absorb shocks, 18% some space, 18% substantial space. For high risk or debt distress: 89% sustainable, 11% unsustainable.
Assessment of other potential risk factors	» Tools to assess: domestic debt vulnerabilities	» Tools to assess: domestic debt vulnerabilities, market-financing pressures, diversity of debt vulnerabilities in countries rated as moderate risk	

(continued)

Reforms	2012 DSF	2017 DSF	Comment
Enhanced guidance for application of judgment	» On marginal or transitory breaches	» On severe domestic debt vulnerabilities and exposure to external market-financing pressures, among other factors	» Applied in 14 of 66 DSAs, with reasons provided consistent with guidelines.

Source: IDA and IMF 2017.

Note: CPIA = Country Policy and Institutional Assessment; DSA = Debt Sustainability Analysis; DSF = Debt Sustainability Framework.

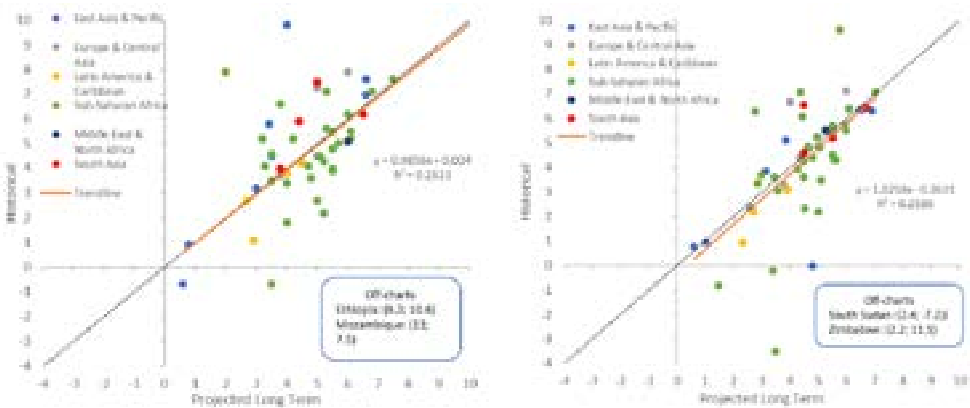
Appendix C. Analysis of Forecasts of Long-Term GDP Growth and Primary Deficits

Long-Term GDP Growth Forecasts in Debt Sustainability Analyses Versus Historical Average

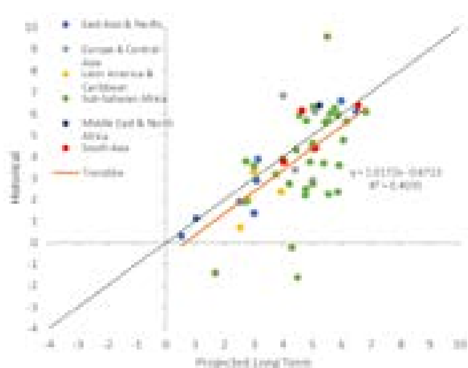
Figure C.1. Long-Term GDP Growth Forecasts in Debt Sustainability Analyses

a. 2015–17 DSAs (pre-DSA reform), historical versus long-term average annual growth forecast. Real GDP growth, percent.

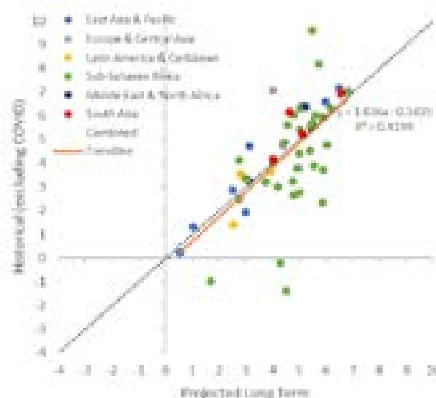
b. 2018–19 DSAs (post-DSA reform), historical versus long-term average annual growth forecast. Real GDP growth, percent.



c. 2020–22 DSAs (post-DSA reform), historical (including COVID) versus long-term average annual growth forecast. Real GDP growth, percent.



d. 2020–22 DSAs (post-DSA reform), historical (excluding COVID) versus long-term average annual growth forecast. Real GDP growth, percent.



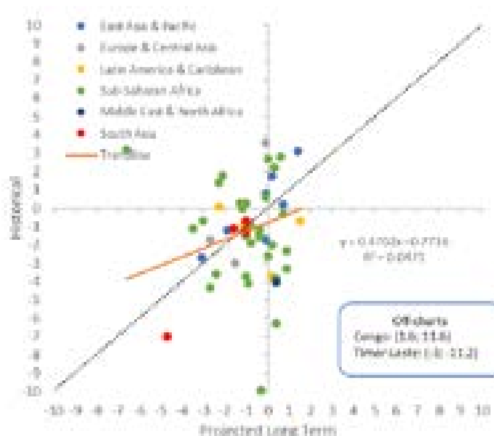
Source: DSAs; Independent Evaluation Group.

Note: DSA = Debt Sustainability Analysis; GDP = gross domestic product.

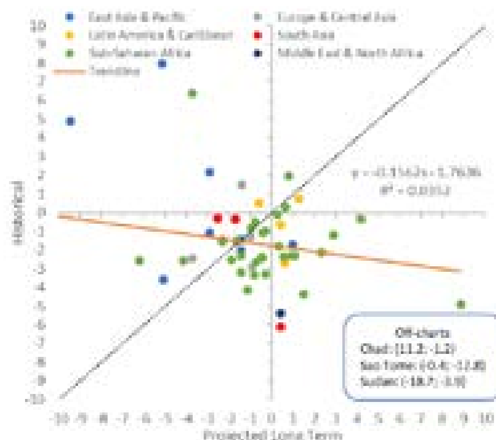
Long-Term Primary Balance Forecasts in Debt Sustainability Analyses Versus Historical Average

Figure C.2. Long-Term Primary Balance Forecasts in Debt Sustainability Analyses

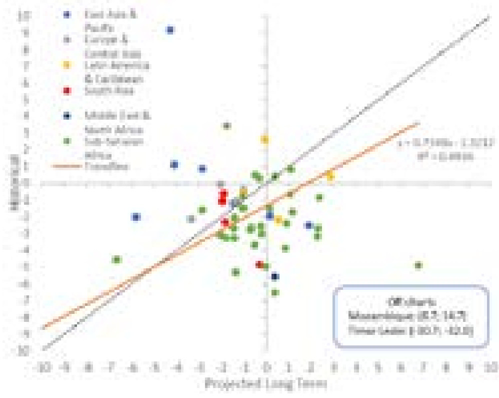
a. 2015–17 DSAs (pre-DSA reform), historical versus long-term average annual primary balance forecast. Primary balance, percent.



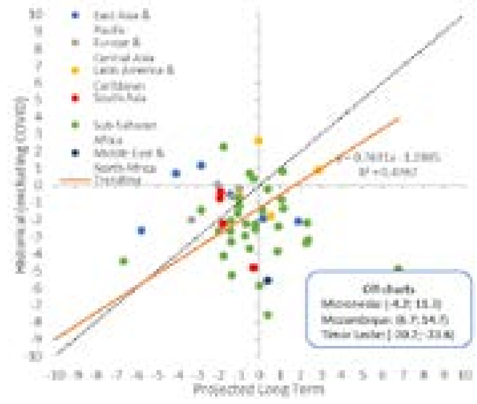
b. 2018–19 DSAs (post-DSA reform), historical versus long-term primary average annual balance forecast. Primary balance, percent.



c. 2020–22 DSAs (post-DSA reform), historical versus long-term average annual primary balance forecast. Primary balance, percent.



d. 2020–22 DSAs (post-DSA reform), historical (ex-COVID) versus long-term average annual primary balance forecast. Primary balance, percent.



Source: DSAs; Independent Evaluation Group.

Note: DSA = Debt Sustainability Analysis.

Appendix D. Results of Survey of World Bank Country Economists on the World Bank's Role in Preparing Low-Income Country Debt Sustainability Analyses

This online survey was carried out using SurveyMonkey and was conducted from June 30 to August 18, 2022. Sixty-seven World Bank country economists responded, working on 58 out of 66 countries. To protect confidentiality, comments by respondents have been removed.

Question 1. Approximately how many LIC-DSAs did you prepare in the last 4 Fiscal Years as a Country Economist?

Table D.1. Response Matrix for Question 1

Answer Choices	Responses	Share (%)
1	14	20.9
2 to 3	31	46.3
4 or more	22	32.8
Answered	67	

Source: Independent Evaluation Group.

Question 2. When was the last time you participated in the preparation of the LIC-DSA?

Table D.2. Response Matrix for Question 2

Answer Choices	Responses	Share (%)
FY22	52	77.6
FY21	9	13.4
Earlier FY	6	9.0
Answered	67	

Source: Independent Evaluation Group.

Note: FY = fiscal year.

Question 3. For which country did you prepare the LIC-DSA?

Fifty-eight countries covered, with nine with two answers (from two different economists).

Question 4. Why was the Debt Sustainability Analysis (DSA) prepared?

Table D.3. Response Matrix for Question 4

Answer Choices	Responses	Share (%)
IMF Staff Report (Article IV, Program Request or Review)	55	82.1
World Bank development policy financing	10	14.9
World Bank IPF	0	0.0
Other World Bank Board Document	0	0.0
Other[a]	2	3.0
Answered	67	

Source: Independent Evaluation Group.

Note: a. If "Other," please indicate who initiated the Low-Income Country Debt Sustainability Analysis and for what purpose. IMF = International Monetary Fund; IPF = investment project financing.

Question 5. What was the LIC-DSA risk rating for external public debt assigned to that country?

Table D.4. Response Matrix for Question 5

Answer Choices	Responses	Share (%)
Low Risk	6	9.0
Moderate Risk	21	31.3
High Risk	29	43.3
In Debt Distress	11	16.4
Answered	67	

Source: Independent Evaluation Group.

Question 6. What was the LIC-DSA risk rating for total public debt assigned to that country?

Table D.5. Response Matrix for Question 6

Answer Choices	Responses	Share (%)
Low Risk	5	7.5
Moderate Risk	20	29.9
High Risk	31	46.3
In Debt Distress	11	16.4
Answered	67	

Source: Independent Evaluation Group.

Question 7. Did the WB team and IMF team discuss and agree on the LIC-DSA's underlying macro-framework and assumptions at the pre-mission stage of preparation?

Table D.6. Response Matrix for Question 7

Answer Choices	Responses	Share (%)
Yes	41	65.1
Somewhat	19	30.2
No	2	3.2
I don't know	1	1.6
Answered	63	

Source: Independent Evaluation Group.

Question 8. Please indicate the responsibility of the WB team for the following inputs to the LIC-DSA.

Table D.7. Response Matrix for Question 8

Answer Choices	Led Preparation (%)	Significant Contributions or Shared Responsibility with IMF (%)	Provided Comments and Some Revisions (%)	No Contributions (%)	Other (%)	Responses (no.)
Short and medium-term macroeconomic forecasts and assumptions (for the next 1 to 5 years; e.g., real GDP growth, investment, exports, imports, etc.)	1.6	30.7	67.7	0.0	0.0	62
Long-term macroeconomic forecasts and assumptions (for the next 6 to 20 years; e.g., real GDP growth, investment, exports, imports, etc.)	9.7	30.7	58.1	1.6	0.0	62
Short and medium-term fiscal and debt forecasts and assumptions (for the next 1 to 5 years; e.g., revenue, expenditure, public investment, debt disbursements, debt service)	1.6	30.7	64.5	3.2	0.0	62
Long-term fiscal and debt forecasts and assumptions (for the next 6 to 20 years; e.g., revenue, expenditure, public investment, debt disbursements, debt service)	4.8	27.0	61.9	6.4	0.0	63
Short and medium-term IDA financing assumptions (for the next 1 to 5 years)	77.4	8.1	11.3	1.6	1.6	62
Long-term IDA financing assumptions (for the next 6 to 20 years)	74.2	14.5	9.7	0.0	1.6	62
If "Other" please explain:						1

Source: Independent Evaluation Group.

Note: GDP = gross domestic product; IDA = International Development Association; IMF = International Monetary Fund.

Question 9. To what extent did the WB (country economist and/or global debt unit) provide inputs into the final DSA write-up on the following topics.

Table D.8. Response Matrix for Question 9

Answer Choices	Lead Author (%)	Significant Contributions or Shared Responsibility with IMF (%)	Provided Comments and Some Revisions (%)	No Contributions (%)	There Was No Discussion on This Topic (%)	Other (%)	Responses (no.)
Discussion on long-term growth	11.1	28.6	57.1	3.2	0.0	0.0	63
Discussion on investment's impact on long-term growth	4.8	24.2	51.6	11.3	8.1	0.0	62
Discussion on impact of climate change on growth and key variables in DSA	1.6	14.3	44.4	11.1	28.6	0.0	63

Source: Independent Evaluation Group.

Note: DSA = Debt Sustainability Analysis; IMF = International Monetary Fund.

Question 10. To what extent were WB contributions incorporated in the final DSA spreadsheet and write-up?

Table D.9. Response Matrix for Question 10

Answer Choices	Responses	Share (%)
Fully included	33	52.4
Mostly included	26	41.3
Partially included	4	6.4
Not included	0	0.0
Answered	63	

Source: Independent Evaluation Group.

Question 11. Please add any comments or clarifications, if needed.

Question 12. In your opinion, did the debt data available for the country have sufficient coverage to allow for a meaningful assessment of public debt sustainability?

Table D.10. Response Matrix for Question 12

Answer Choices	Responses	Share (%)
Yes	46	73.0
Somewhat	16	25.4
No	1	1.6
I don't know	0	0.0
Answered	63	

Source: Independent Evaluation Group.

Question 13. In your opinion, did the debt data available for the country have sufficient quality to allow for a meaningful assessment of public debt sustainability?

Table D.11. Response Matrix for Question 13

Answer Choices	Responses	Share (%)
Yes	43	68.3
Somewhat	19	30.2
No	1	1.6
I don't know	0	0.0
Answered	63	

Source: Independent Evaluation Group.

Question 14. Please elaborate on what is driving the shortcomings in debt coverage and quality.

Question 15. How were these shortcomings in debt data reflected in the DSA?

Question 16. Did you make explicit assumptions about the relationship between public and private investment and growth in the long-term macroeconomic projections?

Table D.12. Response Matrix for Question 16

Answer Choices	Responses	Share (%)
Yes	12	19.1
Somewhat	30	47.6
No	16	25.4
I don't know	5	7.9
Answered	63	

Source: Independent Evaluation Group.

Question 17. If yes or somewhat, on what basis were the assumptions made? (select all that apply)

Table D.13. Response Matrix for Question 17

Answer Choices	Responses	Share (%)
Historical trends	30	73.2
Quantitative model	10	24.4
Comparator estimates	5	12.2
Country Economic Memorandum analysis	8	19.5
Other (please specify)	6	14.6
Answered	41	

Source: Independent Evaluation Group.

Question 18. Were assumptions about the impact of climate change on key variables in the DSA incorporated into the long-term macroeconomic projections?

Table D.14. Response Matrix for Question 18

Answer Choices	Responses	Share (%)
Yes	11	17.5
Somewhat	12	19.1
No	35	55.6
I don't know	5	7.9
Answered	63	

Source: Independent Evaluation Group.

Question 19. If yes or somewhat, on what basis were the assumptions made? (select all that apply)

Table D.15. Response Matrix for Question 19

Answer Choices	Responses	Share (%)
Historical trends	14	63.6
Quantitative model	7	31.8
Comparator estimates	3	13.6
Climate Change and Development Report analysis	1	4.6
Other (please specify)	5	22.7
Answered	22	

Source: Independent Evaluation Group.

Question 20. During the preparation of the LIC-DSA, did the WB team and the IMF team have significant disagreements concerning key projections and assumptions?

Table D.16. Response Matrix for Question 20

Answer Choices	Responses	Share (%)
Yes	3	4.8
Somewhat	25	39.7
No	34	54.0
I don't know	0	0.0
Other	1	1.6
Answered	63	

Source: Independent Evaluation Group.

Question 21. On which key assumptions and projections did the WB and IMF have significant disagreements? (select all that apply)

Table D.17. Response Matrix for Question 21

Answer Choices	Responses	Share (%)
Short and medium-term macroeconomic forecasts and assumptions (e.g., real GDP growth, investment, exports, imports, etc.)	13	44.8
Long-term macroeconomic forecasts and assumptions (e.g., real GDP growth, investment, exports, imports, etc.)	13	44.8
Short and medium-term fiscal and debt forecasts and assumptions (e.g., revenue, expenditure, public investment, debt disbursements, debt service)	7	24.1
Long-term fiscal and debt forecasts and assumptions (e.g., revenue, expenditure, public investment, debt disbursements, debt service)	5	17.2
Short and medium-term IDA financing assumptions	8	27.6
Long-term IDA financing assumptions	3	10.3
Contingent liabilities, customized scenarios, and stress tests	3	10.3
Other (please specify)	2	6.9
Answered	29	

Source: Independent Evaluation Group.

Note: GDP = gross domestic product; IDA = International Development Association.

Question 22. How was an agreement between WB and IMF reached?

Table D.18. Response Matrix for Question 22

Answer Choices	Responses	Share (%)
Discussion with technical staff	31	75.6
Discussion at the manager level	4	9.8
Discussion at the director level or above	3	7.3
Other	3	7.3
If "Other," please explain:	4	
Answered	41	

Source: Independent Evaluation Group.

Question 23. During the preparation of the LIC-DSA, did the WB team and IMF team hold different views concerning the risk ratings to be assigned to the country?

Table D.19. Response Matrix for Question 23

Answer Choices	Responses	Share (%)
Yes	1	1.6
Somewhat	5	7.9
No	56	88.9
I don't know	0	0.0
Other	1	1.6
Answered	63	

Source: Independent Evaluation Group.

Question 24. Why were there different views on risk ratings? (e.g., interpretation of debt thresholds and indicators in baseline and risk scenarios, use of judgment, risk factors not contemplated in the quantitative analysis)

Question 25. How was an agreement between WB and IMF reached?

Table D.20. Response Matrix for Question 25

Answer Choices	Responses	Share (%)
Discussion with technical staff	13	76.5
Discussion at the manager level	2	11.8
Discussion at the director level or above	2	11.8
Other	0	0.0
If "Other," please explain:	0	0.0
Answered	17	

Source: Independent Evaluation Group.

Question 26. How have the April 2021 changes to the Accountability and Decision-Making (ADM) processes for the DSA (which require review meetings for DSA clearance chaired by the MTI Global Director and Equitable Growth, Finance, and Institutions Regional Director, etc.) affected the WB's participation in the DSA process in the following aspects:

Table D.21. Response Matrix for Question 26

Answer Choices	Significantly Improved (%)	Moderately Improved (%)	No Change (%)	Worsened (%)	Significantly Worsened (%)	Have Not Prepared a DSA Since April 2021 (%)	Total (no.)
WB participation in early stages of the DSA process	27.4	43.6	17.7	1.6	0.0	9.7	62
WB administrative procedures and speed of processing	16.1	17.7	1.6	27.4	27.4	9.7	62
Quality of WB inputs into DSA	31.2	39.3	19.7	0.0	0.0	9.8	61
Inclusion of WB inputs into final DSA	30.7	35.5	24.2	0.0	0.0	9.7	62
Overall collaboration with IMF	22.6	32.3	19.4	16.1	0.0	9.7	62

Source: Independent Evaluation Group.

Note: DSA = Debt Sustainability Analysis; IMF = International Monetary Fund; WB = World Bank.

Question 27. Please provide any other comments on how the new ADM has affected the WB's participation in the DSA process

Question 28. Based on your experience in the preparation of LIC-DSAs, how is the quality of the collaboration between the IMF and WB in the preparation of a LIC-DSA at the country level?

Table D.22. Response Matrix for Question 28

Answer Choices	Responses	Share (%)
Very good	28	45.2
Good	28	45.2
Fair	4	6.5
Poor	1	1.6
Very poor	1	1.6
Answered	62	

Source: Independent Evaluation Group.

Question 29. If collaboration is only fair or worse, please elaborate on the issues in the collaboration with the IMF and how can this be improved:

Question 30. Do you have any other comments to add on the WB's inputs into the DSA and collaboration with the IMF?

Appendix E. Results of Survey of Country Authorities on the Low-Income Country Debt Sustainability Framework

A survey of the debt management units from the ministries of finance in Low-Income Country Debt Sustainability Analysis (LIC-DSA) countries was carried out from August to September 2022. The Independent Evaluation Group received responses from 17 countries, representing approximately one-quarter of the countries included in the Low-Income Country Debt Sustainability Framework (tables E.1 through E.10). To respect confidentiality, comments are not reported.

Question 1. Have you been directly involved in discussions of the long-term projections (i.e., 6 to 20 years into the future) of growth and fiscal variables that go into the DSA prepared by World Bank and IMF staff?

Table E.1. Response Matrix for Question 1

Answer Choices	Responses
No	6
Somewhat	2
Yes	11
Answered	19

Source: Independent Evaluation Group.

Question 1.1. If you have been involved in these discussions, were you in agreement with the projections?

Table E.2. Response Matrix for Question 1.1

Answer Choices	Responses
No	4
Somewhat	4
Yes	9
Answered	17

Source: Independent Evaluation Group.

Question 1.2. Please share your impressions of the discussions and their outcome.

Question 2. Are you comfortable with the degree to which climate change and its impact on long-term growth in your country were reflected in the most recent DSA?

Table E.3. Response Matrix for Question 2

Answer Choices	Responses
No	10
Somewhat	6
Yes	2
Other (please specify)	1
Answered	19

Source: Independent Evaluation Group.

Question 2.1. Please elaborate, if needed.

Question 3. Are you comfortable with the degree to which public and private investment and its impact on growth are reflected in the most recent DSA?

Table E.4. Response Matrix for Question 3

Answer Choices	Responses
No	3
Somewhat	10
Yes	6
Answered	19

Source: Independent Evaluation Group.

Question 3.1. Please elaborate, if needed.

Question 4. Are you comfortable with the degree to which the availability of long-term concessional finance for your country was reflected in the most recent DSA?

Table E.5. Response Matrix for Question 4

Answer Choices	Responses
No	3
Somewhat	5
Yes	11
Answered	19

Source: Independent Evaluation Group.

Question 4.1. Please elaborate, if needed.

Question 5. Do you find the most recent DSA prepared by IMF and World Bank staff to be reflective of the current debt risk situation in your country?

Table E.6. Response Matrix for Question 5

Answer Choices	Responses
No	2
Somewhat	2
Yes	13
Other (please specify)	1
Answered	18
Skipped	1

Source: Independent Evaluation Group.

Question 6. Does your Ministry of Finance prepare its own debt sustainability analysis (i.e., without the involvement of IMF or World Bank staff)?

Table E.7. Response Matrix for Question 6

Answer Choices	Responses
No	7
Somewhat	0
Yes	12
Answered	19

Source: Independent Evaluation Group.

Question 6.1. If yes, how often?

Table E.8. Response Matrix for Question 6.1

Answer Choices	Responses
Every year (or more frequently)	11
Every two years	1
More than every two years	0
Answered	12

Source: Independent Evaluation Group.

Question 6.2. If yes, was the DSA published?

Table E.9. Response Matrix for Question 6.2

Answer Choices	Responses
No	2
Somewhat	0
Yes	10
Answered	12

If "Other," please explain.

Source: Independent Evaluation Group.

Question 7. Have you or your staff received training from the World Bank on the conduct of debt sustainability analysis?

Table E.10. Response Matrix for Question 7

Answer Choices	Responses
No	6
Somewhat	0
Yes	13
Answered	19

Source: Independent Evaluation Group.

Question 7.1. If yes, when was the training?

Appendix F. Country Case Study Summary

Table F.1. Summary of Inputs into Debt Sustainability Analyses and How Operations Targeted the Vulnerabilities

Country	Application of Judgment Applied (Y/N)	Contingent Liabilities Tailored Test (Y/N), Uses Defaults (Y/N)	World Bank Led or Jointly Prepared with IMF Long-Term Growth Projections (Y/N)	Climate Change Discussed (Y/N), Incorporated in Long-Term Growth Assumptions (Y/N)	Natural Disaster Tailored Test (Y/N), Uses Defaults (Y/N)	All Issues Resolved at Working Level (Y/N)	CPF Targets Vulnerabilities Identified in DSAs	DPFs Target Vulnerabilities Identified in DSAs	SDFP PPAs Target Vulnerabilities Identified in DSAs
Bhutan	Y	Y, Y	Y	Y, N	N	Y	Y	Y	Y (1 of 4 PPAs)
Comoros	N	Y, N	Y	Y, Y	Y, N	N	Y	Y	Y (3 of 4 PPAs)
Congo, Dem. Rep.	N	Y, N	Y	N, N	N	Y	Y	Y	Y (4 of 4 PPAs)
Dominica	N	Y, N	Y	Y, Y	Y, N	Y	Y	Y	Y (2 of 4 PPAs)
Ghana	N	Y, N	N	N, N	N	Y	Y	No DPF approved	Y (6 of 6 PPAs)
Nicaragua	N	Y, N	N	N, N	Y, Y	N	Indirect	No DPF approved	Y (3 of 3 PPAs)
Papua New Guinea	N	Y, N	N	Y, N	N	Y	Y	Y	Y (4 of 4 PPAs)
Sierra Leone	N	Y, N	Y	N, N	N	N	Y	Y	Y (6 of 6 PPAs)
Zambia	N	Y, N	Y	N, N	N	Y	Y	No DPF approved	Y (4 of 6 PPAs)

Source: Independent Evaluation Group.

Note: CPF = Country Partnership Framework; DPF = development policy financing; DSA = Debt Sustainability Analysis; IMF = International Monetary Fund; PPA = performance and policy action; SDFP = Sustainable Development Finance Policy.

Table F.2. World Bank Operational Response to Debt Vulnerabilities Identified in Debt Sustainability Analyses

Debt Vulnerabilities Explicitly Identified in DSAs	CPF Response to Debt Vulnerabilities Identified in DSAs	DPO Prior Actions Addressing Debt Vulnerabilities Identified in DSAs	SDFP PPAs Addressing Debt Vulnerabilities Identified in DSAs
Bhutan: High deficits, weak revenue mobilization, low productivity and competitiveness of the nonhydropower sector, export and depreciation shocks, contingent liabilities, climate-related shocks, and long-term loans for government of India–sponsored hydropower projects.	The CPF FY21–24 sought to address fundamental vulnerabilities in Bhutan's DRM and management of hydropower-related revenues, targeting vulnerabilities raised in the 2018 DSA.	Development policy credits approved annually from 2018 to 2022 included prior actions to support the improvement in fiscal and debt management emphasized by DSAs. Prior actions included the adoption of GST and preparation of associated regulations; the establishment of governance framework and regulations for a stabilization fund; the publication of reports on fiscal accounts, debt (including that of SOEs), a debt management strategy, and a DSA including SOE debt; and the modernization of PFM and procurement systems. Two prior actions were the same as PPAs.	SDFP PPAs focused largely on debt transparency and reporting, including with respect to SOE contingent liabilities. Only SOE data and reporting were identified as problems or vulnerabilities in DSAs.

(continued)

Debt Vulnerabilities Explicitly Identified in DSAs	CPF Response to Debt Vulnerabilities Identified in DSAs	DPO Prior Actions Addressing Debt Vulnerabilities Identified in DSAs	SDFP PPAs Addressing Debt Vulnerabilities Identified in DSAs
Comoros: Structural vulnerabilities as a small island economy, dependency on remittances, large exposure to external volatility and natural disasters, low GDP and export growth, high fiscal deficits, weak debt and investment management, nonconcessional borrowing, weak DRM, weak SOE governance, and contingent liabilities.	The CPF FY20–24 sought to address weaknesses in Comoros's fiscal policy and debt management that were raised in DSAs. This included increasing revenue mobilization and addressing weak SOE governance. The CPF envisioned a DPO, ASA, and TA to support revenue mobilization, PFM, and restructuring and privatization of SOEs. The CPF discussed support for improving debt management, including work on DSAs.	A DPO approved in 2020 included a prior action to accelerate the restructuring of a systematically important government-owned financial institution (SNPSF), targeting SOE governance issues raised in DSAs. A prior action on debt transparency was the same as an SDFP PPA.	Several PPAs addressed vulnerabilities explicitly raised in Comoros's DSA. These included the adoption of a zero nonconcessional borrowing ceiling (for both FYs, but was breached for FY21), enhanced DRM (FY22), strengthened PIM, and debt reporting.
Congo, Dem. Rep.: Weak DRM and PFM, including cash management and budget execution; low value for money of investments; weak debt management and poor quality of debt reporting; nonconcessional borrowing; contingent liabilities (guarantees); vulnerability to commodity prices; and limited economic diversification.	The CPF FY22–26 (January 2022) addresses vulnerabilities identified in the DSA. Focus area 3 sought to address weaknesses in debt management and improve DRM, strengthen PFM systems and extractive sector governance, and strengthen economic diversification.	The DPF approved in June 2022 targeted expenditure management, SOE transparency and governance, and DRM issues explicitly identified in DSAs. This included a prior action to create the General Directorate of Treasury and Public Accounting that will strengthen budget execution and cash management. Other prior actions mandated SOEs to publish annual reports and audited financial statements in a timely manner and support the competitive recruitment senior management of several key SOEs. Additional measures sought to strengthen the management of nontax revenues.	PPAs addressed drivers of debt vulnerabilities discussed in DSAs—specifically, the transparency of SOEs and nonconcessional borrowing. PPAs also instituted a ceiling on nonconcessional external borrowing, which duplicated a ceiling for an IMF-supported program in FY22.

(continued)

Debt Vulnerabilities Explicitly Identified in DSAs	CPF Response to Debt Vulnerabilities Identified in DSAs	DPO Prior Actions Addressing Debt Vulnerabilities Identified in DSAs	SDFP PPAs Addressing Debt Vulnerabilities Identified in DSAs
Dominica: Fiscal imbalances exacerbated by increasingly frequent and severe natural disasters and challenges of small island states (notably, high input costs, lack of economies of scale, and limited institutional capacity).	The Eastern Caribbean Regional Partnership Framework FY22–25 supported improvement of fiscal and debt management and PFM.	DPFs approved in 2021 and 2022 included prior actions to strengthen fiscal management as identified in DSAs, including development of a Fiscal Rules and Responsibility Framework and approval of a Fiscal Responsibility Act; financing for a Vulnerability Risk and Resilience Fund; limitation of discretionary and ad hoc duty exemptions on vehicle imports; and improvement of cooperation between revenue collection agencies to increase compliance.	Two of four PPAs sought to reduce fiscal vulnerabilities identified in DSAs. This included adopting a Fiscal Rules and Responsibility Framework. Another PPA supported establishment of a Vulnerability Risk and Resilience Fund to act as a buffer against future natural disasters. PPAs institutionalizing regular debt reporting were not associated with debt drivers identified in DSAs.
Ghana: Low tax revenues, commodity price shocks, cost of financial and energy sector cleanups, and risks from contingent liabilities associated with SOEs and increased borrowing on nonconcessional terms.	The CPF FY18–22 targets vulnerabilities identified in the DSAs and focused on reforms to improve DRM and expenditure efficiency, better management and transparency of SOE liabilities, and reduction of refinancing risks.	No DPO approved during evaluation period.	Ghana's PPAs were closely aligned with the vulnerabilities identified in DSAs. They focused on addressing financial risks of SOEs by strengthening SOE governance and transparency. DRM PPAs built on measures to improve revenue mobilization through VAT and National Health Insurance Scheme rate hikes, higher fuel excises, and audits of large taxpayers (notably, in the mining sector).

(continued)

Debt Vulnerabilities Explicitly Identified in DSAs	CPF Response to Debt Vulnerabilities Identified in DSAs	DPO Prior Actions Addressing Debt Vulnerabilities Identified in DSAs	SDFP PPAs Addressing Debt Vulnerabilities Identified in DSAs
Nicaragua: Widespread social unrest and violence in response to pension reforms, destructive hurricanes, weaknesses in fiscal governance, external shocks, and the risk of contingent liabilities from SOEs and private sector debt owed to Venezuela, RB.	The CPF FY18–22 has been on hold because of the limited engagement due to sanctions imposed in 2018. The CPF targeted vulnerabilities associated with natural disasters, weak governance, and contingent liabilities identified in DSAs.	No DPO approved during evaluation period.	In FY21, Nicaragua was not required to implement PPAs because of a pause in operational engagement. In FY22, PPAs targeted fiscal risks associated with poor financial governance of SOEs. PPAs also sought to address the paucity of timely information on domestic debt, as discussed in DSAs.
Papua New Guinea: High-cost domestic and external debt; limited revenue mobilization; volatile revenues from large swings in commodity prices; accumulation of large expenditure arrears, which are not accounted for in official debt data; substantial contingent liabilities, through guarantees; and no comprehensive register of loans and guarantees, including to statutory authorities and SOEs.	The CPF FY19–23 sought to address a few of the factors raised in DSAs. This includes improving macroeconomic and fiscal resilience by strengthening fiscal management and improving governance in the resource sector. The CPF foresaw a series of DPOs to support an improved fiscal framework. DPO reforms are expected to support tax administration and operationalizing the sovereign wealth fund.	Prior actions in DPOs sought to address the drivers of debt stress identified in DSAs. The First Economic and Fiscal Resilience DPO (2018) included prior actions to establish a medium-term fiscal anchor and measures to improve revenue administration, enhance tax compliance, and reduce tax exemptions. The Crisis Response and Sustainable Recovery DPO (2021) included prior actions to approve a budget strategy paper that included a commitment to medium-term fiscal consolidation and actions to simplify tax administration for small businesses.	PPAs addressed debt vulnerabilities discussed in DSAs. These included a nonconcessional borrowing ceiling (albeit one that accommodated new quasi-concessional loan commitments from Australia, ADB, and IBRD), amending the State Guarantee Policy for monitoring and reporting on public loan guarantees and mandating credit risk assessments.

(continued)

Debt Vulnerabilities Explicitly Identified in DSAs	CPF Response to Debt Vulnerabilities Identified in DSAs	DPO Prior Actions Addressing Debt Vulnerabilities Identified in DSAs	SDFP PPAs Addressing Debt Vulnerabilities Identified in DSAs
Sierra Leone: Domestic revenue shortfalls, weak PFM and expenditure controls (arrears), weak spending efficiency and value for money, rollover risks, SOE contingent liabilities, limited growth and diversification, and commodity prices and exports.	The CPF FY21–26 targeted multiple debt vulnerabilities that had been identified in DSAs. The CPF supported strengthening revenue mobilization and expenditure management (particularly, by rationalizing subsidies and wage bill); clearing domestic arrears; and enhancing debt management, with a focus on formulating a debt strategy, managing contingent liabilities, and improving debt recording and reporting (including coverage required for DSAs).	DPFs approved in 2019, 2020, and 2021 included reforms to support fiscal consolidation, revenue mobilization, improved PFM, and SOE contingent liabilities as informed by DSAs. This included prior actions on rationalization of energy subsidies (which had contributed to budget deficits directly); transferring revenues collected into the Treasury Single Account (which had created considerable revenue losses for the government); modernization of procurement processes (which had contributed to unplanned cost overruns and arrears); and publication of the debt and guarantees of the five largest SOEs (which was the same as an SDFP PPA).	PPAs addressed the drivers of Sierra Leone's debt identified in the DSA. A zero nonconcessional borrowing ceiling was introduced (albeit one that duplicated that contained in the program with the IMF). PPAs also enhanced SOE debt transparency and targeted reducing arrears through a cash management plan and a framework for reducing tax and import duty waivers.

(continued)

Debt Vulnerabilities Explicitly Identified in DSAs	CPF Response to Debt Vulnerabilities Identified in DSAs	DPO Prior Actions Addressing Debt Vulnerabilities Identified in DSAs	SDFP PPAs Addressing Debt Vulnerabilities Identified in DSAs
Zambia: Expansionary and procyclical fiscal policies, weak DRM, a rapid increase in nonconcessional external borrowing, a large-scale public investment program that was poorly managed, debt management, arrears, and SOE contingent liabilities.	The CPF FY19–23 sought to control public sector arrears, improve debt management, strengthen PIM and procurement, and strengthen revenue administration. This is to be implemented through PFM reform and TA on debt management.	No DPO approved during evaluation period.	Two of three PPAs targeted vulnerabilities discussed in DSAs including a zero nonconcessional borrowing ceiling, cancellation of at least $1 billion of the undisbursed pipeline of public investments, and implementation of tax policies to support fiscal consolidation. PPAs to support debt transparency did not target a clear driver of debt vulnerabilities.

Source: Independent Evaluation Group.

Note: ADB = Asian Development Bank; ASA = advisory services and analytics; CPF = Country Partnership Framework; DPF = development policy financing; DPO = development policy operation; DRM = domestic revenue mobilization; DSA = Debt Sustainability Analysis; FY = fiscal year; GST = goods and services tax; IBRD = International Bank for Reconstruction and Development; IMF = International Monetary Fund; PFM = public financial management; PIM = public investment management; PPA = performance and policy action; SDFP = Sustainable Development Finance Policy; SNPSF = Société Nationale des Postes et des Services Financiers; SOE = state-owned enterprise; TA = technical assistance; VAT = value-added tax.

Appendix G. Detailed Country Case Studies

Bhutan Country Case Study

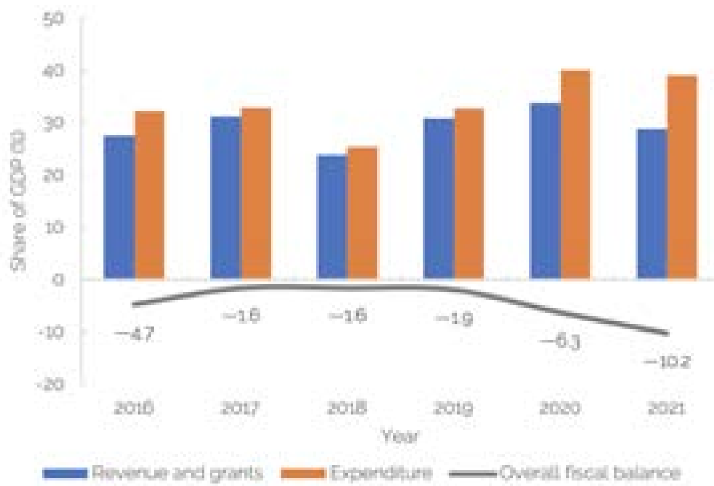
Table G.1. Key Macroeconomic Indicators

Macroeconomic Indicators	2015	2016	2017	2018	2019	2020	2021[a]
Real GDP growth (%)	6.2	7.4	6.3	3.8	4.4	−2.4	−3.7
Inflation—annual average (%)	3.6	3.3	4.3	3.7	2.8	4.2	8.2
Public debt (% of GDP)	—	117.3	111.7	113.4	106.5	131.2	134.9
of which external	—	113.9	105.1	108.4	103.6	121.9	125.3
External debt service as a share of exports	—	3.4	3.4	3.3	3.3	3.4	3.2
Current account balance (% of GDP)	−27.0	−29.3	−23.1	−18.0	−20.0	−12.3	−11.8
Primary balance (% of GDP)	—	−1.0	−3.4	−0.3	−0.6	−1.4	−5.3
Institutional capacity							
CPIA rating, debt management	4.0	4.0	4.0	4.0	4.0	4.0	—
Debt sustainability							
Risk of external debt distress	—	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Risk of overall debt distress	—	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Official exchange rate (LCU per US$)	64.1	67.2	65.1	68.5	70.4	74.1	73.7
Interest payments (% of revenue)		4.7	4.1	3.8	1.5	3.1	6.1

Sources: Low-Income Country Debt Sustainability Analyses (various years); World Development Indicators; World Economic Outlook.

Note: CPIA = Country Policy and Institutional Assessment; GDP = gross domestic product; LCU = local currency unit.
a. International Monetary Fund World Economic Outlook projections.

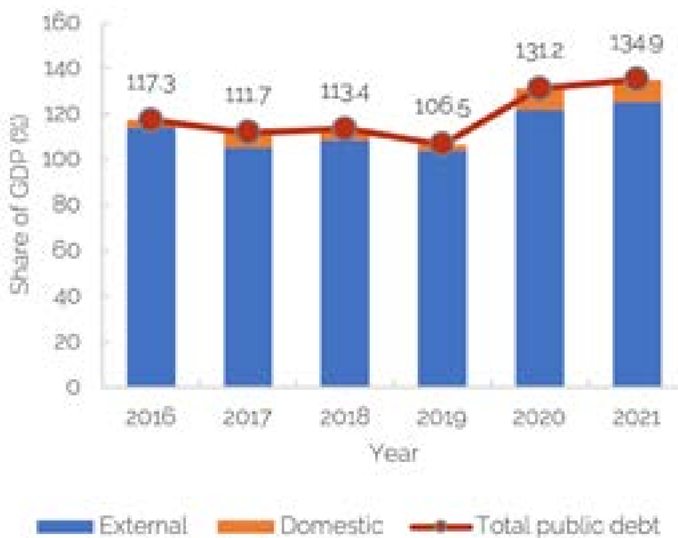
Figure G.1. Fiscal Indicators 2016–21



Sources: Low-Income Country Debt Sustainability Analyses (various years); World Development Indicators; World Economic Outlook.

Note: GDP = gross domestic product.

Figure G.2. Public Debt 2016–21



Source: Low-Income Country Debt Sustainability Framework (April 2022).

Note: GDP = gross domestic product.

Table G.2. Country Diagnostics, Strategies, and Major Analytical Work

Diagnostic	Year
Public Expenditure and Financial Accountability	2016
Public Investment Management Assessment	None
Debt Management Performance Assessment	None
Systematic Country Diagnostic	2020
Public Expenditure Review and Public Finance Review	None
Country Partnership Framework	2021

Source: Independent Evaluation Group.

Table G.3. Composition of Public and Publicly Guaranteed External Debt, 2015–20

Debt Composition	2015	2016	2017	2018	2019	2020
Public and publicly guaranteed debt from:	1,945	2,221	2,541	2,484	2,616	2,818
Official creditors	1,904	2,186	2,506	2,455	2,592	2,796
Multilateral	469	460	533	563	646	789
Bilateral	1,436	1,726	1,973	1,892	1,946	2,007
Private creditors	41	35	35	29	24	22

Source: 2022 International Debt Statistics.

Background on Public Debt Vulnerabilities

Public debt increased from 117 percent of GDP in 2016 to an estimated 135 percent in 2021. About 70 percent of public debt corresponds to funding for large hydropower projects supported by the government of India. Financing terms are soft and include guaranteed returns, long maturities, and matching of currency in which hydropower exports and debt service obligations are denominated, both in Indian rupee, to which the Bhutanese ngultrum is pegged. The government of India covers financial risks and is committed to buying all surplus electricity at a price reflecting cost plus a margin. Hydropower projects generated high economic growth in the past decade (excluding during the coronavirus [COVID-19] pandemic) and are expected to drive long-term economic performance.

Both external and domestic public debt drove the increase in the debt-to-GDP ratio since 2016. External public debt grew from 114 percent of GDP to 125 percent between 2016 and 2021. About 73 percent of external public debt at end-2021 comprised obligations associated with hydropower projects agreed with the government of India; the remaining 27 percent included mainly concessional loans from the Asian Development Bank and the International Development Association (IDA). Multilateral and bilateral creditors have expanded their financing to Bhutan in recent years, whereas private creditors have reduced their claims (table G.3). The government has established a ceiling of 35 percent of GDP on non-hydropower-related foreign liabilities, which has not been breached in recent years. Domestic public debt rose from 3 percent of GDP in 2016 to nearly 10 percent in 2021. Approximately half of domestic public debt includes short-term Treasury bills (which carry significant refinancing risk), and another one-quarter is from Treasury bonds with a maturity of 3 and 10 years.

Drivers of Increasing Public Debt

Total public debt stock stood above 100 percent of GDP for several years and significantly grew during the COVID-19 pandemic—largely driven by a collapse in economic growth and sizable fiscal deficits. Although a growth slowdown was already observed in 2018–19, the COVID-19 pandemic caused a contraction in real GDP in 2020–21. Primary deficits rose as tax revenue fell sharply, and the government increased support measures—for example the National Resilience Fund, which provided income support to individuals directly affected by the pandemic.

Debt Sustainability Assessment

According to the April 2022 Debt Sustainability Analysis (DSA), Bhutan is at moderate risk of debt distress for both external public debt and overall public debt. The country is deemed to have medium debt-carrying capacity. All debt indicators exceeded their respective thresholds in the baseline and stress test scenarios, suggesting a high risk of debt distress. However, Bhutan is considered to be at only moderate risk given the foreign direct investment nature of hydropower-related loans and the projected growth of exports and fiscal revenues in the medium term. Bhutan's debt is considered sustainable

as all debt indicators tend to decrease in the long term, falling below their respective thresholds.

External debt sustainability is vulnerable to export and exchange rate shocks. Hydropower debt service obligations are denominated in Indian rupees, and a currency depreciation would increase the local currency value of the external debt stock and debt service. In addition, the government's repayment capacity would deteriorate as a result of an export shock caused by delays in the commissioning of new hydropower plants or production difficulties due to climate change or natural disasters. Furthermore, overall debt sustainability is susceptible to contingent liability shocks. Bhutan is assessed to have limited space to absorb additional shocks without being downgraded to a high risk of debt distress.

To avoid a downgrade to high risk of debt distress, the DSA outlines broad policy recommendations. These include that Bhutan undertake a gradual fiscal consolidation with a focus on revenue mobilization. It also calls for structural reforms to improve productivity and competitiveness of the non-hydropower sector.

The DSA identifies the main drivers of the buildup of debt. These include central government public and publicly guaranteed (PPG) liabilities; debts of state-owned enterprises (SOEs), including on-lending from central government to fund hydropower projects and guaranteed foreign liabilities taken directly by SOEs; and central bank debt, for example standby credit facilities. Local governments, the social security fund, and extra budgetary funds do not have outstanding debt.

To assess risks from SOE debt, the financial sector, and public-private partnerships (PPPs), the DSA formulates a tailored test for contingent liabilities using DSA default values. The analysis stressed that debt sustainability is susceptible to the realization of contingent liabilities.

The DSA notes that Bhutan could be vulnerable to climate-related shocks, such as changes to glacier-fed rivers and adverse weather patterns that could reduce hydropower generation, fiscal revenues, and exports; these shocks would also affect other sectors that depend on rain and water cycles (for example, agriculture and forestry). However, no tailored test was undertak-

en to analyze possible impact. A Country Climate and Development Report is under preparation and may provide guidance on how to incorporate this issue into long-term growth projections.

Long-term GDP growth assumptions are broadly consistent with historical performance (excluding the COVID-19 pandemic). Average annual GDP growth converges to 5.8 percent by 2032—just slightly better than Bhutan's historical average growth of 5.0 percent between 2009 and 2018. This improvement is explained by expanded hydropower generation capacity. There were no significant disagreements between the International Monetary Fund (IMF) and the World Bank on growth projections in the preparation of the DSA.

Long-term fiscal assumptions are more favorable than the historical record as new hydropower projects are anticipated to boost fiscal revenues. The baseline scenario projects a gradual budget consolidation, with the primary budget converging to a balanced position in the medium term. Domestic revenues are expected to increase due to additional hydropower-related income and in response to policies for mobilizing nonhydropower revenue sources, including the recently introduced goods and services tax. In the baseline scenario, total revenues amount to 28 percent of GDP, on average, during the next decade (compared with 31 percent in the past 10 years). For the same periods, primary expenditures total 28 percent in the baseline scenario (compared with 32 percent over the past 10 years). Fiscal consolidation in the long term is expected to deliver an average annual primary surplus of 1.8 percent of GDP in 2027–32—more optimistic than the average annual primary deficit of 1.0 percent over the past 10 years. External grants are expected to be phased out as Bhutan is expected to graduate from least developed country status by 2023.

Division of Labor with International Monetary Fund

IMF and World Bank staff preparing the April 2022 DSA collaborated well, consistent with the Low-Income Country Debt Sustainability Framework (LIC-DSF) staff guidance. World Bank staff provided long-term growth projections and IDA financing assumptions,[1] and both staff jointly produced the medium-term growth projections and the fiscal assumptions throughout

the forecast horizon. Collaboration was stronger than in most case studies. According to the World Bank's Debtor Reporting System (DRS) assessment of data reporting for Bhutan, debt coverage was relatively comprehensive, with partial information only on external, private, nonguaranteed debt.

Use of Debt Sustainability Analysis to Inform World Bank Engagement in Bhutan

Debt vulnerabilities for Bhutan identified in DSAs included weak revenue mobilization, low productivity and competitiveness of the nonhydropower sector, export and depreciation risks, contingent liabilities, and climate-related risks.

The Country Partnership Framework (CPF) for fiscal year (FY)21–24 sought to address vulnerabilities in domestic revenue mobilization and hydropower-related revenues. By the time the CPF was approved (January 2021), Bhutan had been at moderate risk of debt distress for several years. The CPF's strategic focus area on resilience targeted vulnerabilities discussed in the 2018 DSA. It recognized the need to mobilize domestic revenue to cope with the expected reduction in grants and to establish a rules-based framework for managing hydropower-related revenues, including objectives of fiscal stability, countercyclicality, and revenue smoothing. The CPF envisioned a new Public Financial Management Multi-Donor Fund project and the delivery of related advisory services and analytics (ASA) and technical assistance (World Bank 2020a).

As an IDA-eligible country at moderate risk of debt distress, Bhutan was required to implement performance and policy actions (PPAs) as part of the Sustainable Development Finance Policy (SDFP). PPAs required the publication of fiscal accounts and two quarterly debt reports, publication of a debt management strategy, publication of a debt sustainability analysis that expanded coverage to include guaranteed and nonguaranteed debt of nonfinancial SOEs, and publication of a 2020 SOE report with comprehensive enterprise-level information on the performance of major SOEs. However, apart from a need to strengthen the fiscal oversight of SOEs, the DSA did not identify significant problems with other aspects of debt reporting, debt data,

or debt transparency. No PPA addressed revenue mobilization despite its significance to debt sustainability.

Development policy credits approved annually from 2018 to 2022 included several prior actions to support the fiscal and debt risks raised by DSAs. These included the adoption of goods and services tax and preparation of supporting regulations, the establishment of a stabilization fund, and the modernization of public financial management (PFM) and procurement systems. Publication of reports on fiscal accounts, debt, and a debt management strategy and a DSA with coverage expanded to include SOE debt were also supported by prior actions, although only SOE debt and contingent liabilities were raised in DSAs as a concern.

Assessment

- The DSA identified weak revenue mobilization as a major risk to a deterioration in debt stress. It also explicitly recognized fiscal risks associated with contingent liabilities (particularly from SOE debt and the financial sector) and risks associated with climate change.
- Long-term growth and revenue assumptions in the most recent DSA for Bhutan assumed continued expansion of the hydropower sector (which is vulnerable to climate change shocks). Although there is ongoing analytical work assessing the potential impact of natural disasters and climate change on debt sustainability in Bhutan, these have not yet been explicitly reflected in DSA projections.
- To address risks identified in DSAs, development policy operation (DPO) prior actions and technical assistance have supported revenue mobilization, including through support for the introduction of a goods and services tax. Considerable attention was given to debt reporting and publication, although the DSAs identified only SOE debt and contingent liability data as a concern.
- SDFP PPAs focused largely on debt transparency and reporting, including with respect to SOE contingent liabilities. Only SOE data and reporting were identified as problems or vulnerabilities in DSAs.

The Comoros Country Case Study

Table G.4. Key Macroeconomic Indicators

Macroeconomic Indicators	2015	2016	2017	2018	2019	2020	2021[a]
Real GDP growth (%)	1.3	3.5	4.2	3.6	1.8	−0.5	2.2
Inflation—annual average (%)	0.9	0.8	0.1	1.7	3.7	0.8	1.5
Public debt (% of GDP)	13.6	16.7	15.8	16.7	20.7	22.1	26.4
of which external	13.4	15.8	15.4	16.4	19.9	21.2	25.7
External debt service as a share of exports	2.1	3.0	3.0	2.9	5.2	9.6	n.a.
Current account balance (% of GDP)	−0.3	−4.4	−2.1	−2.9	−3.3	−1.6	−3.4
Primary balance (% of GDP)	−2.5	−9.4	−5.0	−7.8	−9.5	−7.3	n.a.
Institutional capacity							
CPIA rating, debt management	—	2.8	2.9	2.8	2.8	2.8	2.8
Debt sustainability							
Risk of external debt distress	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	High
Risk of overall debt distress	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	High
Official exchange rate (LCU per US$)	443	445	436	416	439	431	416
Interest payments (% of revenue)	0.5	1.0	0.5	0.6	2.1	2.2	n.a.

Sources: Low-Income Country Debt Sustainability Analysis (October 2021); World Economic Outlook (April 2022).

Note: CPIA = Country Policy and Institutional Assessment; GDP = gross domestic product; LCU = local currency unit; n.a. = not applicable.
a. International Monetary Fund World Economic Outlook projections.

Figure G.3. Fiscal Indicators 2015–20

Source: Low-Income Country Debt Sustainability Analysis (October 2021).

Note: GDP = gross domestic product.

Figure G.4. Public Debt 2015–21

Source: Low-Income Country Debt Sustainability Analysis (October 2021).

Note: GDP = gross domestic product; PPG = public and publicly guaranteed.

Table G.5. Country Diagnostics, Strategies, and Major Analytical Work

Diagnostic	Year
Public Expenditure and Financial Accountability	2016
Public Investment Management Assessment	None
Debt Management Performance Assessment	2011
Systematic Country Diagnostic	2019
Public Finance Review	2017
Country Partnership Framework	2020

Source: Independent Evaluation Group.

Table G.6. Composition of Public and Publicly Guaranteed External Debt, 2015–20

Debt Composition	2015	2016	2017	2018	2019	2020
Public and publicly guaranteed debt from:	100	152	160	221	233	258
Official creditors	100	152	160	221	233	258
Multilateral	57	53	54	54	68	77
Bilateral	43	99	105	167	165	181
Private creditors	—	—	—	—	—	—

Source: 2022 International Debt Statistics.

Background on Public Debt Vulnerabilities

The Comoros's risk of debt distress increased from moderate to high in 2021. The country had maintained a moderate rating from 2015 to 2020. Ratings were reassessed in view of larger debt service obligations after a steady increase in the public debt stock—from 13.6 percent of GDP in 2015 to an estimated 26.4 percent in 2021. Consumption-driven growth is heavily dependent on remittance inflows and is vulnerable to exogenous shocks—including commodity and oil prices—and natural disasters (for example, volcanic eruptions, cyclones, and floods).

External public debt drove the increase in the debt-to-GDP ratio. External public debt—held by official bilateral creditors (table G.6) and largely on con-

cessional terms—reached 25.7 percent of GDP in 2021, whereas domestic debt was 0.7 percent of GDP. Domestic public debt is limited by the small domestic financial system and a lack of tradable government debt securities. Domestic public debt is limited to local commercial bank credit to the central government (which does not issue local tradable securities). Subnational governments and SOEs cannot issue external debt without a government guarantee.

Drivers of Increasing Public Debt

The accumulation of total public debt accelerated in the latter five years of the analysis period, driven primarily by disbursements of loans funding investment projects. Total public debt-to-GDP ratio rose by 10.6 percentage points between 2017 and 2021—from 15.8 percent of GDP to an estimated 26.4 percent. Cyclone Kenneth in 2019 and the COVID-19 pandemic caused the fiscal position and growth to deteriorate. External concessional loans were contracted to finance large investment projects, but risks emerged from nonconcessional loans contracted for hotel construction and tourism (13 percent of 2021 GDP).

Domestic revenue was negatively affected by Cyclone Kenneth in 2019 and the COVID-19 pandemic, whereas expenditures remained stable. The fiscal deficit was financed through external grants from donors that totaled 9 percent of GDP in 2020 and about 7.5 percent of GDP in 2021. Domestic revenue is weak as a result of tax exemptions and a weak tax administration. Interest payments amounted to 1.2 percent of GDP on average in 2015–20 and are expected to increase because of recently contracted nonconcessional loans.

Debt Sustainability Assessment

According to the October 2021 DSA, the Comoros is at high risk of debt distress for both external and overall public debt. The country is deemed to have medium debt-carrying capacity—unchanged from recent years. The DSA indicates that the Comoros's debt is sustainable because all debt indicators tend to decrease in the long term, falling below their respective thresholds. The Comoros's debt indicators are particularly vulnerable to export and exchange rate shocks. A narrow base for exports implies vulnerability to commodity price fluctuations related to the ongoing war on Ukraine, fuel

price volatility, and rising global inflation. A currency depreciation would increase the local currency value of external debt stock and debt service flows. To preserve sustainability and reduce debt distress risk, the DSA outlines policy recommendations to raise domestic resource mobilization and avoid further nonconcessional borrowing.

The DSA notes that information on domestic debt was limited to central government debt to domestic commercial banks and that no information was available on domestic debt incurred by SOEs. Publicly guaranteed external debt contracted by SOEs and the central bank on behalf of the government, according to the DSA, is "believed to be zero" (IMF 2021b). The DSA formulates a tailored test for contingent liabilities from SOE debt, the financial sector, PPPs, and other entities not captured in the central government debt stock. It uses default values—that is, 2 percent of GDP for the SOE debt, 5 percent of GDP for the financial sector, and 35 percent of PPP value stock for PPP-related contingent liabilities (which are assumed to be zero). The DSA adds specific estimations for contingent liabilities not captured in government debt; specifically, unaudited domestic arrears are estimated to be 1.8 percent of GDP. Thus, a contingent liability shock of 8.8 percent of GDP is added to the projected public debt in 2022.

A tailored test was undertaken to analyze the potential impact of natural disasters, which are becoming more frequent because of climate change. The Comoros is susceptible to natural hazards and climate change, such as the eruption of Karthala and hurricanes. A natural disaster–related shock of 9.7 percent of GDP was carried out in the DSA as a tailored test. The impact of climate change is already incorporated in the baseline projection: long-term potential growth was revised down by 0.3 percentage points relative to earlier projections to reflect the probable influence of natural disasters.

Long-term GDP growth projections were prepared by World Bank staff utilizing growth models and included a positive impact from projects funded by IDA. Long-term growth assumptions in the DSA were moderately above historical; given an assumption of higher investment and policy implementation aligned with the IMF's Staff Monitored Program from 2027 onward and supported by hotel construction and tourism, average annual GDP growth is expected to reach 4.2 percent. This is above the average of 3.2 percent

between 2010 and 2019. There was no significant disagreement between the IMF and the World Bank on growth projections in preparation of the DSA.

Long-term fiscal assumptions were more optimistic than historical performance. The baseline scenario projects a budget consolidation, with the fiscal deficit narrowing from 3.7 percent of GDP in 2021 to an average of 1.3 percent of GDP from 2027 onward. This outperforms the average overall deficit of 2.1 percent of GDP between 2016 and 2020. The fiscal deficit is assumed to be funded by continuing external grants, donors, and concessional financing, with a fiscal gap filled with borrowing on close to concessional terms reflecting the government's commitment to avoid nonconcessional borrowing going forward. The DSA assumed grants and loans for the next three years, and only loans afterward. According to the DRS assessment, debt data coverage was almost complete and only lacked information on external, private, nonguaranteed debt.

Long-term assumptions concerning revenue imply successful efforts to mobilize domestic revenue. The DSA draws on the Staff Monitored Program's assumption of tax revenue gains by 0.2 percent of GDP in 2021 and 0.3 percent of GDP per year thereafter. Revenue and grants are expected to grow from an average of 9.6 percent of GDP in 2020–26 to 11.6 percent of GDP in 2030, and 15.1 percent in 2041. Additional revenues would come from tax and customs policy measures (for example, abolishing some sales tax exemptions), the registration of additional taxpayers, and transfers of fuel product transactions from SOEs to customs. In the baseline scenario, primary expenditures amounted to 19.1 percent of GDP on average over the next decade (compared with 16.8 percent in the past 10 years).

Division of Labor with International Monetary Fund

LIC-DSF guidance establishing a division of labor in the preparation of macrofiscal projections for DSAs was followed in the Comoros. The World Bank produced the long-term growth projections, factoring in impacts of climate change—although without the benefit of a formal model to quantify impact. In the preparation of the October 2021 DSA, the IMF staff led work on long-term fiscal projections, including estimation of domestic revenue under reform scenarios. World Bank staff provided IDA financing assumptions.

IMF staff expressed concerns about the length of time required to complete World Bank review and approval processes for the DSA. This reportedly had a negative impact on preparation of documentation related to the IMF-supported program.

Use of Debt Sustainability Analyses to Inform World Bank Engagement in the Comoros

DSAs identified the Comoros's key debt drivers, which included the following: structural vulnerabilities as a small island economy; dependency on remittance inflows; large exposure to external volatility and natural disasters; low GDP, external competitiveness, and exports growth; weak debt management and limited assessment of high-cost nonconcessional borrowing; weak domestic revenue mobilization, weak SOE governance, and no information on SOE domestic debt; uncertain level of domestic arrears; and contingent liabilities.

The most recent CPF, FY20–24 (June 2020), addressed fundamental weaknesses in the Comoros's fiscal policy and debt management that were discussed in DSAs. By the time the CPF was approved, the Comoros had been carrying a moderate risk of debt distress. The CPF's focus area 2 (economic recovery and inclusive growth) emphasized the need to mobilize more revenue to fund investment and to address critical issues related to SOEs, including contingent liabilities and risks associated with two critical SOEs—SNPSF (Société Nationale des Postes et des Services Financiers; postal bank) and Comores Telecom (World Bank 2020c). The CPF envisioned a DPO, analytical and advisory services, and technical assistance to support reforms concerning revenue mobilization, PFM, and restructuring and privatization of SOEs. In addition, the CPF explicitly referred to support for improving debt management and restoring debt sustainability, including work on DSAs.

ASA and technical assistance addressed challenges for debt management. The Comoros had benefited from technical assistance missions conducting a Debt Management Performance Assessment (DeMPA) and reform plan in 2016. This work provided a comprehensive diagnosis of debt vulnerabilities and elaborated on detailed policy recommendations to strengthen the debt management office. A debt technical assistance report prepared in 2020 showed that debt governance, institutional coordination, and technical

capacity were challenges for the Comoros. In 2021, training on DSA preparation was delivered by the World Bank, and the government established a committee to review loan proposals before cabinet approval.

The Comoros prepared PPAs as part of the SDFP, which addressed issues identified in DSAs. One PPA required the adoption of a zero ceiling on nonconcessional external borrowing; however, this PPA was eventually breached by the nonconcessional loan signed in 2020 to finance hotel construction. The ceiling was subsequently replicated by the ceiling in the IMF Staff Monitored Program. Another PPA required the publication of a semiannual statistical bulletin on PPG external and domestic debt, which was duplicated as a prior action in the DPO. Other PPAs focused on tax administration and strengthening of public investment management and debt management by reinforcing the role of the minister of finance and the committee reviewing loans and guarantees.

A DPO approved in 2020 included a prior action to accelerate the restructuring process for a systematically important government-owned financial institution (SNPSF), targeting SOE governance issues raised in DSAs. In addition, it included a prior action duplicating the FY21 SDFP PPA on debt transparency.

Assessment

- The most recent DSA for the Comoros contains conservative assumptions about growth in the long term (which was predicated on the successful completion of the IMF-supported program).
- The DSA explicitly recognizes fiscal risks associated with contingent liabilities, particularly from SOE debt and the financial sector.
- PPAs under the SDFP addressed drivers of the Comoros's debt vulnerabilities explicitly mentioned in DSAs. PPAs focused on enhancing revenue mobilization and public investment management.
- A COVID-19 emergency DPO approved in 2020 targeted SOE governance and transparency issues raised in DSAs, although one prior action duplicated an SDFP PPA.

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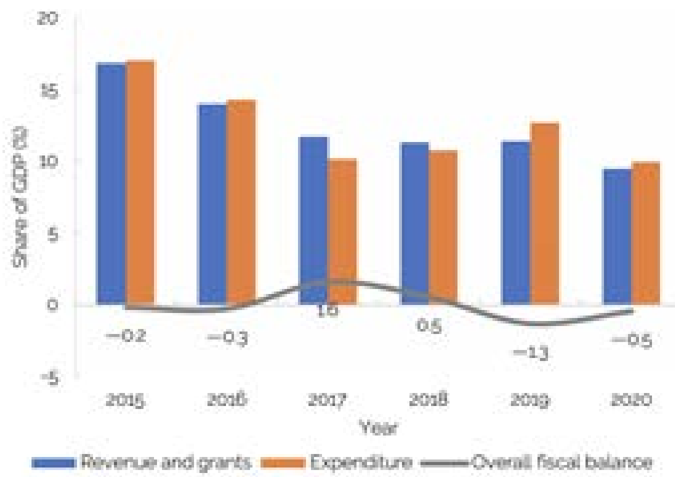
Table G.7. Key Macroeconomic Indicators

Macroeconomic Indicators	2015	2016	2017	2018	2019	2020	2021[a]
Real GDP growth (%)	6.9	2.4	3.7	5.8	4.4	1.7	6.2
Inflation—annual average (%)	0.7	3.2	35.7	29.3	4.7	11.4	9.0
Public debt (% of GDP)	19.3	23.5	23.5	20.3	20.1	23.6	23.7
of which external	13.4	15.4	17.0	13.7	14.0	15.7	15.6
External debt service as a share of exports	2.6	2.9	1.0	1.2	3.2	2.9	n.a.
Current account balance (% of GDP)	−3.9	−4.1	−3.3	−3.5	−3.2	−2.2	−0.9
Primary balance (% of GDP)	−0.1	−0.2	1.6	0.6	−1.2	−0.3	n.a.
Institutional capacity							
CPIA rating, debt management	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Debt sustainability							
Risk of external debt distress	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Risk of overall debt distress	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Official exchange rate (LCU per US$)	926	1,024	1,466	1,623	1,648	1,852	1,990
Interest payments (% of revenue)	0.3	0.4	0.4	0.3	0.8	1.2	n.a.

Sources: Low-Income Country Debt Sustainability Analysis (June 2022); World Economic Outlook (October 2022).

Note: CPIA = Country Policy and Institutional Assessment; GDP = gross domestic product; LCU = local currency unit; n.a. = not applicable.
a. International Monetary Fund World Economic Outlook projections.

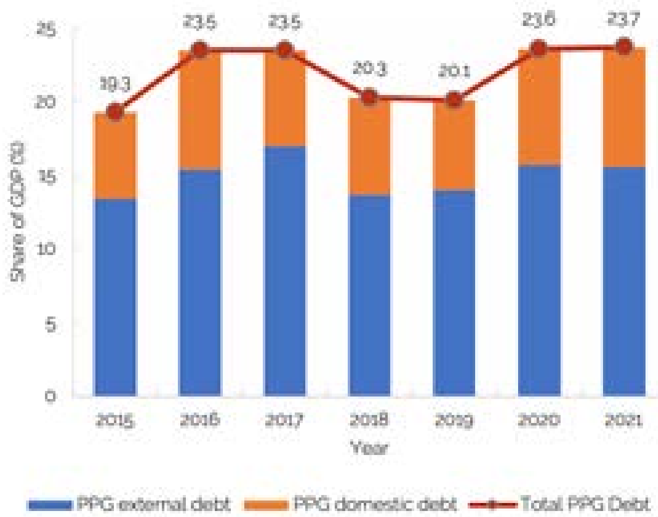
Figure G.5. Fiscal Indicators 2015–20



Source: Low-Income Country Debt Sustainability Analyses (various years).

Note: GDP = gross domestic product.

Figure G.6. Public Debt 2015–21



Source: Low-Income Country Debt Sustainability Analysis (June 2022).

Note: GDP = gross domestic product; PPG = public and publicly guaranteed.

Table G.8. Country Diagnostics, Strategies, and Major Analytical Work

Diagnostic	Year
Public Expenditure and Financial Accountability	2020
Public Investment Management Assessment	2022
Debt Management Performance Assessment	None
Systematic Country Diagnostic	2018
Public Finance Review	None
Country Partnership Framework	2022

Source: Independent Evaluation Group.

Table G.9. Composition of Public and Publicly Guaranteed External Debt, 2015–20

Debt Composition	2015	2016	2017	2018	2019	2020
Public and publicly guaranteed debt from:	4,065	3,817	4,004	4,023	4,279	4,496
Official creditors	4,055	3,816	4,003	3,993	4,177	4,361
Multilateral	1,872	1,724	1,995	2,037	2,122	2,290
Bilateral	2,182	2,091	2,008	1,956	2,055	2,071
Private creditors	11	2	1	30	102	135
IMF	1,098	989	954	839	1,130	1,511

Source: 2022 International Debt Statistics.

Note: IMF = International Monetary Fund.

Table G.10. External Debt at End-2021—Creditor Composition

Creditor	Debt Stock End-2021		
	$, millions	Share of Total (%)	Share of GDP (%)
Multilateral creditors	4,245.1	48.2	7.5
IMF	1,171.1	13.3	2.1
IDA	1,759.1	20.0	3.1
AfDB	449.9	5.1	0.8
Other	865	9.8	1.5
Bilateral creditors	3,842.4	43.7	6.8
Paris Club	117.2	1.3	0.2
France	61.6	0.7	0.1
Korea, Rep.	55.6	0.6	0.1
Non–Paris Club	3,725.2	42.3	6.6
China	3,197.3	36.3	5.7
India	163.8	1.9	0.3
Other	364.1	4.1	0.6
Private creditors	713.7	8.1	1.3
Total external debt	8,801.1	100.0	15.6

Source: The Democratic Republic of Congo Ministry of Finance and IMF.

Note: AfDB = African Development Bank; GDP = gross domestic product; IDA = International Development Association; IMF = International Monetary Fund.

Background on Public Debt Vulnerabilities

The most recent World Bank–IMF DSA assessed the Democratic Republic of Congo to be at moderate risk of external and overall debt distress, unchanged since 2014 (IMF 2022b). Public debt had increased from 19.3 percent of GDP in 2015 to an estimated 23.7 percent in 2021. External debt accounted for two-thirds of the increase in public debt over this period, including sovereign borrowing, debt of Gécamines (the state-owned copper mining company), and guaranteed debt of Sicomines (a joint venture between Gécamines and foreign investors). In nominal terms, over 90 percent of the end-2021 external debt was owed to official multilateral and bilateral creditors on highly concessional terms. Domestic debt amounting to 8 percent of GDP at end-2021 consisted of mostly arrears. These included reconciled arrears (3.9 percent of GDP), value-added tax arrears to exporters

(2.7 percent of GDP), and arrears to oil companies (0.6 percent of GDP), but not unaudited arrears amounting to 5.3 percent of GDP.

Drivers of Increasing Public Debt

The rise in public debt since 2016 has been moderate. Total public debt-to-GDP ratio increased from 19.3 percent of GDP in 2015 to 23.7 percent in 2021. One-fifth of the rise can be attributed to the buildup of domestic arrears resulting from inadequate public finance practices, including shortcomings in cash management and budget execution.

The impact of the COVID-19 pandemic on debt was moderate. The economy grew on average by 5 percent in 2018 and 2019, but a decline in revenue in 2019, coupled with financing of the president's 100-day program, led to a fiscal deficit of 1.2 percent of GDP. Economic activity decelerated sharply in 2020 as a result of the COVID-19 pandemic; however, the mining sector was resilient, international copper and cobalt prices reached record levels, and growth remained positive at 1.7 percent. Growth rebounded strongly in 2021 to 6.2 percent, and the fiscal deficit narrowed to 1.5 percent of GDP, reflecting higher grant inflows and increased tax and nontax revenues.

Debt Sustainability Assessment

The 2022 DSA assessed the Democratic Republic of Congo at moderate risk of debt distress, with weak debt-carrying capacity. The DSA identified weak revenue mobilization as the primary determinate of the Democratic Republic of Congo's risk of debt distress. External debt thresholds were breached under stress tests, highlighting the country's vulnerability to external shocks, primarily to exports in the context of dependence on commodity exports and volatile commodity prices. The DSA underscored that strengthening debt and cash management was essential to debt sustainability. Arrears accumulation was the primary source of domestic debt accumulation.

The DSA covers PPG external and domestic debt, contracted by the central government, the Central Bank of the Democratic Republic of Congo, and provinces, with partial information on the debt of SOEs and other government institutions. The DSA indicates that public institutions are legally prevented from borrowing externally without approval from the Ministry of

Finance. However, because the Ministry of Finance Direction Générale de la Dette Publique does not receive information from public institutions (except for Gécamines, Sicomines, and the provinces), adherence to this policy cannot be confirmed and is a source of risk. Nonguaranteed borrowing by the private sector is thought to be minimal, but no data are available. The DSA includes a contingent liability stress test that assumes SOE debt of 0.5 percent of GDP (the LIC-DSF default is 2 percent), unreported debt of public institutions of 2 percent of GDP (the default is zero), and a financial market shock set at the average LIC-DSF fiscal cost (5 percent of GDP). As a result, the contingent liability stress test amounts to 7.5 percent of GDP.

The medium-term outlook is favorable. The DSA baseline scenario assumes average growth of 6.8 percent over the medium term, driven by increases in mining production, supportive commodity prices, and strong demand for copper and cobalt. After 2027, growth is projected to converge to an annual rate of 4.9 percent.

Fiscal outcomes are predicated on sustained implementation of the fiscal measures committed to under the 2021 IMF-supported arrangement under the Extended Credit Facility. These included stepping up domestic revenue mobilization by restoring value-added tax normal functioning, rationalizing nontax and parafiscal charges, streamlining tax expenditures, modernizing revenue administration, and strengthening natural resource management and transparency. The primary fiscal deficit is projected to fall from 2.6 percent of GDP in 2022 to 0.4 percent of GDP in 2027, reflecting measures to strengthen the tax base and targeted PFM reforms to rationalize and contain current spending (IMF 2022b). The baseline scenario caps current expenditure at 11.7 percent of GDP over the medium term (from 10 percent of GDP in 2022), whereas capital expenditure is projected to rise moderately from 5.5 percent of GDP in 2022 to 5.8 percent in 2027. Revenues are projected to increase from 9 percent of GDP in 2020 to 14 percent by 2024, in line with the targets set in the IMF Extended Credit Facility arrangement.

Division of Labor with the International Monetary Fund

The World Bank's contribution to the DSA centered on the long-term projections. The World Bank commented on the draft DSA, and comments were

incorporated. The World Bank provided input to the long-term projections, including IDA lending assumptions and assumptions about ongoing and proposed investment projects, and to the long-term outlook for cobalt and copper prices. Working relations with the IMF were described as very good, with the two institutions in agreement on both the medium- and long-term projections.

Implications of Debt Sustainability Analyses for World Bank Engagement in the Democratic Republic of Congo

DSAs identified the Democratic Republic of Congo's key debt vulnerabilities as weak cash management and budget execution, giving rise to domestic arrears; vulnerability to commodity prices; limited economic diversification; weak PFM and domestic revenue mobilization; weak debt reporting from SOEs; and weak value for money of investments. The 2016 DeMPA identified shortcomings in debt coverage, particularly with respect to SOE liabilities.

Support to the Democratic Republic of Congo is guided by the World Bank CPF FY22–26, which includes an objective to "strengthen economic governance for increased private sector investment" (World Bank 2022a, 24). The CPF addresses issues identified in the DSA, including by strengthening debt management and increasing domestic revenue mobilization. Other than SOE data issues, problems with debt transparency were not identified in the DSA, nor were they drivers of debt stress.

The Democratic Republic of Congo's DPO approved in June 2022 targeted reforms to expenditure management, SOE transparency and governance, and domestic revenue mobilization—all issues identified in DSAs. This included prior actions creating the General Directorate of Treasury and Public Accounting within the Ministry of Finance, mandating SOEs to publish annual reports and their audited financial statements in a timely manner, and supporting competitive, meritocratic, and transparent recruitment of SOE senior management (World Bank 2022b).

As an IDA-only country at moderate risk of debt distress, the Democratic Republic of Congo implemented PPAs under the SDFP. A PPA sought to improve information on SOEs by requiring the publication of debt bulletins with data on PPG debt (domestic and external), including loan terms and

creditors. The FY22 PPA extended the coverage of the annual debt report to include domestic arrears and contingent liabilities and information on the debt liabilities of strategic SOEs; these included Société Minière de Bakwanga (diamonds), Société Nationale d'Electricité (electricity), and Gécamines (copper). This PPA was duplicated as a prior action for the Foundational Economic Governance Reforms DPO approved in June 2022. Although nonconcessional borrowing was not identified as a major driver of the Democratic Republic of Congo's debt stress, a PPA required a zero nonconcessional borrowing ceiling, which duplicated the ceiling in the existing IMF program.

Assessment

- Debt coverage is comprehensive for central government debt and obligations of the provinces and the central bank, but the DSA notes only partial coverage of the debt liabilities of SOEs.
- Some SDFP PPAs addressed the Democratic Republic of Congo's debt vulnerabilities from incomplete data on SOE liabilities and domestic arrears, as identified in the DSA. Another PPA imposed a nonconcessional borrowing limit. The prioritization of this PPA is questionable given that nonconcessional borrowing was not identified as a major driver of debt stress or risk in the DSA. Moreover, this PPA duplicated the nonconcessional borrowing ceiling under an IMF program.
- The 2022 DPO sought to address weaknesses in expenditure management, SOE transparency and governance, and domestic revenue mobilization issues identified in DSAs.

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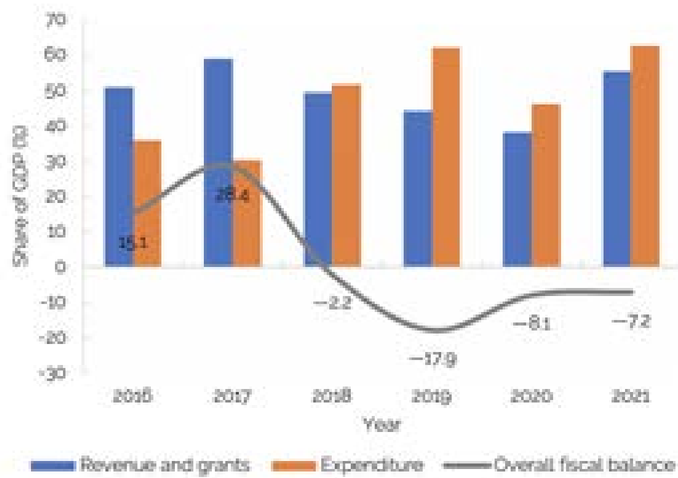
Table G.11. Key Macroeconomic Indicators

Macroeconomic Indicators	2015	2016	2017	2018	2019	2020	2021[a]
Real GDP growth (%)	0.0	−2	−1.7	5.6	−2.1	−4.1	4.8
Inflation—annual average (%)	−0.9	0.1	0.3	1.0	1.5	−0.7	1.6
Public debt (% of GDP)	68.9	75.3	81.9	84.6	94.2	106.0	101.3
of which external	58.2	56.6	55.5	52.4	54.7	66.7	64.4
External debt service as a share of exports	11.1	11.9	16.2	20.7	18.5	24.7	n.a.
Current account balance (% of GDP)	−4.7	−7.7	−8.9	−43.7	−34.4	−29.3	−32.5
Primary balance (% of GDP)	13.6	13.4	−1.3	−14.8	−5.4	−5.0	n.a.
Institutional capacity							
CPIA rating, debt management	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Debt sustainability							
Risk of external debt distress	High	High	High	High	High	High	High
Risk of overall debt distress	High	High	High	High	High	High	High
Official exchange rate (LCU per US$)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Interest payments (% of revenue)	2.3	2.3	2.6	2.5	2.8	1.7	n.a

Sources: Low-Income Country Debt Sustainability Analysis (January 2022); World Economic Outlook (October 2022).

Note: CPIA = Country Policy and Institutional Assessment; GDP = gross domestic product; LCU = local currency unit; n.a. = not applicable.
a. International Monetary Fund World Economic Outlook projections.

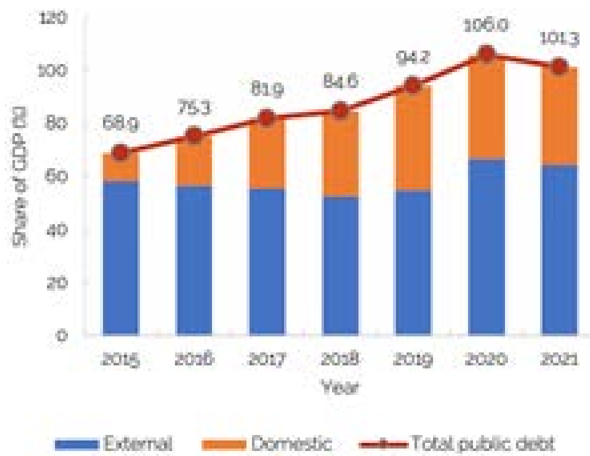
Figure G.7. Fiscal Indicators, 2016–21



Sources: Low-Income Country Debt Sustainability Analysis (January 2022); World Economic Outlook (October 2022).

Note: GDP = gross domestic product.

Figure G.8. Public Debt, 2015–21



Sources: Low-Income Country Debt Sustainability Analysis (January 2022); World Economic Outlook (October 2022).

Note: GDP = gross domestic product; PPG = public and publicly guaranteed.

Table G.12. Country Diagnostics, Strategies, and Major Analytical Work

Diagnostic	Year
Public Expenditure and Financial Accountability	2016
Public Investment Management Assessment	None
Debt Management Performance Assessment	2018
Systematic Country Diagnostic	None
Public Finance Review	None
Country Partnership Framework	Regional Partnership Framework 2022

Source: Independent Evaluation Group.

Table G.13. Composition of Public and Publicly Guaranteed External Debt, 2015–20

Debt Composition	2015	2016	2017	2018	2019	2020
Public and publicly guaranteed debt from:	312	291	289	270	271	311
Official creditors	225	209	207	193	183	214
Multilateral	133	127	129	124	122	154
Bilateral	92	82	78	69	61	60
Private creditors	61	59	57	55	68	62
IMF	27	24	24	22	21	36

Source: 2022 International Debt Statistics.

Note: IMF = International Monetary Fund.

Table G.14. External Debt Stock 2017–20 (US$, millions)

External Debt Stock	2017	2018	2019	2020
Total public debt	1,051.5	1,121.0	1,226.4	1,436.4
Domestic	314.9	430.3	538.2	630.8
External	736.7	690.7	688.2	805.5
Central government	878.5	959.1	1,059.7	1,276.4
Domestic	245.9	363.3	468.3	561.6
Treasury bills/notes	44.8	39.4	37.8	34.5
Bonds	140.7	209.9	213.8	254.5
Overdrafts	23.6	69.6	151.5	83.6
Loans	36.9	44.3	65.3	189.0
External	632.6	595.8	591.5	714.8
Treasury bills/notes	16.2	21.8	24.4	26.7
Bonds	95.5	90.3	113.2	101.6
Loans	520.8	483.8	453.8	586.5
Bilateral	184.5	157.9	137	131.5
Multilateral	310.6	319.1	310.1	448.3
Other	6.8	6.8	6.8	6.8
Government guaranteed	173.1	161.9	166.7	160.0
Domestic (loans)	68.9	67	69.9	69.2
External (loans)	104.1	94.9	96.8	90.8
Bilateral	11.0	10.9	10.9	10.8
Multilateral	93.2	84	85.9	79.9

Source: Ministry of Finance of Dominica.

Background on Public Debt Vulnerabilities

The most recent World Bank–IMF DSA (January 2022) assessed Dominica at high risk of external and overall debt distress, unchanged since 2014. Public debt increased from 75.3 percent of GDP in 2016 to an estimated 101.3 percent in 2021 (IMF 2022c). Domestic and external debt contributed equally to the rise in debt-to-GDP ratio. Domestic debt rose 18 percentage points from 19 percent of GDP to 37 percent and external debt by 7 percent points from 57 percent of GDP to 64 percent. In nominal terms, external debt accounted for 56 percent of end-2020 public debt. Approximately 90 percent of public debt is obligations of the central government, and the remaining 10 percent, equivalent to 11.9 percent of GDP, is the guaranteed debt of SOEs. Dominica

is classified as an IDA–International Bank for Reconstruction and Development blend borrower but has no access to international financial markets, and 90 percent of external debt is owed to bilateral and multilateral creditors on concessional terms. Other external debt liabilities reflect bonds issued in the regional market and purchased by regional commercial banks and insurance companies. Dominica participated in the Debt Service Suspension Initiative and benefited from bilateral debt payment deferrals of approximately $2.5 million, 0.5 percent of GDP. Recently, debt service to PetroCaribe, República Bolivariana de Venezuela (the largest bilateral creditor), has been canceled or rescheduled.

Drivers of Increasing Public Debt

Dominica's high level of debt has been largely driven by recurrent fiscal deficits resulting from postdisaster reconstruction and recovery efforts. Before 2017, public debt was declining, and Dominica was realizing substantial fiscal surpluses largely because of buoyant revenues from its Citizenship by Investment (CBI) program. Tropical Storm Erika in 2015 and Hurricane Maria in 2017, coupled with the COVID-19 pandemic, significantly altered the debt trajectory. Hurricane Maria caused loss and damage equivalent to 226 percent of GDP. This followed the loss and damage cause by Tropical Storm Erika, equivalent to 96 percent of GDP, which rendered the main airport inoperable for three months.

Fiscal pressures were exacerbated by the COVID-19 pandemic. Expenditures rose to an annual average of 54 percent of GDP in 2020–21 from 45 percent in 2016–19, whereas revenues fell from 51 percent of GDP to 47 percent. Before COVID-19, the 2020 fiscal deficit was projected at 3.8 percent of GDP, with a primary deficit of 2 percent. However, the outcome for 2020 was an overall fiscal deficit of 8.1 percent of GDP and a primary deficit of 5.8 percent. With limited fiscal space and constraints on immediate reallocation of current expenditures, increased COVID-19–related expenditures were partially offset by contraction in public investment, including with respect to capital investments to build resilience to climate shocks.

Debt Sustainability Assessment

According to the January 2022 DSA, Dominica is at high risk of debt distress, with medium debt-carrying capacity. DSA projections assumed full implementation of the fiscal consolidation plan committed to under the 2020 IMF arrangement, which was projected to bring the debt-to-GDP ratio below the regional debt target of 60 percent of GDP by 2035. Main risks to the outlook included (i) more prolonged impact of the COVID-19 pandemic, resulting in slower growth and weaker tourism-related revenue; (ii) greater impacts from natural disasters; and (iii) lower revenues from the CBI program.

The DSA captured public debt of the central government, guaranteed debt of SOEs, and borrowing under the PetroCaribe arrangement with República Bolivariana de Venezuela. There is no borrowing by state and local governments or the central bank on behalf of the government. SOEs are not permitted to borrow externally without a state guarantee. Dominica has no PPPs and thus no related contingent liabilities. The DSA does not take account of the nonguaranteed domestic debt of SOEs, primarily the National Bank of Dominica, the Dominica Agricultural Industrial and Development Bank, and the Dominica Social Security. These liabilities are not included in the public debt stock but are assumed to be small, relative to state-guaranteed debt. The DSA included a contingent liability stress test assuming SOE debt of 2 percent of GDP (the LIC-DSF default).

The DSA included stress tests for climate risks to which Dominica is highly vulnerable. A financial market shock of 7 percent of GDP (higher than the 5 percent of GDP default) was included to account for risks from natural disasters. It reflects the potential fiscal costs of strengthening financial sector balance sheets in the event of a natural disaster, given undercapitalization of Dominica's nonbank financial institutions and high nonperforming loans. A customized "catastrophic climate event" scenario assumed a Category 5 hurricane in the second half of 2022 with declines in real GDP, exports, and revenues comparable to those after Hurricane Maria, and large increase in expenditure for rehabilitation, but with a slow recovery to account for financing constraints.

The DSA assumed strong medium-term growth. The January 2022 DSA baseline assumed average annual growth of 5.5 percent in 2021–26, much higher than over the past 10 years before the COVID-19 pandemic (0.7 percent). Higher public capital expenditures and execution of a large public investment plan were projected to provide an impulse to growth supported by a gradual recovery of tourism. This assumes that the COVID-19 pandemic abates domestically and globally from 2021 and new hotel facilities become operational as scheduled. After 2026, annual GDP growth is projected to gradually decline to about 1.5 percent on average.

Public investment in the medium term is assumed to be financed by CBI revenues. CBI revenues are projected to taper gradually from 30 percent of GDP in 2020 to 14 percent of GDP by 2026. This assumption is predicated on several years of sizable inflows starting from 2014 and the fact that CBI revenues remained resilient in the face of successive natural disasters and the COVID-19 pandemic. Public investment plans are ambitious and include a new international airport and geothermal electricity generation plant to alleviate dependence on imported diesel fuel.

Division of Labor with the International Monetary Fund

The World Bank provided input to the long-term projections, including assumptions about IDA lending volumes, ongoing and proposed investment projects, and disaster risk scenarios for the customized stress tests. There was agreement between the IMF and the World Bank on the level of the public debt portfolio and implicit contingent liabilities.

Implications of Debt Sustainability Analyses for World Bank Engagement in Dominica

DSAs identified Dominica's debt vulnerabilities as stemming from recurrent and severe natural disasters and challenges typical of small island states (notably, high input costs, lack of economies of scale, and limited institutional capacity).

World Bank support to Dominica is guided by the Eastern Caribbean Regional Partnership Framework FY22–25. The framework supports, among other objectives, improvement in fiscal and debt management and PFM. Although

the DSA did not identify weaknesses in the coverage of debt data, the 2018 DeMPA for Dominica identified weaknesses in debt management and debt coverage and recommended institutionalizing the submission of an annual debt policy review to parliament with coverage of SOE liabilities and publication on the Ministry of Finance website (World Bank 2018a).

The World Bank approved two COVID-19 response and recovery programmatic development policy credits in 2021 and 2022 that included measures to strengthen fiscal management. Dominica's first COVID-19 response and recovery programmatic development policy credit was the country's first development policy financing (World Bank 2021a). Of the issues identified in the DSA, it supported reforms to improve fiscal vulnerabilities through the development of a Fiscal Rules and Responsibility Framework and a Vulnerability Risk and Resilience Fund and through revenue enhancement by limiting discretionary and ad hoc duty exemptions on vehicle imports and increasing compliance between Customs and Inland Revenue administrations. The second COVID-19 response and recovery programmatic development policy credit contained prior actions to enact a Fiscal Responsibility Act that established measurable quantitative targets for fiscal balances and public debt levels (World Bank 2022c).

As an IDA-eligible country at risk of debt distress, Dominica had to implement actions under the SDFP. A PPA sought to strengthen debt reporting and accountability that (although they were findings in the 2018 DeMPA) were not identified in the DSAs as significant weakness or key drivers of debt vulnerability. These PPAs duplicated prior actions in the COVID-19 recovery DPOs. Other PPAs also duplicated rather than extended or complemented DPO prior actions to enshrine fiscal targets in a Fiscal Rules and Responsibility Framework and ensure adequate financing and prudent management of funds set aside for vulnerability risks.

Assessment

- Drivers of debt buildup were clearly identified in DSAs; public debt and contingent liabilities were comprehensively measured, except the nonguaranteed domestic borrowing of SOEs, which was assessed as small.

- The World Bank took the lead in the formulation of the long-term projections in the DSA, including by assessing the impact of climate-related disasters to which Dominica is highly vulnerable.
- DPOs and PPAs approved in 2021 and 2022 included actions to support strengthening fiscal management as identified in DSAs. These included development of fiscal rules and financing for a Vulnerability Risk and Resilience Fund, limitation of discretionary and ad hoc duty exemptions on vehicle imports, and improvement of cooperation between revenue collection agencies to increase compliance. However, they also gave significant emphasis to debt reporting and debt data coverage (neither of which were considered by the DSA to be problematic or sources of vulnerability).

Ghana Country Case Study

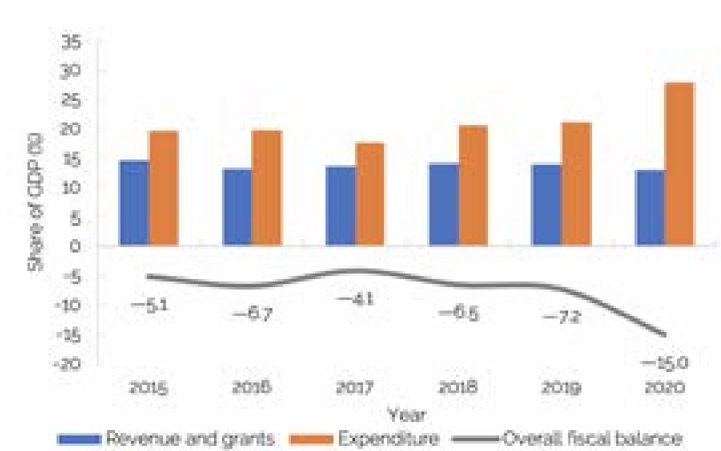
Table G.15. Key Macroeconomic Indicators

Macroeconomic Indicators	2015	2016	2017	2018	2019	2020	2021[a]
Real GDP growth (%)	2.1	3.4	8.1	6.2	6.5	0.4	5.4
Inflation—annual average (%)	17.2	17.5	12.4	9.8	7.1	9.9	10.0
Public debt (% of GDP)	54.3	56.3	57.4	57.9	62.9	78.9	83.5
of which external	36.8	37.1	39.0	36.4	39.0	44.7	44.2
External debt service as a share of exports	15.6	18.4	17.4	16.1	16.2	24.8	n.a.
Current account balance (% of GDP)	−5.7	−5.1	−3.3	−3	−2.7	−3	−3.2
Primary balance (% of GDP)	−0.3	−1.9	0.5	−1.4	−1.7	−8.8	−3.7
Institutional capacity							
CPIA rating, debt management	3.0	3.5	3.5	3.5	3.5	3.5	3.5
Debt sustainability							
Risk of external debt distress	High	High	High	High	High	High	High
Risk of overall debt distress	High	High	High	High	High	High	High
Official exchange rate (LCU per US$)	3.7	3.9	4.4	4.6	5.2	5.6	5.8
Interest payments (% of revenue)	32.9	36.8	33.9	36.3	39.5	47.9	n.a.

Sources: Low-Income Country Debt Sustainability Analysis (September 2021); World Economic Outlook (October 2022); Country Partnership Framework (January 2022).

Note: CPIA = Country Policy and Institutional Assessment; GDP = gross domestic product; LCU = local currency unit; n.a. = not applicable.
a. International Monetary Fund World Economic Outlook projections.

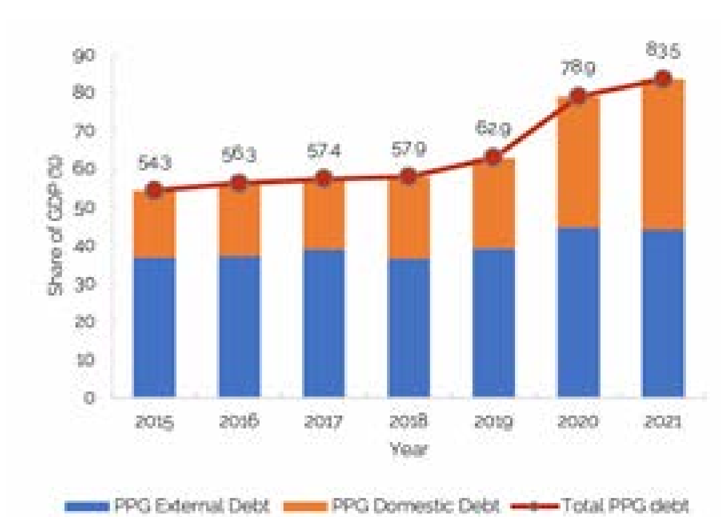
Figure G.9. Fiscal Indicators 2015–20



Source: Low-Income Country Debt Sustainability Analyses (various years).

Note: GDP = gross domestic product.

Figure G.10. Public Debt 2015–21



Source: Low-Income Country Debt Sustainability Analyses (various years).

Note: GDP = gross domestic product; PPG = public and publicly guaranteed.

Table G.16. Country Diagnostics, Strategies, and Major Analytical Work

Diagnostic	Year
Public Expenditure and Financial Accountability	2018
Public Investment Management Assessment	2016
Debt Management Performance Assessment	Pre-2012
Systematic Country Diagnostic	2018
Public Finance Review	2021
Country Partnership Framework	2022

Source: Independent Evaluation Group.

Table G.17. Composition of Public and Publicly Guaranteed External Debt, 2015–20

Debt Composition	2015	2016	2017	2018	2019	2020
Public and publicly guaranteed debt from:	16,516	18,017	18,636	19,286	21,871	25,933
Official creditors	8,639	8,592	9,076	8,758	8,780	9,185
Multilateral	4,574	4,723	5,378	5,370	5,477	6,029
Bilateral	4,065	3,870	3,699	3,388	3,303	3,156
Private creditors	6,635	8,059	8,095	9,020	11,516	14,137
IMF	1,242	1,366	1,465	1,508	1,576	2,612

Source: 2022 International Debt Statistics.

Note: IMF = International Monetary Fund.

Table G.18. External Debt Stock—Creditor Composition 2019–21 (US$, billions)

Creditor	2019	2020	2021
Official creditors	10,487.4	12,085.4	12,104.4
Bilateral	3,931.9	3,805.2	3,912.0
Multilateral	6,555.5	8,280.2	8,192.4
IDA	3,989.5	4,477.2	4,663.0
IMF	1,086.3	2,103.2	1,925.2
AfDB	1,159.1	1,225.5	1,209.3
Other	320.6	474.3	394.9
Private creditors	9,860.0	12,630.5	16,234.7
Eurobonds	7,694.7	10,215.1	13,119.9
Banks and suppliers' credits	2,165.3	2,415.4	3,114.8
Total	20,347.4	24,715.9	28,339.1

Source: Ministry of Finance of Ghana, annual debt reports 2019–21.

Note: AfDB = African Development Bank; IDA = International Development Association; IMF = International Monetary Fund.

Background on Public Debt Vulnerabilities

Ghana's public debt rose from 56.3 percent of GDP in 2016 to 83.5 percent in 2021, with domestic borrowing accounting for 75 percent of the increase. Domestic debt as a share of GDP rose from 19.2 percent of GDP in 2016 to 39.3 percent in 2021. External debt rose more moderately from 37.1 percent of GDP to 44.2 percent over the same period, but with a shift in composition to nonconcessional borrowing from private creditors. Eurobond holders and commercial banks share of end-2021 external debt stock rose to an estimated 60 percent, from 46 percent in 2016. Over this period, multilateral creditors' share of external debt fell from 31 percent to 28 percent and bilateral creditors' share declined from 23 percent to 11 percent. As a result, the share of concessional financing in PPG debt fell from 30 percent in 2016 to an estimated 19 percent in 2021.

Drivers of Increasing Public Debt

Ghana's public debt vulnerabilities stem from low tax revenues, large-scale borrowing on nonconcessional terms, currency depreciation, and cleanup in the financial and energy sectors. Debt vulnerabilities were further heightened by the economic contraction precipitated by the COVID-19 pandemic. A concerted fiscal consolidation program between 2015 and 2018 helped narrow the fiscal deficit to below 5 percent of GDP, but domestic revenues have stagnated at approximately 14 percent of GDP since 2010, which is 5 percentage points below the average for lower-middle-income countries. In 2018–20, cleanup in the financial sector, accelerated arrears accumulation, and fiscal liabilities in the energy sector created new fiscal pressures. This was exacerbated by increased spending to combat COVD-19–related trade disruptions and lower oil prices. The primary deficit widened from less than 2.0 percent in 2019 to 8.8 percent in 2020 (and an estimated 3.7 percent in 2021). Growth contracted to 0.4 percent in 2020 from 6.5 percent in 2019.

Debt Sustainability Assessment

The most recent World Bank–IMF (July 2021) DSA assessed Ghana at high risk of external and overall debt distress, with high debt-carrying capacity, unchanged since 2014. The DSA pointed to inadequate implementation of the medium-term fiscal consolidation plan, growth slowdown and commodity price shocks, and worsening global risk sentiment as significant downside risks in the outlook. The DSA underscored that debt sustainability required an aggressive and credible fiscal consolidation to create an inflexion in the debt trajectory (IMF 2021a).

The DSA captures public debt of the central, state, and local government; state guarantees to other entities in the public and private sector; and implicit government liabilities associated with SOEs and off-budget operations. Among the latter are the Energy Sector Levies Act debt of the energy sector, the Ghana Educational Trust Fund (GETFund/Daakye) debt for education infrastructure, and external borrowing related to the bauxite mining project with Sinohydro.

The DSA excludes debt of the cocoa marketing board (Cocobod), one of Ghana's largest SOEs, and payment arrears to independent power producers and gas producers. The DSA indicated that Cocobod had debt liabilities estimated at 2.5 percent of GDP at end-2020 and was engaged in quasi-fiscal activity. The authorities contend that Cocobod operates on a wholly commercial basis and its liabilities are not public debt. Payment arrears to independent power producers and gas producers, estimated at 2.1 percent of GDP at end-2020, were excluded because they were being reconciled. The contingent liability stress test included an SOE shock of 3 percent of GDP (above the average 2 percent SOE shock in the LIC-DSF), a financial market shock set at the average LIC-DSF fiscal cost of a financial crisis, and a PPP shock of 1.44 percent of GDP. As a result, the contingent liability stress test amounts to 9.4 percent of GDP, compared with 7 percent under default assumptions, and 8.4 percent under the 2019 DSA.

The DSA does not include specific stress tests for climate risks, although Ghana is vulnerable to climate change risks. These stem from erratic rainfall, rising temperatures, drought, floods, a rising sea level, and tidal waves that present significant threats to agriculture and energy (with large dependence on hydropower), both highly susceptible to fluctuating rainfall. Ghana is a member of the Vulnerable Twenty Group of Ministers of Finance and the Coalition of Finance Ministers for Climate Action to facilitate resilience to climate change. The inclusion of climate-related shocks was not discussed in the preparation of the DSA, but improved management of natural resources and climate change risks is a major objective of the CPF.

The DSA has relatively conservative long-term growth assumptions. The baseline scenario assumes that GDP growth converges to 5.2 percent in 2026, driven mainly by oil production, with new oil discoveries and gas production offsetting declining production of existing fields. Nonoil growth is expected to average 5 percent over the medium term as a result of expected improvements in business climate, digitalization, and structural transformation. Over the long term (2027–41), growth is assumed to average 4.5 percent, lower than the historical rate over the past 10 years (7 percent).

Fiscal assumptions were optimistic, which the DSA acknowledges. Projections for Ghana have tended to overestimate fiscal adjustment. Compared

with the five-year projection in the 2016 DSA, total public debt exceeded projections by 37 percentage points of GDP because of higher-than-expected fiscal deficits, including financial sector cleanup and energy sector costs, and rising interest costs. The current 2021 DSA baseline projection is for a primary balance adjustment of 9 percent of GDP over four years (2022–25). This assumes a return to a prepandemic primary deficit level of 1.4 percent of GDP in 2022, a 2.7 percent of GDP annual adjustment in 2023–25, and a sustained primary balance of 2.3 percent of GDP thereafter.

The projected consolidation falls within the top quartile for peers, underlining the ambitious nature of the government's plans. This is even after discounting in the baseline the authorities' expectations of a strong increase in tax revenues over the medium term. Except for a small primary surplus in 2017 (0.5 percent of GDP), Ghana recorded an average primary deficit of 3.4 percent of GDP between 2010 and 2021. The baseline projection is based on an increase in revenues from an average of 15.1 percent of GDP over 2021–26 to 16.4 percent over the long term (2027–41) and a fall in expenditures from 15.9 percent to 14.3 percent over the same time frame. There is no clear explanation in the DSA of how the reduction in expenditure will be achieved.

Division of Labor with the International Monetary Fund

Working relations with the IMF were reported as good, and World Bank comments were taken on board and reflected in the final DSA in summary format. There were no significant disagreements between the World Bank and the IMF on the long-term growth projections to which the World Bank provided input. The World Bank noted the optimism of the fiscal projections but thought that they were achievable. World Bank staff were, however, of the view that adjustment would need to come from higher revenue mobilization than from significant expenditure reduction.

Implications of Debt Sustainability Analyses for World Bank Engagement in Ghana

DSAs identify Ghana's key debt vulnerabilities as follows: low tax revenues, commodity price shocks, costs of financial and energy sector cleanups, and

inadequate fiscal consolidation and risks from contingent liabilities associated with SOEs and increased borrowing on nonconcessional terms.

The CPF FY22–26 identified restoration of a sustainable fiscal framework as critical to Ghana's macroeconomic stability and economic transformation. The CPF targeted reforms to improve domestic revenue mobilization and expenditure efficiency, better management and transparency of SOE liabilities, and reduction of refinancing risks to complement fiscal efforts (World Bank 2022d). The World Bank proposed a Public Expenditure Review to review spending quality and suggest ways to increase efficiency and ASA to strengthen public debt and risk management. World Bank support was also planned to help address the financial viability of the energy sector to further underpin fiscal consolidation.

The World Bank provided ASA and lending to build debt management capacity. The 2016 Economic Management Strengthening Project sought to strengthen revenue, expenditure, and debt management (World Bank 2016). It includes support to the Ministry of Finance's debt management office, strengthening of capacity for public investment management, and improvement of the governance of SOEs. In June 2022, the World Bank approved the PFM for Service Delivery Program, which targets improving domestic revenue mobilization, resource allocation, and budget execution and accountability.

As an IDA-eligible country at high risk of debt distress, Ghana was required to implement actions to reduce debt vulnerability under the SDFP. One PPA focused on the transparency of SOEs, with inclusion in the annual debt report of the debt of the energy sector SOEs and disclosure of SOEs and statutory bodies subjected to a centralized credit risk assessment by end-2020. Another PPA required submission to the cabinet of a state ownership policy to clarify the framework for SOE governance and oversight by specifying the roles of the various agencies involved and annual publication of a State Ownership Report. A subsequent PPA required publication of the 2020 State Ownership Report to improve monitoring of SOE financial and operational performance, including details of state guarantees, on-lending by the government to SOEs, data on SOE liabilities, and evaluation of SOEs' performance against agreed targets.

PPAs provided considerable support to domestic revenue mobilization through improved tax administration and revisions to the tax code, integral to the fiscal consolidation agenda highlighted in the DSA. A PPA required the Parliament of Ghana to amend the Revenue Administration Act to strengthen the voluntary disclosure program, promote self-declarations and improve tax compliance and collection, increase the number of registered taxpayers, and expand the tax base. This was complemented by a PPA requiring the Ministry of Finance to submit a revised Tax Exemption Bill to the Parliament of Ghana to streamline tax exemptions, make the process of granting exemptions more transparent, and institute periodic reviews of exemption provisions to ensure removal of those no longer valid. Other PPAs required the Ministry of Finance to revise the invoice value discount policy on selected imports to remove the special treatment for a broad range of imported goods, limit the scope for manipulation, and reduce revenue losses.

Assessment

- According to the DSA, debt data coverage of the DSA is comprehensive for central government and publicly guaranteed debt, but coverage of the debt liabilities of SOEs was partial. Key debt vulnerabilities were identified as low tax revenues, costs of financial and energy sector cleanups, risks from contingent liabilities associated with SOEs, and borrowing on nonconcessional terms.
- The World Bank provided input to, but did not lead on, the DSA's long-term projections. These did not include an assessment of the impact of climate change, nor did the DSA include specific stress tests for climate risks, although the CPF identifies Ghana as vulnerable to climate change impacts.
- The DSA has relatively conservative long-term growth assumptions, although fiscal assumptions were optimistic.
- SDFP PPAs addressed SOE transparency and domestic revenue mobilization debt vulnerabilities identified in DSAs. They were the World Bank's primary vehicle for supporting reforms to address critical fiscal and debt vulnerabilities.

Nicaragua Country Case Study

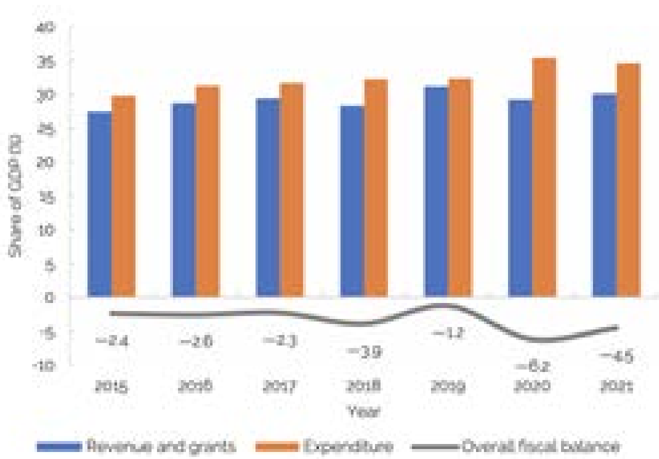
Table G.19. Key Macroeconomic Indicators

Macroeconomic Indicators	2015	2016	2017	2018	2019	2020	2021[a]
Real GDP growth (%)	4.8	4.6	4.6	—3.4	—3.8	—1.8	10.3
Inflation—annual average (%)	4.0	3.5	3.9	4.9	5.4	3.7	4.9
Public debt (% of GDP)	40.7	41.7	44.4	48.4	51.0	57.4	60.0
of which external	31.7	32.2	34.9	38.2	42.1	48.9	51.2
External debt service as a share of exports	13.6	13.7	17.5	16.6	16.1	22.6	n.a.
Current account balance (% of GDP)	−9.9	−8.5	−7.2	−1.8	6.0	3.9	−2.3
Primary balance (% of GDP)	−1.1	−1.3	−0.9	−2.5	0.2	−1.0	−0.5
Institutional capacity	4.8	4.6	4.6	−3.4	−3.8	−1.8	10.3
CPIA rating, debt management	4.0	3.5	3.9	4.9	5.4	3.7	4.9
Debt sustainability	40.7	41.7	44.4	48.4	51.0	57.4	60.0
Risk of external debt distress	31.7	32.2	34.9	38.2	42.1	48.9	51.2
Risk of overall debt distress	13.6	13.7	17.5	16.6	16.1	22.6	n.a.
Official exchange rate (LCU per US$)	−9.9	−8.5	−7.2	−1.8	6.0	3.9	−2.3
Interest payments (% of revenue)	−1.1	−1.3	−0.9	−2.5	0.2	−1.0	−0.5

Sources: Low-Income Country Debt Sustainability Analyses (various years); World Economic Outlook (October 2022).

Note: CPIA = Country Policy and Institutional Assessment; GDP = gross domestic product; LCU = local currency unit; n.a. = not applicable.
a. International Monetary Fund World Economic Outlook projections.

Figure G.11. Fiscal Indicators 2015–21



Source: Low-Income Country Debt Sustainability Analyses (various years).

Note: GDP = gross domestic product.

Figure G.12. Public Debt 2015–21

Source: Low-Income Country Debt Sustainability Analyses (various years).

Note: GDP = gross domestic product; PPG = public and publicly guaranteed.

Table G.20. Country Diagnostics, Strategies, and Major Analytical Work

Diagnostic	Year
Public Expenditure and Financial Accountability	2015
Public Investment Management Assessment	None
Debt Management Performance Assessment	2021
Systematic Country Diagnostic	2017
Public Finance Review	None
Country Partnership Framework	2018

Source: Independent Evaluation Group.

Table G.21. Composition of Public and Publicly Guaranteed External Debt, 2015–20

Debt Composition	2015	2016	2017	2018	2019	2020
Public and publicly guaranteed debt from:	4,226	4,446	4,928	5,303	5,609	6,268
Official creditors	3,957	4,207	4,695	5,083	5,402	5,874
Multilateral	2,841	3,081	3,529	3,914	4,215	4,652
Bilateral	1,116	1,126	1,167	1,170	1,187	1,222
Private creditors	5	11	14	24	26	25
IMF	264	228	219	195	181	369

Source: 2022 International Debt Statistics.

Note: IMF = International Monetary Fund.

Background on Public Debt Vulnerabilities

The most recent World Bank–IMF DSA (November 2020) assessed Nicaragua to be at moderate risk of external and overall debt distress, the same as the January 2020 DSA. Public debt rose from 41.7 percent of GDP in 2016 to an estimated 60 percent in 2021, of which most was external debt, equivalent to 51.2 percent of GDP. Three-quarters of the rise in the debt burden can be attributed to the 13.9 percent contraction in GDP since 2018. About 70 percent of external public debt is owed to multilateral institutions, primarily the Inter-American Development Bank and the Central American Bank for Economic Integration. Nicaragua is classified as an IDA-only borrower but

is eligible for blended loans from the Inter-American Development Bank and the Central American Bank for Economic Integration; 25 percent of new financing from the Inter-American Development Bank is on highly concessional terms and 75 percent has low, but market-linked, adjustable interest rates. Virtually all other external public debt is owed to bilateral creditors. Domestic debt was an estimated 8.8 percent of GDP at end-2021, of which 83 percent was medium- and long-term debt. The nonfinancial public sector accounted for 75 percent of domestic debt and the Central Bank of Nicaragua for the remaining 25 percent.

The DSA identified a private, nonguaranteed, external debt stock equivalent to 43.95 of GDP at end-2018. This was largely accumulated between 2010 and 2013, when flows related to the oil cooperation agreement with República Bolivariana de Venezuela, channeled through the private company ALBA de Nicaragua S.A., were at their peak. The agreement with República Bolivariana de Venezuela operates outside the fiscal accounts.

The January and November 2020 DSAs measured public debt in relation to GDP only. The LIC-DSF guidelines indicate that detailed information should be provided on the creditor composition, terms, and concessionality of public debt. DSAs give no information on the amount of public debt outstanding, creditor composition of external debt is expressed only as a share of the total, and there is no information on the composition of domestic debt.

Drivers of Increasing Public Debt

Improvements in the fiscal accounts in 2019 were upended by COVID-19. A sharp fall in tax revenues widened the primary deficit to 2.5 percent of GDP in 2018, but it improved in 2019 to a deficit of 0.2 percent as a result of implementation of tax and pension reforms. In 2020, costs to mitigate the economic and social expenses of the pandemic and natural disasters pushed the primary deficit to 1 percent of GDP.

Debt Sustainability Assessment

The November 2020 DSA assessed Nicaragua at moderate risk of external and overall debt distress with medium carrying capacity and limited space to absorb shocks. It was prepared in conjunction with the authorities' request

for emergency financial support from the IMF and updated the DSA prepared in January 2020 (IMF 2020a). The January 2020 DSA identified the key risks to debt sustainability as lower GDP growth and a contingent liability shock associated with the private sector debt owed to República Bolivariana de Venezuela (IMF 2020b). The DSA stated that if external financing envisaged under the baseline scenario did not materialize, contingency measures would be required to ensure debt sustainability.

The 2020 DSAs captured the consolidated external and domestic debt of the central government, the Central Bank of Nicaragua, decentralized public entities, and guaranteed debt of SOEs. It assumed delivery of heavily indebted poor countries debt relief by non–Paris Club creditors (an estimated $350 million at end-2018), for which agreements had not been concluded. Data for 2016 included partial information on the domestic debt of SOEs, the municipality of Managua, and other municipalities. Estimates for 2017 onward were based on the 2016 amortization schedule and the assumption of new domestic financing. Data on extra budgetary funds, nonguaranteed debt of SOEs, and debt of all state and local governments were not available. The DSA included a contingent liability stress test that assumed SOE debt of 2 percent of GDP (the Low-Income Country Debt Sustainability Analysis [LIC-DSF] default), a financial market shock set at the average LIC-DSA fiscal cost of a financial crisis (5 percent of GDP), and a PPP shock of 1.6 percent of GDP. The contingent liability stress test amounted to 8.6 percent of GDP, compared with 7 percent under the default assumptions.

The DSA applied a tailored shock scenario including a natural disaster shock but otherwise did not include further discussion of climate change or natural disaster vulnerabilities. Nicaragua has a long history of vulnerability to hurricanes, including two of the worst in the country's history in 2020.

Weaknesses in fiscal governance and anticorruption frameworks were a known source of vulnerability but received only passing reference in the January 2020 DSA. Operations of the nonfinancial public sector were not audited on a regular basis, and audits were not accessible to the public. Many SOEs were saddled with activities that went beyond their de jure functions. A lack of transparency created difficulties ascertaining fiscal risks related to contingent liabilities from SOEs.

Baseline GDP growth projections were conservative. The baseline scenario assumes growth of approximately 1 percent of GDP in 2021–24, with a gradual rebound over the longer term (2025–35), converging around an annual rate of 2.8 percent. This is broadly consistent with the average annual growth rate observed over 2000–10. The DSA described the long-term growth projection as based on a growth accounting exercise, using a neoclassical production function and assuming a growth rate of labor of 1.3 percent, capital of 1.8 percent, and total factor productivity growth of zero percent.

The DSA base case assumed successful fiscal consolidation. The baseline scenario assumes that the government adopts a multiyear fiscal consolidation with permanent measures that reduce the fiscal deficit by at least 3 percent of GDP between 2021 and 2023 and unwinds the temporary programs implemented in response to COVID-19. This is consistent with the commitment made by the authorities in the context of the request to the IMF for emergency financing and that the IMF regards as necessary to set debt on a firmly declining path by 2025.

Division of Labor with the International Monetary Fund

The World Bank provided information on IDA projections and input to the long-term projections. The World Bank's role was constrained by data lags as a result of limited engagement in Nicaragua since 2018 when sanctions were imposed. Staff did not have access to updated information, including rebased current account data, made available to the IMF by the authorities in the context of the request for emergency financial assistance.

Implications of Debt Sustainability Analyses for World Bank Engagement in Nicaragua

DSAs identified debt vulnerabilities as widespread social unrest and violence in response to pension reforms, successive and destructive hurricanes, weaknesses in fiscal governance, external shocks, and the risk of contingent liabilities from SOEs and private sector debt owed to República Bolivariana de Venezuela.

The Country Partnership Framework for FY18–22 targeted vulnerabilities such as natural disasters, weak governance, and contingent liabilities iden-

tified in DSAs indirectly. It included an objective to improve resilience to macroeconomic volatility, which foresaw potential technical assistance on stabilization funds or fiscal rules and catastrophic risk insurance projects. Another objective was to improve data availability and public sector management capacity, including the scope and quality of fiscal information (World Bank 2018b). The CPF envisaged several ASAs. A DeMPA and fiscal risk assessment were undertaken in 2021, supported by the Debt Management Facility. A Public Expenditure Review is being prepared and is expected to be finalized by end-2022.

As an IDA-only country at moderate risk of debt distress, Nicaragua is required to take actions to reduce debt vulnerability under the SDFP. In FY21, Nicaragua was not required to implement PPAs because of a pause in operational engagement. In FY22, Nicaragua implemented three PPAs that addressed vulnerabilities identified by the DSA, specifically fiscal risks associated with poor financial governance of SOEs and the paucity of timely and comprehensive information on domestic debt. One PPA required Nicaragua to prepare and publish external audits of annual financial statements of the five largest SOEs for 2015–20 and to commit to gradually expand the list of SOEs publishing annual financial statements and timely external audits. Another PPA required the Ministry of Finance to prepare and publish a yearly fiscal risk statement, identify the source and size of explicit and implicit risks, and formulate mitigation measures. The third PPA broadened the coverage of the public debt reports to include information on domestic debt, enhancing timeliness and improving transparency through inclusion of an assessment of the implementation of the medium-term debt management strategy and annual borrowing plan in the Annual Public Debt Report.

Assessment

» The DSA identified shortcomings in the availability of data on extra budgetary funds, nonguaranteed SOEs, municipalities and state and local governments, and only partial and estimated domestic debt data. The DSA was based on interim partial debt data.

- The long-term growth projections were based on a growth accounting exercise and do not include estimates of the potential impact of climate change events to which Nicaragua is highly vulnerable.
- ASA and SDFP were the primary vehicles for maintaining a dialogue with the authorities and helping to strengthen fiscal and debt sustainability. The SDFP focused on the shortcomings in debt and fiscal data that were clearly identified in the DSA.

Papua New Guinea Country Case Study

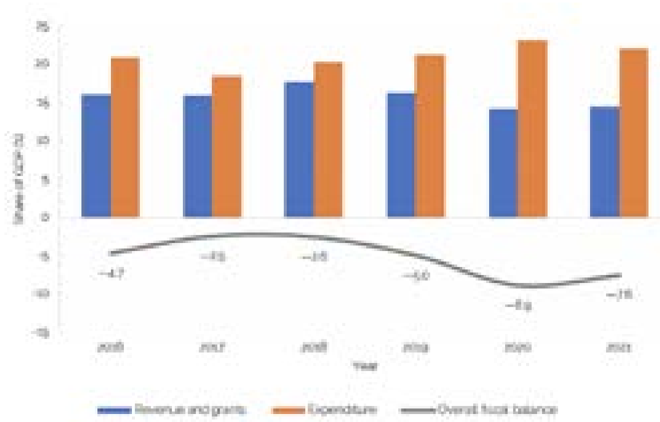
Table G.22. Key Macroeconomic Indicators

Macroeconomic Indicators	2015	2016	2017	2018	2019	2020	2021[a]
Real GDP growth (%)	6.6	5.5	3.5	−0.3	4.5	−3.5	4.8
Inflation—annual average (%)	6.0	6.7	5.4	4.7	3.7	4.9	4.5
Public debt (% of GDP)	32.2	33.7	32.5	36.7	41.5	49.0	56.0
of which external	7.9	8.5	8.8	15.2	18.0	23.0	24.9
External debt service as a share of exports	30.0	49.4	29.6	26.3	24.1	25.8	n.a.
Current account balance (% of GDP)	24.5	28.4	28.4	24.5	20.6	20.9	22.0
Primary balance (% of GDP)	−3	−2.8	−0.4	−0.3	−1.9	−6	−5.1
Institutional capacity							
CPIA rating, debt management	3.5	3.5	3.5	3.5	3.5	3.0	3.0
Debt sustainability							
Risk of external debt distress	Low	Low	Moderate	Moderate	Moderate	High	High
Risk of overall debt distress	Low	Low	Moderate	Moderate	Moderate	High	High
Official exchange rate (LCU per US$)	2.8	3.1	3.2	3.3	3.4	3.5	3.5
Interest payments (% of revenue)	10.3	11.9	13.2	13.2	15.4	17.9	16.2

Sources: Low-Income Country Debt Sustainability Analyses (various years); World Development Indicators; World Economic Outlook (October 2022).

Note: CPIA = Country Policy and Institutional Assessment; GDP = gross domestic product; LCU = local currency unit; n.a. = not applicable.
a. International Monetary Fund World Economic Outlook projections.

Figure G.13. Fiscal Indicators 2016–21



Source: World Bank 2022g.

Note: GDP = gross domestic product.

Figure G.14. Public Debt 2015–21

Source: Low-Income Country Debt Sustainability Analyses (various years).

Note: GDP = gross domestic product.

Table G.23. Country Diagnostics, Strategies, and Major Analytical Work

Diagnostic	Year
Public Expenditure and Financial Accountability	2015
Public Investment Management Assessment	None
Debt Management Performance Assessment	2010 (published); 2020 (unpublished)
Systematic Country Diagnostic	2018
Public Finance Review	2021
Country Partnership Framework	2019

Source: Independent Evaluation Group.

Table G.24. Composition of Public and Publicly Guaranteed Debt, 2015–20

Debt Composition	2015	2016	2017	2018	2019	2020
Public and publicly guaranteed from:	1,501	1,922	2,306	3,411	4,313	5,112
Official creditors	1,500	1,705	1,957	2,374	3,161	4,181
Multilateral	1,088	1,168	1,278	1,633	1,853	2,565
Nonconcessional	479	560	635	1,017	1,266	1,956
Concessional	608	608	643	617	587	608
IDA	181	204	232	414	428	472
Other	427	404	411	203	159	136
Bilateral	413	537	679	741	1,308	1,616
Nonconcessional	394	493	612	655	1,185	1,381
Concessional	19	45	67	86	122	235
Private creditors	1	217	349	1,037	1,153	931
Bonds	0	0	0	500	500	500
Commercial banks	1	217	349	537	653	431

Source: 2022 International Debt Statistics.

Note: IDA = International Development Association.

Background on Public Debt Vulnerabilities

Papua New Guinea's risk of debt distress rose from low to high between 2016 and 2020, and debt distress remained high in 2021. Public debt increased from 34 percent of GDP in 2016 to an estimated 56 percent in 2021, whereas external debt tripled over the period from 8.5 percent to 25.0 percent. The

COVID-19 pandemic precipitated significant declines in economic activity and export earnings, and the assessed risk of debt distress was raised from moderate in 2019 to high in June 2020. Public debt would have breached the threshold for debt-to-GDP ratio according to Papua New Guinea's Fiscal Responsibility Act (rising from 42 percent in 2019 to 49 percent in 2020, above the 45 percent limit), but a September 2020 amendment temporarily increased the debt limit to 60 percent.

External debt has contributed about three-quarters to the rise in the debt-to-GDP ratio since 2016. Domestic debt has fluctuated between 25 percent and 31 percent of GDP since 2016. External debt as a share of GDP, however, has tripled from 8.5 percent in 2016 to 24.9 percent in 2021. About three-quarters of the increase came from nonconcessional borrowing, both multilateral and bilateral; between 2015 and 2020, the share of nonconcessional finance increased from 58 percent to 65 percent (table G.24). Bond and commercial finance contributed another 22 percent to external debt. As a result, the share of concessional financing in PPG debt has fallen from about a third in 2016 to only 16 percent in 2021.

Drivers of Increasing Public Debt

Total public debt to GDP is estimated to have increased by approximately 19 percentage points between 2018 and 2021 (from 36.7 percent to 56.0 percent of GDP). Two-thirds of that increase was the result of primary deficits, whereas increases in the average interest rate on existing debt increased debt service by another 5.9 percent of GDP. A shallow domestic financial sector and country risk ratings below investment grade contributed to ballooning interest costs. Before 2018,[2] the realization of state-guaranteed loans for SOEs taken over by the central government increased total debt obligations by about 1.4 percent of GDP, and a one-time revaluation of foreign currency debt in 2018, in line with international best practice, resulted in an increase in debt obligations of 1.5 percent of GDP.

Tax revenues are low and have fallen with lower commodity prices and economic contraction on the back of a major earthquake and COVID-19. Nontax revenue also declined. Before the pandemic, expenditure as a share of GDP was stable but increased and drove the primary deficit from less than 2 per-

cent in 2019 to 6 percent by 2020 (and an estimated 5.1 percent in 2021). Commodity exports have been depressed by mine closures and mobility restrictions related to COVID-19. Additionally, persistent foreign exchange shortages since 2014 have resulted in forex rationing, which has reduced investment and growth.

Debt Sustainability Assessment

According to the May 2022 DSA, Papua New Guinea is at high risk of debt distress, with weak debt-carrying capacity. The DSA indicates that Papua New Guinea is susceptible to export and exchange rate shocks, signaling downside risks to the debt outlook in a global environment of high uncertainty (IMF 2022d).

The DSA clearly identifies the drivers of the buildup of debt, but debt data do not fully capture contingent liabilities. The May 2022 DSA identifies drivers of the buildup of PPG debt, but numbers do not fully capture implicit guarantees of SOEs and unfunded superannuation liabilities. Given the difficulties in capturing and assessing SOE risks in Papua New Guinea, a contingent liability stress test was included in the DSA in the second year of the projection,[3] assuming SOE debt of 9 percent of GDP and other debts (mainly unfunded superannuation liabilities related to pensions) of 3 percent of GDP. The stress test also included a financial market shock of 5 percent of GDP (the average fiscal cost of a financial crisis in a low-income country). As a result, the contingent liability stress test amounts to a debt shock of 17 percent of GDP, compared with 7 percent under the normal assumptions in the 2017 LIC-DSF Guidance Note.

The DSA does not undertake specific stress tests for climate risks, although Papua New Guinea is prone to natural hazards. These include floods, droughts, earthquakes (Papua New Guinea suffered a major earthquake in 2018, at a recovery cost of about 1 percent of GDP), volcanic activity, tsunamis, and sea-level rise. The 2022 DSA notes the exposure to natural disasters and climate change, remarking that in an adverse shock scenario, the room for significant policy adjustment is limited. The inclusion of climate-related shocks was not specifically discussed in the preparation of the DSA.

Papua New Guinea suffers from significant data gaps that are explicitly discussed in the 2022 DSA. Key series, such as GDP, are published with a lag of three to four years.[4] Most historical series rely on estimates, determined through discussion between the IMF and the World Bank. In addition to data lag, there are discrepancies between the data presented by various government agencies. In the course of preparing the 2019 DSA, the World Bank identified a large discrepancy between the external debt stock data in local currency terms published by the central bank and those published by the Ministry of Finance. It was ultimately determined that the external debt data used in prior DSAs (drawn from the Ministry of Finance) were incorrect,[5] resulting in a revaluation of the external debt stock by 1.5 percent of GDP.

The DSA has relatively conservative long-term growth assumptions. In the baseline, the 2022 DSA assumes GDP growth will converge to 3 percent in 2031, increasing to 3.3 percent in 2041, both lower than the historical growth rate over the past 10 years (3.9 percent).

Fiscal assumptions for the long term are optimistic. The DSA baseline assumes that Papua New Guinea reaches primary balance by 2025 and then sustains a fiscal surplus thereafter (its fiscal deficit has averaged 3 percent of GDP since 2015). The projection is based on an assumed significant decline in public spending (from a historical average of 18.6 percent of GDP to an average of 15.8 percent over the next 10 years and 13.7 percent thereafter), despite higher envisaged capital expenditure and increased spending on teacher salaries and contributions to employers' retirement account. There is no clear explanation for the source of long-term savings.[6] Longer-run savings hinge on "additional cuts to other spending items" that are not identified.[7] The projection assumes stable revenue (from a historical average of 16.1 percent of GDP over the past 10 years to 15.6 percent over the next 10 years, averaging 15–16 percent of GDP thereafter).

Division of Labor with the International Monetary Fund

The IMF took the lead on long-term projections. The World Bank commented on and discussed the projections and write-up. Although the World Bank considered the fiscal projections to be overly optimistic, World Bank staff ultimately agreed that the projections were feasible given the scope for high-

er fiscal revenue from the extractive and resource sector. World Bank staff thought that the projections on the fiscal balance were achievable, although they considered that adjustment would come less from expenditure reduction than from higher revenue.

Use of Debt Sustainability Analyses to Inform World Bank Engagement in Papua New Guinea

DSAs identified Papua New Guinea's debt vulnerabilities as increasing high-cost domestic and external debt; limited revenue mobilization; volatile revenues from large swings in commodity prices, coupled with procyclical fiscal policy; accumulation of large expenditure arrears to the private sector, which were not accounted for in official debt data; exposure to substantial contingent liabilities (through guarantees); and no comprehensive register of loans and guarantees, including to statutory authorities and SOEs.

When the 2019 CPF was approved, Papua New Guinea's risk of debt distress was assessed as moderate. Pillar 1 of the CPF sought to address factors raised in DSAs through the objectives of strengthened fiscal management and improved governance of the resource sector (World Bank 2019). The CPF envisioned a DPO series to improve the fiscal framework and a range of ASA to support improved revenue mobilization, improved expenditure efficiency, and strengthened fiscal resilience in the face of climate change and natural disasters.

ASA had addressed the heart of the deterioration in the primary balance over the past several years and were highly relevant for improving Papua New Guinea's debt sustainability. With the onset of the COVID-19 pandemic, a second DeMPA was conducted in 2020 but has not been published. A Public Finance Review was produced that provided policy recommendations to strengthen fiscal consolidation (World Bank 2021c). These included improved budget credibility, revised revenue contribution from the resource sector, introduction of wage controls, and rationalization of the public investment program to improve the quality of the capital budget.

As an IDA-eligible country at moderate risk of debt distress in 2019 and high from 2020, Papua New Guinea was required to comply with the SDFP. PPAs included a nonzero ceiling on nonconcessional borrowing (albeit one that

accommodated new quasi-concessional loan commitments from the government of Australia, the Asian Development Bank, and the International Bank for Reconstruction and Development, with a reduced ceiling in FY22). This addressed a driver of debt increases discussed in DSAs.

A second series of PPAs amended policies for monitoring, reporting, and approving guarantees, which helped address contingent liability and data quality issues discussed in DSAs. Papua New Guinea's guarantee portfolio is substantial; recording and monitoring have been a matter of concern for a long time, and state auditors have noted several deficiencies on guarantee recording. A PPA addressed a shortcoming of the current policy to better monitor and report outstanding loan guarantees, payments, and recovery. Another PPA required the government to approve a binding Guidance Note for loan guarantees, mandating credit risk assessments in decisions on loan guarantees and restricting the issuance of any state guarantees until the Guidance Note was issued.

The World Bank approved the First Economic and Fiscal Resilience DPO in 2018 (World Bank 2018c). Debt-related prior actions addressed DSA-identified concerns with domestic resource mobilization and included establishment of measures to improve revenue administration and enhance tax compliance, measures to reduce tax exemptions, and an increase in the excise tariff on diesel. However, the Independent Evaluation Group rated the overall outcome of the DPO to be highly unsatisfactory.[8] Although a second DPO was planned (and aimed at focusing on fiscal consolidation), it was dropped at the start of COVID-19.

The 2021 Crisis Response and Sustainable Recovery DPO included a prior action that sought to address inadequate fiscal policies identified in the DSA. The DPO includes a prior action for the approval of a budget strategy paper that included a commitment to fiscal consolidation in the medium term (World Bank 2021b).

Assessment

- The 2022 Papua New Guinea DSA contains conservative assumptions about long-run growth but optimistic assumptions about long-run fiscal balances.

- The DSA explicitly recognized risks associated with contingent liabilities (including poor reporting and data).
- Despite the likelihood of significant and costly climate events, the DSA did not include an assessment of the potential impact of climate change on debt sustainability.
- Prior actions in recent DPOs sought to address the drivers of debt stress identified in DSAs; however, the first DPO performed very poorly, and the second DPO's prior action was weak.
- SDFP PPAs helped improve Papua New Guinea's policies on guarantees, which were identified as a debt vulnerability in DSAs. PPAs on a nonconcessional borrowing ceiling are also targeting high-cost borrowing, which has been raised in DSAs.

Sierra Leone Country Case Study

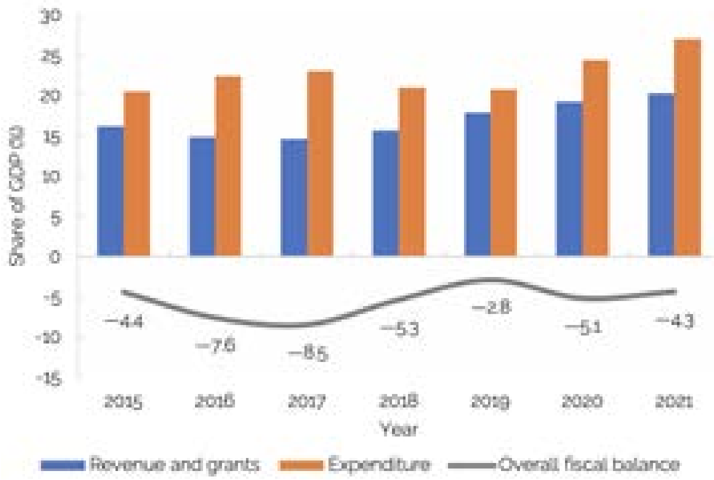
Table G.25. Key Macroeconomic Indicators

Macroeconomic Indicators	2015	2016	2017	2018	2019	2020	2021[a]
Real GDP growth (%)	−20.5	6.4	3.8	3.5	5.5	−2.2	3.2
Inflation—annual average (%)	19.6	5.8	8.9	14.0	8.6	13.8	11.9
Public debt (% of GDP)	45.7	60.7	69.2	69.1	71.7	73.7	76.8
of which external	32.3	40.0	41.4	41.2	44.1	48.0	49.2
External debt service as a share of exports	7.8	5.7	7.5	9.5	9.0	20.3	n.a.
Current account balance (% of GDP)	−23.6	−9.4	−21.8	−18.6	−22.2	−16.7	−13
Primary balance (% of GDP)	−3.7	−7.0	−6.5	−2.8	−0.4	−2.6	−4.3
Institutional capacity							
CPIA rating, debt management	—	3.3	3.2	3.2	3.2	3.1	3.1
Debt sustainability							
Risk of external debt distress	Moderate	Moderate	Moderate	High	High	High	High
Risk of overall debt distress	Moderate	Moderate	Moderate	High	High	High	High
Official exchange rate (LCU per US$)	5,076	6,303	7,397	7,932	9,016	9,840	10,695
Interest payments (% of revenue)	3.9	3.9	13.3	15.9	13.3	12.9	n.a.

Sources: Low-Income Country Debt Sustainability Analyses (various years); World Development Indicators.

Note: CPIA = Country Policy and Institutional Assessment; GDP = gross domestic product; LCU = local currency unit; n.a. = not applicable.
a. International Monetary Fund World Economic Outlook projections.

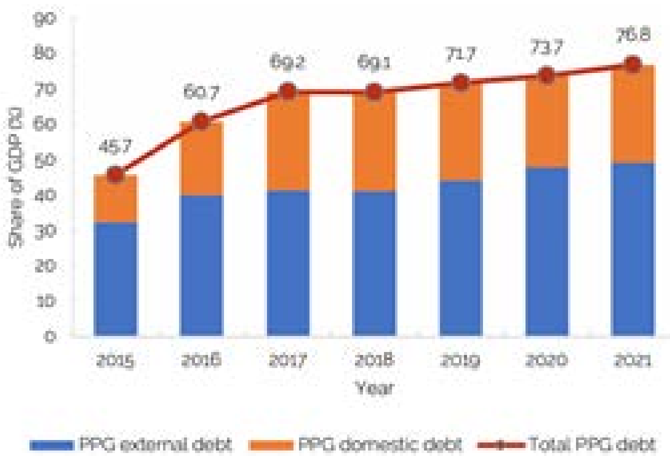
Figure G.15. Fiscal Indicators 2015–21



Source: Low-Income Country Debt Sustainability Analyses (various years).

Note: GDP = gross domestic product.

Figure G.16. Public Debt 2015–21



Source: Low-Income Country Debt Sustainability Analyses (various years).

Note: GDP = gross domestic product; PPG = public and publicly guaranteed.

Table G.26. Country Diagnostics, Strategies, and Major Analytical Work

Diagnostic	Year
Public Expenditure and Financial Accountability	2018 (published); 2022 (unpublished)
Public Investment Management Assessment	2021
Debt Management Performance Assessment	2009 (published)
Systematic Country Diagnostic	2018
Public Finance Review	2021 and 2010 (Public Expenditure Review)
Country Partnership Framework	2020

Source: Independent Evaluation Group.

Table G.27. Composition of Public and Publicly Guaranteed Debt, 2015–20

Debt Composition	2015	2016	2017	2018	2019	2020
Long-term external debt stocks	953	982	1,047	1,065	1,164	1,278
Public and publicly guaranteed debt from:	953	982	1,047	1,065	1,164	1,278
Official creditors	760	789	853	872	977	1,091
Multilateral	591	602	673	684	756	853
Bilateral	169	187	180	187	221	238
Private creditors	193	193	193	193	187	187

Source: 2022 International Debt Statistics.

Background on Public Debt Vulnerabilities

Sierra Leone's risk of debt distress has been high since 2018. Public debt increased from 46 percent of GDP in 2015 to an estimated 77 percent in 2021. The debt stock includes central government PPG liabilities. Sierra Leone's Medium-Term National Development Plan 2019–23 refers to a debt ceiling of public debt equal to or less than 70 percent of GDP in nominal terms (or less than 55 percent of GDP in net present value terms). These ceilings have been systematically breached.

External public debt drove the increase in the debt-to-GDP ratio from 2017, growing from 41 percent of GDP to 49 percent in 2021. Domestic public debt rose from 13 percent of GDP in 2015 to approximately 28 percent in 2017 and has remained relatively stable since. About 60 percent of domestic public debt is owed to commercial banks (mainly in the form of short-term Treasury bills carrying significant refinancing risk); the remaining 40 percent is distributed between the Central Bank of Sierra Leone, nonbank creditors, and arrears to suppliers. Both multilateral and bilateral creditors expanded lending, whereas commercial creditors' claims remained unchanged (table G.27). Nearly 80 percent of external public debt at end-2021 comprised obligations to multilateral creditors—mostly the IMF and the World Bank.

Drivers of Increasing Public Debt

Increasing public debt was driven primarily by widening fiscal deficits amid large macroeconomic shocks. These shocks included the Ebola crisis, a collapse in iron ore prices, low revenue, currency depreciation, expenditure overruns, and arrears to suppliers. Domestic revenue shortfalls during the COVID-19 pandemic led to the accumulation of payment arrears to suppliers, resulting in the government abandoning its planned fiscal consolidation. Access to budget support grants decreased after most development partners frontloaded disbursement to mitigate the impact of the COVID-19 pandemic. Debt service obligations are onerous, absorbing 26 percent of revenue in 2020.

Debt Sustainability Assessment

According to the June 2022 DSA, Sierra Leone is at high risk of debt distress for both external public debt and overall public debt. The country is deemed to have "medium" debt-carrying capacity, upgraded from "weak" capacity in earlier years (IMF 2022e). The DSA indicates Sierra Leone's debt is sustainable, with all debt indicators tending to decrease in the long term, falling below their respective thresholds. Debt indicators are particularly susceptible to export and exchange rate shocks, and, in turn, its exports are vulnerable to commodity price fluctuations related to the ongoing war on Ukraine, fuel price volatility, and rising global inflation.

To reduce debt distress risk going forward, the DSA outlines broad policy recommendations. It recommends resuming prepandemic fiscal adjustment, strengthening PFM and expenditure controls, and adopting structural and revenue mobilization reforms. The authorities have agreed with the conclusions of the DSA and its policy implications.

The DSA recognizes progress made to expand debt data coverage. With the support of development partners, the government is enhancing accounting and recording procedures and systems, particularly in relation to SOE debt and self-accounting bodies.

To address risks emerging from SOEs and from the financial sector, the DSA formulates a tailored test for contingent liabilities. Contingent liabilities related to SOEs and other bodies are estimated to be 7 percent of GDP, higher than the default of 2 percent. Those associated with the financial sector are assumed to be 5 percent of GDP—the DSA default option and in line with the average fiscal cost of a financial crisis in a low-income country. In total, a contingent liability shock of 12 percent of GDP is added to the projected public debt in 2023. Although there is ongoing analytical work by the World Bank on energy sector subsidies and contingent liabilities, it is not explicitly referred to in the DSA.

No tailored test is undertaken to analyze natural disasters and climate change. Sierra Leone is vulnerable to natural hazards, according to the 2021 Public Expenditure Review (World Bank 2021e). However, the DSA stresses health risks in view of the recent Ebola and COVID-19 crises. Although climate-related shocks were not specifically discussed in the DSA, they were mentioned in the July 2022 IMF Article IV Consultation Staff Report, which includes a Selected Issues paper on climate vulnerability and debt sustainability (IMF 2022e).

Long-term GDP growth assumptions are broadly aligned with historical performance. The baseline scenario envisages a strong recovery in 2024–25, with real GDP growth peaking at 5 percent per year. Annual GDP growth then converges to 4.5 percent by 2032—somewhat above the historical average of 4 percent in the past decade. There were no significant disagreements between the IMF and the World Bank on growth projections during the preparation of the DSA.

Long-term fiscal assumptions were optimistic relative to historical averages, partly reflecting the expected impact of the IMF-supported program. The baseline scenario projected a significant budget consolidation, with the primary balance improving from a deficit of 4.3 percent of GDP in 2021 to a surplus of 1.0 percent by 2024. Subsequently, the primary balance converges to a deficit of approximately 1.0 percent of GDP by 2032, well above the average of a 3.4 percent deficit over the past 10 years.

Long-term baseline projection implies strong revenue mobilization and tight expenditure controls. Revenues are projected at 18.3 percent of GDP, on average, over the next decade (compared with 16.2 percent in the past decade). Projected primary expenditures total 18.7 percent of GDP (compared with the historical average of 19.6 percent). Some of the measures assumed to be successfully implemented will be challenging—for example, curtailing spending overruns, including in the run-up to elections, as these have often occurred in Sierra Leone. The DSA itself recognizes this risk through a stress test with a shock to the primary balance of about 4 percent of GDP.

Division of Labor with the International Monetary Fund

In the preparation of the June 2022 DSA, the IMF led the formulation of medium- and long-term growth and fiscal projections. The IMF assumed that successful completion of the IMF-supported program would have a positive effect on fiscal and growth performance in the long term. The World Bank provided long-term IDA financing assumptions, which followed the LIC-DSF guidelines in assuming grants for existing commitments and only loans afterward. However, discussions at the managerial level resulted in the DSA including grants in the medium term and half grants and loans in the longer term—more concessional than indicated in the LIC-DSF guidelines. IMF and World Bank staff otherwise agreed on debt data, macrofiscal projections, and other assumptions. According to World Bank's assessment of DRS debt data for Sierra Leone, the DRS had only partial information on external PPG debt of the general government and no information on external, private, nonguaranteed debt. Discrepancies were observed with the debt data sourced by the government, with the former being for the DSA.

Use of Debt Sustainability Analyses to Inform World Bank Engagement in Sierra Leone

DSAs consistently discussed Sierra Leone's debt vulnerabilities stemming from domestic revenue shortfalls, weak PFM and expenditure controls (arrears), weak spending efficiency, rollover risks, SOE contingent liabilities, and the need to rely on highly concessional financing (ideally grants).

The CPF FY21–26 responded directly to the debt vulnerabilities identified in the DSA. The CPF explicitly referred to Sierra Leone's high risk of debt distress, which the country had had for almost two years at the time the CPF was approved (World Bank 2020b). Focus area 1—sustainable growth and accountable governance—targeted multiple debt vulnerabilities discussed in DSAs. It stressed the imperative to reverse the rising trend of public debt by strengthening revenue mobilization; adopting prudent expenditure management, rationalizing subsidies and wage bills; clearing domestic arrears to suppliers; and enhancing debt management and transparency, with a focus on formulating a debt strategy, managing contingent liabilities, and improving debt recording and reporting (including coverage required for DSAs).

ASA and technical assistance addressed challenges for debt sustainability. The June 2021 Public Expenditure Review provided a comprehensive diagnosis of debt vulnerabilities and described policy recommendations to support fiscal consolidation (World Bank 2021e). In 2021, technical assistance was delivered to help the government formulate its medium-term debt management strategy for 2021–25.

As an IDA-eligible country at high risk of debt distress, Sierra Leone was required to comply with the SDFP. An FY21 PPA required that the coverage of SOE debt in an official publication be expanded; the DSA had estimated it at 6.8 percent of GDP. In FY22, the PPA expanded this coverage from the largest 5 SOEs to the largest 10. Another PPA required the government to approve a cash management plan and establish a Cash and Debt Management Committee to avoid arrears accumulation suppliers, which the DSA had raised as a vulnerability. Another PPA required the approval of a policy to rationalize waivers for taxes and import duties (which averaged 1.6 percent of GDP from 2015 to 2019) to reduce discretion. PPAs for a zero ceiling on nonconcession-

al external borrowing were implemented in both FY21 and FY22 to address exchange rate and real interest rate dynamics, which were major drivers of debt dynamics in the DSA.

DPOs approved in 2019, 2020, and 2021 included prior actions to support fiscal consolidation. The Second and Third Productivity and Transparency Support Grant development policy financing included reforms to support revenue mobilization, improved PFM, and address SOE contingent liabilities as informed by DSAs. The Second Productivity and Transparency Support Grant development policy financing included prior actions to rationalize energy subsidies and to require ministries, departments, and agencies to transfer all revenues collected into the Treasury Single Account. The Third Productivity and Transparency Support Grant included modernization of procurement processes, which had contributed to unplanned cost overruns and arrears. In 2021, a prior action in the Inclusive and Sustainable Growth DPO duplicated an SDFP PPA requiring publication of information on the debt and guarantees of the five largest SOEs (World Bank 2021d).

Assessment

- The most recent DSA for Sierra Leone contains conservative assumptions about growth in the long term. Long-term fiscal assumptions were optimistic and predicated on the success of reforms supported by the IMF program.
- The DSA explicitly recognizes fiscal risks associated with contingent liabilities—particularly from SOE debt and the financial sector.
- Climate-related shocks were not specifically discussed in the DSA despite the significance of natural disasters and climate change to debt sustainability.
- PPAs under the SDFP addressed some of the drivers of indebtedness discussed in DSAs, including nonconcessional borrowing, SOE contingent liabilities, cash management, and revenue mobilization.
- DPO prior actions targeted issues raised in DSAs, including SOE contingent liabilities, energy subsidies, and revenue mobilization and PFM.

Zambia Country Case Study

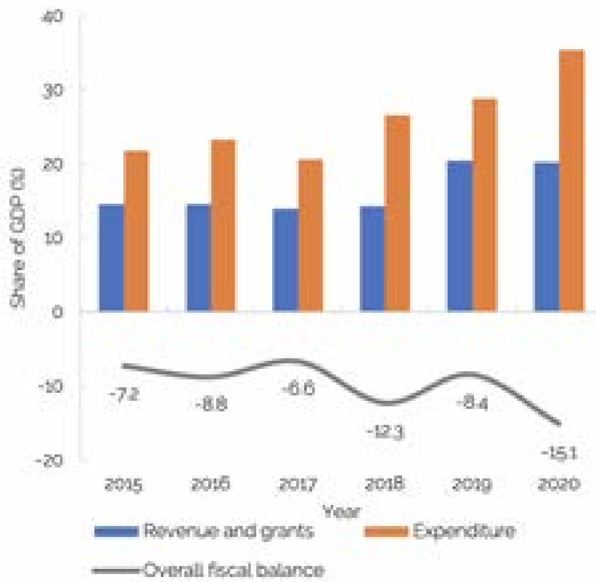
Table G.28. Key Macroeconomic Indicators

Macroeconomic Indicators	2015	2016	2017	2018	2019	2020	2021[a]
Real GDP growth (%)	2.9	3.8	3.5	4.0	1.4	−2.8	4.6
Inflation—annual average (%)	10.1	17.9	6.6	7.5	9.2	15.7	22.0
Public debt (% of GDP)	61.4	60.7	65.6	80.8	111.6	154.9	132.7
of which external	43.1	39.5	41.9	53.7	66.8	103.0	78.6
External debt service as a share of exports	4.8	9.9	4.6	13.9	19.3	20.9	n.a.
Current account balance (% of GDP)	−2.7	−3.3	−1.7	−1.3	1.4	12.0	7.6
Primary balance (% of GDP)	−5.6	−6.4	−4.0	−3.6	−2.5	−7.8	n.a.
Institutional capacity							
CPIA rating, debt management	3.5	3.5	3.0	3.0	3.0	2.5	2.5
Debt sustainability							
Risk of external debt distress	Moderate	Moderate	High	High	High	High	High
Risk of overall debt distress	Moderate	Moderate	High	High	High	High	High
Official exchange rate (LCU per US$)	8.6	10.3	9.5	10.5	12.9	18.3	20.0
Interest payments (% of revenue)	11.3	15.9	18.8	25.3	29.0	35.8	n.a.

Sources: Low-Income Country Debt Sustainability Analyses (various years); Low-Income Country Debt Sustainability Framework (January 2022); World Economic Outlook (October 2022).

Note: CPIA = Country Policy and Institutional Assessment; GDP = gross domestic product; LCU = local currency unit; n.a. = not applicable.
a. International Monetary Fund World Economic Outlook projections.

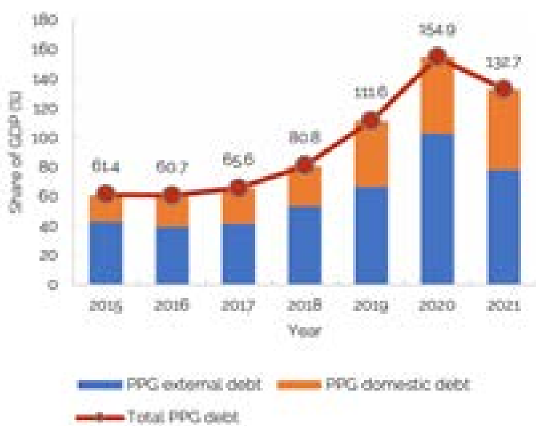
Figure G.17. Fiscal Indicators 2015–20



Source: Low-Income Country Debt Sustainability Analyses (various years).

Note: GDP = gross domestic product.

Figure G.18. Public Debt 2015–21



Source: Low-Income Country Debt Sustainability Analyses (various years).

Note: GDP = gross domestic product; PPG = public and publicly guaranteed.

Table G.29. Country Diagnostics, Strategies, and Major Analytical Work

Diagnostic	Year
Public Expenditure and Financial Accountability	2017
Public Investment Management Assessment	2017
Debt Management Performance Assessments	2018
Systematic Country Diagnostic	2018
Public Finance Review	None
Country Partnership Framework	2018

Source: Independent Evaluation Group.

Table G.30. Composition of Public and Publicly Guaranteed External Debt, 2015–20

Debt Composition	2015	2016	2017	2018	2019	2020
Public and publicly guaranteed debt from:	7,394	7,873	9,579	10,603	11,683	12,923
Official creditors	3,222	3,764	4,227	4,670	5,614	6,540
Multilateral	1,295	1,408	1,622	1,818	2,113	2,498
Bilateral	1,927	2,356	2,606	2,851	3,501	4,042
Private creditors	3,265	3,297	4,559	5,219	5,403	5,705
IMF	907	813	794	715	667	678

Source: 2022 International Debt Statistics.

Note: IMF = International Monetary Fund.

Background on Public Debt Vulnerabilities

Zambia is in debt distress with public debt at end-2021 equivalent to 133 percent of GDP. Large-scale borrowing against a backdrop of deteriorating economic fundamentals led to the unsustainable debt burden and accumulation of arrears. Public debt rose by 72 percentage points of GDP between 2016 and 2021. External debt rose from 39.5 percent of GDP in 2016 to 66.8 percent in 2019. This was accompanied by a shift to nonconcessional borrowing from private creditors (beginning with the first Eurobond issue in 2012) and non–Paris Club bilateral creditors. Multilateral creditors accounted for 16 percent of end-2019 external debt stock, down from over 60 per-

cent at the start of the decade. By 2019, access to external financing from most creditors had dried up, and in December 2019 a cabinet directive froze all new external borrowing. Between 2019 and 2021, external public debt payable in foreign currency rose by 5 percentage points of GDP to 67 percent. The lack of access to budget support from external creditors led to reliance on domestic currency–denominated debt. It had averaged 27 percent of GDP over 2016–18 but ballooned to 41 percent of GDP in 2019 and 66 percent of GDP by end-2021. An increasing share of domestic currency–denominated debt is held by nonresidents. Measured on a residency basis, external public debt reached 78.6 percent of GDP at end-2021. Domestically issued local currency PPG debt stock (excluding nonresident holdings) reached the equivalent of 54.5 percent of GDP at end-2021.

Zambia defaulted on its Eurobonds in November 2020. It stopped debt service payments to most external creditors, leading to payment arrears of about $2.2 billion at end-2021. The IMF approved a three-year arrangement under the Extended Credit Facility in August 2022. The Extended Credit Facility–supported program seeks to help reestablish debt sustainability through fiscal adjustment and debt restructuring, create fiscal space for social spending, improve PFM, and catalyze financial support from development partners.

Drivers of Increasing Public Debt

Zambia is dealing with the legacy of years of economic mismanagement and an inefficient and wasteful public investment drive. Current debt vulnerabilities stem from years of expansionary and procyclical fiscal policy, a rapid increase in nonconcessional external borrowing, and a large-scale public investment program that did not yield a growth dividend. Fiscal deficits (measured on a cash basis) averaged 9.3 percent of GDP per year from 2016 to 2021, peaking at 13.8 percent in 2020, with weak commitment controls resulting in fiscal outturns that differed significantly from approved budgets. Debt servicing pressures became severe by 2019 as financing terms tightened and rollover options became limited and expensive. Annual interest costs on public debt consumed approximately 30 percent of domestic revenues in 2019, and debt service costs and the public wage bill together were estimated at over 85 percent of domestic revenue in 2020–21.

The COVID-19 pandemic exacerbated fiscal and external imbalances already strained by high public investment spending, a collapse in growth because of a severe drought in 2019, and a weaker exchange rate. Before the onset of the COVID-19 pandemic, Zambia's fiscal and external positions had weakened relative to the July 2019 DSA that assessed debt to be unsustainable (IMF 2019b). Absent reforms, it was clear that this would eventually trigger a disorderly fiscal adjustment that would depress economic activity and confidence, potentially prompting large capital outflows and adding to exchange rate pressures. Growth contracted by 3 percent in 2020 as a result of a fall in mining and tourism. Export volumes collapsed, but import compression and a rebound in international copper prices in the second half of 2020 resulted in a current account surplus equivalent to 12.8 percent of GDP. The fiscal deficit widened to 17.4 percent of GDP in 2020, and unmet external financing needs of approximately 7 percent of GDP led to the accumulation of large external payment arrears. The exchange rate depreciated 50 percent year on year and compounded debt vulnerabilities.

Debt Sustainability Assessment

The August 2022 World Bank–IMF DSA assessed Zambia as in debt distress with weak debt-carrying capacity (IMF 2022g). Zambia's debt burden was already unsustainable in the July 2019 DSA, and the added pressure of the global COVID-19 crisis triggered a sovereign default in November 2020. The 2022 DSA confirmed that Zambia is in debt distress and that absent deep debt restructuring and significant fiscal adjustment, public debt is unsustainable. Under the baseline scenario, all external debt burden indicators breach their indicative thresholds by large margins throughout the medium term. The government participated in the Debt Service Suspension Initiative in 2020–21, which provided temporary and limited debt relief; it has requested comprehensive debt treatment under the Group of Twenty's Common Framework.

The DSA is comprehensive in its coverage. It captures public debt of the central government, state-guaranteed debt of public sector entities including social security funds, the central bank, budget expenditure arrears, nonguaranteed external debt of ZESCO (the state-owned power company), and ZESCO's guaranteed and nonguaranteed domestic and external arrears.

This is a broader definition than the authorities' official definition, which covers only the government's direct and guaranteed debt and budget expenditure arrears. Using the authorities' definition, total PPG debt was an estimated $32.1 billion at end-2021, compared with $33.8 billion in the DSA. Nonresident holdings of domestic currency–denominated debt are treated as external debt and are estimated at about 18 billion kwacha (14 percent of outstanding domestic currency government securities) at end-2020, equivalent to 5.3 percent of GDP. By end-2021, they had risen to 54 billion kwacha (28 percent of outstanding domestic currency government securities).

The inclusion in the DSA of nonguaranteed external debt and external and domestic arrears of ZESCO reflects the significant fiscal risks they pose. The contingent liabilities of the central government associated with ZESCO's nonguaranteed external debt were estimated at $139 million (0.5 percent of GDP) at end-2021. ZESCO's outstanding payables in foreign currency to domestic and external independent power producers were estimated at $1.56 billion at end-December 2021. No other outstanding nonguaranteed external debt of nonfinancial SOEs considered to pose a contingent fiscal risk was identified. However, an additional 10 percent of GDP was added to the standard (2 percent of GDP) SOE contingent liability shock stress test to account for risks associated with foreign currency–denominated domestic debt of SOEs, and acquisition from Glencore of the Mopani mine by ZCCM Investments Holdings (a majority state-owned investment holding company). The contingent liability stress test includes a financial market shock set at the average LIC-DSF fiscal cost of a financial crisis (5 percent of GDP) and a PPP shock of 1.4 percent of GDP. As a result, the contingent liability stress test amounts to 18.4 percent of GDP (compared with 7 percent under default assumptions) in the 2019 DSA.

The DSA does not include stress tests for climate risks, although Zambia faces erratic rainfall, droughts, and floods that exacerbate economic shocks because of the high dependence on rain-fed agriculture and the limited water storage system. Droughts have a knock-on effect on deforestation, simultaneously impacting environmental vulnerabilities and carbon emissions. The inclusion of climate-related shocks was not considered in the preparation of the DSA, but institutionalizing scalable, sustainable solutions that leverage external climate financing is a key objective of the CPF.

The baseline scenario envisages steady economic recovery and significant fiscal adjustment in 2022–25. The economy is projected to grow by an annual average rate of 3.8 percent through 2025. Over the longer term, through 2031, annual real GDP growth is projected to average 4 percent. This is predicated on structural, fiscal, and institutional reforms that build the foundation for sustained growth driven by a competitive private sector rather than debt-financed government spending. Reorienting of expenditure away from inefficient subsidies and toward investments in education, health, and social protection is expected to build human capital; decentralization of public services is anticipated to increase the efficiency of spending, increase budget credibility, and reduce corruption.

Fiscal adjustment is significant. The primary balance is targeted to improve from a deficit (on a commitment basis) of 10.1 percent and 6.0 percent of GDP in 2020 and 2021, respectively, to a surplus of 3.2 percent of GDP by 2025. Most of the adjustment occurs in 2022, with a primary surplus target of 0.7 percent of GDP. Much of the consolidation will be achieved through front-loaded reductions in poorly targeted and wasteful spending, supported by reforms to strengthen commitment controls and enhance fiscal governance. A key element will be a sharp reduction in spending on fuel subsidies. In December 2021, the authorities removed explicit subsidies on petroleum products and reinstated an automatic pricing mechanism, raising the pump prices of petrol and diesel by 20 and 30 percent, respectively, and are now adjusting them monthly. Public investment will be scaled back and focused on the highest priority projects. Fiscal consolidation will be supported by domestic revenue mobilization. Revenues (adjusted for arrears on value-added tax refunds) are projected to increase by about 3.25 percent of GDP by 2025, from the 2019 (before COVID-19) level of 19.6 percent of GDP, including elimination of tax expenditures (implicit subsidies) on fuel (1.6 percent of GDP) and other measures to broaden the tax base and strengthen compliance.

Division of Labor with the International Monetary Fund

Although the World Bank prepared internal DSAs in 2020 and 2021 for emergency COVID-19 DPOs and Common Framework assessments, there were no published DSAs for Zambia between July 2019 and August 2022. The World Bank had extensive discussions with the IMF on the long-term growth

and fiscal assumptions. The August 2022 DSA reflected the World Bank's long-term growth assumptions; however, those assumptions did not fully consider climate change. Although the World Bank prepared the long-term IDA financing projections, their approval within the World Bank took several months because of uncertainty about development policy financing assumptions. Despite the lengthy approval processes, more engagement with senior management on the DSA under the new Accountability and Decision-Making process helped increase World Bank involvement with the DSA.

Implications of Debt Sustainability Analyses for World Bank Engagement in Zambia

DSAs identified key debt vulnerabilities as stemming from expansionary and procyclical fiscal policies, weak domestic resource mobilization, a rapid increase in nonconcessional external borrowing, a large-scale public investment program that was poorly managed, debt management and arrears, and SOE contingent liabilities.

The CPF FY19–23 considered an increase in fiscal and financial fitness as critical to Zambia's macroeconomic stability. The objectives of pillar 3 were significant reforms in PFM, including public procurement, fiscal decentralization, and public debt and investment management, which are all key sources of the increase in debt stress identified in DSAs. The CPF also expressed the intention to operationalize the information management systems developed through the ongoing PFM program to improve fiscal discipline, increase transparency in procurement, and enhance internal controls and audits. These objectives were expected to be met through the proposed Public Sector Governance for Service Delivery Program and biannual economic briefs to support the policy dialogue on structural issues of macroeconomic importance and raise public awareness of policy options and trade-offs.

The World Bank is providing ASAs to build debt management capacity based on the vulnerabilities identified in DSAs and the 2018 DeMPA. The DeMPA assessed 20 out of 33 debt management performance indicators as not meeting a minimum international requirement. The Debt Management Reform Plan to address shortcomings identified by the DeMPA, including regular

publication of public debt data, was formulated in 2019 and is being implemented with support from the Debt Management Facility.

As an IDA-eligible country at high risk of debt distress, Zambia is required to implement PPAs under the SDFP. Zambia implemented three PPAs each year in FY21 and FY22. One PPA each year imposed a zero nonconcessional borrowing ceiling on new external PPG debt. A PPA contributed to the 2019 cabinet directive that targeted cancellation of about $6 billion of contracted but undisbursed external loans. An additional PPA required the government to cancel at least $1 billion of the undisbursed amount by May 2021. Another PPA required implementation of tax policies to support fiscal consolidation in the 2022 budget.

PPAs required regular publication of comprehensive public debt data to ensure awareness of total public debt levels and debt servicing costs. An FY21 PPA required publication of the 2020 Annual Public Debt Report, including loan terms and conditions and coverage of guarantees and contingent liabilities of SOEs by end-May 2021. An FY22 PPA required the Annual Public Debt Report be published on the website of the Ministry of Finance on a regular basis by end-April each year and extended the coverage of the 2021 Annual Public Debt Report to include comprehensive statistics by currency, residency of creditors, and debt instrument for domestic and external public debt (including publicly guaranteed debt), the debt of nonfinancial SOEs (including nonpublicly guaranteed external debt), and the amount of contracted but undisbursed debt.

Assessment

- The DSA captures a broader definition of debt than the authorities' official definition. The inclusion in the DSA of nonguaranteed external debt and external and domestic arrears of ZESCO reflected the associated fiscal risks.
- The CPF FY19–23 sought to address issues identified in DSAs, including controlling public sector arrears, improving debt management, strengthening public investment management and procurement, and strengthening revenue administration.

- Long-term growth projections are consistent with historical performance and assume successful implementation of agreed reforms. Fiscal projections are considerably more optimistic than historical performance.
- The DSA does not include stress tests for climate risks, although Zambia faces erratic rainfall, droughts, and floods that exacerbate economic shocks as a result of the high dependence on rain-fed agriculture and the limited water storage system.
- PPAs targeted vulnerabilities discussed in the DSA, including nonconcessional borrowing, cancellation of nonpriority planned public investment, and implementation of tax policies.

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[1] There were no published Debt Sustainability Analyses between 2018 and 2021.

[2] A discrepancy between data in the 2018 and 2022 Debt Sustainability Analyses makes it difficult to decompose the increase in total debt between 2016 and 2022.

[3] For the December 2021 Debt Sustainability Analysis, the first projection year is 2021 and the second year (when the shock occurs) is 2022.

[4] In the preparation of the World Bank's 2019 Country Partnership Framework, it was noted that gross domestic product data were not available from the National Statistical Office after 2014.

[5] The Ministry of Finance figures had not revalued the external debt stock at current exchange rates, and with a steady depreciation of the kina, the actual historical and present external debt stock figures were considerably higher than suggested in the Ministry of Finance figures.

[6] In the short run, there is an expectation of savings in interest costs based on Papua New Guinea's participation in the Debt Service Suspension Initiative and success in attracting more concessional support.

[7] According to interviews with World Bank staff, Papua New Guinea's 13-year fiscal strategy for budget repair and reconstruction (Papua New Guinea Department of Treasury 2022) calls for expenditure reductions of some 6–7 percent of gross domestic product. The Independent Evaluation Group has not been able to verify this projection to determine from where the savings are to come.

[8] The fiscal anchor was not met, the nonresource primary balance deteriorated significantly, and the adjustment in fiscal spending came through an enormous decline in capital spending to compensate for a large (and unbudgeted) increase in the public sector wage bill. Revenues declined from the baseline, and other measures to increase tax compliance and reduce tax expenditures were not achieved. The Independent Evaluation Group found that the program failed to take into account the capacity for reform and was not able to influence a deteriorating lack of ambition in the government's fiscal consolidation strategy.

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1818 H Street NW
Washington, DC 20433