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DEBT VULNERABILITIES IN LOW INCOME COUNTRIES RECENT DEVELOPMENTS AND TRENDS

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DEBT VULNERABILITIES IN LOW-INCOME COUNTRIES RECENT DEVELOPMENTS AND TRENDS

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Abbreviations and Acronyms

COVID-19	Coronavirus Disease 2019
DBI	Debt Burden Indicator
DRM	Domestic Resource Mobilization
DRS	Debtors Reporting System
DSA	Debt Sustainability Analysis
DSF	Debt Sustainability Framework
EAP	East Asia Pacific
ECA	Europe and Central Asia
EMDE	Emerging Markets and Developing Economies
FCS	Fragile and Conflict-Affected States
FCV	Fragility, Conflict and Violence Situations
GDP	Gross Domestic Product
GFN	Gross Financing Needs
HIPC	Heavily Indebted Poor Countries
IDA	International Development Association
IDS	International Debt Statistics
IMF	International Monetary Fund
IQR	Interquartile Range
LAC	Latin America and Caribbean
LICs	Low-Income Countries
MENA	Middle East and Northern Africa
MPO	Macro-Poverty Outlook
NFA	Net Foreign Assets
PPG	Public and Publicly Guaranteed
PPP	Public-Private Partnership
PRGT	Poverty Reduction and Growth Trust
PV	Present Value
SAR	South Asia
SOEs	State-Owned Enterprises
SSA	Sub-Saharan Africa
WEO	World Economic Outlook
WB	World Bank

Despite significant efforts to unwind the impact of the COVID-19 fiscal stimulus and other shocks, debt levels in many Low-Income Countries (LICs) remain relatively high, with debt vulnerabilities exacerbated by uncertain global conditions and a changing creditor landscape. In this context, the purpose of this paper is to provide factual data and insights on recent trends in public debt vulnerabilities and financing challenges in LICs, with a special focus on domestic debt issues. The evidence presented, particularly on the ever more important role of domestic debt as a source of public financing, highlights the importance of the continued work of the IMF and the World Bank to monitor debt vulnerabilities and support countries through a combination of policy advice, financial resources, and capacity building. Furthermore, the scale of identified vulnerabilities reinforces the need for strong debt management and enhanced debt transparency to sustain good relations with creditors and underpin sound financing decisions.

INTRODUCTION

1. Many Low-Income Countries (LICs) continue to face significant debt vulnerabilities and pressing financing needs amid global uncertainty.¹ After a steady rise in public debt levels in the years leading up to COVID-19, the sharp increase during 2020-21 compounded by tighter global financial conditions, has left many LICs burdened with growing debt service obligations that limit the fiscal space for development expenditures. While pandemic-related deficits have narrowed and public debt levels have stabilized, Bank and Fund staffs' projections under baseline assumptions suggest these debt service obligations will remain elevated and above pre-pandemic peaks, with Sub-Saharan African LICs particularly burdened. Furthermore, a few countries remain particularly vulnerable to the risk that debt becomes unsustainable. Bolstering debt management and enhancing debt transparency is critical to sustain good creditor relations, both external and domestic, with a view to helping countries lower borrowing costs and increase financing flows, while managing risks effectively.

2. While debt sustainability risks appear broadly contained, liquidity risks have become more prominent, driven by tighter fiscal space amid growing financing needs, which have nearly doubled over the past decade. Elevated external debt service burdens are likely crowding-out development spending, especially in SSA and commodity-exporting LICs. Meeting external financial needs remains a significant challenge, with refinancing requirements projected to exceed \$35 billion annually through 2028, amid a shifting creditor landscape and uncertain global financial conditions. These pressures underscore the need for continued fiscal discipline, greater domestic resource mobilization efforts, growth-enhancing reforms, enhanced access to sustainable financing, and improved debt transparency to mitigate the risk that liquidity pressures evolve into broader solvency problems.

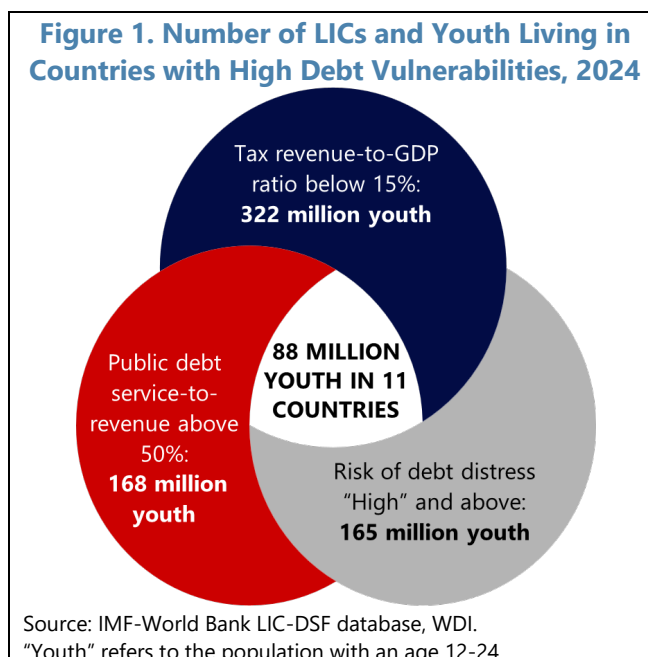
3. Over the past decade, LICs have increasingly turned to domestic debt financing. This shift has helped mobilize resources during shocks and reduced exchange rate risks. Domestic debt

¹ The term LICs is used to refer to the 69 countries that use the LIC DSF. However, LIC DSF data is available for 67 countries with a recent LIC DSA.

to GDP ratio in LICs more than doubled from 8 percent of GDP in 2014 to over 17 percent of GDP in 2024, with over one-fifth of LICs now having more domestic than external debt. By 2024, 80 percent of LICs issued domestic debt through local markets, with marketable instruments accounting for around 60 percent of domestic issuance. Domestic debt vulnerabilities have grown, especially after COVID-19, as limited external financing and high fiscal needs drove up domestic debt burdens and service costs—particularly in frontier economies. Countries with low tax revenue and high domestic debt levels face acute challenges.

4. Elevated debt vulnerabilities carry broader social implications. As debt service absorbs an increasing share of scarce revenues, fiscal space for investment in education, health, and infrastructure is squeezed, constraining the ability of governments to create jobs. This is particularly concerning given LICs' demographic profile: large and growing youth populations whose prospects depend on sustained investment in human capital and growth-enhancing infrastructure. In 2024, 88 million young people lived in LICs simultaneously facing the triple challenge of low revenues, high debt service, and elevated risks of debt distress (Figure 1). Addressing these pressures will require comprehensive strategies to strengthen domestic resource mobilization, enhance debt management frameworks, and improve the efficiency of public spending.

5. This paper provides factual data and insights on recent trends in public debt vulnerabilities and financing challenges in LICs, taking a deep dive into domestic debt issues. Domestic debt vulnerabilities are looked at through three metrics: the level of domestic public debt-to-GDP, primary deficits, and debt service-to-revenue. These indicators help identify countries with relatively high vulnerabilities from high domestic debt burdens and high domestic debt rollover risks. In addition, vulnerabilities are also assessed through risks from persistent macro-financial weaknesses such as elevated banking sector exposure, reduced private credit, and low net foreign assets.



EVOLUTION OF PUBLIC DEBT VULNERABILITIES

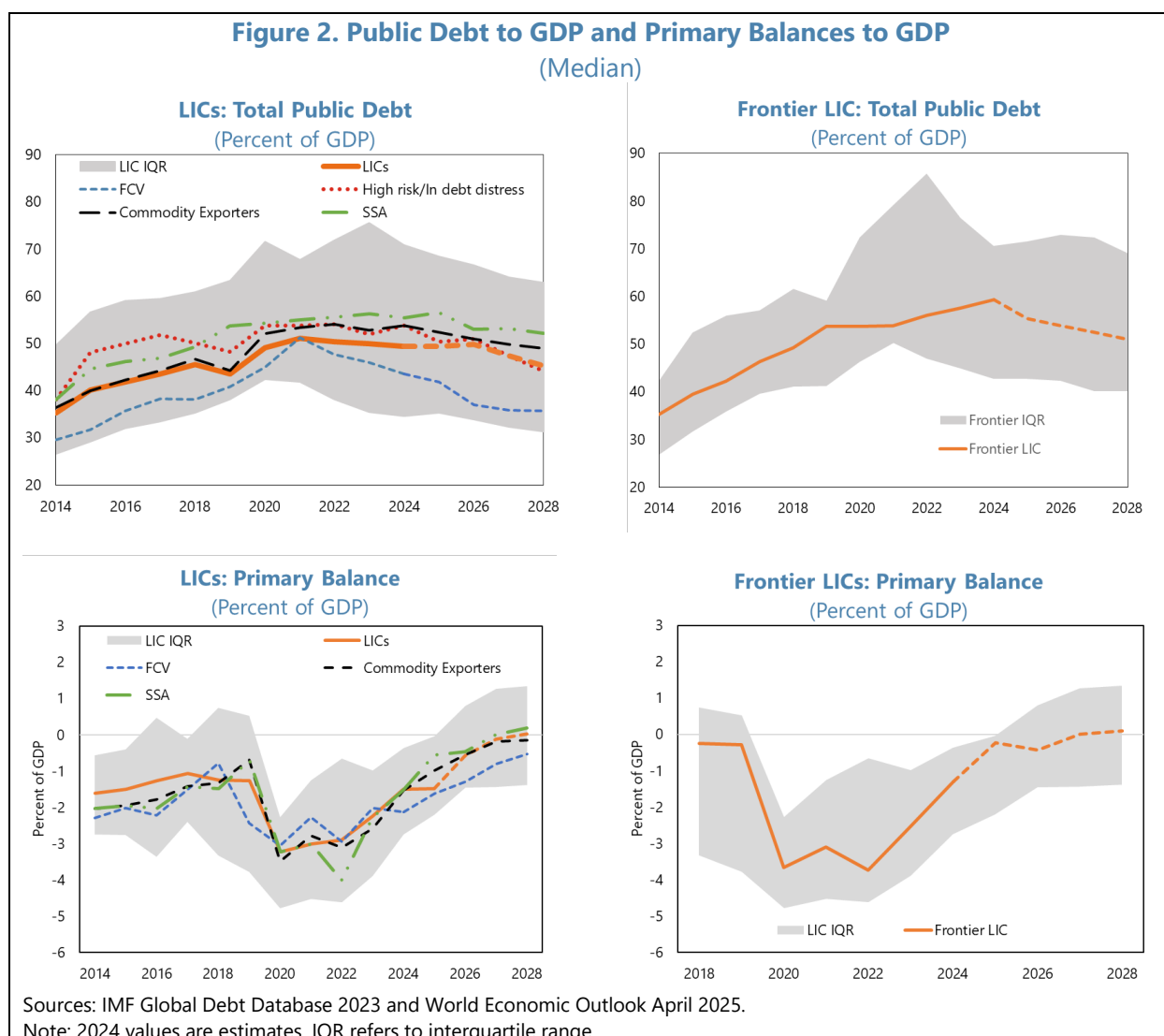
Debt Vulnerabilities and Financing Needs Remain Elevated in LICs

6. Fiscal consolidation has been key to curbing debt growth and mitigate sustainability risks, but progress has been uneven across countries. Before the COVID-19 crisis, LICs were already experiencing rising public debt levels, following a consistent upward trend throughout the 2010s driven largely by primary deficits and more non-concessional market borrowing. After the 2020 pandemic shock that caused a sharper increase in debt-to-GDP ratios, many countries have worked to restore fiscal sustainability, with primary fiscal deficits generally narrowing. For the median LIC, the primary deficit narrowed to roughly half of its pandemic peak (in excess of 3 percent of GDP) by 2024. It is now near its pre-pandemic levels and is expected to further narrow over the medium term under staff's baseline assumptions. The improvement in the primary balance in the post-pandemic period has varied by country group, with frontier LICs making significant gains (albeit from a lower starting point), while fragile and conflict-affected states (FCS/FCV LICs)² and commodity exporters are adjusting more modestly. Meanwhile, the median SSA LIC—which had the largest primary deficit of any country group following the pandemic (over 4 percent of GDP)—has subsequently shown the most rapid fiscal consolidation, having already recorded a consolidation of more than 2½ percent of GDP between 2022 and 2024.³

7. Public debt levels in LICs remain elevated and though expected to stabilize under baseline assumptions, some countries remain vulnerable. Although debt levels are expected to stabilize or marginally decline, they remain above their pre-pandemic peak (at 49 percent of GDP by end 2024). Among LICs, the debt-to-GDP ratio has fallen faster in FCS/FCV, where debt relief efforts have concentrated, while debt in Frontier LICs, Commodity Exporters and SSA countries are projected to remain elevated and above the LIC median (Figure 2). Moreover, since 2018, the median SSA LIC has recorded the highest public debt-to-GDP levels among peers.

² In this note, the IMF's Fragile and Conflict-Affected States (FCS) and WB's Fragility, Conflict and Violence Situations (FCV) categories refer to the same group of countries.

³ Annex II provides additional details of the evolution of public debt vulnerabilities by country groups.



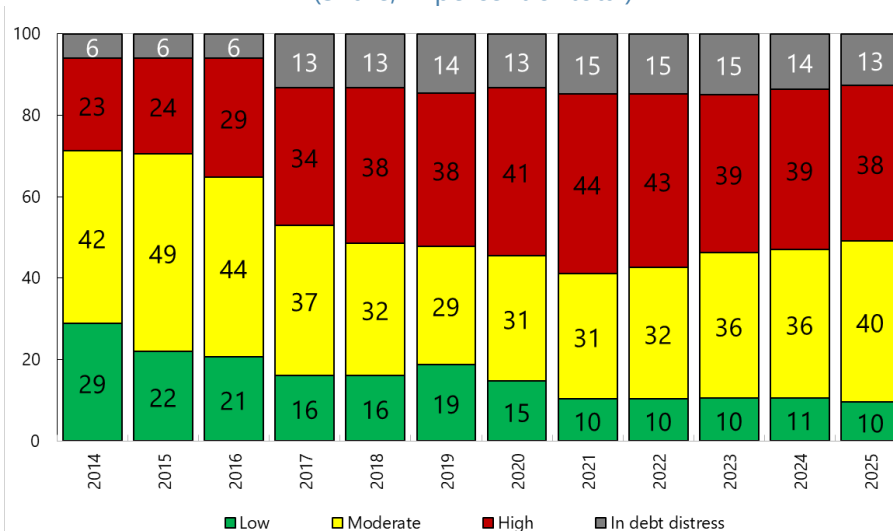
8. Risks of a systemic debt crisis continue to appear broadly contained under baseline assumptions.⁴ The number of countries with unsustainable external public debt or rated as being in debt distress remains limited: out of 69 LICs in this note's perimeter, only 10 countries are in debt distress or have unsustainable public debt.⁵ While the share of countries assessed at high risk of external debt distress briefly increased at the onset of the pandemic, the situation has steadily improved since 2021, with the share now six percentage points lower (Figure 3). Based on the most recent ratings, FCS/FCV and Small Developing States (SDS) report the largest share of high-risk of external debt distress ratings (over 45 percent), while SSA and Commodity Exporter countries record the lowest incidence (less than 1/3 and 1/4, respectively). Meanwhile, it is also important to note

⁴ The analysis is based on the evolution of risk rating for public external debt under the LIC DSF.

⁵ Based on LIC-DSF risk ratings available as of June 2025, these countries are Republic of Congo, Djibouti, Ethiopia, Grenada, Lao PDR, Malawi, Maldives, Sao Tome and Principe, Sudan, and Zimbabwe. In addition, Eritrea, with no recent LIC DSA, has protracted arrears with multilateral creditors, including the World Bank, the AfDB, and bilateral official creditors. Yemen has arrears with official bilateral creditors.

that a high-risk rating does not necessarily signal a risk of debt distress in the near term. Based on the latest LIC DSF ratings through June 2025 close to 1/5 of high-risk ratings were based on either long-term breaches or the application of judgement (i.e., they did not present any breaches of thresholds). Furthermore, the share of countries at low and moderate risk (whose debt is deemed sustainable) has returned to pre-pandemic levels and remains at the highest level since 2017.

Figure 3. Evolution of IMF-World Bank LIC-DSF Risk Ratings
(Share, in percent of total)



Source: IMF-World Bank LIC-DSF database as of June 2025.

Note: Ratings based on final external risk ratings. In 2025 the methodology changed to exclude: Guyana (not PRGT eligible), St. Lucia (using SRDSF), and Afghanistan, Eritrea, Myanmar, Sudan, and Yemen (DSAs older than 3 years).

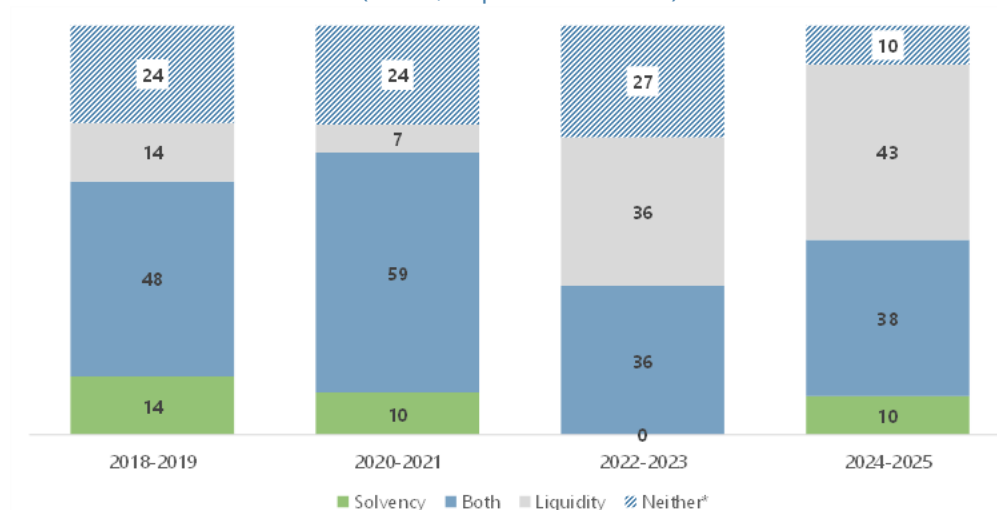
As of June 30, 2025.

9. Liquidity risks have become more prominent.⁶ If we consider the external debt service to revenue or exports ratios as indicators of liquidity risk, and the present value of external debt to GDP or exports as indicators of solvency risk, then an assessment of the pattern of threshold breaches under the LIC-DSF for countries assessed at high risk suggests that, while solvency risks remain a concern for a handful of countries, liquidity risks have gained preponderance over the last four years. This is revealed by a higher share of high-risk ratings triggered by breaches of liquidity indicators only (Figure 4). This pattern highlights the importance of continuous monitoring of liquidity constraints, including to prevent liquidity pressures from evolving into a solvency problem.

⁶ Since the overall risk rating in the LIC-DSF relies on solvency thresholds only, the solvency vs. liquidity analysis is based on the external debt risk rating.

Figure 4. High External Debt Risk Rating: Pattern of Breaches of Debt Indicators Thresholds by Type

(Share, in percent of total)



Source: IMF-World Bank LIC-DSF database as of June 2025.

Notes: Share of breaches triggering an external high-risk rating indicates whether the liquidity DBIs (debt service to revenue or debt service to exports), the solvency DBIs (PV of external debt to GDP or PV of external debt to exports) or both mechanically trigger a high-risk rating.

(*) For those cases where neither group of DBIs is breached, the high-risk rating is based on judgement (e.g., long-term considerations).

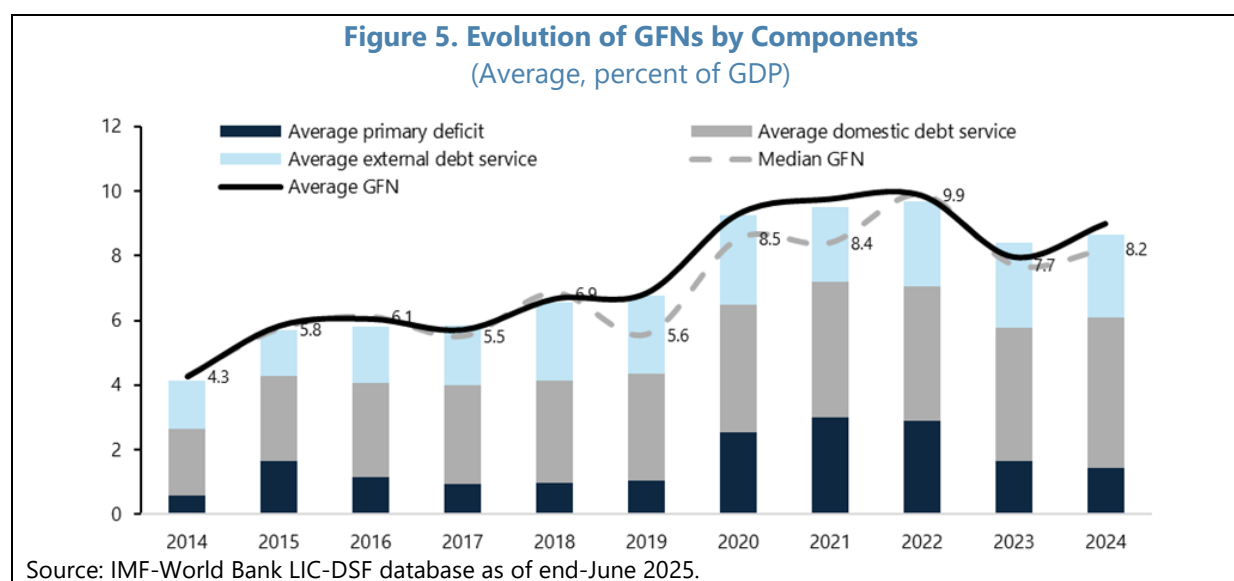
10. Nevertheless, risks and uncertainty around the outlook remain elevated, including from potential setbacks in global growth amid heightened policy uncertainty, shifts in international financial conditions, reduced flows in official aid, exchange rate volatility, weaker-than-expected domestic macro-structural reforms, or the possibility of multiple or consecutive shocks. If these risks were to materialize, they could lead to more countries facing unsustainable debt burdens.

11. In addition, limitations in debt data and gaps in debt transparency may lead to an underestimation of the full extent of debt challenges. Public debt reporting in LICs has improved, as evidenced by the growing share of countries producing debt bulletins over the last 5 years. In 2024, less than 25 percent of LICs (mostly FCS/FCV) had not published any debt data over the previous two years, compared to 40 percent in 2021. Nevertheless, significant gaps persist for countries that report debt. Only one in four countries reports loan level information on newly contracted debt. Comprehensive sectoral coverage remains rare, and subnational borrowing, contingent liabilities, and state-owned enterprise debt are often excluded from official tabulations. However, as instruments grow more complex and shift beyond the central government, there is an increased need to enhance debt transparency to provide an accurate representation of debt risks. Failure to expand debt coverage across the public sector will raise the risks of “hidden debts.”⁷

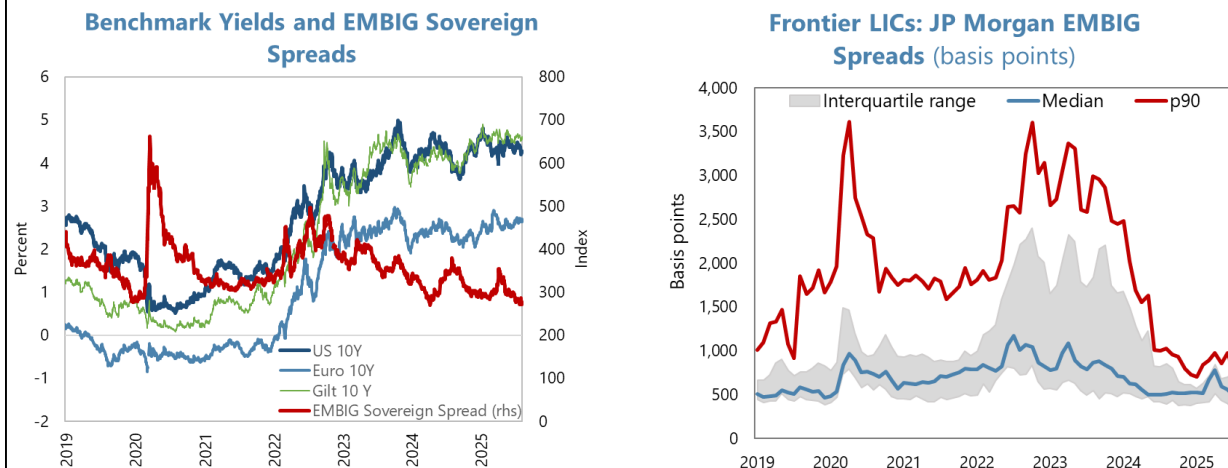
⁷ For a detailed discussion, see World Bank (2025) [Radical Debt Transparency](#), and IMF (2023) [Making Public Debt Public](#).

Elevated Debt Service Obligations, Growing Financing Needs and Declining Net Flows Continue to Pose Important Challenges

12. Fiscal space remains tight amid gross financing needs (GFNs) which have almost doubled between 2014 and 2024 and remain elevated due to high interest costs and elevated public debt service burdens. Median financing needs in LICs have gradually increased over the last decades, from a modest 4 percent GDP in 2014 to about 8 percent of GDP by 2024 (Figure 5). The most significant shift occurred between 2019 and 2022, by almost 4 percentage points of GDP, reflecting the severe fiscal impact of the COVID-19 pandemic on LICs. The post-pandemic period shows a gradual decline even though the GFN level in 2024 remains 70 percent higher than a decade ago, suggesting that LICs continue to face substantial fiscal stress, despite significant post-COVID-19 fiscal consolidation. GFNs are higher in Frontier economies and commodity exporters, and in many are driven by high public domestic debt service (Annex 3).



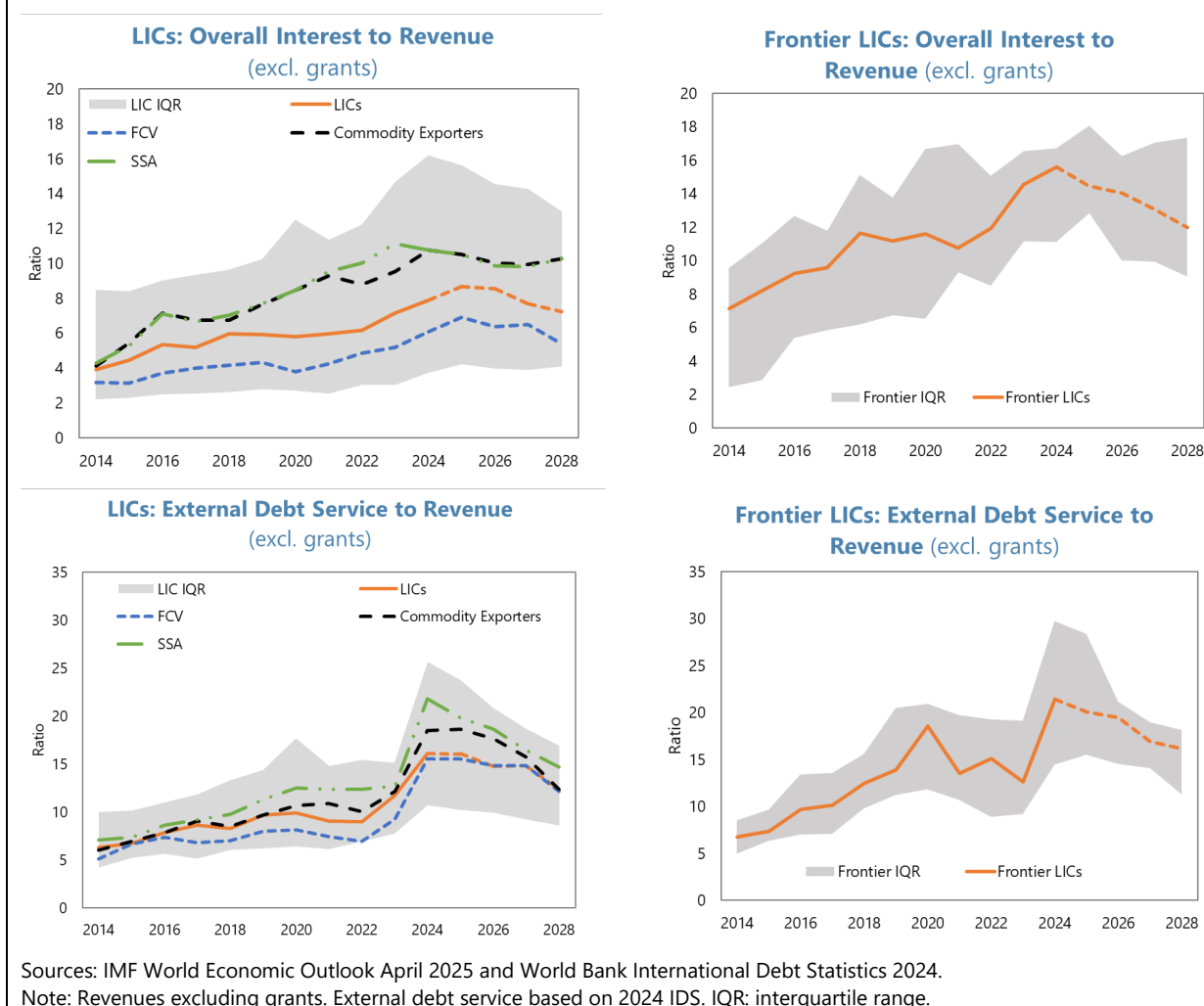
13. Elevated funding costs continue weighing on public debt rollover obligations amid policy uncertainty. Global financial conditions tightened sharply in 2022 as central banks in advanced economies responded to persistent post-COVID-19 inflationary pressures and accompanied a rise in EMDE bond spreads (Figure 6). As volatility subsided, spreads have broadly retraced to near pre-pandemic lows for most countries and the share of countries trading at distressed levels (>1000 bps) has continued to decline—falling from nearly 10 percent a year ago to under 5 percent by end-August 2025. Nevertheless, notwithstanding the reduction in spreads, the still-high benchmark rates mean funding costs remain elevated, compared to the pre-COVID-19 period.

Figure 6. LIC Bond Spreads and Underlying Yields

Sources: Bloomberg, JP Morgan, and Fund staff calculations.

Note: As of July 31, 2025. RHS chart includes only frontier low-income countries.

14. Debt service burdens have sharply increased across all LIC country groups and are constraining countries' capacity to finance critical development needs and build buffers (Figure 7). This reflects rising obligations on both interest and amortization, particularly among SSA and Commodity Exporter LICs. The public external debt service-to-revenue ratio (excluding grants) in the median frontier LIC and the median SSA LIC has remained persistently above that of the median LIC. In 2024, these ratios were over one-third higher than the median LIC, underscoring the elevated repayment pressures facing these country groups. Ongoing expenditure based fiscal consolidation, combined with increasing share of revenues allocated to interest payments, has crowded out critical growth-enhancing development spending. Interest payments on total public debt (external and domestic) have more than doubled over the past decade, from around US\$13 billion in 2014 to US\$35 billion in 2024. For frontier LICs, this ratio was almost twice as large as that of the median LIC in 2024 (top right panel in Figure 7), reflecting a higher reliance on expensive, non-concessional borrowing sources. Interest costs as a share of revenue are most acute for the median SSA LIC, which saw a ratio of nearly 11 percent in 2024—close to one third higher than that of the median LIC. Moreover, the median SSA LIC, along with Commodity Exporters, have consistently recorded the highest interest-to-revenue ratio among all subgroups since 2014. While this ratio is projected to decline over the forecast period, staff expect the median SSA LIC to continue to experience significantly higher interest-to-revenue ratios than the median LIC.

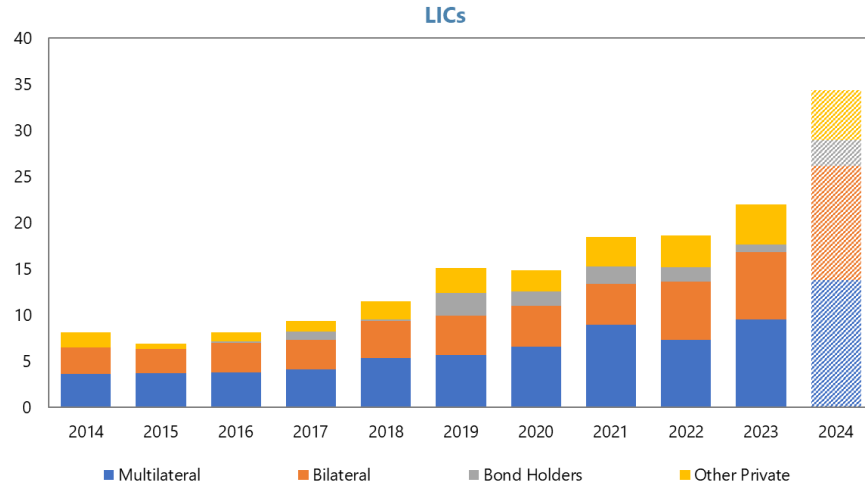
Figure 7. Overall Interest to Revenue and External Debt Service to Revenue

15. Meeting external refinancing needs will continue to be challenging, with historically elevated external payments. External principal payments are estimated to have exceeded US\$34bn in LICs in 2024, more than quadruple the comparable figure a decade earlier (Figure 8). Over three-fourths of these payments were due to official creditors, with most of the remainder due to commercial lenders, reflecting the shift in creditor composition over the last decade. For 2025-28, LICs' external refinancing needs over the medium term are set to remain elevated during the remainder of the decade.

16. Financing challenges are further aggravated by a changing financing environment. The decline in net external PPG debt flows in recent years, together with competing financing demands, including those of advanced economies that have also important financing needs, and uncertainty around the evolution of international financial conditions and exchange rate movements exacerbate LICs' challenges in meeting their elevated external financing needs. In the next few years, average annual gross flows of about US\$40 billion per year to LICs will be needed just to maintain exposure

to these countries (Figure 9). This amount is notably higher than gross flows observed in the pre-COVID-19 era.⁸

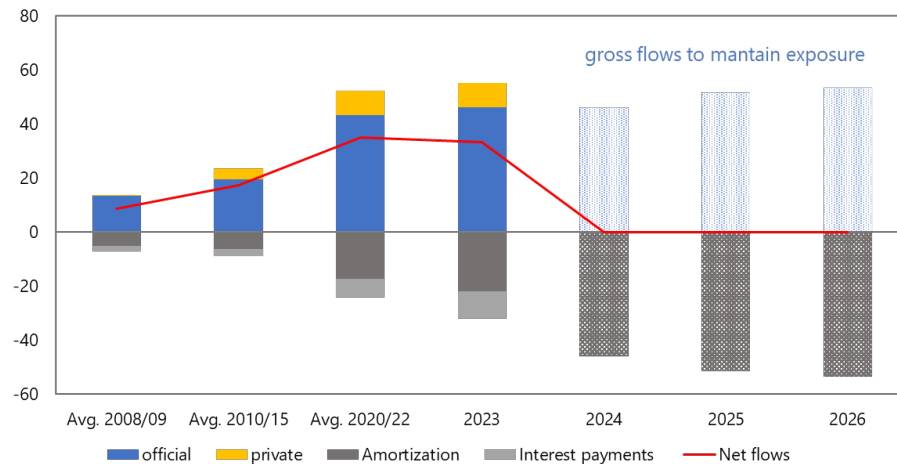
Figure 8. External Public and Publicly Guaranteed Principal Payments, By Creditor Type (USD bn)



Sources: World Bank International Debt Statistics 2024 and IMF-World Bank LIC-DSF database.

Note: 2024 are IDS projections based on 2023 external debt stocks. Countries currently undergoing a debt restructuring are excluded to avoid overestimating future payments.

Figure 9. Public External Financing Supply and Needs (USD bn)



Sources: Fund staff calculations, World Bank International Debt Statistics 2024, and IMF-World Bank LIC-DSF database.

Note: Countries currently undergoing debt restruct. are excluded.

⁸ For further discussion, see the IMF (2025a).

EVOLUTION OF PUBLIC DOMESTIC DEBT VULNERABILITIES⁹

Domestic Borrowing Has Become an Important Source of Funding for LICs in the Last Decade

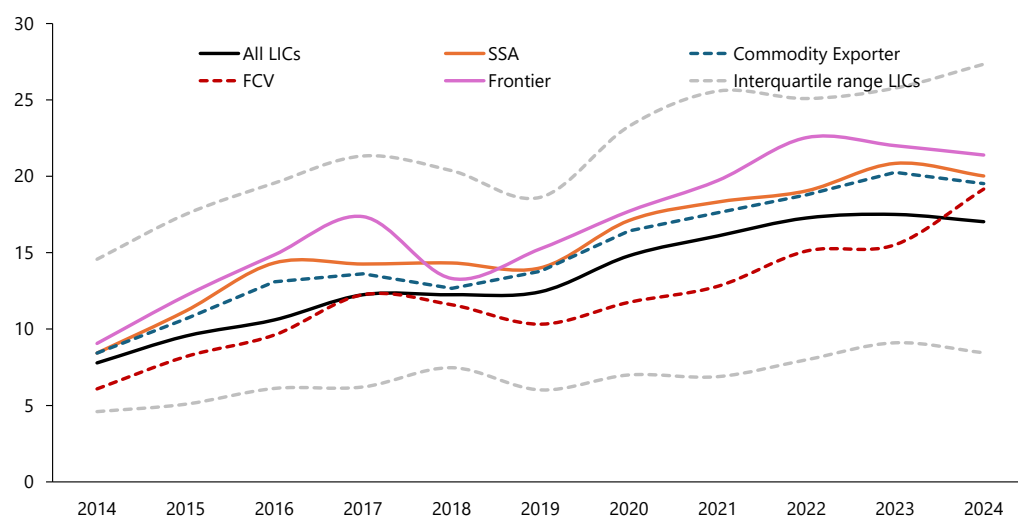
17. Public domestic debt in LICs has risen steadily over the last decade. About half of the increase in public domestic debt-to-GDP between 2014 and 2024 occurred before the COVID-19 pandemic, rising from 8 percent of GDP in 2014 to 12 percent in 2019, further increasing to 17 percent in 2024 (Figure 10). Over this period, the median LIC raised its share of public domestic debt by 10 percentage points (Figure 11a). Moreover, the share of countries with public domestic debt being more than half of their total public and publicly guaranteed debt more than doubled from 10 percent in 2014 to 21 percent in 2024 (Figure 11b). During this period, some frontier LICs, such as Ghana, Kenya, Tanzania, and Zambia, were able to issue local currency bonds at maturities equal or longer than 15 years.¹⁰

18. The pandemic amplified the reliance on domestic borrowing, particularly for SSA, frontier LICs, and FCS/FCV LICs. To help meet the sudden increase in financing needs, governments in LICs borrowed more heavily on domestic markets. This shift was also made possible by ongoing efforts, including those supported by the World Bank and the IMF, to develop local debt markets given the opportunity these markets can provide for reducing currency exposures and enhancing financing resilience. In frontier LICs the median level of domestic debt has increased from 15 to 20 percent of GDP over the 2019-21 period (Figure 10). Since 2021, the post-pandemic surge has been driven by SSA and FCS/FCV countries, where the public domestic debt burden rose by 2 and 6 percentage points of GDP, respectively—compared with 0.9 percentage points in the median LIC.

⁹ This section aims at a comprehensive analysis of the composition and evolution of domestic public debt in LICs. For the purpose of this analysis, domestic debt is generally defined as loans from banks authorized to operate in the jurisdiction, arrears to domestically-registered suppliers and marketable securities issued in the domestic or regional market held by residents of the domestic or regional market. The domestic public debt statistics are based on the data from the joint World Bank and IMF LIC DSAs and debt bulletins published by LICs government. The analysis is supplemented by indicators of debt transparency, compiled by the World Bank, and financial indicators from the IMF. Major limitations to this assessment relate to the lack of a consolidated database to draw upon including the availability of domestic debt composition, debt service data, domestic arrears, and domestic debt default episodes (see Annex 4).

¹⁰ See “Recent Developments on Local Currency Bond Markets in Emerging Economies”, IMF and World Bank (2020).

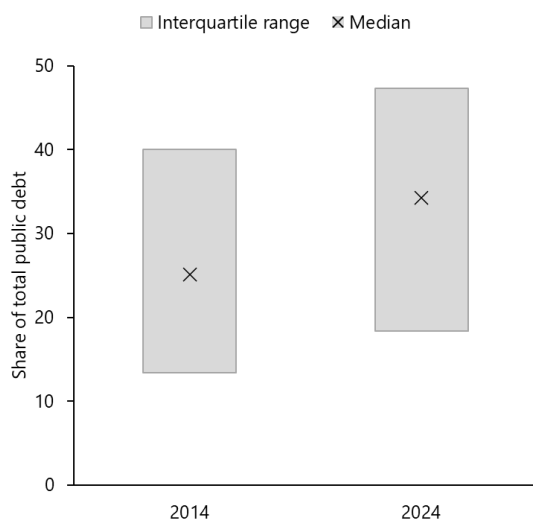
Figure 10. Evolution of Domestic Public Debt-to-GDP in LICs
(median)



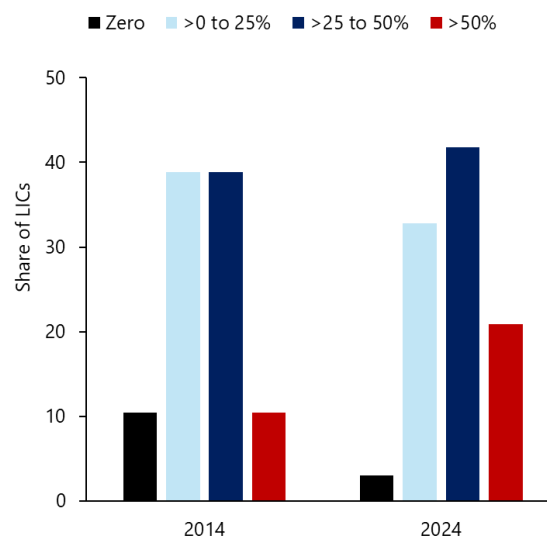
Source: IMF-World Bank LIC-DSF database as of June 2025.

Figure 11. Share of Domestic Public Debt in LICs

a. Share of total public debt in LICs



b. Distribution of countries with domestic debt as a share of total public debt



Source: IMF-World Bank LIC-DSF database as of June 2025

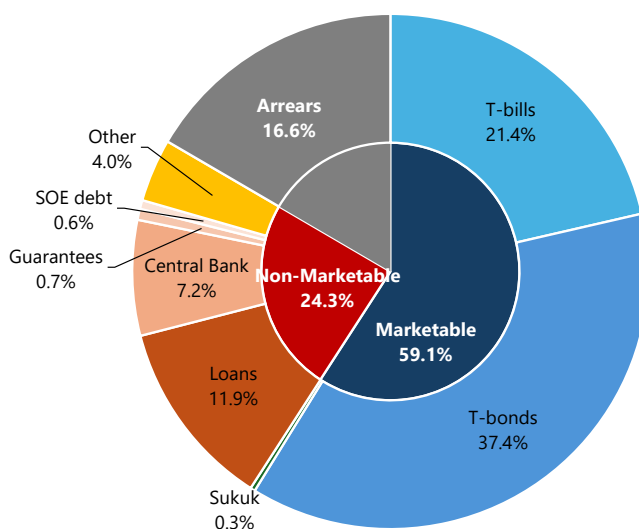
19. The rapid rise in public domestic debt service has contributed to financing pressures in LICs. Between 2014 and 2024, domestic debt service more than doubled from 2.1 percent of GDP to

4.7 percent of GDP, making it a significant component of their overall financing needs. As a result, GFNs have remained high despite recent fiscal consolidation efforts, increasing budget pressure, as domestic debt often carries higher interest rates than concessional external financing.

Composition of Domestic Debt, Rising Costs, and Shorter Maturities Call for Close Monitoring of Domestic Debt Vulnerabilities

20. Domestic debt in LICs is dominated by marketable instruments, though non-marketable debt remains important especially in certain regions. As of end-2024, about 59 percent of the stock of public domestic debt is in marketable securities (mainly T-bills and T-bonds, with a marginal share of sukuk), 24 percent in non-marketable debt such as loans and central bank financing, and 17 percent in arrears (Figure 12).¹¹ Among the 60 countries considered, 80 percent issue marketable debt, while of those that do not, about two-thirds are FCS/FCV and the remaining are small states. The increasing reliance on marketable debt has been accompanied in some cases by improvements in debt transparency (Box 1). The share of marketable debt is highest in South Asia (SAR) and Europe and Central Asia (ECA), while non-marketable debt is dominant in East Asia Pacific (EAP) and Latin America and Caribbean (LAC) (see Annex V).

Figure 12. Composition of Public Domestic Debt in 2024
(average shares)



Sources: LIC DSAs, debt bulletins of national authorities, and Bank of Canada–Bank of England database of sovereign defaults.

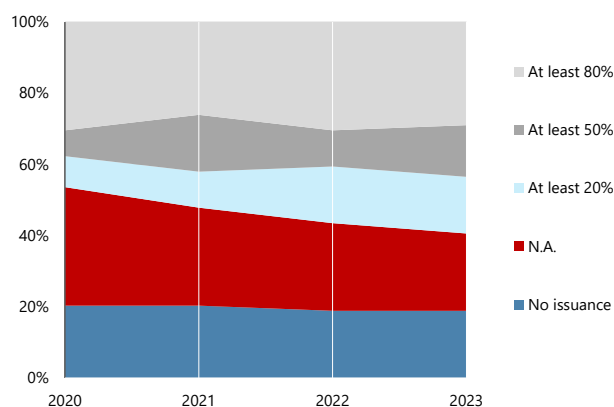
¹¹ Data on public domestic debt composition covers 60 out of the 69 countries under the LIC DSF. The nine countries that are excluded from the analysis due to the lack of published data or sufficiently detailed data include Afghanistan, Eritrea, Myanmar, Sudan, and Yemen due to the lack of a recent LIC DSA and Samoa, Solomon Islands, Tonga, and Tuvalu.

Box 1. Developments in Domestic Debt Transparency

Domestic debt transparency in LICs has improved since 2020 according to the World Bank's annual assessment of the transparency of domestic debt issuance, with notable advances among active issuers. More countries have adopted market-based instruments, with the share of LICs relying on auctions for more than half of their domestic borrowing rising by 15 percent (to 30 countries by 2023). The number of countries publishing issuance calendars also increased by 20 percent, to 30 out of 69 LICs. These advances have improved predictability and communication with market participants.

However, weak implementation and gaps in post-issuance transparency continue to constrain market development. The number of LICs issuing more than 80 percent of their domestic borrowing through auctions has remained flat since 2020 at around 20 countries. Also, cancellations of planned issuances have increased with LICs reporting from 5 to 20 percent of the share of cancelled auctions, undermining credibility of issuance calendars. Secondary market transparency remains limited: while more countries now report results on a weekly, monthly, or quarterly basis, only 24 percent (10 countries out of 41 covered by the assessment) publish daily post-trade data, restricting investor visibility and confidence.

Distribution of LICs by Share of Domestic Debt Issued Through Auctions
(As a Proxy for Debt Transparency)



Sources: Staff's computation based on the domestic securities heatmap and LIC DSF data. N.A. refers to less than 20 percent of domestic debt is placed through auctions or with no information available on public websites.

Notes: The assessment is conducted across five main areas: (1) use of market-based mechanisms to borrow from national (or regional) markets; (2) predictability of the government securities issuances; (3) adherence to the issuance calendar; (4) publication of the results of the borrowing transactions; and (5) secondary market operations. See <https://www.worldbank.org/en/data/interactive/2024/08/12/domestic-debt-securities-heatmap>.

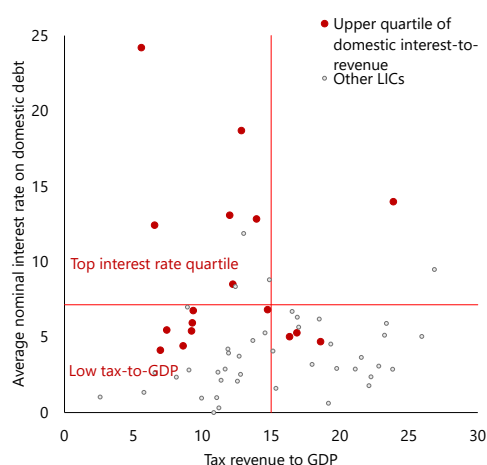
21. An increasing reliance on short-term domestic debt is heightening refinancing risks.

While the 2024 stock of domestic debt was predominantly medium- and long-term (79 percent), new issuance in 2025 shows a shift toward short-term borrowing, with 41 percent of new debt (including central bank financing) issued at short maturities. The median maturity of new longer-term debt is 4.5 years for LICs and 5 years for frontier LICs, but significantly shorter for small economies (2.9 years) and FCV countries (3.6 years). A subset of countries has consistently maintained elevated short-term debt, averaging 12 percent of GDP and 44 percent of total domestic debt between 2019 and 2023. Within this group, four countries stand out with new short-term borrowing in 2023 exceeding half of their 2022 domestic debt stock, amplifying rollover pressures and interest rate risks.

22. Domestic borrowing costs are generally higher than for external borrowing and the effective costs may be obscured by non-marketable instruments and financial repression.

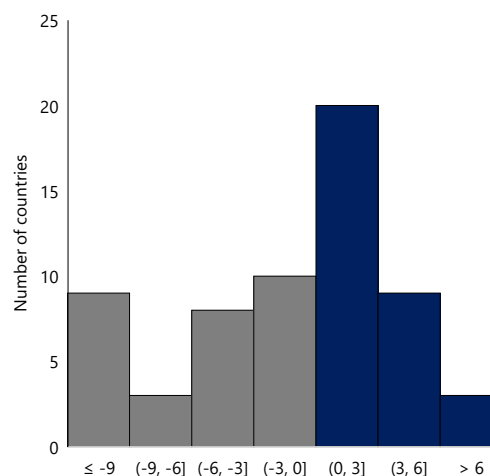
Nominal rates on domestic debt are high—reaching up to 25 percent in some LICs—with the median at about 5 percent in 2024, and countries with the highest interest payments-to-revenue also facing a low revenue-generating capacity (Figure 13). Yet nearly half of LICs (48 percent) continue to record negative real domestic interest rates, with the median close to zero in 2024 (Figure 14), partly reflecting the global inflationary spike that inflated away the real value of existing debts. In some cases, however, persistently negative real rates reflect financial repression, as regulatory requirements or policy incentives push domestic financial institutions to absorb government securities at below-market returns. While this dynamic may temporarily ease governments' financing costs, it could mask the true fiscal burden and raise concerns over resource misallocation: bank balance sheets become increasingly exposed to sovereign risk, private sector credit is crowded out, and capital allocation becomes distorted. In the context of rising domestic debt, these dynamics heighten vulnerabilities and imply that moving toward positive real rates would require significantly greater fiscal adjustment.

Figure 13. Average Nominal Interest Rate on Domestic Debt, 2024



Source: IMF-World Bank LIC-DSF database as of end-June 2025. Nominal interest rate is estimated based on the interest payments over total domestic debt.

Figure 14. Distribution of Real Domestic Interest Rates in 2024

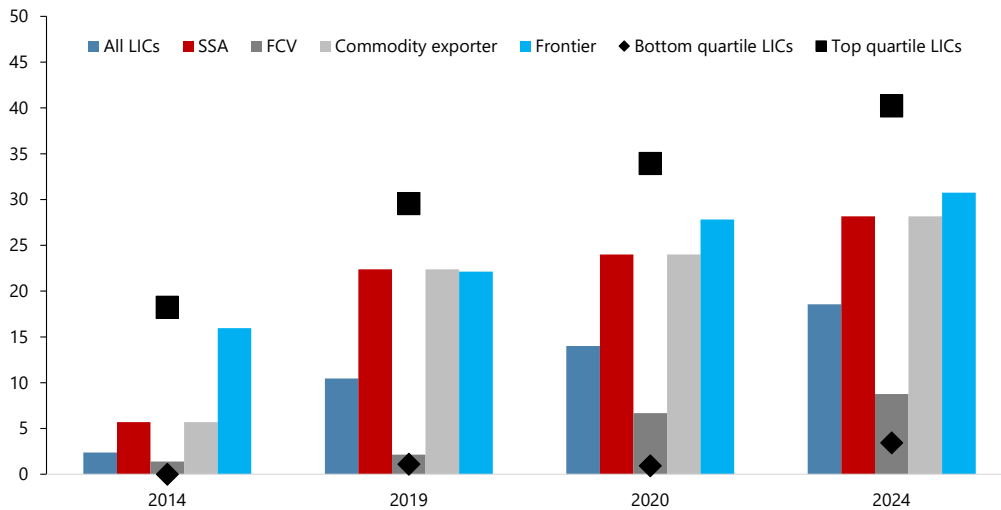


Source: IMF-World Bank LIC-DSF database as of end-June 2025.

23. All these trends are driving up domestic public debt service costs and heightening rollover risks.

The median domestic debt service-to-revenues (including grants) has increased more than five-fold over the past decade, from 3 percent in 2014 to 19 percent in 2024 (Figure 15). Of concern is the fact that LICs with the largest domestic debt service-to-revenues also have tax revenues-to-GDP lower than 15 percent (Figure 16a). Countries with the highest domestic debt burden ratios also face the most pressure on domestic debt service (Figure 16b).

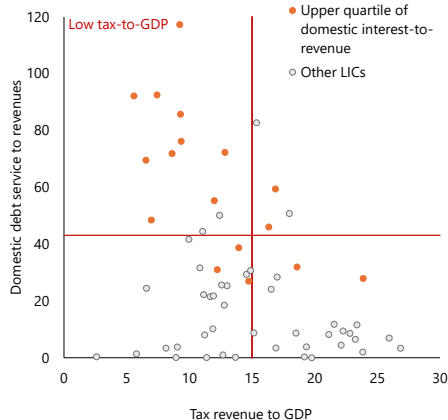
Figure 15. Evolution of Domestic Public Debt Service-to-Revenues (Median)



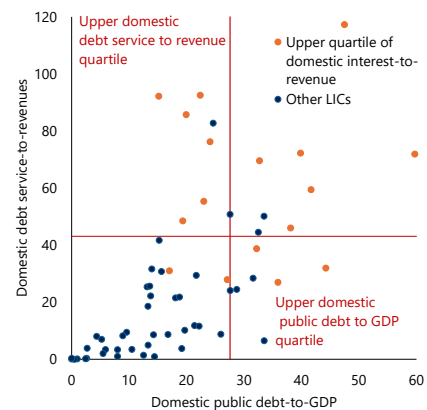
Source: IMF-World Bank LIC-DSF database as of June 2025.

Figure 16. Domestic Public Debt Service-to-Revenues, 2024

a. Versus Tax Revenues-to-GDP



b. Versus Domestic Public Debt to GDP



Source: IMF-World Bank LIC-DSF database as of end-June 2025

Assessing Public Domestic Debt Vulnerabilities through the Lens of the Bank-Fund LIC-DSF and Macro-Financial Linkages

24. Over the past decade, the development of domestic debt markets has brought many benefits to low-income countries but also exposed them to new risks. Domestic financing has helped countries finance critical development needs amid external shocks and weak revenue mobilization, enabling countercyclical policy responses, reducing exchange rate risks, and supporting local capital market development. Furthermore, developing deeper domestic financial

markets can help in some countries reduce informality and support higher private consumption and investment through the efficient channeling of resources. At the same time, increasing domestic debt burdens and a growing sovereign-bank nexus in some LICs suggest that vulnerabilities need careful monitoring and management.¹²

25. The LIC-DSF accounts for public domestic debt vulnerabilities in the overall debt risk and sustainability assessment.¹³ In addition to the analysis of overall public debt burden indicators, the framework considers the dynamics of domestic public debt indicators and, importantly, the consistency of the domestic public borrowing plans with maintaining macroeconomic and financial stability.

26. An overview of public domestic debt vulnerabilities in LICs can be gathered by analyzing the following: (i) the assessment of the magnitude of breaches of the overall public debt burden indicator relative to that of external debt burden indicators; and (ii) the assessment of the level of domestic debt, debt service, and primary balance among those countries at high risk of overall debt distress or in distress. Analyzing the scale of the sovereign-bank nexus is also important.

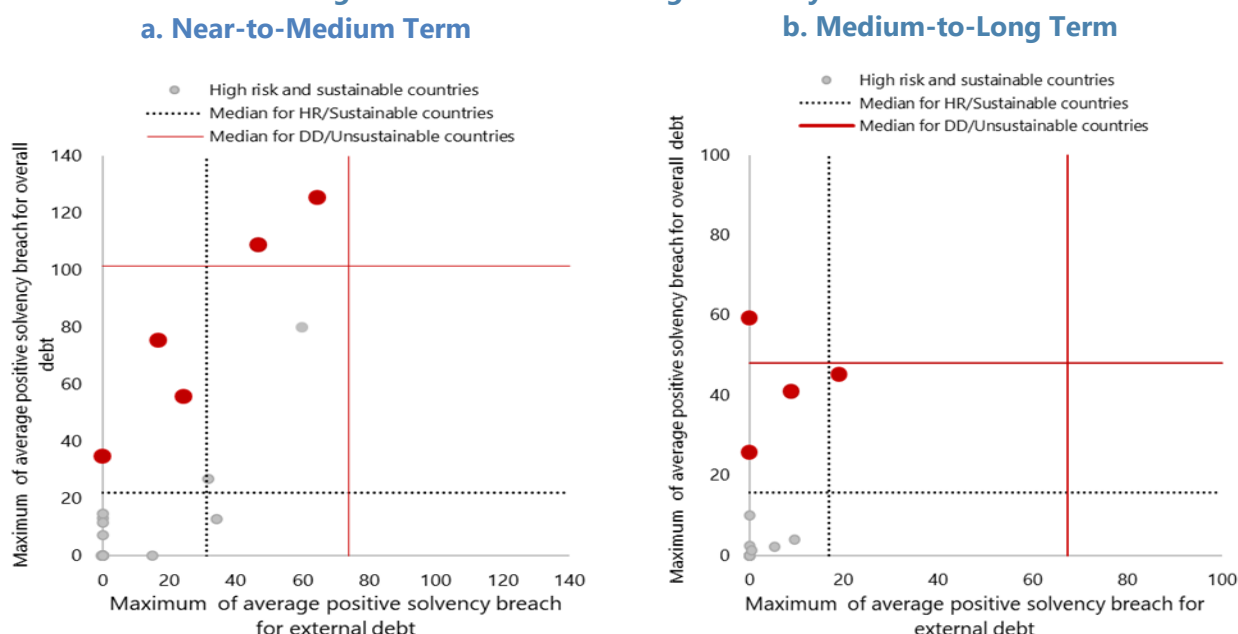
Threshold Breaches of Solvency Indicators

27. The analysis of solvency threshold breaches shows that domestic debt challenges are more intense than external ones in five countries over the near-medium term. Figure 17 compares the maximum average breach of solvency indicators for external debt (x-axis) and overall debt (y-axis), measured as deviations from country-specific debt-carrying capacity thresholds/benchmarks.¹⁴ Notably, in the near to medium term, of the 13 countries exhibiting breaches of solvency thresholds, five present breaches of higher intensity for overall debt than external debt, with two countries exceeding the in-debt distress/unsustainable median. In the long term, of the 9 countries exhibiting a breach of solvency thresholds, the number of countries with more intense breaches of overall debt than external debt is only four, with one overall debt breach surpassing the in-debt distress/sustainability benchmark.

¹² See IMF (2025b).

¹³ See Supplement to 2018 Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries, IMF and World Bank, 2024.

¹⁴ A 45-degree line would indicate similar magnitude of external and overall breaches, while dots above it would point to larger overall debt challenges coming from domestic debt. The dotted black lines benchmark the median breaches of high-risk but sustainable countries, and the solid red lines show the median for countries in debt distress and unsustainable debt. Overall, the sample analyzed consists of the 24 countries currently assessed as at high risk of debt distress but where debt remains sustainable.

Figure 17. Maximum Average Solvency Breaches

Source: IMF-World Bank LIC-DSF database

Notes: Medians are computed separately for (i) high-risk (HR) countries assessed to have sustainable debt, and (ii) countries assessed in debt distress (DD) and to have unsustainable debt, based on LIC-DSF vintages from 2007–25. The maximum average positive breach is calculated based on the latest DSA per country, following: 1) Calculate the positive relative deviations from the relevant debt-burden thresholds, based on country-specific debt-carrying capacities. 2) Compute the average deviation separately for the near-to-medium term (projection years 1–5) and the medium-to-long term (projection years 6–10). 3) The maximum average breach for each horizon is then identified across the solvency indicator. In the case of external debt, the maximum is computed among the two debt burden indicators PV of external debt to GDP and PV of external debt to exports, while in the case of overall debt is equal to the PV of overall public debt to GDP.

Public Domestic Debt Vulnerability Indicators

28. Additional insights on the scale of vulnerabilities in countries assessed at high risk of overall debt distress or in debt distress can be drawn by adding supplementary information on domestic debt vulnerabilities. The Supplement to the 2018 LIC DSF Guidance Note identifies a benchmark of 17 percent for the average domestic public debt-to-GDP ratio and 22 percent for the average domestic public debt service-to-revenue ratio as indicative of domestic debt vulnerability and offers an additional lens through which we can narrow our focus on evolving risks. Supplementing this with a third metric that indicates potential fiscal space constraints—the primary balance-to-GDP—deepens our understanding of risks.¹⁵

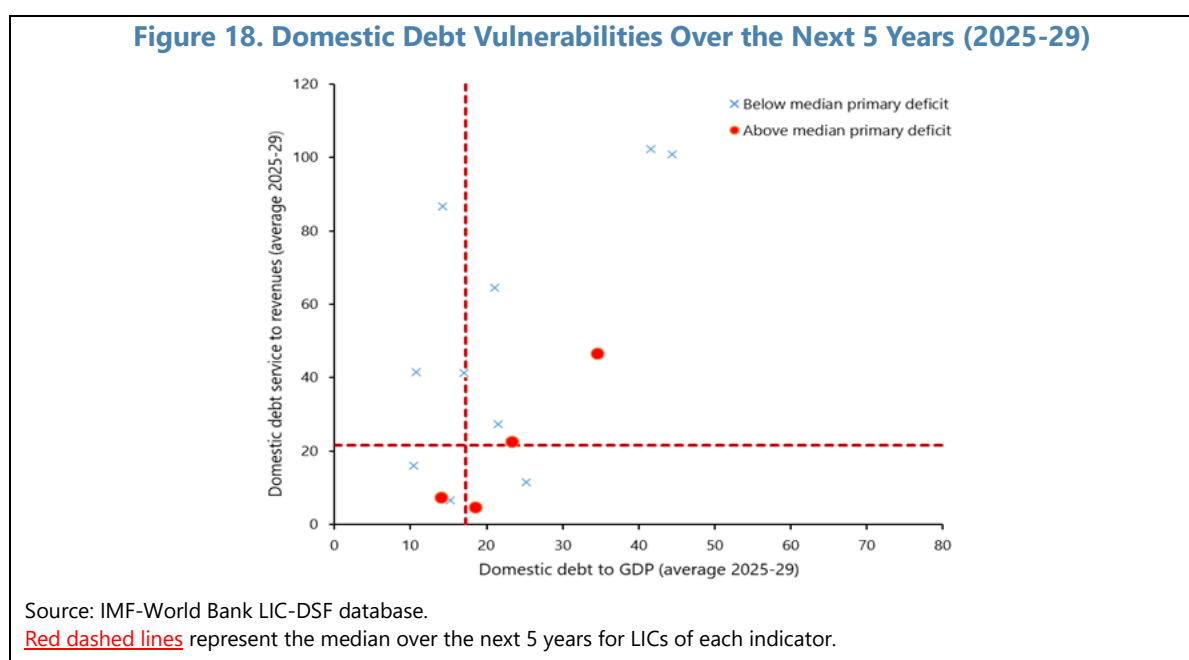
29. Among the LICs that are either in high risk of overall debt distress or in debt distress, 18 appear particularly vulnerable.¹⁶ Two of these countries face both the highest risk of domestic debt stress with high domestic debt-to-GDP, elevated projected domestic debt service-to-revenue

¹⁵ All three supplementary metrics are assessed over the medium-term (i.e., the first five years of the forecast period).

¹⁶ In these 18 countries, the creditor composition of the external debt structure could reduce the scope for meaningful debt relief in the event debt becomes unsustainable.

ratios and face the highest fiscal space constraints with high primary deficits-to-GDP. An additional 13 countries meet one or two of these vulnerability criteria (Figure 18):¹⁷

- Primary balance. Four countries have primary deficits exceeding the median of the distribution in 2025-29 for LIC, of which one is already in debt distress.¹⁸
- Domestic debt stock. Nine countries have a level of domestic debt-to-GDP exceeding the median of the distribution over the next 5 years, of which three are already in debt distress. Of these, five also have a relatively high level of domestic debt service-to-revenue ratio, and one has a high level of primary deficit to GDP, suggesting growing refinancing risks absent fiscal adjustment.
- Domestic debt service. Ten countries have elevated domestic debt service to revenue ratios, that could indicate a particularly high cost of servicing domestic debt, including due to high interest rates, of which two are already in debt distress.



Domestic Debt and Sovereign Bank Nexus

30. Domestic debt poses distinct risks compared to external debt, reflecting differences in creditor bases and macro-financial linkages. External debt pressures will aggravate balance of payments pressures and with broader macroeconomic risks reflecting any impact on external creditors and the prospects of future access to external financing. Meanwhile, domestic debt pressures can weigh on the local financial system, impeding the private sector's access to credit and limiting growth. This creates strong sovereign-bank-central bank balance-sheet linkages that can

¹⁷ Three other countries have no complete data (Afghanistan, Eritrea, and Yemen).

¹⁸ This would indicate broader risks to overall debt stress beyond domestic debt stress.

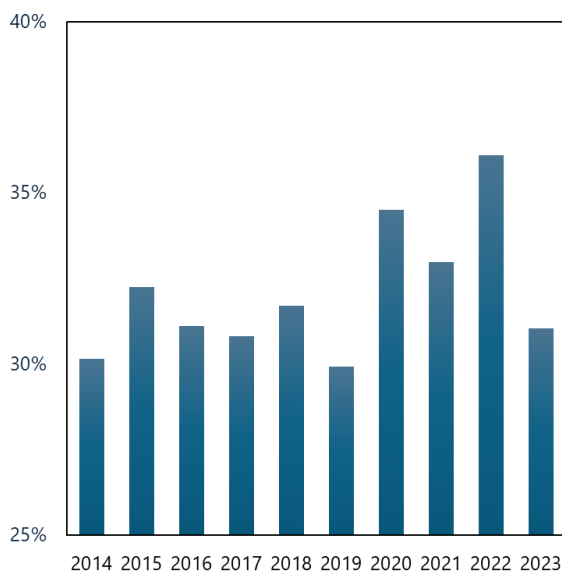
amplify vulnerabilities: any domestic default would heighten risks of banking crises and financial instability, with related spillovers to credit growth, while quasi-fiscal operations and monetary financing can distort pricing, obscure sovereign risks, and undermine price stability. These risks could be amplified by shallow domestic financial markets, limited fiscal space, and weak financial sector crisis management frameworks.

31. Over the last decade, the increase in domestic debt has been associated with the increase in LICs' central bank exposures to the sovereign (Figure 19).¹⁹ This monetary financing can distort the pricing of domestic debt, artificially lowering costs and concealing sovereign risks. In large volumes, it can also be a source of vulnerability on the balance sheet of the central bank itself. More generally, monetary financing has widely known implications on price stability across the economy.

32. The sovereign-banking nexus has also strengthened over the recent past mirroring governments amplified dependence on domestic financing. Since 2014, domestic commercial banks in LICs have on average increased their exposure to the sovereign, while exposure to the private sector declined in relative terms (Figure 20). Over the last decade, the number of LICs with domestic banks that had more than a quarter of their assets with the sovereign more than doubled (Figure 21), while over the same period the number of LICs that had more than a quarter of their banks' assets with the private sector declined (Figure 22). The causality of risk along the sovereign-banking nexus runs in both directions; banking crises can lead to sovereign defaults as demand for domestic debt recedes, while sovereign defaults imply asset losses on the balance sheet of the local financial sector, which could risk citizens' deposits and reduce the capacity to provide financing to the private sector and support growth.

¹⁹ While this exposure was already expanding prior to COVID-19, rising from an average of 27 percent of central banks assets in 2010 to 32 percent by 2018, the pandemic exacerbated this trend causing to increase further to 36 percent by 2022.

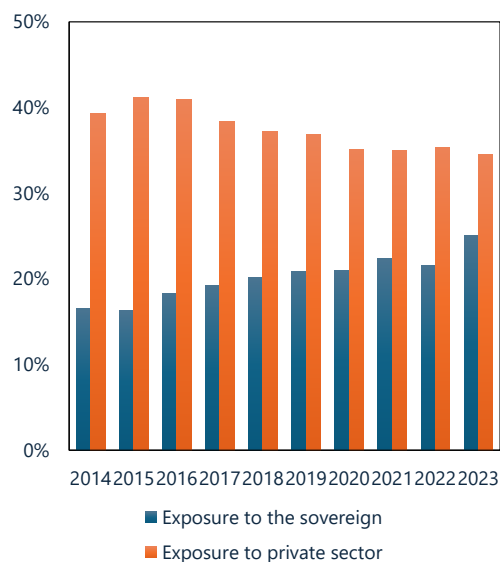
Figure 19. LICs Central Banks' Exposure to Sovereign
(% of total assets)



Sources: WB staff and IFS.

Exposure to the sovereign includes central banks' claims on the central government, non-financial public institutions, and state and local governments. The annual observations are an unweighted average across LICs

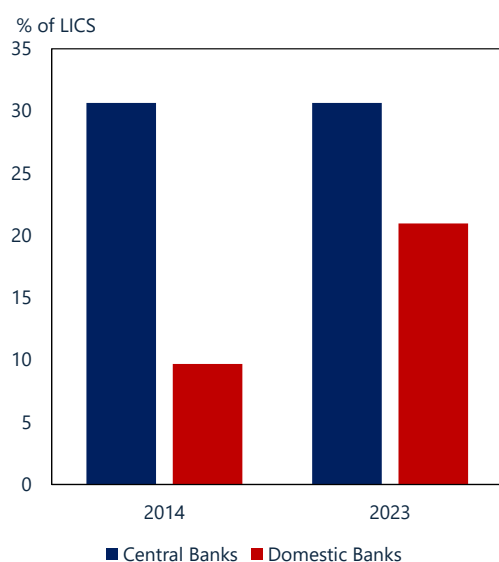
Figure 20. LICs Domestic Banks' Exposure to Sovereign vs. Private Sector
(% of total assets)



Sources: WB staff and IFS.

Exposure to the sovereign includes banks' claims on the central government, non-financial public institutions, and state and local governments. Exposure to the private sector includes banks' claims on the private sector and other financial corporations. The annual observations are an unweighted average across LICs.

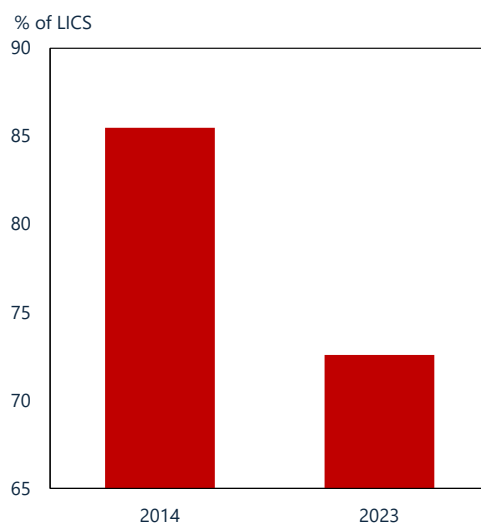
Figure 21. LICs with Claims on the Sovereign Exceeding 25% of Balance Sheet



Sources: WB staff and IFS.

Exposure to the sovereign includes central banks' claims on the central government, non-financial public institutions and state and local governments.

Figure 22. LICs with Banks' Claims on the Private Sector Exceeding 25% of Balance Sheet



Sources: WB staff and IFS.

33. These trends highlight the potential risks to macro-financial stability as domestic debt vulnerabilities rise. Ultimately, domestic debt stress in LICs is marked by lower growth and higher domestic debt burden, increased financial sector exposure to government debt, reduced bank lending to the private sector, and declining external reserves (Box 2).

Box 2. Analysis of Domestic Debt Stress Episodes: Central Bank and the Domestic Banking and Non-Banking Sectors' Balance Sheet Characteristics

Improved data have deepened the understanding of domestic debt stress. Most domestic stress events,¹ have coincided with or followed external debt stress, though their nature has shifted over time. While earlier episodes were typically triggered by multiple domestic and external factors, recent cases are increasingly driven by single domestic pressures such as accumulation of arrears, monetary financing, or financial repression (World Bank 2024).

Domestic debt stress episodes occur in a stressed macroeconomic context. Specifically, compared to non-crisis events, crisis episodes are associated with higher domestic debt-to-GDP ratios, lower growth rates of real GDP per capita, and lower private credit to GDP ratios (Figure AVI.A.1 and AVI.A.2). This is consistent with findings in the literature (Erce *et al*, 2024).

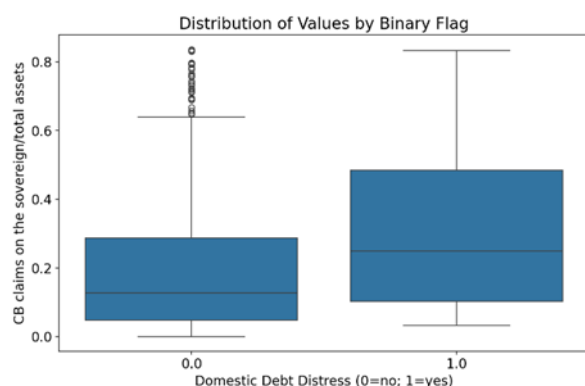
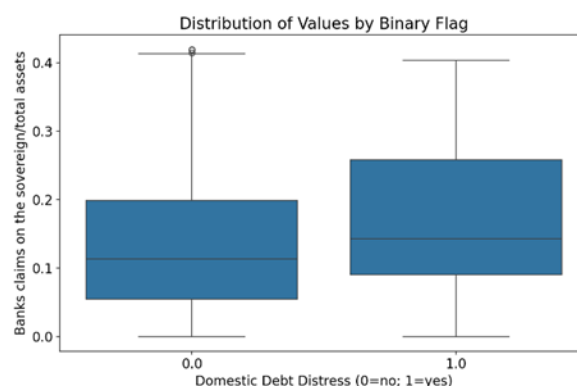
In domestic debt stress episodes, both central banks and domestic banks have a fundamentally higher exposure to the sovereign, while banks fundamentally lend less to the private sector (Figures 23, 24, and 25). Exposures to the sovereign for both central banks and domestic banks are due to a combination of long-term fundamentals as well as an increase in lending as the crisis approaches. Meanwhile, the lower exposure to the private sector by commercial banks is also driven by a combination of long-term fundamentals and crisis-related deleveraging (See Annex VI.A).

Central banks steadily increase their exposure to domestic banks as domestic debt stress builds up (Figure AVI.A.3). Central banks' claims on domestic banks increase as shares of total assets over the 5-year period prior to the crisis. The combined results suggest that in stress episodes there are, a priori, higher exposures to the sovereign by both central banks and domestic banks. These exposures intensify as crisis is approached, possibly driven by conventional and non-conventional interventions by central banks.

Central banks' net claims on non-residents are lower in domestic debt stress episodes than in non-stress events (Figure AVI.A.4). These largely reflect long-term fundamentals, even as central banks attempt to boost their net non-resident position as stress builds up only to have it decline again at crisis point (Annex VI.A).

Domestic non-bank holders of domestic debt are also important agents in the context of domestic debt distress. In fact, they tend to have a higher share of total debt during domestic debt stress episodes, than in non-stress episodes (Figure AVI.A.5). This reflects the role that pension funds play in many countries as a source of unchecked financing for government.

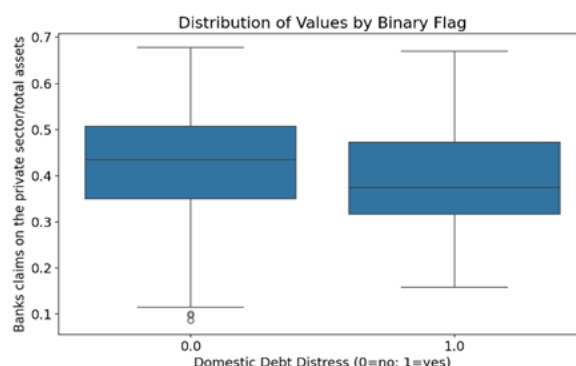
¹ For the purposes of this analysis, we define a domestic stress event as one which entails any of the following: (i) a de jure default (Erce *et al.* (2022), IMF); (ii) inflation rate at above 100 percent or is at least 50 percent and has doubled over the past year (inflation spike); (iii) central bank claims on central government exceed 4 percent of GDP and has more than doubled (y-o-y) (excessive monetary financing); (iv) the 3-year moving average of domestic debt-to-GDP is in the 67th LIC percentile and the 3-year moving average of real effective domestic interest rate is negative (financial repression); or (v) the stock of domestic arrears exceeds 5 percent of GDP for past three years and is at least 10 percent higher than the previous year.

Figure 23. Central Banks' Claims on the Sovereign**Figure 24. Domestic Banks' Claims on the Sovereign**

Sources: WB staff and IFS.

Notes: Central banks and domestic banks' claims on the sovereign each include claims on the central government, non-financial public institutions and state and local governments.

The Y-axis plots the distribution of the relevant indicator, while X-axis 1 indicates domestic debt default episodes, 0 denotes non-default episodes, and -1 merely flags the year prior of default episodes. This is for the sample of LIC over the 2000-23 period. Each blue box represents the 25th (Q1) to 75th (Q3) percentile range, the line inside the box is the median, and the bottom and top whiskers are the $1.5 \times \text{IQR}$ from Q1 and Q3, respectively. Circles outside the whiskers denote outliers.

Figure 25. Domestic Banks' Claims on the Private Sector

Sources: WB staff and IFS.

Notes: Analysis performed as part of the ongoing Bank-Fund Review of LIC DSF methodology.

KEY TAKEAWAYS

34. While fiscal consolidation has been important in curbing debt growth and mitigating sustainability risks following the recent succession of global shocks, the pace of improvement has been uneven. Though public debt is expected to stabilize at high levels, some countries remain vulnerable. Overall, risks of a systemic debt crisis appear broadly contained under baseline assumptions, while liquidity risks have become relatively more prominent. Thus, fiscal space remains tight with gross financing needs almost doubling between 2014 and 2024. Despite broadly contained sovereign spreads, still elevated base rates amid policy uncertainty are contributing to high funding costs, which are weighing on public debt rollover obligations. In this context, public

debt service burdens have remained elevated and constrain countries' capacity to finance critical development needs and build buffers. Meeting external refinancing needs will continue to be challenging, particularly for SSA and Commodity Exporting LICs, which is further complicated by a changing financing landscape.

35. In this context, LICs have increased their reliance on domestic financing, which has brought benefits and costs. Over the past decade, the development of domestic debt markets has enabled LICs to finance widening deficits amid shocks, rising development needs, and subdued revenue mobilization, while reducing exchange rate risks. The pandemic amplified the reliance on domestic borrowing, particularly for SSA, frontier economies, and FCS/FCV LICs. Given the potential benefits of deepening domestic financial markets, the IMF and World Bank continue to work with countries to strengthen domestic debt markets, with IDA21 reinforcing this agenda through its commitment to capital market development. At the same time, the increased reliance on domestic financing has been accompanied by a higher domestic debt service burden—driven by the rising importance of short-term domestic debt and high domestic interest rates—with the burden highest among frontier economies and those with low domestic revenue mobilization.

36. The analysis of public domestic debt vulnerabilities through the lens of the LIC-DSF shows that domestic debt risks are rising across LICs. Even though this analysis shows that external debt risks are more pronounced in LICs, domestic debt risks are rising and are particularly acute in a small set of countries. Among countries with high risk of overall debt distress and in debt distress, nearly half face challenges linked to domestic debt, such as large fiscal financing needs, elevated levels of domestic debt stock, or elevated domestic debt service burden. This analysis also underscores the importance of balancing the reliance on domestic financing to mitigate financial stability risks associated with higher exposure of the banking sector to the sovereign. Continued efforts to improve debt transparency would support further enhancements in the assessment of debt vulnerabilities.

Annex I. Countries Included in Data Sample

Table AI.1. Countries Included in Data Sample

Count	Country	ISO3 Code	LIC DSF Users	PRGT	IDA	Frontier Markets	SSA	SDS	Fragile	Commodity Exporter
1	Afghanistan	AFG	1	1	1				1	
2	Bangladesh	BGD	1	1	1					
3	Benin	BEN	1	1	1	1	1			1
4	Bhutan	BTN	1	1	1			1		1
5	Burkina Faso	BFA	1	1	1		1		1	1
6	Burundi	BDI	1	1	1		1		1	1
7	Cabo Verde	CPV	1	1	1		1	1		1
8	Cambodia	KHM	1	1	1					
9	Cameroon	CMR	1	1	1	1	1		1	1
10	Central African Republic	CAF	1	1	1		1		1	1
11	Chad	TCD	1	1	1		1		1	1
12	Comoros	COM	1	1	1		1	1	1	1
13	Congo, Democratic Republic of the	COD	1	1	1		1		1	1
14	Congo, Republic of	COG	1	1	1	1	1		1	1
15	Côte d'Ivoire	CIV	1	1	1	1	1			1
16	Djibouti	DJI	1	1	1			1		
17	Dominica	DMA	1	1	1			1		
18	Eritrea	ERI	1	1	1		1		1	
19	Ethiopia	ETH	1	1	1	1	1		1	1
20	Gambia	GMB	1	1	1		1			1
21	Ghana	GHA	1	1	1	1	1			1
22	Grenada	GRD	1	1	1			1		
23	Guinea	GIN	1	1	1		1			1
24	Guinea-Bissau	GNB	1	1	1		1		1	1
25	Guyana	GUY	1		1			1		1
26	Haiti	HTI	1	1	1				1	
27	Honduras	HND	1	1	1	1				1
28	Kenya	KEN	1	1	1	1	1			1
29	Kiribati	KIR	1	1	1			1	1	
30	Kyrgyz Republic	KGZ	1	1	1					1
31	Lao People's Democratic Republic	LAO	1	1	1					1
32	Lesotho	LSO	1	1	1		1			
33	Liberia	LBR	1	1	1		1			1
34	Madagascar	MDG	1	1	1		1			1
35	Malawi	MWI	1	1	1		1			1

Table AI.1. Countries Included in Data Sample (concluded)

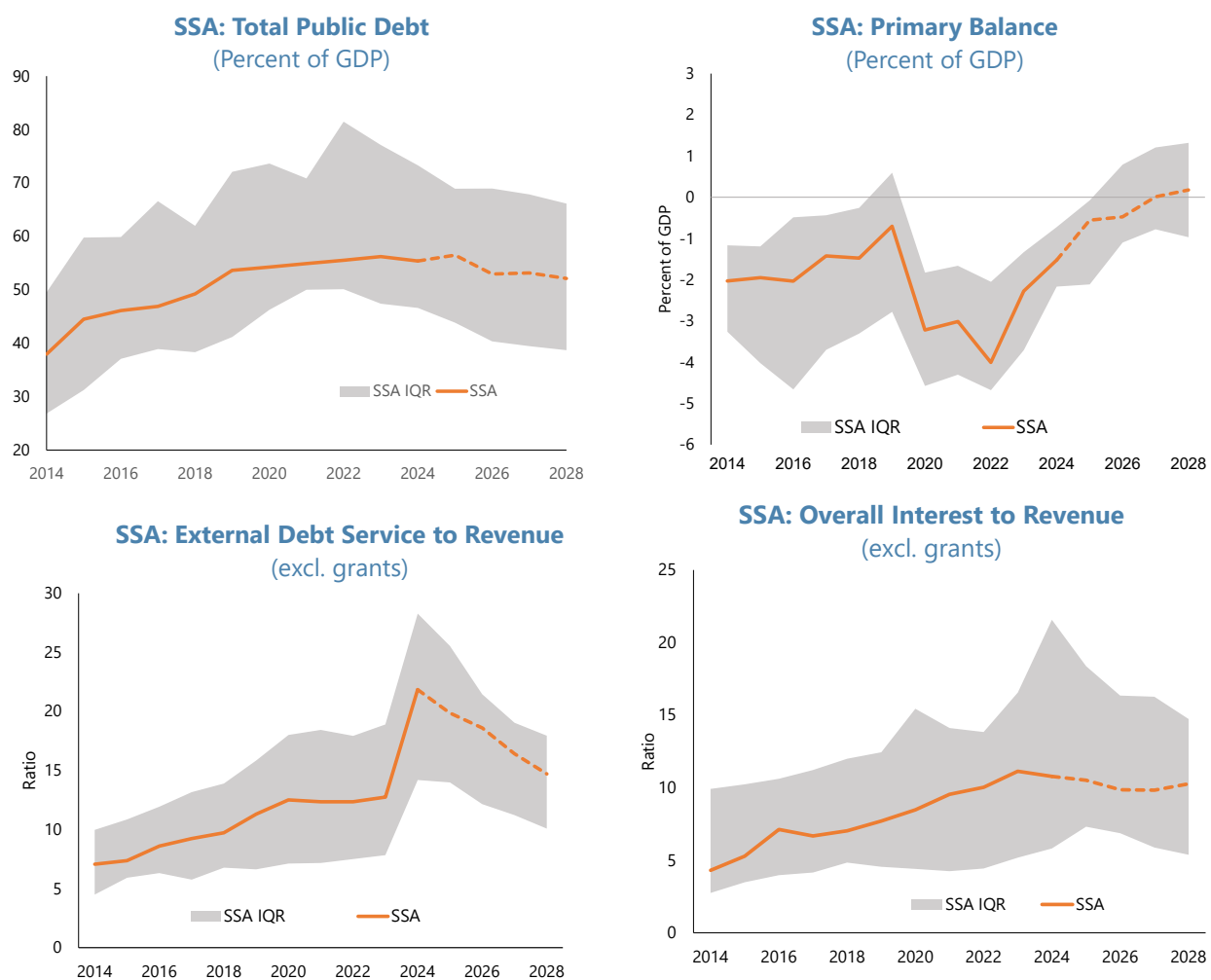
Count	Country	ISO3 Code	LIC DSF Users	PRG T	IDA	Frontier Markets	SSA	SDS	Fragile	Commodity Exporter
36	Maldives	MDV	1	1	1			1		
37	Mali	MLI	1	1	1		1		1	1
38	Marshall Islands	MHL	1	1	1			1	1	
39	Mauritania	MRT	1	1	1		1			1
40	Micronesia (Federated States of)	FSM	1	1	1			1	1	
41	Moldova	MDA	1	1						
42	Mozambique	MOZ	1	1	1	1	1		1	1
43	Myanmar	MMR	1	1	1				1	1
44	Nepal	NPL	1	1	1					
45	Nicaragua	NIC	1	1	1					1
46	Niger	NER	1	1	1		1		1	1
47	Papua New Guinea	PNG	1	1	1	1			1	1
48	Rwanda	RWA	1	1	1	1	1			1
49	Samoa	WSM	1	1	1			1		
50	São Tomé and Príncipe	STP	1	1	1		1	1	1	
51	Senegal	SEN	1	1	1	1	1			1
52	Sierra Leone	SLE	1	1	1		1			1
53	Solomon Islands	SLB	1	1	1			1	1	1
54	Somalia	SOM	1	1	1		1		1	
55	South Sudan	SSD	1	1	1		1		1	1
56	St. Vincent and the Grenadines	VCT	1	1	1			1		
57	Sudan	SDN	1	1	1		1		1	1
58	Tajikistan	TJK	1	1	1	1				1
59	Tanzania	TZA	1	1	1	1	1			1
60	Timor-Leste	TLS	1	1	1			1	1	1
61	Togo	TGO	1	1	1	1	1			1
62	Tonga	TON	1	1	1			1		
63	Tuvalu	TUV	1	1	1			1	1	
64	Uganda	UGA	1	1	1		1			1
65	Uzbekistan	UZB	1	1	1	1				1
66	Vanuatu	VUT	1	1	1			1		
67	Yemen	YEM	1	1	1				1	1
68	Zambia	ZMB	1	1	1	1	1			1
69	Zimbabwe	ZWE	1	1	1		1		1	1
Total:			69	68	68	17	38	19	30	47

Source: IMF and World Bank.

Notes: Countries not in the analysis: St. Lucia and Syria as they have not produced a LIC DSA under the 2017 framework. Frontier markets classification is from IMF (2025). The commodity exporter classification is from WB Global Economic Prospects.

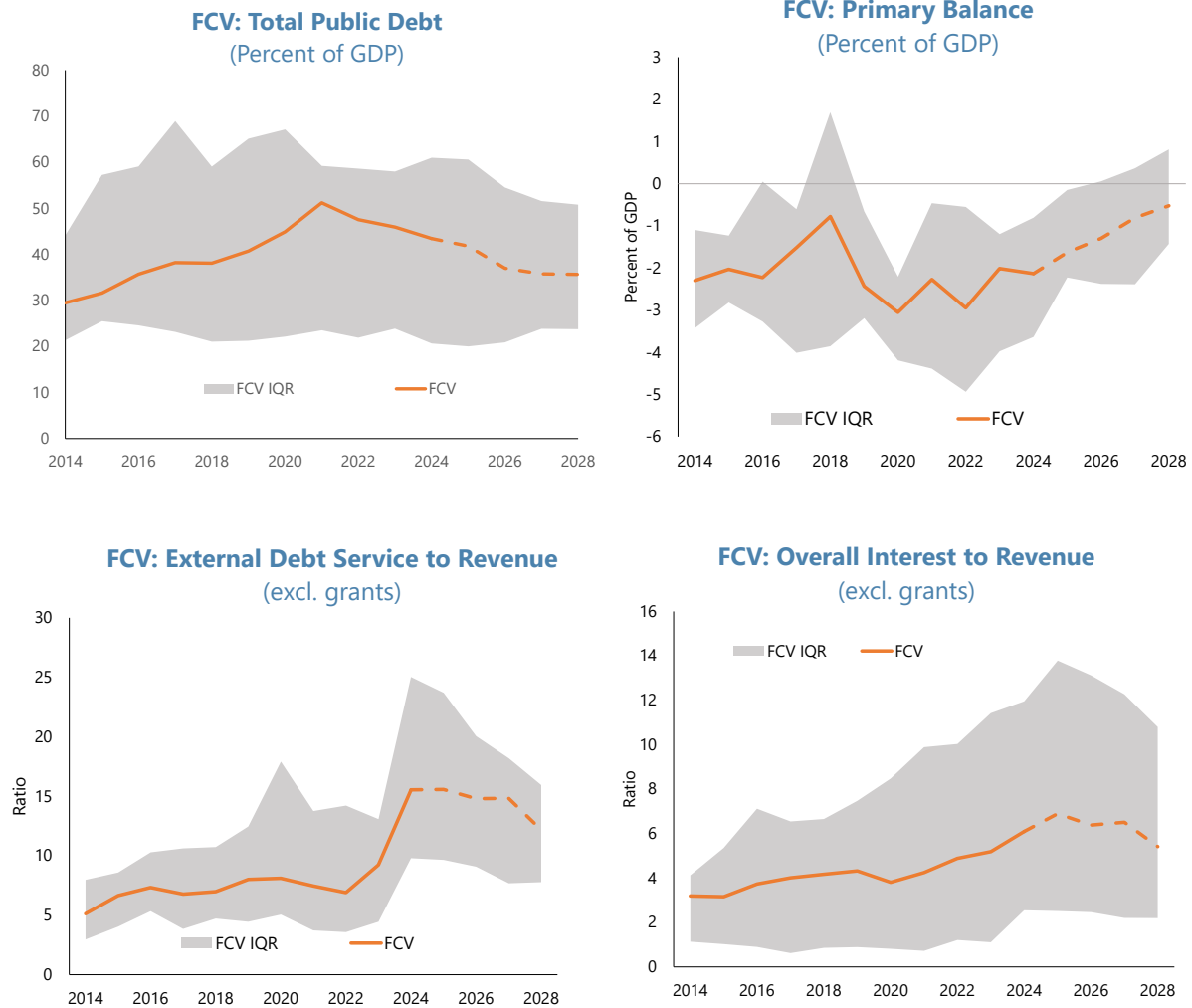
Annex II. Debt Vulnerabilities by Country Groups

Figure All.1. South Saharan African (SSA) Countries



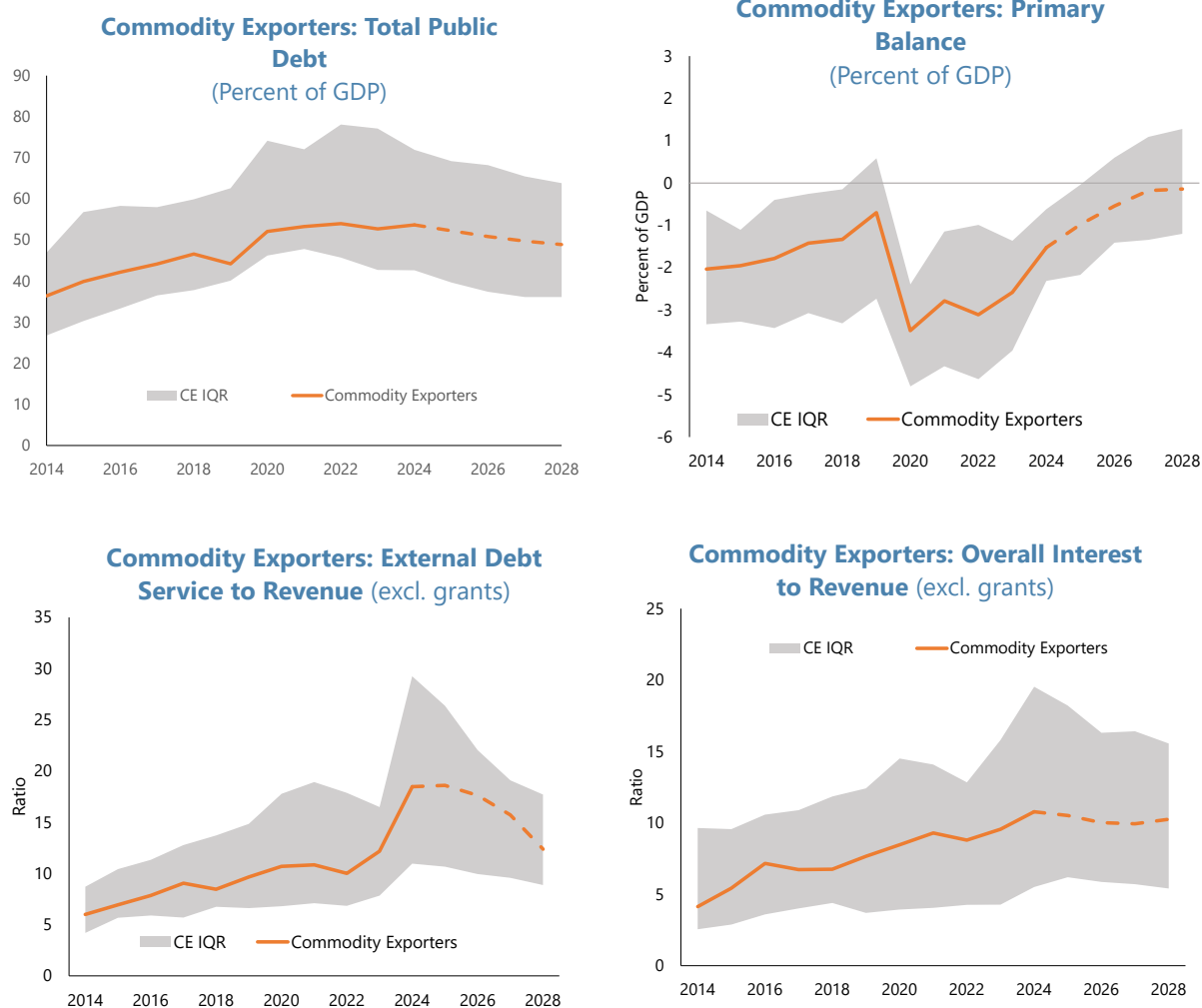
Source: IMF World Economic Outlook April 2025 and World Bank International Debt Statistics 2024.

Notes: See Annex I for a complete table with country classifications.

Figure All.2. Fragile and Conflict-Affected States

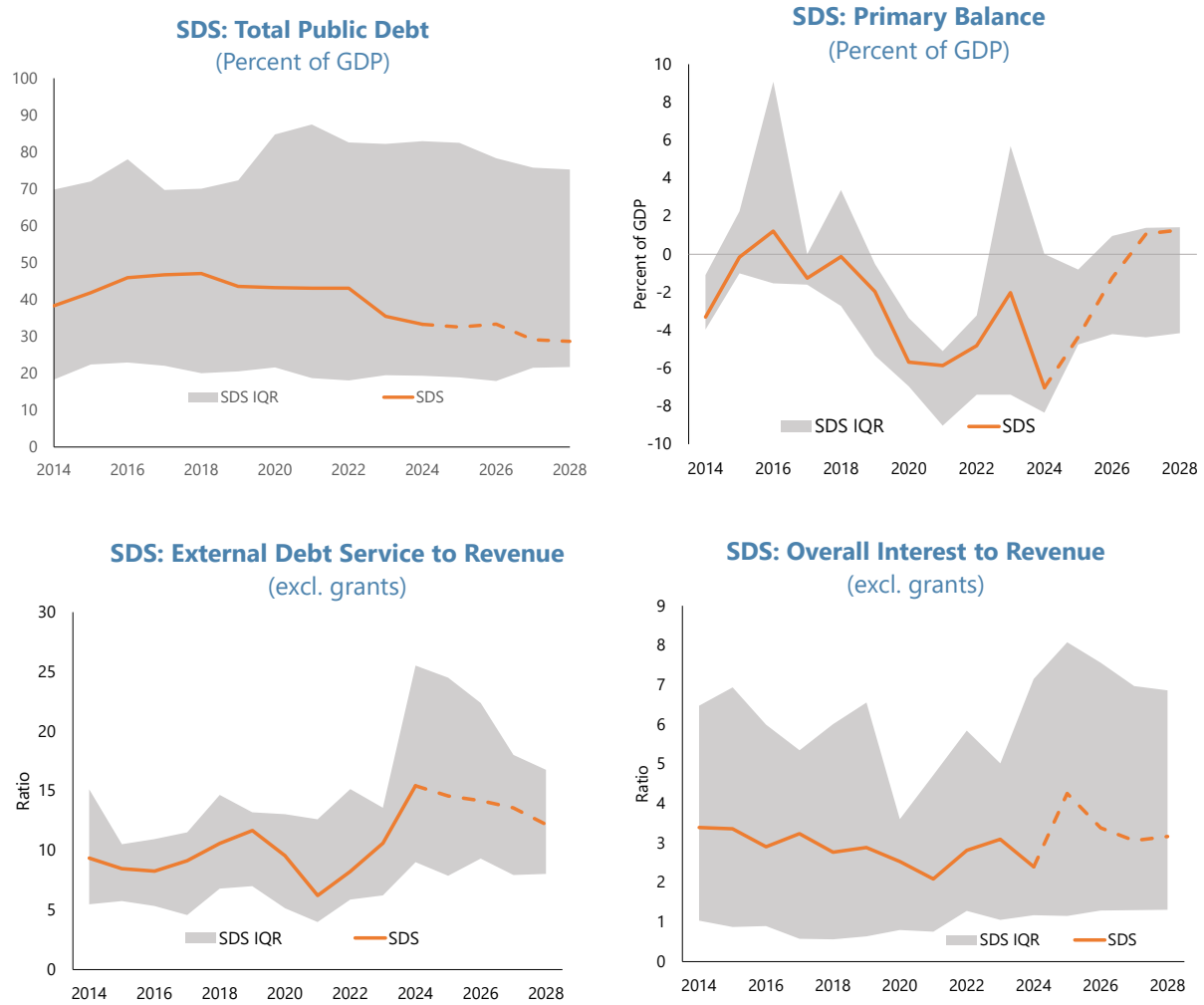
Sources: IMF World Economic Outlook April 2025 and World Bank International Debt Statistics 2024.

Notes: See Annex I for a complete table with country classifications.

Figure AII.3. Commodity Exporting Countries

Sources: IMF World Economic Outlook April 2025 and World Bank International Debt Statistics 2024.

Notes: See Annex I for a complete table with country classifications.

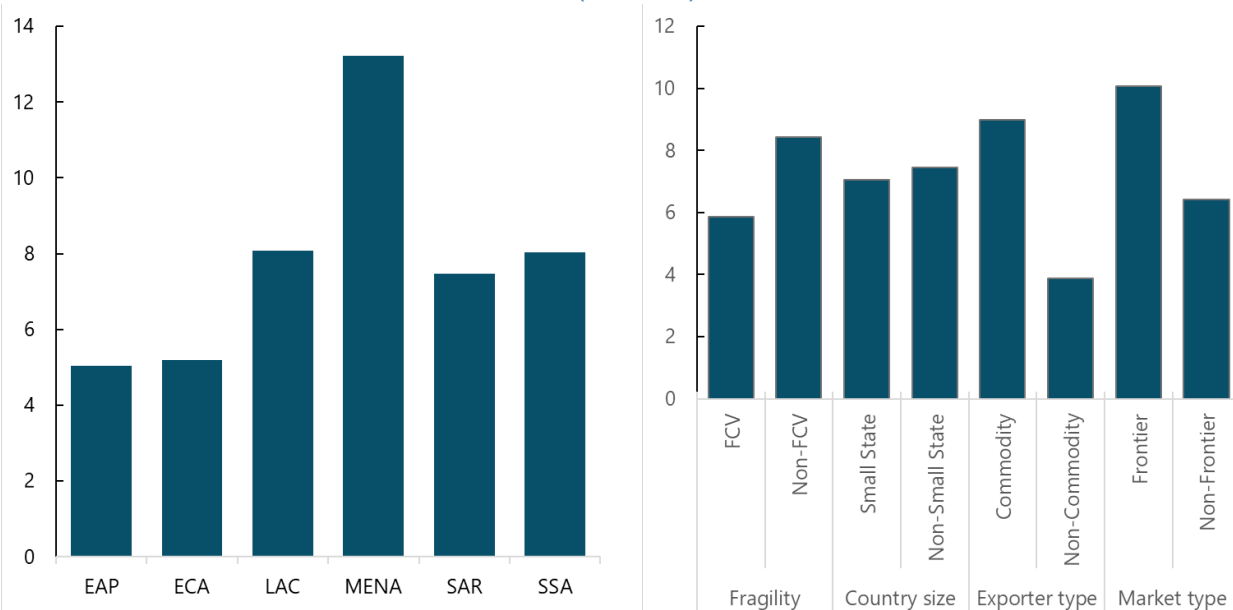
Figure All.4. Small Developing States

Sources: IMF World Economic Outlook April 2025 and World Bank International Debt Statistics 2024.

Notes: See Annex I for a complete table with country classifications.

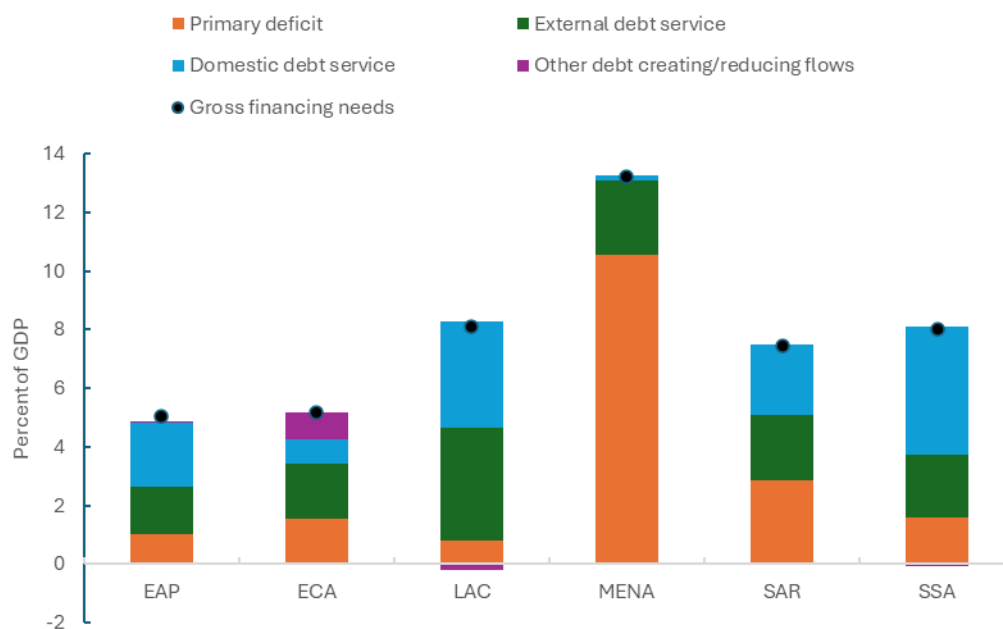
Annex III. Gross Financing Needs

Figure AIII.1. Average Gross Financing Needs (% of GDP)
(2014–24)



Source: IMF-World Bank LIC-DSF database as of end-June 2025.

Figure AIII.2. Regional Breakdown of GFN and Its Drivers (% of GDP)
(average: 2014–24)



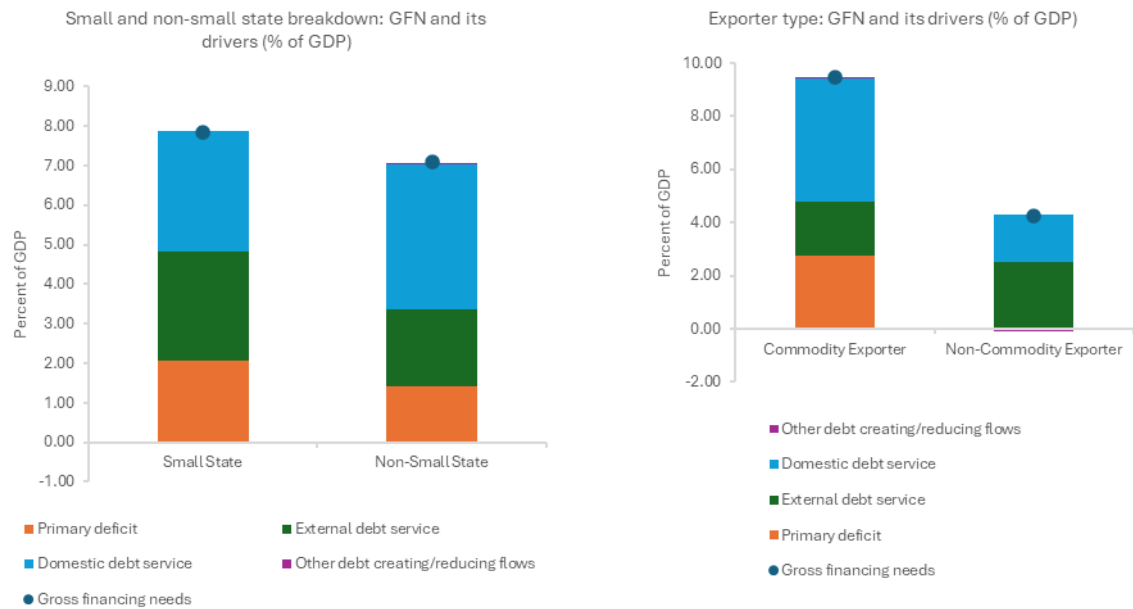
Source: IMF-World Bank LIC-DSF database as of end-June 2025.

Figure AIII.3. GFN and Its Drivers by Income Level and Fragility
(average: 2014-24)



Source: IMF-World Bank LIC-DSF database as of end-June 2025.

Figure AIII.4. GFN and Its Drivers by Small-State and Exporter Type
(average: 2014-24)



Source: IMF-World Bank LIC-DSF database as of end-June 2025.

Annex IV. Limitation in Measuring Public Domestic Debt Burden, Default, and Arrears

- **Domestic public debt composition.** There is no comprehensive database on domestic public debt statistics comparable to the World Bank's International Debt Statistics for external debt. While efforts are underway in the World Bank to bridge that gap, this analysis relies on information included in LIC DSAs on the composition of debt and maturity by origin of debt instruments, supplemented by debt bulletins published by country's governments. Yet data on the composition of debt remains unavailable in some fragile and conflict-afflicted states and small states.
- **Debt service.** There is no comprehensive and reliable database on domestic public debt service. The IMF WEO and the World Bank Macro Poverty Outlooks (MPOs) report overall interest payments and amortizations (with some gaps). Domestic debt service could be derived by subtracting external debt service from the overall public debt service, but this approach runs the risk of producing inconsistent series due to the use of two different datasets—WB's DRS/IDS (which is a primary source for external debt service) versus WEO/MPOs (source for overall debt service). This analysis builds a historical database on debt service using data included in the LIC DSAs.
- **Domestic arrears.** Domestic arrears used for the report are extracted from the Bank of Canada – Bank of England Sovereign Default Database and LIC DSAs. Some domestic arrears are large, exceeding 10% of GDP, which is why their use as a signal for a domestic debt stress episode is well justified. However, during the data validation stage conducted by both the WB and the IMF, the size and time of accumulation of these arrears could not be validated by some country teams. Therefore, the accuracy of arrears data remains a concern. Arrears disputed by country teams were dropped for the purpose of identifying domestic debt stress episodes, while they were retained for the presentation of the domestic debt composition.

Annex V. Composition of Domestic Debt in 2024

Figure AV.1. By Regions
(Percent of total)

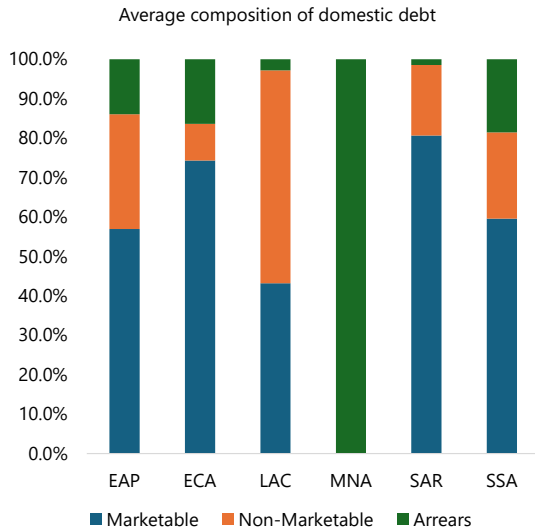
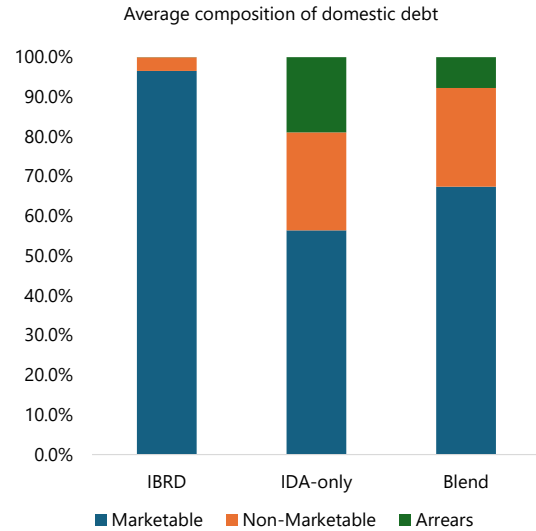


Figure AV.2. By Lending
(Percent of total)



Sources: LIC DSAs, debt bulletins of national authorities, and Bank of Canada – Bank of England database of sovereign defaults.

Figure AV.3. By Income
(Percent of total)

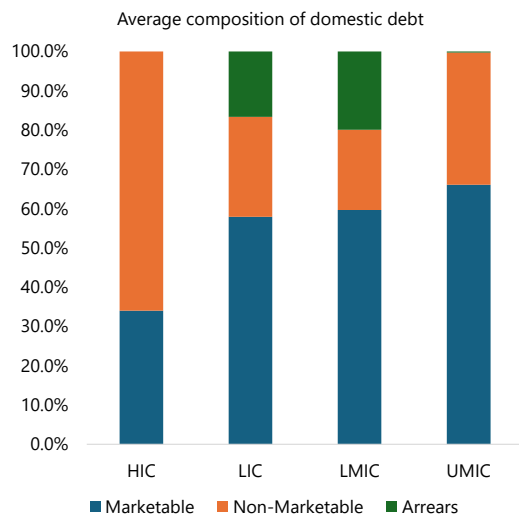
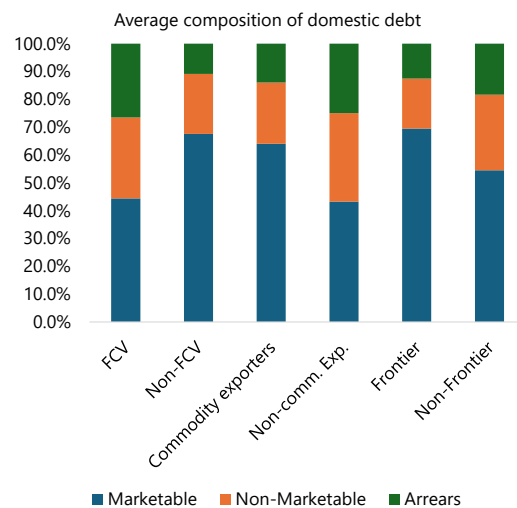


Figure AV.4. By Structural Features
(Percent of total)



Sources: LIC DSAs, debt bulletins of national authorities, and Bank of Canada – Bank of England database of sovereign defaults.

Annex VI. Domestic Debt Distress Charts

A. Domestic Debt Stress

Figure AVI.A.1. Domestic Debt-to-GDP

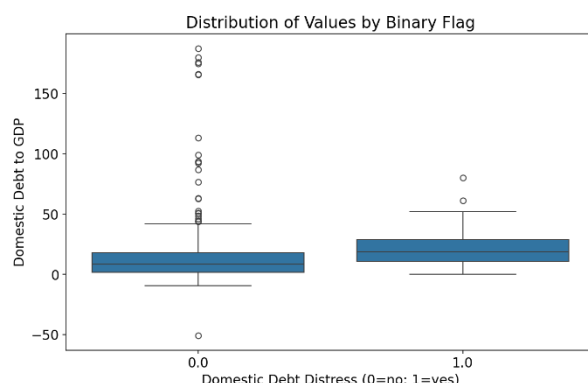
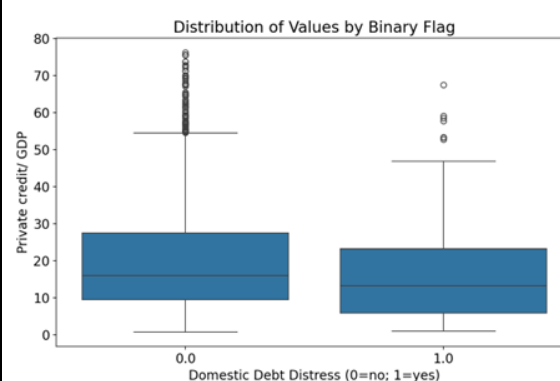


Figure AVI.A.2. Private Credit-to-GDP



Sources: WB staff and IFS.

Notes: The Y-axis plots the distribution of the relevant indicator. The X-axis plots 1 to indicate domestic debt stress episodes and 0 to denote non-stress episodes. This is for the sample of LIC-DSF countries over the 2000-23 period. Each blue box represents the 25th (Q1) to 75th (Q3) percentile range, the line inside the box is the median, and the bottom and top whiskers are the $1.5 \times$ IQR from Q1 and Q3, respectively. Circles outside the whiskers denote outliers.

Figure AVI.A.4. Central Banks' Net Claims on Non-Residents

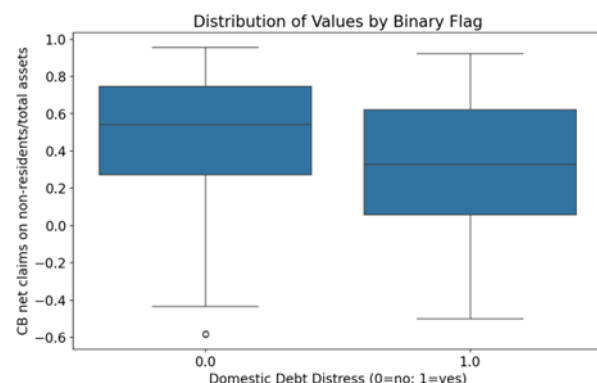
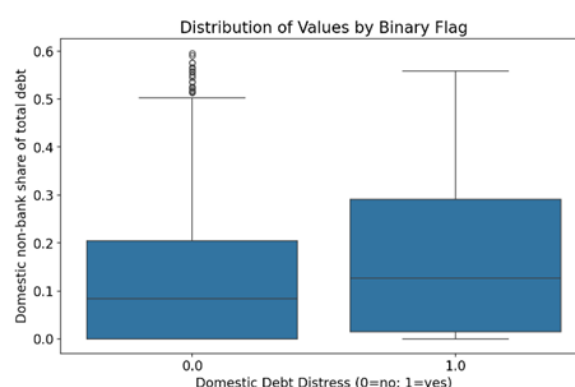


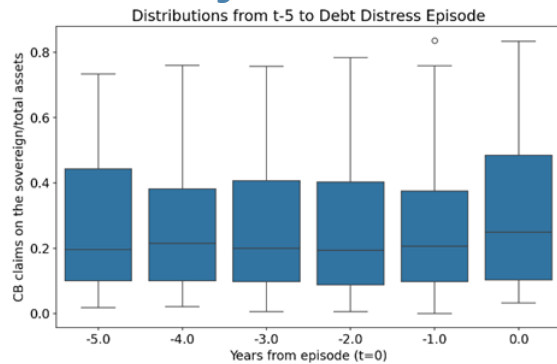
Figure AVI.A.5. Total Debt Share of Domestic Non-Bank Holders



Sources: WB staff and IFS.

Notes: The Y-axis plots the distribution of the relevant indicator. The X-axis plots 1 to indicate domestic debt stress episodes and 0 to denote non-stress episodes. This is for the sample of LIC-DSF countries over the 2000-23 period. Each blue box represents the 25th (Q1) to 75th (Q3) percentile range, the line inside the box is the median, and the bottom and top whiskers are the $1.5 \times$ IQR from Q1 and Q3, respectively. Circles outside the whiskers denote outliers.

Figure AVI.A.6. Central Banks' Claims on the Sovereign from t-5 to Crisis



Sources: WB staff and IFS.

Notes: Central banks' and domestic banks' claims on the sovereign include claims on the central government, non-financial public institutions and state and local governments. **The Y-axis plots the distribution of the relevant indicator. The X-axis plots 1 to indicate domestic debt stress episodes and 0 to denote non-stress episodes. This is for the sample of LIC-DSF countries over the 2000-23 period.** Each blue box represents the 25th (Q1) to 75th (Q3) percentile range, the line inside the box is the median, and the bottom and top whiskers are the $1.5 \times$ IQR from Q1 and Q3, respectively. Circles outside the whiskers denote outliers.

Figure AVI.A.7. Domestic Banks' Claims on the Sovereign from t-5 to Crisis

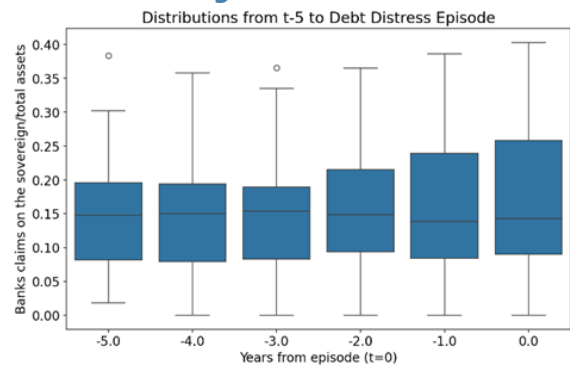
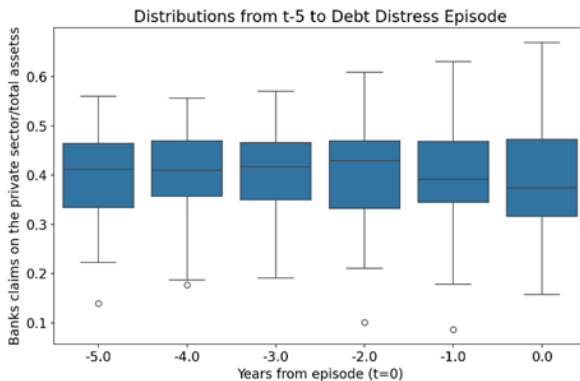


Figure AVI.A.8. Domestic Banks' Claims on the Private Sector from t-5 to Crisis



Sources: WB staff and IFS.

Notes: **The Y-axis plots the distribution of the relevant indicator. The X-axis plots 1 to indicate domestic debt stress episodes and 0 to denote non-stress episodes. This is for the sample of LIC-DSF countries over the 2000-23 period.** Each blue box represents the 25th (Q1) to 75th (Q3) percentile range, the line inside the box is the median, and the bottom and top whiskers are the $1.5 \times$ IQR from Q1 and Q3, respectively. Circles outside the whiskers denote outliers.

Figure AVI.A.9. The Total Debt Share of Domestic Non-Bank Holders from t-5 to Crisis

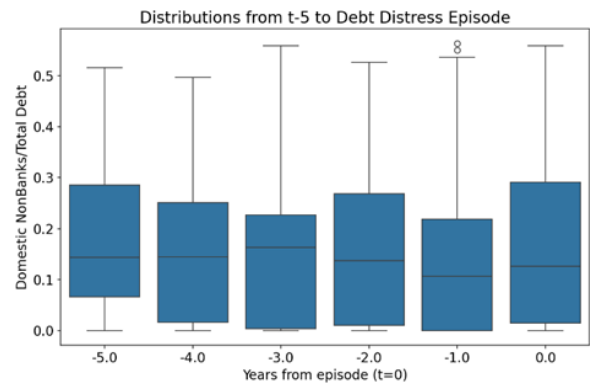


Figure AVI.A.10 Central Banks' Net Claims on Non-Residents from t-5 to Crisis

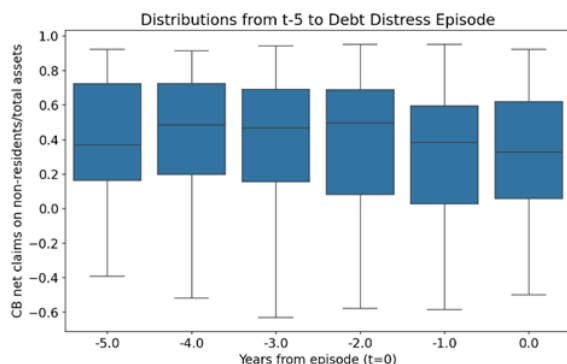
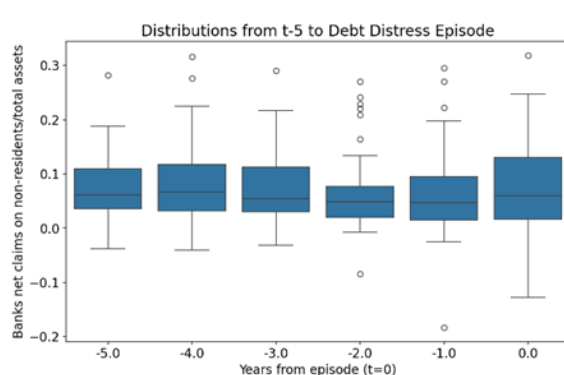


Figure AVI.A.11. Domestic Banks' Net Claims on Non-Residents from t-5 to Crisis



Sources: WB staff and IFS.

Notes: **The Y-axis plots the distribution of the relevant indicator. The X-axis plots 1 to indicate domestic debt stress episodes and 0 to denote non-stress episodes. This is for the sample of LIC-DSF countries over the 2000-23 period.** Each blue box represents the 25th (Q1) to 75th (Q3) percentile range, the line inside the box is the median, and the bottom and top whiskers are the $1.5 \times \text{IQR}$ from Q1 and Q3, respectively. Circles outside the whiskers denote outliers.

B. Unsustainable Domestic Debt

1. For robustness, we examine macro-financial indicators in unsustainable domestic debt episodes.¹ In domestic default episodes, LICs have higher domestic debt-to-GDP ratios, lower GDP growth rates, and lower credit to GDP ratios compared to non-crisis events. Monetary conditions in particular are worse; central banks' monetary base is a higher share of total assets and total liabilities, and the share increases as the default approaches. Central banks continue to be overly exposed to the sovereign both due to long-term fundamentals as well as crisis dynamics. Domestic banks, on the other hand, undertake a deleveraging strategy from both the public and private sectors as pressure builds up. Further, interventions by the central banks in unsustainable episodes appear clearer on their liability side; central banks' liabilities to domestic banks are higher, increasing as pressure builds up. The net position on non-residents for both central banks and banks also deteriorates in unsustainable domestic debt episodes.

¹ Unsustainable domestic debt episodes comprise any of the following signals: (i) Inflation spikes with the annual inflation rate exceeding 400 percent; (ii) De jure default episodes (Erce et al.(2022), IMF); and (iii) The stock of domestic arrears exceeds 10 percent of GDP for 3 consecutive years and exceeds 10 percent of the previous year's domestic arrears, cross-checked with DSA ratings.

Figure AVI.B.1 Central Banks' Monetary Base Money

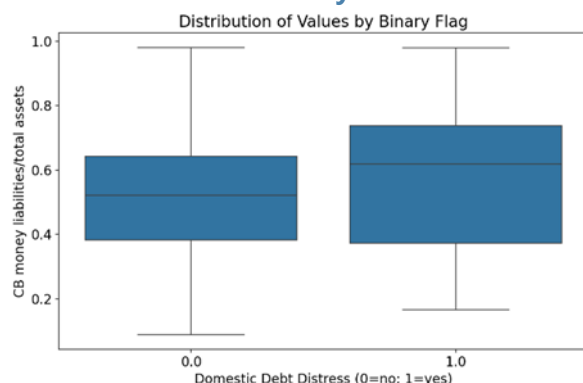
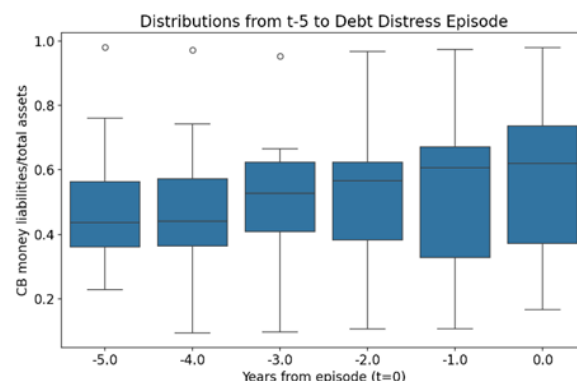


Figure AVI.B.2 Central Banks' Monetary Base from t-5 to Crisis



Sources: WB staff and IFS.

Notes: **The Y-axis plots the distribution of the relevant indicator. The X-axis plots 1 to indicate domestic debt stress episodes and 0 to denote non-stress episodes. This is for the sample of LIC-DSF countries over the 2000-23 period.** Each blue box represents the 25th (Q1) to 75th (Q3) percentile range, the line inside the box is the median, and the bottom and top whiskers are the $1.5 \times \text{IQR}$ from Q1 and Q3, respectively. Circles outside the whiskers denote outliers.

Figure AVI.B.3 Central Banks' Claims on the Sovereign

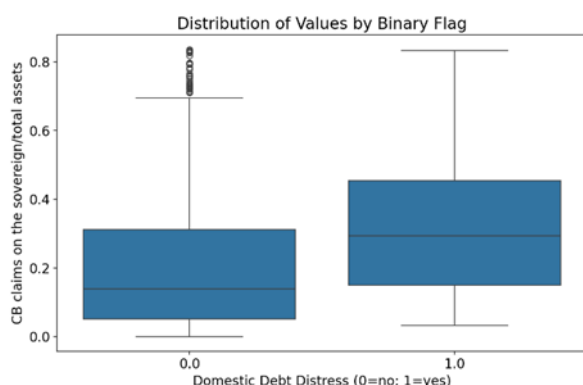
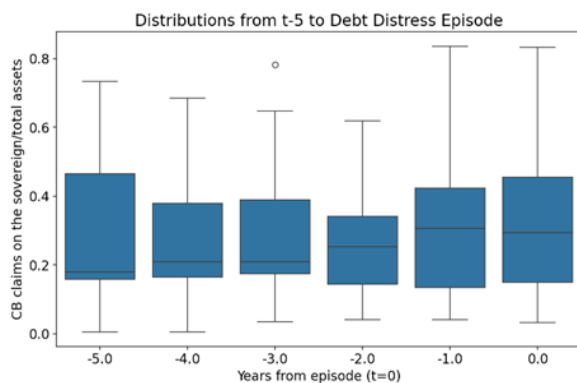


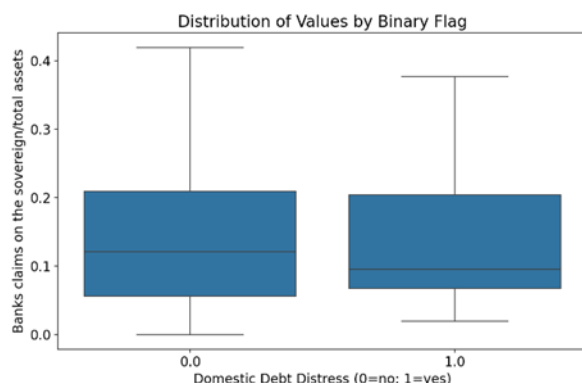
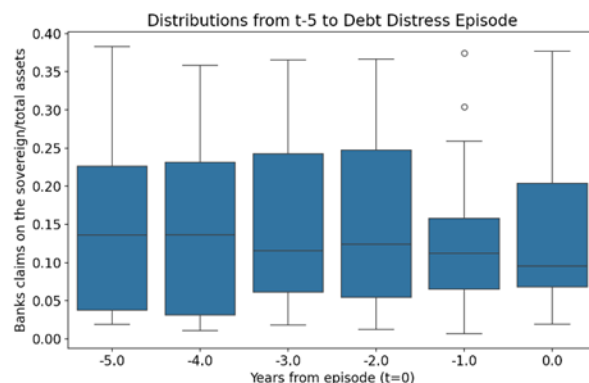
Figure AVI.B.4 Central Banks' Claims on the Sovereign from t-5 to Crisis



Sources: WB staff and IFS.

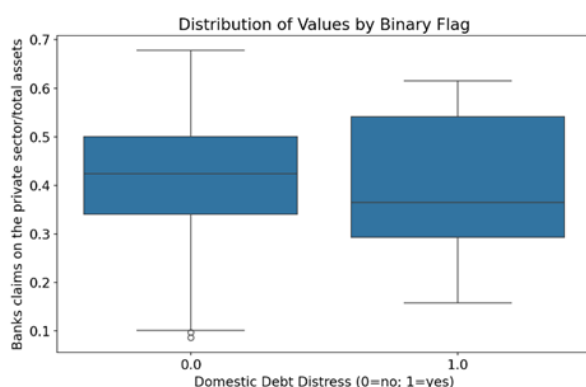
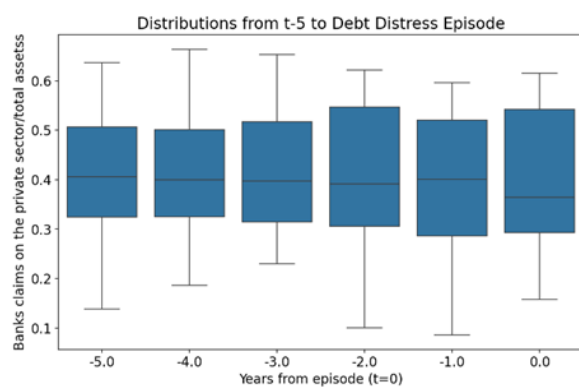
Notes: Central banks' claims on the sovereign include claims on the central government, non-financial public institutions and state and local governments.

The Y-axis plots the distribution of the relevant indicator. The X-axis plots 1 to indicate domestic debt stress episodes and 0 to denote non-stress episodes. This is for the sample of LIC-DSF countries over the 20-2023 period. Each blue box represents the 25th (Q1) to 75th (Q3) percentile range, the line inside the box is the median, and the bottom and top whiskers are the $1.5 \times \text{IQR}$ from Q1 and Q3, respectively. Circles outside the whiskers denote outliers.

Figure AVI.B.5 Domestic Banks' Claims on the Sovereign**Figure AVI.B.6 Domestic Banks' Claims on the Sovereign from t-5 to Crisis**

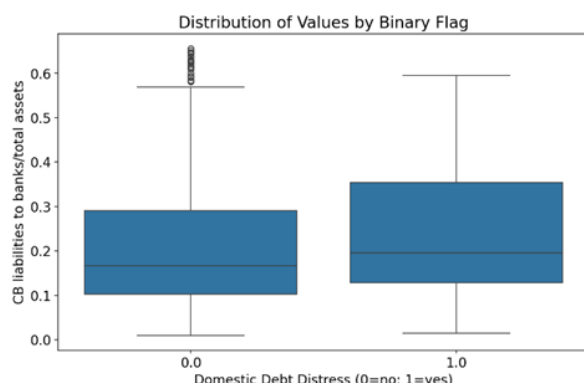
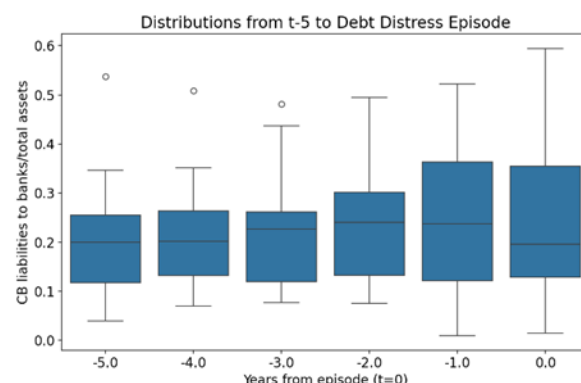
Sources: WB staff and IFS.

Notes: Domestic banks' claims on the sovereign include claims on the central government, non-financial public institutions and state and local governments. **The Y-axis plots the distribution of the relevant indicator. The X-axis plots 1 to indicate domestic debt stress episodes and 0 to denote non-stress episodes. This is for the sample of LIC-DSF countries over the 2000-23 period.** Each blue box represents the 25th (Q1) to 75th (Q3) percentile range, the line inside the box is the median, and the bottom and top whiskers are the $1.5 \times$ IQR from Q1 and Q3, respectively. Circles outside the whiskers denote outliers.

Figure AVI.B.7. Domestic Banks' Claims on the Private Sector**Figure AVI.B.8 Domestic Banks' Claims on the Private Sector from t-5 to Crisis**

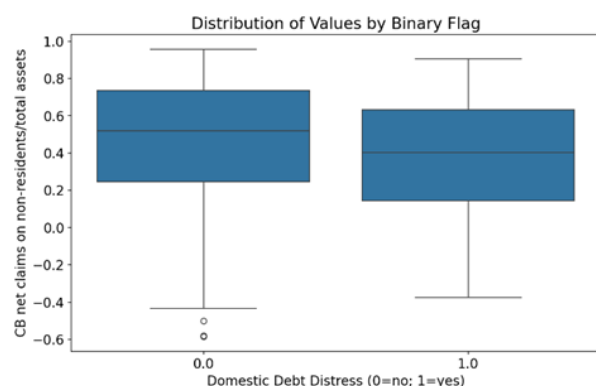
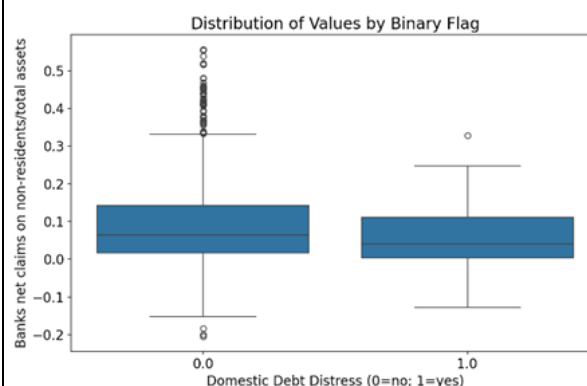
Sources: WB staff and IFS.

Notes: **The Y-axis plots the distribution of the relevant indicator. The X-axis plots 1 to indicate domestic debt stress episodes and 0 to denote non-stress episodes. This is for the sample of LIC-DSF countries over the 2000-23 period.** Each blue box represents the 25th (Q1) to 75th (Q3) percentile range, the line inside the box is the median, and the bottom and top whiskers are the $1.5 \times$ IQR from Q1 and Q3, respectively. Circles outside the whiskers denote outliers.

Figure AVI.B.9. Central Banks' Liabilities to Domestic Banks**Figure AVI.B.10 Central Banks' Liabilities to Domestic Banks from t-5 to Crisis**

Sources: WB staff and IFS.

Notes: **The Y-axis plots the distribution of the relevant indicator. The X-axis plots 1 to indicate domestic debt stress episodes and 0 to denote non-stress episodes. This is for the sample of LIC-DSF countries over the 2000-23 period.** Each blue box represents the 25th (Q1) to 75th (Q3) percentile range, the line inside the box is the median, and the bottom and top whiskers are the $1.5 \times \text{IQR}$ from Q1 and Q3, respectively. Circles outside the whiskers denote outliers.

Figure AVI.B.11. Central Banks' Net Claims on Non-Residents**Figure AVI.B.12. Domestic Banks' Net Claims on Non-Residents**

Sources: WB staff and IFS.

Notes: **The Y-axis plots the distribution of the relevant indicator. The X-axis plots 1 to indicate domestic debt stress episodes and 0 to denote non-stress episodes. This is for the sample of LIC-DSF countries over the 2000-23 period.** Each blue box represents the 25th (Q1) to 75th (Q3) percentile range, the line inside the box is the median, and the bottom and top whiskers are the $1.5 \times \text{IQR}$ from Q1 and Q3, respectively. Circles outside the whiskers denote outliers.

References

Erce, Aitor, Enrico Mallucci, and Mattia Picarelli, 2024, "Sovereign Defaults at Home and Abroad," European Stability Mechanism Working Paper, Series 60, available at: https://www.esm.europa.eu/system/files/document/2024-04/WP%2060_1.pdf.

International Monetary Fund, 2023, "Making Public Debt Public—Ongoing Initiatives and Reform Options," IMF Policy Paper, available at: <https://doi.org/10.5089/9798400251382.007>, (Washington).

International Monetary Fund, 2025a, "Debt Vulnerabilities and Financing Challenges in Emerging Markets and Developing Economies—An Overview of Key Data," IMF Policy Paper No. 2025/002, available at: <https://doi.org/10.5089/9798229002264.007>, (Washington).

International Monetary Fund, 2025b, "Macroeconomic Developments and Prospects for Low-Income Countries—2025," IMF Policy Paper No. 2025/008, available at: <https://doi.org/10.5089/9798229004701.007>, (Washington).

International Monetary Fund and World Bank, 2020, "Recent Developments on Local Currency Bond Markets in Emerging Economies," Staff Note for the G20 International Financial Architecture Working Group (IFAWG), available at: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/129961580334830825>, (Washington).

International Monetary Fund and World Bank, 2024, "Supplement to 2018 Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries", IMF Policy Paper No. 2024/039, available at: <https://doi.org/10.5089/9798400285363.007>, (Washington).

Serkan Arslanalp, and Takahiro Tsuda, 2014, "Tracking Global Demand for Emerging Market Sovereign Debt," IMF Working Paper No. 14/39, available at: <https://doi.org/10.5089/9781484326541.001>, (Washington).

World Bank, 2025, "Radical [Debt] Transparency," available at: <http://hdl.handle.net/10986/43496>, (Washington).

World Bank, 2024, "Finance and Prosperity 2024," DOI: 10.1596/978-1-4648-22060-1, available at: [Finance & Prosperity 2024](#), (Washington).