INTERNATIONAL MONETARY FUND

Restructuring Sovereign Domestic Debt in Developing Countries: New Cases and Lessons

Eriko Togo, Hui Miao, Myrvin Anthony, Marie Kim, Joe Kogan, and Kia Luo

WP/25/202

2025
OCT

WORKING PAPER

 WP/25/202

IMF Working Paper
Monetary and Capital Markets Department

Restructuring Sovereign Domestic Debt in Developing Countries: New Cases and Lessons

Prepared by Eriko Togo, Hui Miao, Myrvin Anthony, Marie Kim, Joe Kogan, and Kia Luo*

Authorized for distribution by Thordur Jonasson
October 2025

ABSTRACT: Amid rising domestic sovereign debt overhang in some emerging and developing economies (EMDEs), this paper underscores the importance of effective domestic sovereign debt restructuring (DDR) strategies where a DDR is deemed necessary. The paper suggests that delayed responses to, or inaction on, rising domestic debt vulnerabilities can be costly, highlighting the importance of assessing the intertemporal tradeoff between short-term costs from a DDR and achieving long-term economic resilience. Drawing on case studies, practical guidance is provided for designing and executing a DDR, tailored to country-specific circumstances and constraints, to minimize risks to financial stability and domestic debt market dysfunction. Restructuring alone does not ensure success. A comprehensive macroeconomic adjustment program addressing the root cause of debt accumulation—while distributing the burden among creditors, implementing fiscal adjustment, and securing support from the international financial community anchored by an IMF arrangement—will enhance the chance of a successful DDR outcome.

JEL Classification Numbers:	H63, F34, F36
Keywords:	Domestic Debt Restructuring, Sovereign Debt, Debt Relief, Government Securities Markets
Author's E-Mail Address:	etogo@imf.org, hmiao@imf.org, manthony@imf.org, jkogan@imf.org, hkim2@imf.org, sluo@imf.org

WORKING PAPERS

Restructuring Sovereign Domestic Debt in Developing Countries: New Cases and Lessons

Prepared by Eriko Togo, Hui Miao, Myrvin Anthony,
Marie Kim, Joe Kogan, and Kia Luo[1]

[1] The authors thank Miguel Savastano for overall guidance, and Emre Balibek, Mary Goodman, Thor Jonasson, Samer Saab, and Miriam Tamene for their valuable comments and feedback. They are grateful to participants at a MCM seminar, to Jeta Menkulasi for being the discussant at the IMF seminar, and to the participants at the seminar for the comments and feedback. The authors would like to thank Jorge Lugo for the helpful editorial assistance. The usual disclaimer applies.

Contents

Glossary

AQR	asset quality review
BERT MC	Barbados Economic Recovery and Transformation Plan Monitoring Committee
CAC	collective action clause
CoT	comparability of treatment
DDR	domestic debt restructuring
EPOC	Economic Program Oversight Committee
EDR	external debt restructuring
ELA	Emergency Liquidity Assistance
EM	emerging market
EMDEs	emerging market and developing economies
FX	foreign exchange
FY	fiscal year
GDP	gross domestic product
GFN	gross financing needs
IFRS	International Financial Reporting Standards
LC	local currency
LIC	low-income country
LIC DSF	Low-Income Country Debt Sustainability Framework
LL	local law instrument
MAC DSA	Debt Sustainability Framework for Market Access Countries
NOP	net open position
NPL	nonperforming Loan
NPV	net present value
PV	present value
SD	selective default
S&P	Standard & Poor's
SOE	state-owned enterprise
SRDSF	Sovereign Risk and Debt Sustainability Framework
T-bill	Treasury bill
T-bond	Treasury bond
US$	U.S. dollars

I. Introduction

A. Background

1. **Domestic government debt has been rising in emerging market and developing economies** (EMDEs) **in recent years** (Figure 1).[1] In most emerging markets (EMs), this trend resulted from consistent policies to deepen domestic government debt markets following several financial crises characterized by sovereign balance sheet currency mismatches in the late 1990s and early 2000s. In low-income countries (LICs), domestic government debt accumulation was less deliberate. LICs had historically relied on external concessional financing—domestic financing served cash management functions to manage temporary mismatches in the timing of external loan disbursements and expenditures. However, domestic debt increased when external financing dried up in the run-up to the Heavily Indebted Poor Countries Initiative and the Multilateral Debt Relief Initiative in the mid-2000s. Domestic debt accumulation in LICs continued in the aftermath of the debt relief, but the increase was overshadowed by strong economic growth and, for some, access to new official sector creditors and external bond financing. In both EMs and LICs, domestic debt increased rapidly as governments supported their economies during the COVID-19 pandemic. The post-pandemic period coincided with major Eurobond maturities and elevated global interest rates and spreads for EMDEs (Figure 2). This left some vulnerable economies with high government debt levels, unable to access international markets, contributing to a further increase in domestic debt.

Figure 1. General Government Debt in Emerging Market (Ex. China)
(In percent of GDP)

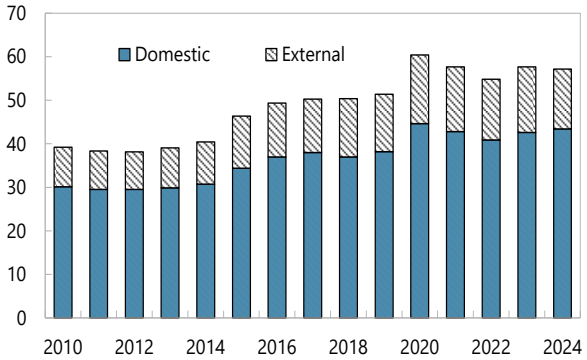
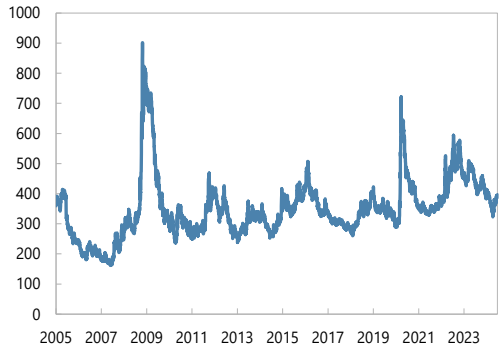


Figure 2. Emerging Market Bond Index (EMBI) Sovereign Spreads
(In basis points)



Sources: IMF World Economic Outlook (database) and staff calculations; JP Morgan; and Bloomberg.

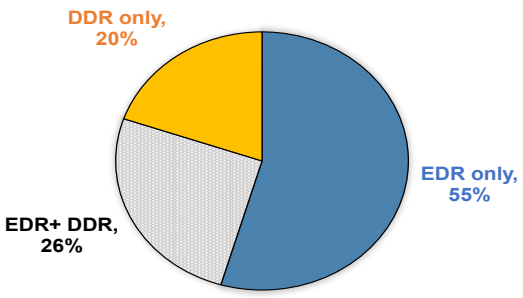
2. **Government domestic debt brings both benefits and risks.** Domestic financing in local currency reduces exposure to exchange rate risk. In a well-functioning market, where the government bonds are deemed creditworthy and liquid, they serve as collateral for market funding and as a benchmark for pricing assets over different maturities, supporting the efficient allocation of financial

[1] This paper uses "domestic government debt" and "domestic debt" interchangeably; each refers to government debt issued under domestic jurisdiction.

resources in the economy and monetary policy transmission (IMF et al; 2013; IMF and World Bank 2021). However, the safe-asset status is predicated on the government's creditworthiness, and rapid domestic debt accumulation in the context of high debt and deficits can increase its riskiness.[2] In countries with shallow financial systems and high macroeconomic and financial vulnerability, heavy reliance on Treasury bill (T-bill) issuance elevates refinancing risk. A narrow institutional investor base, often dominated by commercial banks, deepens sovereign-bank linkages and crowds out private sector investment. In some cases, domestic debt overhang could lead to sovereign debt restructuring, as illustrated by examples discussed later in this paper.

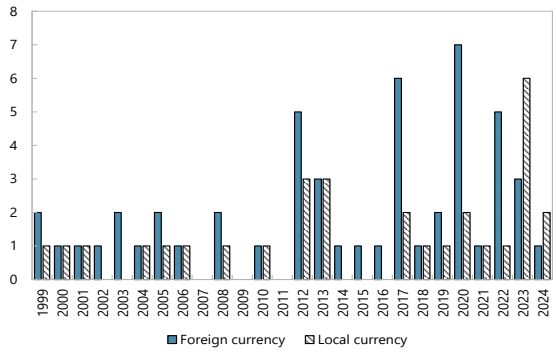
3. **Since 2019, several EMDEs have had to restructure their government debt.**[3] These include Argentina, Chad, Ecuador, Ethiopia, Ghana, Malawi, Sri Lanka, Suriname, and Zambia, where government debt restructurings has been concluded or is ongoing. Amid heightened domestic debt vulnerabilities, Argentina (2019-20), Ghana (2022-23), and Sri Lanka (2022-23) opted to undertake both domestic debt restructuring (DDR) and external debt restructuring (EDR), while Chad, Ecuador, Ethiopia, Malawi, and Zambia (Box 1) carried out only EDR.[4] Suriname chose not to undertake a DDR but cleared arrears on its domestic debt following a disorderly default (Box 2).[5] Looking further back, several Caribbean countries—including Barbados (2018), Grenada (2013-15), and St. Kitts and Nevis (2011-12)—restructured both domestic and external debt, while Jamaica (2010 and 2013) restructured only domestic debt. Since 1999, roughly half of all sovereign debt restructurings have involved DDRs, with persistent frequency in recent years (Figures 3 and 4). This growing frequency, together with rising domestic debt vulnerabilities in several EMDEs underscores the importance of taking stock and drawing lessons on DDR design and outcomes to prepare for future cases.

Figure 3. Sovereign Debt Restructuring, 1999-2024



Source: S&P Global.

Figure 4. Selective Sovereign Defaults



Source: S&P Global.

[2] Creditworthiness encompasses good governance, strong capacity and risk controls in debt management offices, debt transparency, and regulatory and supervisory capacity and enforcement.
[3] Debt restructuring refers to renegotiations of repayment terms on outstanding debt instruments (IMF 2021a).
[4] Chad and Ecuador had small domestic debt stock.
[5] DDR was considered at the time of the IMF arrangement request, but ultimately was not included in the debt restructuring perimeter due to financial sector stability concerns.

B. Literature Review and Contributions

4. **Recent studies on government debt highlight the challenges of balancing the costs and benefits of a DDR.** IMF (2021a) and Mitchener and Trebesch (2023) predict the increasing relevance of domestic debt restructuring given the growing volumes of domestic debt. Erce, Mallucci, and Picarelli (2022) found that the frequency and size of domestic defaults globally are increasing, mostly on bonds, with significant net present value (NPV) losses to creditors predominantly, through maturity extensions. Lazard (2023, 2025) suggested that domestic debt restructuring was no longer taboo when certain conditions were met. The literature on possible consequences of a DDR is discussed in two main dimensions: financial stability and macroeconomic balance.

- *Financial stability implications*: IMF (2021a) discussed how spillover risks from a DDR can be mitigated, and Grigorian (2023) elaborated on the banking sector implications of a DDR and the need to weigh the net benefit of debt relief against the cost of banking sector recapitalization. The sovereign-bank nexus literature highlights the doom loop and the consequences of sovereign default on the banking sector (Dell'Ariccia et al. 2018; IMF 2022). Barrail, Dehmej and Wezel (forthcoming) studied the impact of a DDR in the context of high sovereign -bank nexus. Gennaioli, Martin, and Rossi (2014) document that banks' holdings of government bonds are large—particularly for banks that make fewer loans in financially less developed countries—and that there is a negative correlation between banks' bondholding and lending activities following a sovereign default.
- *Macroeconomic consequences:* Atsebi and Menkulasi (2025) found that the adverse impacts of DDRs were contingent on their design, the degree of the sovereign-bank nexus, and the level of financial development. Clifford Chance (2023) found that DDR's economic impact is highly country specific, depending on the design and execution of DDR strategies. Ando et al. (2025) found that including domestic creditors in debt restructurings, combined with fiscal consolidation, helped reduce debt ratios. The debt overhang and debt intolerance literature has documented the costs of inaction, often resulting in economic instability, high borrowing costs, limited access to capital, and subpar growth lasting decades (Reinhart, Rogoff, and Savastano 2003; Reinhart and Rogoff 2013; Salmon 2021). Fitch Ratings (2013) weighed the policy option of inflation—which is economically, socially, and politically costly—against domestic debt restructuring, which may be the less-bad policy option. Lazard (2023) cautioned that a DDR can create second- and third-round effects that may undermine its expected benefits, given the high financing costs for the government and the negative impact of a weak financial sector on the economy. Buchheit et al. (2019) discussed the dilemma involved in deciding the burden sharing arrangement between domestic and external creditors, given the collateral damage that the former can inflict. Melville (2021) and Breuer, Dhungana, and Li (2025) discussed the distributional consequences of DDR in Barbados and Sri Lanka, respectively.

5. **Recognizing that domestic government debt lies at the intersection of macro-financial linkages, this paper evaluates the intertemporal costs and benefits of DDRs from macroeconomic and financial stability perspectives.** Building on IMF (2021a), this paper documents how countries have carried out DDRs, balancing the immediate benefits of debt relief against associated risks, and assesses their contribution to economic stabilization and the restoration of domestic—and, indirectly, external—balance over time. DDRs are analyzed within a broader macroeconomic framework, reflecting the policy trade-offs authorities face, including whether to restructure or endure the challenges of a

persistent debt overhang, and how to determine the appropriate burden-sharing among DDR, fiscal adjustment, and concessional financing. Although DDRs can be costly in the short term, the cost of inaction may be greater, potentially resulting in high inflation, financial repression, elevated real interest rates, accumulation of budgetary arrears, rising nonperforming loans (NPLs), and prolonged low growth—all of which disproportionately affect the general population, especially the poor. The paper does not advocate DDRs but rather presents them as a sovereign choice among difficult adjustment options. As Diwan and Kessler (2023) argue, DDRs can form part of a broader adjustment strategy that helps protect the most vulnerable by reducing the need for harsher fiscal measures. The focus of the lessons learned from the diverse set of cases will be on how the costs and macro-financial risks can be mitigated to design a durable DDR in future cases.

6. **The methodology adopted in this paper is to draw on recent cases of government debt restructuring to identify common and country-specific factors of domestic debt restructuring (DDR) processes**. It builds on earlier studies by Okwuokei and van Selm (2017) on the Caribbean; Anthony, Impavido, and van Selm (2020) on Barbados; and Arslanalp, Eichengreen, and Henry (2024), Grigorian, Alleyne, and Guerson (2012), Schmid (2016) on Jamaica; Asonuma et al. (2017) on Grenada and Breuer et al (2025) on Sri Lanka. As Erce, Mallucci, and Picarelli (2022) emphasize, domestic debt defaults are complex and heterogeneous, and reducing them to a few indicators or regression analyses risks obscuring critical insights. By systematically comparing DDR cases in developing countries, the paper examines the design, execution, and impact of DDRs—analyzing their causes, scope, legal frameworks, and outcomes—to draw practical lessons for future restructurings. However, given the limited number of cases, we underscore the limitations of generalizing conclusions, and each DDR should be treated as context-specific and assessed on a case-by-case basis.

7. **The cases analyzed include recent DDRs in seven countries that resulted in net present value (NPV) losses for creditors.** This paper draws on government DDRs in the following countries: Argentina (2019-20), Barbados (2018), Ghana (2022-23), Grenada (2013-15), Jamaica (2010 and 2013), Sri Lanka (2022-23), and St. Kitts and Nevis (2011-12). These cases represent a diverse set of developing countries—from LICs to EMs—that employed a wide array of policy tools, offering valuable insights for future DDRs. The paper is not intended to be exhaustive with respect to all DDRs that have taken place in the recent past. For example, some of the recent cases deemed distressed exchange by rating agencies—based on the notions that (i) material losses were incurred by the creditors, and (ii) a default might have occurred had the exchange not taken place—such Argentina (2022-24), El Salvador (2024), and the Republic of Congo (2024)—were not studied. Eurozone debt restructurings following the global financial crisis are also not the subject of this study, as they involved a mix of external and domestic debt restructuring, heavily reliant on financial support of Eurozone members.

8. **The rest of the paper is organized as follows:** Section II presents the initial macroeconomic conditions across the cases, highlighting early signs of vulnerabilities, and concerns raised about the risks of entering into a DDR; Section III examines the objectives and details of the DDR design, while Section IV focuses on execution of DDRs; Section V assesses the post-DDR outcomes and the challenges of assessing long-term costs; Section VI concludes drawing policy lessons and practical guidance for designing future DDR cases Annex I presents a comprehensive summary table of DDR cases.

II. Pre-DDR: Early Signs and Risks

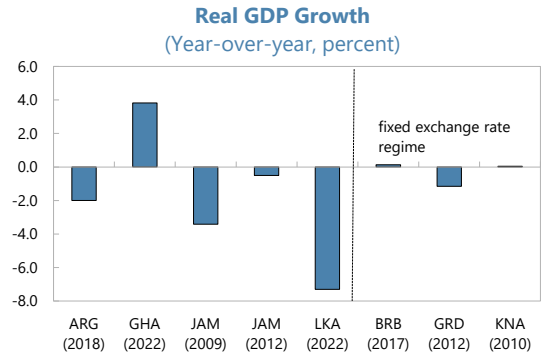
Amid a fragile macroeconomic backdrop and tightening financial conditions, debt restructuring emerged as the only viable path to restoring debt sustainability and macroeconomic balance. Concerns over the negative impact of DDR centered around the impact on financial stability, dysfunction in the government bond market, and economic growth.

A. Deteriorating Macroeconomic Conditions and Outlook

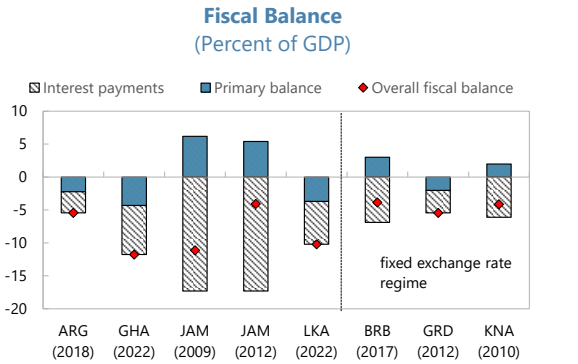
9. **Leading up to the DDRs, macroeconomic conditions were deteriorating in all countries in the sample** (Figure 5). All the country cases faced twin fiscal and external deficits. The domestic and external imbalances were financed by debt, increasing interest payment burdens. In Sri Lanka (2021), Jamaica (2009), and Ghana (2021-22) interest payments consumed nearly 70, 63, and 47 percent of revenues, respectively. All the cases, except Ghana, experienced negative real output growth. Countries with flexible exchange rates faced negative exchange rate-inflation spirals (Argentina, Ghana, and Sri Lanka).[6] Central banks intervened to counter depreciation or devaluation pressures, eventually depleting foreign currency reserves—Barbados's reserves fell to one month of imports, and Sri Lanka's to less.

Figure 5. Macroeconomic Conditions

Years of economic mismanagement weakened economic activity…



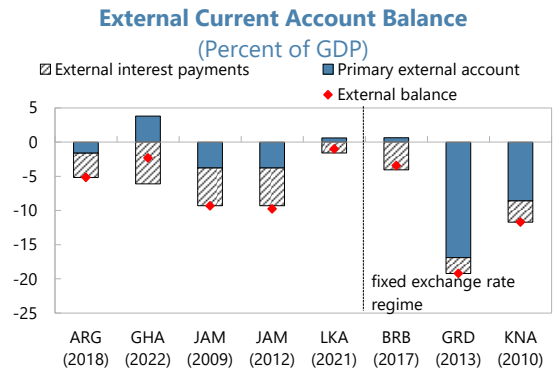
… leading to a widening fiscal deficit exacerbated by high interest payments.

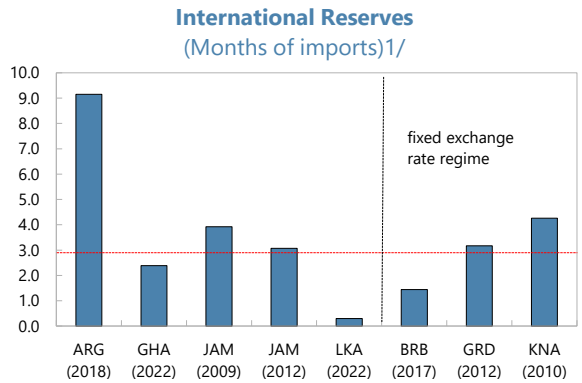


External imbalances were also burdened by interest payments to creditors…

… and the decline in external financing depleted international usable reserves.

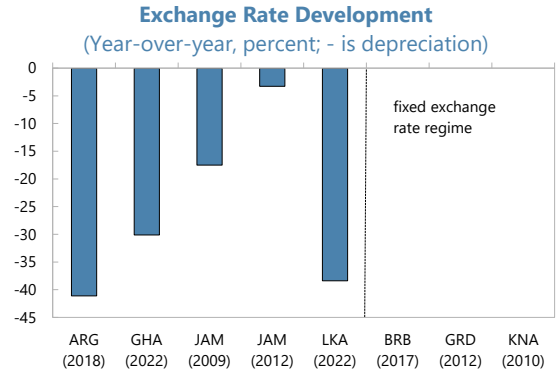
[6] Monetary financing in the current context refers to non-temporary, short-term financing to help governments manage the timing of cash flow mismatches, but also to finance government needs that result in a permanent increase of the monetary base beyond the level consistent with the inflation target. See Agur et al. (2022).

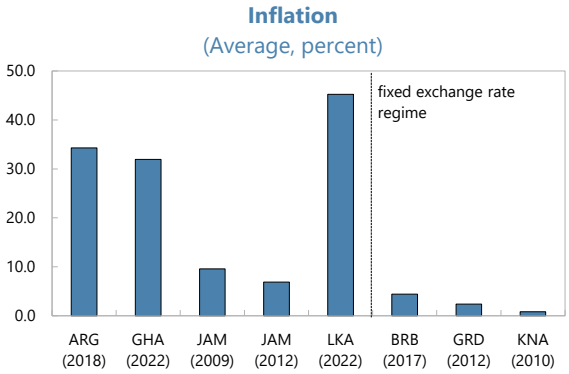




Despite central bank intervention, currencies depreciated sharply…

… thus adding to inflation pressures.





Sources: IMF International Finance Statistics (database); IMF staff reports and calculations; and IMF World Economic Outlook (database).

Note: The year in parenthesis indicates one year prior to the commencement of the domestic debt restructuring.
1/ For Argentina, the data include swap with China.

10. **Following the loss of access to international capital markets, domestic debt became the primary source to cover the government's financing needs**. Argentina, Ghana, Jamaica (2010), and Sri Lanka last issued in the international capital market about 1.5-2 years before their defaults, while their spreads surged (Table 1; Figure 6). With limited external funding sources, governments increasingly relied on domestic financing, causing domestic debt levels to rise sharply—by over 15 percent of GDP within three years in Ghana and Sri Lanka, and by over 25 percent of GDP in Barbados and Jamaica (Figure 6).

Table 1. Key Dates: DDR and EDR

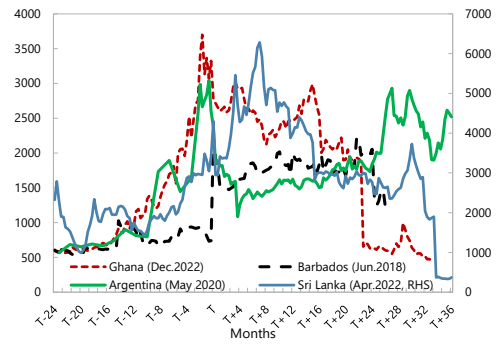
	Last international bond issuance	International bond default 1/	EDR: Announcement of commencement	DDR: Announcement of commencement	DDR: Launch of exchange offer
Argentina 2/	January 11, 2018	May 22, 2020	February 12, 2020	August 30, 2019, December 19, 2019	August 30, 2019, August 8, 2020
Barbados 3/	July 27, 2010	June 5, 2018	June 1, 2018	June 1, 2018	September 7, 2018
Ghana 4/	March 29, 2021	December 19, 2022	December 2022	December 4, 2022	December 5, 2022
Grenada	June 2002	March 15, 2013	March 8, 2013	March 8, 2013	October 5, 2015
Jamaica	June 17, 2008	No default	NA	February 2010, February 2013	January 14, 2010, February 2013
Sri Lanka 5/	June 24, 2019	April 12, 2022	April 2022	July 2022	July 3, 2023
St. Kitts and Nevis 6/	June 2009	Preemptive	June 2011	June 2011	April 2012

Sources: Eastern Caribbean Central Bank; government web sites; IMF staff reports; Reuters; various news outlets.

Note: DDR = domestic debt restructuring; EDR = external debt restructuring.
1/ After the expiration of the grace period.
2/ The external default was declared by Decree 346/2020, which was published on April 5, 2020. The restructuring of external debt began with the publication of Law 27,544 on February 12, 2020, and the restructuring of domestic debt began with the publication of Law 27,556 on August 8, 2020.
3/ Barbados signed a syndicated loan agreement arranged by Credit Suisse on December 13, 2014.
4/ The intention to enter into a debt restructuring was presented to Parliament in the government's Budget Statement of November 24, 2022, which Parliament approved two days later.
5/ The president publicly discussed the need for DDR in July 2022. Parliamentary approval followed on July 1, 2023, an official announcement on July 3, 2023, and the transaction was completed in September 2023.
6/ St. Kitts and Nevis never issued Eurobonds; the dates reflect its last issuance in the Regional Government Securities Market (RGSM).

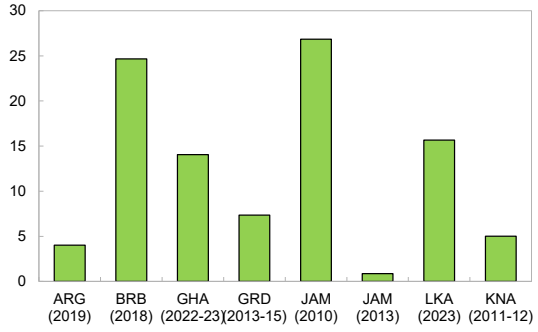
Figure 6. Sovereign Spread and Change in Domestic Debt

Sovereign Spreads
(T= at the time of EDR, weighted average, bps)



Source: Sovereign Spreads Monitor.

Change in Domestic Debt in 3 Years Prior to DDR
(Percent of GDP)



Sources: Country authorities; IMF staff calculations; and IMF World Economic Outlook (database).

11. **The initial macroeconomic conditions and outlook determine the prospects for debt sustainability and the need for debt restructuring.** The IMF's debt sustainability analysis methodologies consider both the initial conditions and the forward-looking macroeconomic framework, including the growth outlook, financing availability, fiscal adjustment, and external balance (IMF 2019a, 2022c). Regardless, given domestic debt vulnerabilities and the refusal of investors to finance the government, DDR became necessary before debt was assessed as unsustainable. In Grenada (2013), Argentina (2019), and Ghana (2022), the decision to restructure was made before the IMF (and the World Bank, in the cases of Ghana and Grenada) assessed the debt as unsustainable (Table 2). In Sri Lanka, the Article IV report had assessed debt as unsustainable before an IMF arrangement was requested. In

Barbados, Jamaica (2010), Jamaica (2013), and St. Kitts and Nevis, the launch, completion, or announcement of the debt restructurings were prior actions required to access IMF financial arrangements.

Table 2. Key Dates: IMF-Supported Programs Surrounding the DDR

	Last Article IV/IMF Staff report before DDR	Debt Sustainability Assessment	Staff Level Agreement	Program Request Endorsement by Board	Debt Sustainability Assessment
Argentina 1/	July 14, 2019	Sustainable but not high probability	N.A.	N.A.	Unsustainable
Barbados 1/	January 11, 2018	Sustainable	September 7, 2018	October 1, 2018	Unsustainable 2/
Ghana	July 1, 2021	Sustainable 3/	December 12, 2022	May 2, 2023	Unsustainable
Grenada	March 25, 2010	Sustainable 3/	March 14, 2014	June 26, 2014	Unsustainable
Jamaica (2010)	April 3, 2008	Sustainable	January 14, 2010	February 4, 2010	Sustainable 2/
Jamaica (2013)	December 28, 2010	Sustainable	February 15, 2013	April 17, 2013	Sustainable 2/
Sri Lanka 3/	February 10, 2022	Unsustainable	September 1, 2022	March 6, 2023	Unsustainable
St. Kitts and Nevis	April 30, 2009	Sustainable	June 3, 2011	July 20, 2011	N.A. 2/

Source: IMF staff reports.
1/ Argentina completed its 4th Review under the Stand-By Agreement in July 2019, but the domestic debt restructurings of 2019 and 2020 were not carried out under an IMF arrangement. However, it received technical assistance on public debt sustainability in March 2020, which assessed Argentina's debt as unsustainable.
2/ The debt restructurings of Barbados (2018), Jamaica (2010 and 2013), and St. Kitts and Nevis were prior actions required to access IMF financial support.
3/ Assessed as a high risk of debt distress under the LIC DSF.
4/ President Ranil Wickremesinghe publicly discussed the need for domestic debt restructuring in July 2022. The DDR domestic bond exchanges were completed in September 2023, and the restructuring of FX loans to CPC was completed by August 2024.

B. Rising Domestic Debt Vulnerabilities

12. **Domestic debt vulnerabilities unfolded in stages and manifested in various ways** (Figure 7).[7] Initially, market forces, to the extent that they existed, signaled emerging risks as investors demanded higher risk premiums, shorter maturities, and indexed securities. As default risk rose, auctions started to fail and domestic bond issuances stopped. Reliance on captive investors and monetary financing increased. Financial repression took hold, with the sovereign-bank nexus tightening further as a result of regulatory changes that incentivized domestic investment in government securities. These developments did not occur in all cases, nor did they necessarily follow a linear path, highlighting the idiosyncratic ways countries arrived the decision to undertake a DDR. Despite these differences, the common delay strategies observed in the case studies eventually necessitated decisive remedial policy actions.

- **Government bond auctions failed.** Since 2019, half of Ghana's auctions have been undersubscribed. In Jamaica and Sri Lanka, central banks stepped in to purchase government securities when auctions failed. Eventually, bond auctions were suspended in Ghana and Sri Lanka. Argentina saw volatile auction subscriptions in 2018-19, and its final auction before the DDR was declared "deserted."

- **Nonmarket-based placements increased.** In Ghana, with half of the auctions uncovered during 2019-22, the government resorted to nonmarket mechanisms such as tap issuances and private

[7] Some of these warning signs are consistent with the framework on market access developed in Guscina, Malik and Papaioannou (2017).

placements to cover financing shortfalls. In Grenada, financing under the Petrocaribe program increased to 2.6 percent of GDP (2011-13), and new bonds were primarily sold to the National Insurance Scheme and domestic insurance companies through private placements.[8]

- **Maturities of government securities shortened and rollover risks intensified.** Amid rising uncertainty and eroding government credibility, T-bills became the primary market financing option. In Argentina, only T-bills were issued to domestic private investors and GFN was projected to reach 22 percent of GDP in 2020. In Ghana and Sri Lanka, T-bill issuance accounted for the majority of annual gross borrowing and 20-30 percent of total domestic debt in 2022-2023. Ghana's share of short-term debt rose by 6 percentage points (2021-22), and gross financing needs (GFN) reached close to 35 percent of GDP on the eve of the DDR. In Barbados, between FY2006/07 and FY2017/18, commercial bank holdings of T-bills increased from 6 percent to 18 percent of GDP, and GFN reached 51 percent of GDP.

- **Domestic debt issuance shifted toward indexed instruments.** In Argentina, issuance of dollar-denominated, dollar-linked T-bills, and inflation-indexed securities increased. Sri Lanka issued short-term dollar-denominated securities to commercial banks that needed to manage the currency risk on their FX deposits and close their net FX open positions. In Jamaica, investors demanded short-term floating-rate and dollar-denominated instruments in addition to T-bills increasing government refinancing risk.

- **Investor composition shifted toward local captive investors.** As macroeconomic and market conditions worsened, state-owned institutions, under moral suasion, stepped in to replace private investors. While non-captive investors (e.g., commercial banks) held shorter-maturity and FX-denominated instruments, captive investors and the central bank held longer-term bonds and nonmarketable instruments. For instance, in Ghana, by the time of the DDR, about one-third of total domestic debt consisted of nonmarketable instruments, primarily held by the central bank.[9]

- **Domestic expenditure arrears increased.** Barbados accumulated expenditure arrears exceeding 10 percent of GDP on the eve of the DDR. In St. Kitts and Nevis, Ghana, and Grenada, governments accumulated arrears to domestic suppliers amounting to 8, 7.4, and 4 percent of GDP, respectively. Argentina and Jamaica were under IMF-supported programs before their DDRs, observing the conditionality of no accumulation of domestic expenditure arrears.

- **Central bank lending to the government increased.** Some provided financing through participation in the primary market, while others extended direct lending, issued "temporary" advances that were not repaid, or assisted indirectly through secondary market purchases. By end-2019, the Central Bank of Argentina held over 40 percent of domestic government debt (23 percent of GDP), mostly in nonmarketable instruments, and provided an additional 7.4 percent of GDP in monetary financing to the government in 2020. Before the debt restructuring, the Central Bank of Barbados's claims on the central government stood at over 20 percent of GDP, mainly in T-bills; Grenada drew 6 percent of GDP in overdraft facilities from the Eastern Caribbean Central Bank; and the Bank of Ghana extended 7.2 percent of GDP in overdraft facilities to the government.

[8] The Petrocaribe program allowed Caribbean countries (and some Central American countries) to buy Venezuelan oil at low upfront costs and pay the remainder later on very favorable loan terms.

[9] Part of the buildup in non-marketable instruments issued to the Bank of Ghana up to 2019 was to support recapitalization and provide liquidity assistance to distressed banks during the Ghana financial sector cleanup.

- **Demand from nonresident investors fell.**[10] In Ghana, nonresident holdings of domestic debt fell from 19 percent ($4.7 billion) at end-2021 to 8.6 percent ($1.6 billion) at end-2022. In Sri Lanka, they dropped from 4 percent of total domestic debt ($2 billion) to practically zero. In Argentina, capital controls were introduced, including restrictions on access to the official foreign exchange market for financial account transactions.[11]

- **The sovereign-bank nexus intensified.** In Ghana and Sri Lanka, government securities reached over 30 percent of total banking sector assets, driven by high returns, favorable regulatory treatment, and perceived lower risks compared to private sector lending.[12] In Sri Lanka, regulations required banks to invest in sovereign Eurobonds and local FX-denominated bonds. In Barbados, despite banks' initial efforts to reduce exposure, regulatory changes led to a sharp increase in their holdings of government securities before the DDR. In Jamaica, the links with securities dealers became acute and concerning because of their inter-connectedness with financial conglomerates.

- **Reliance on financial repression increased.** Ghana and Sri Lanka kept the policy interest rate below inflation for nearly a year prior to entering DDR, and auctions were cut off at rates even further below the policy rate, reducing investor appetite for government securities. However, despite the negative real interest rate, banks in these countries continued to invest in government securities, maintaining profitability through a positive net interest margin, as deposit rates were kept even lower (Figure 8). Ultimately, depositors bore the cost of financial repression. Sri Lankan state-owned banks were required to direct credit toward the government and state-owned enterprises (SOEs), at the expense of credit available to the private sector, hampering economic growth. In Barbados, the central bank doubled banks' statutory minimum requirement for government securities holdings to 20 percent to reduce central bank financing of the government. Argentina implemented forced rollovers of public sector holdings of government securities and gave priority to noncompetitive allocations, measures that distorted market pricing and reduced liquidity.

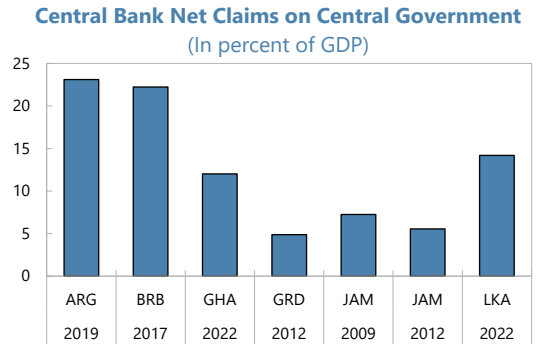
[10] Depending on their investment mandate, nonresident investors may be forced to exit the market because of rating restrictions when the sovereign rating of local sovereign debt is downgraded to "SD" after the announcement of the DDR.

[11] These are considered capital flow measures under the institutional view on capital flows of Article VIII of the Articles of Agreement.

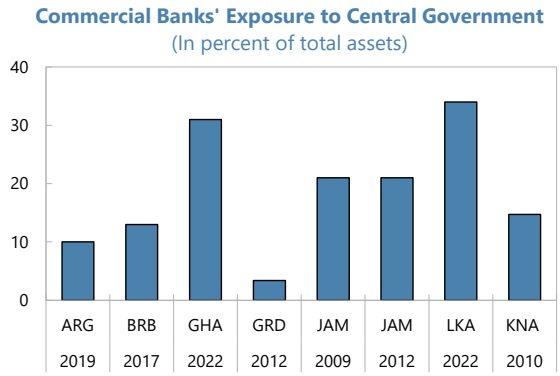
[12] Under the standardized approach of the Basel framework, sovereign exposures are risk-weighted according to their external ratings on an increasing scale. However, at national discretion, a lower weight may be applied if the exposure is both denominated and funded in domestic currency. This discretion is widely applied, including by all Basel Committee member jurisdictions. Under the internal-ratings-based approach, banks are permitted to use their own models to estimate default probabilities and loss-given-default, using a granular rating scale to assess the credit of individual sovereigns; in this case, sovereign debt is exempt from the three-basis-point floor under the default probability prescribed for private issuers with broadly similar characteristics. In practice, the applied risk weight under this approach is typically close to zero. There are currently no concentration limits applied to sovereign debt, and such debt is explicitly exempt from large exposure requirements that limit exposures to any single counterparty or group of connected counterparties to 25 percent of eligible capital.

Figure 7. Initial Condition of Government Funding before DDR

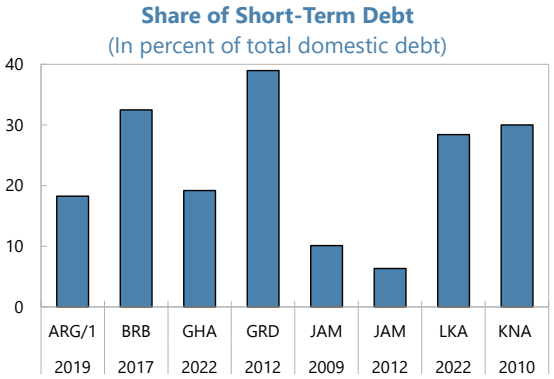
In the run up to DDR, central banks were often pressured to provide monetary financing.



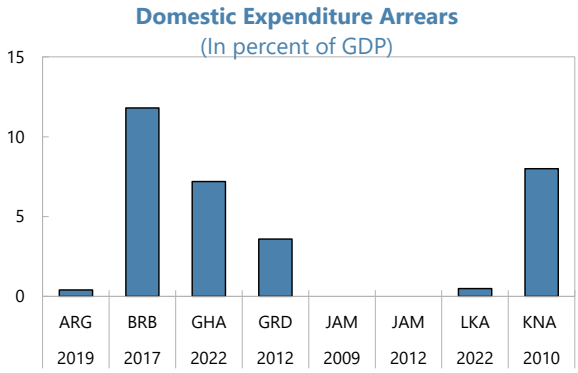
Given limited financing resources, governments increasingly relied on financing from banks, intensifying the sovereign-bank nexus.



Domestic debt issuance shifted toward short-term debt...



…and domestic expenditure arrears increased.



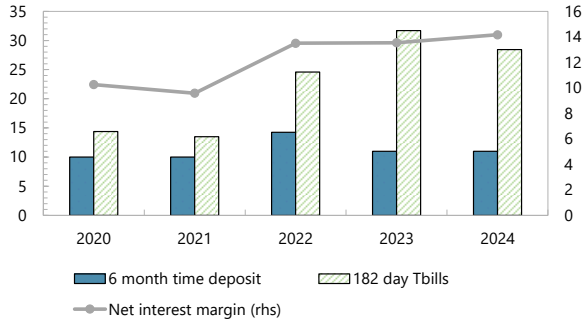
Sources: Country debt statistics reports; IMF International Financial Statistics (database); IMF staff reports and calcuations; IMF World Economic Outlook (database).

Note: Year before announcement of debt restructuring.
1/ For Argentina, the figure shows the share of short-term debt in total domestic debt held by the private sector.

Figure 78. Bank Deposits and T-bill Rates

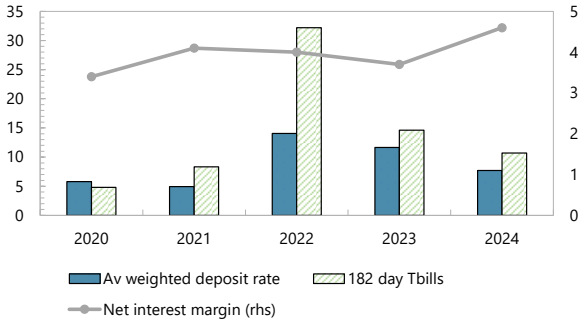
(Percent)

Ghana



Source: Central Bank of Ghana.

Sri Lanka



Source: Central Bank of Sri Lanka.

C. Main Risk Considerations for Deciding on a DDR

13. **Governments hesitated to undertake a DDR because of concerns about its potential cost.** These include financial stability risks, the risk of domestic bond market dysfunction, and negative impacts on growth. These are legitimate risk considerations and are discussed below.

14. **Financial stability risk is a first-order concern.** When the sovereign and the banking system are highly interconnected through large holdings of sovereign debt by domestic financial institutions, a deep DDR can inflict substantial financial losses on the banking sector. Banks with large exposures to highly indebted governments often lack adequate provisions for sovereign risk, which is assigned a zero risk weight under regulations and treated as high-quality liquid assets. A sovereign default would force banks to recognize losses and classify them as nonperforming loans (NPLs), diminishing capital adequacy and jeopardizing balance sheets, especially if depositors began to doubt the solvency of the banking sector. Public debt is often held at cost in "held-to-maturity" accounts, even when market values have declined substantially. In extreme cases, a loss of confidence by depositors may trigger bank runs, potentially escalating into social unrest if depositors are unable to withdraw their funds. Moreover, significant capital depletion in banks may lead to a credit crunch, undermining prospects for timely economic recovery.

15. **Another concern is the potential disruption to the domestic bond market, restricting local financing to meet government needs during and after the DDR.** Governments in the case studies have invested heavily in developing their local government bond markets, but DDR can reverse this progress by eroding investor confidence in government securities. As governments lost access to international capital markets, the domestic market became the primary source of public financing. Domestic market disruption would put public finances at risk and jeopardize the government's ability to function. Additionally, DDR may raise the sovereign risk premium for a prolonged period, increasing borrowing costs.

16. **Because of the negative impact on the financial sector and the domestic bond market, combined with fiscal consolidation, DDR can have significant spillover effects on growth—especially if insufficient attention is given to mitigating measures.** Since DDR imposes losses on domestic stakeholders, it inevitably has a negative impact on economic growth, especially when combined with fiscal consolidation. Banking sector balance sheet repair will take time if its capital adequacy is not restored quickly. A withering banking sector could durably depress economic activity and impede a swift recovery by limiting credit provision to both the private and public sectors. Banks with sufficient market power may attempt to charge higher lending rates and increase interest margins to recover the loss from DDR at the expense of the borrowers and depositors.

17. **While these concerns are valid, they should not be exaggerated.** The fundamental questions governments need to assess are: Can DDR be avoided without resorting to other forms of debt repudiation, and what are the alternatives? While markets remain open to the government, liability management operations to reduce refinancing risk could be implemented, but these may be costly and offered at rates inconsistent with debt sustainability if carried out during periods of debt distress. With the buildup of domestic debt vulnerabilities, policies to avoid a DDR will be exhausted, as monetary financing will trigger an inflation-exchange rate depreciation spiral, further destabilizing the economy. Debt will be

deemed unsustainable, fiscal adjustment will be maximized to politically and socially feasible levels, and burden sharing will need to be extended to both external and domestic creditors. When domestic creditors ultimately refuse to roll over their holdings, DDR will become inevitable.

18. **While counterfactuals are inherently difficult to assess, the baseline scenario without debt restructuring—typically presented in IMF staff reports at the time of an arrangement request—offers a useful benchmark.** In the absence of a DDR, alternative policy paths may entail more aggressive fiscal consolidation, deeper haircuts in EDR, prolonged reliance on monetary financing with elevated inflation, or intensified financial repression. Each of these alternatives carries substantial short- and long-term costs, including delays in financial sector development and adverse distributional and welfare effects. Under these conditions, the domestic government bond market functioning will also begin to unravel. Markets are likely to recognize the unsustainability of such a strategy, responding by demanding only short-term instruments (e.g., T-bills) or indexed debt, both carrying sizable risk premiums. Elevated interest rates will transmit to private sector lending, constraining bank credit to businesses and households. The resulting debt overhang undermines the development of a robust government debt market, as sovereign credit risk becomes a growing concern. To meet rising interest obligations, governments may be compelled to cut spending in critical areas such as health, education, and infrastructure—often in a procyclical manner—with significant distributive consequences. In some cases, market mechanisms are suppressed, weakening bank balance sheets through directed lending and the use of nonmarket interest rates.

19. **IMF staff reports highlighted the unsustainable debt path in the absence of domestic and external debt restructurings**. Without debt restructuring, the public debt-to-GDP ratio in Barbados and Grenada would have exceeded 120 percent and 134 percent, respectively (IMF 2014, 2018a)). In the 2021 staff report for Sri Lanka, public debt and GFN were projected to reach 118.9 percent and 30.1 percent of GDP, respectively, in 2021, with public debt rising to 125.3 percent of GDP by 2026. In Ghana, at the time of the 2023 IMF-supported program request in 2023, even under a large and frontloaded fiscal adjustment scenario, public debt was projected to reach 90 percent of GDP and GFN 30 percent of GDP in 2025—well above the 14 percent GFN benchmark—without debt restructuring (IMF 2023b).

20. **In all cases, a combination of deteriorating financing conditions made it clear that a DDR was unavoidable (Table 3).** Jamaica and Barbados faced surging spreads, credit downgrades, and loss of market access. St. Kitts and Nevis, Grenada, and Ghana faced rising debt service and gross financing needs, weak growth, and limited financing options. In Sri Lanka, reserve depletion and political turmoil led to an external debt default. In Argentina and Ghana, bond auctions were abandoned. In Argentina, Ghana, and Sri Lanka runaway inflation and exchange rate depreciation created mounting economic uncertainty and public discontent.

Table 3. Key Triggers for DDR

Country	Key Triggers for DDR
Argentina	Collapse of domestic auction, fiscal and external imbalances
Barbados	Rising domestic arrears, external imbalances, credit downgrades, political transition
Ghana	Collapse of domestic bond auctions, fiscal and external imbalances
Grenada	Hurricane Ivan, legacy weak growth, unsustainable debt
Jamaica	Spike in spreads, loss of investor confidence, ratings downgrade
Sri Lanka	Depletion of reserves, runaway inflation, market refusal to roll over debt
St. Kitts and Nevis	Post-crisis recession, high debt service burden

Source: IMF staff.

21. **If a DDR cannot be avoided, or is the least bad option, the key question is: What design features and mitigating measures can minimize the risks and reduce the costs of a DDR?** A well-designed and executed DDR with mitigating measures can prevent a disorderly default and address the concerns raised above. These issues are discussed in the next section.

III. Objectives, Key Steps, and Design

Once the government concludes a DDR is necessary to bring down both the stock and flow of debt, detailed modalities need to be identified that minimize adverse economic and financial impacts. This section reviews the key elements characteristic of a credible and durable DDR, including the perimeters of "restructurable" instruments and the mitigating measures needed to underpin financial stability. While guided by core principles, there is no one-size-fits-all DDR design; it must reflect country-specific circumstances and policy priorities. These include government financing options during and after the DDR, the investor base, financial stability, and political economy (See the Table of Summary in Annex I).

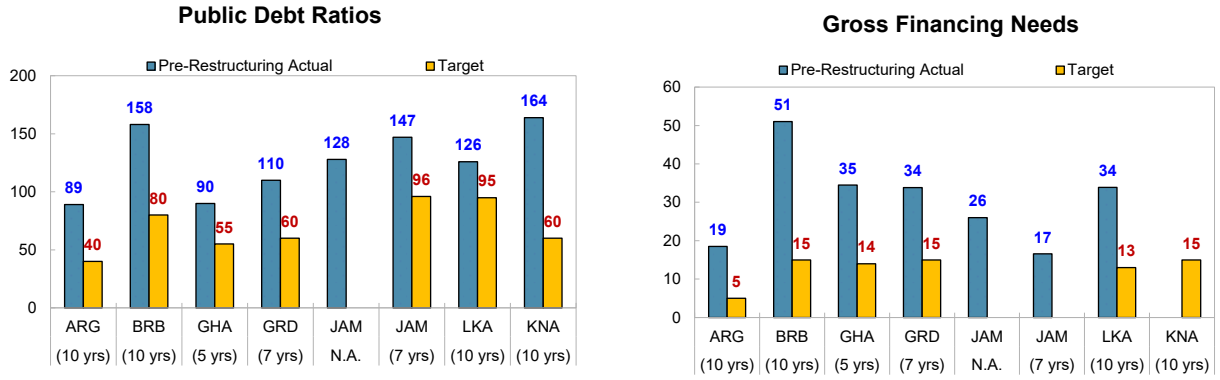
A. Objectives of a DDR

22. **The main objectives of a DDR are to reduce short- and medium-term borrowing needs, restore debt sustainability, and contribute to achieving macroeconomic stabilization.** Most debt restructurings, aside from Argentina's, took place under IMF-supported programs, where the IMF calibrated the required debt relief and set sustainability targets.[13] These programs targeted both stock adjustments (to lower the debt ratio) and flow adjustments (to reduce rollover risks through GFN reduction).[14] Figure 9 presents pre-restructuring levels of debt and GFN in the case studies, alongside the corresponding targets and timeframes set under the IMF-supported programs. The targets and adjustment horizons varied depending on the applicable debt sustainability analysis framework: Ghana and Grenada applied the LIC Debt Sustainability Framework (LIC DSF), with their debt stock targets measured in present value (PV) terms, while others used the Sovereign Risk and Debt Sustainability Framework (SRDSF) or, at the time, the Sovereign Risk and Debt Sustainability Analysis for Market Access Countries (MAC DSA). Implicit in the GFN target is the need to reduce debt-servicing pressures and create space for policy adjustments, paving the way to restore macroeconomic stabilization.

[13] In Argentina, the IMF produced a technical assistance note on debt sustainability assessment. See IMF (2020a).

[14] See the Permanent Secretary's speech on the rationale for restructuring domestic debt in Sri Lanka.

Figure 8. Public Debt and GFN: Pre-Restructuring Actual vs. Targets under IMF Arrangements
(At the time of the program request, percent of GDP)



Sources: IMF Article IV and Program staff reports.

Note: The 80 percent public debt target for Barbados was an intermediate target, with a long-term target set at 60 percent of GDP within 15 years. For the GFN, targets are set as averages over a period indicated in brackets following debt restructuring. While Jamaica's objective was to reduce the debt-to-GDP ratio and lower GFN, the 2010 program did not have an explicit target. Argentina and Sri Lanka also had foreign-currency-debt-service-to-GDP ratios as the third target. Ghana's GFN target represents the market financing risks benchmark from the LIC DSF (IMF Country Report 23/168).

B. Key Steps

23. **The design of a DDR should take into account the potential impact on the domestic financial system and the broader economy.**[15] In designing a DDR, the first step is to identify the investors, the debt instruments outstanding, and their holders (Tables 4 and 5). In most cases, commercial banks were the dominant holders, while pension and social security funds were the dominant holders in Barbados and securities dealers in Jamaica. In terms of instruments, investors predominantly held T-bonds, except in Grenada and St. Kitts and Nevis, where T-bills and non-marketable instruments were the main domestic debt instruments. In most cases, banks held T-bills, pension funds and non-resident investors held T-bonds, and the central bank held non-marketable instruments.

24. **Choosing the perimeter of the DDR is the next key step—a complex process that must balance various considerations.** The perimeter of a DDR defines which debt instruments and investors are included. For external debt, the perimeter generally covers all debt except for loans from multilateral creditors, reflecting their preferred creditor status and the need to preserve multilateral financing as the lender of last resort.[16] The principle of Comparability of Treatment (CoT), established by the Paris Club and the G20's Common Framework, requires a debtor country seeking debt relief to secure comparable terms across external creditors. For domestic debt, however, the perimeter varies by a country's economic situation, debt profile, and major creditors. Also, the CoT principle with external creditors is generally not expected to apply but external investors do demand some burden sharing. CoT among different categories of domestic creditors is also more nuanced and largely depends on loss-absorptive capacity as well as social welfare considerations (¶28). The technical challenges in applying CoT principles across heterogeneous domestic instruments also should not be overlooked, particularly given the difficulties in establishing consistent discount rates and measuring NPV losses across creditor groups.

[15] Country authorities should hire financial and legal advisors to assist them through the DDR process.
[16] Except in Argentina's 2020 EDR, where the non-Paris Club creditors were not restructured; in Barbados, where official bilateral creditors did not participate; and in Jamaica where all external debt, including international bonds held by resident investors, was excluded.

((¶64). While some governments determined the perimeter upfront (Argentina, Barbados, Grenada, and St. Kitts and Nevis), others adopted an iterative approach (Ghana, Sri Lanka).

Table 4. Composition of Domestic Debt Investor Base

(Total domestic debt in percent of GDP; rest in percent of total domestic debt)

	Year before DDR 1/	Domestic debt	Commercial banks	Pension/ social security	Nonbanks	Nonresidents	Central bank
		Percent of GDP	Percent of total domestic debt				
Argentina	2019	47.0	25.4	18.1	10.1		46.5
Barbados	2017	107.8	19.1	36.1	25.4	N/A	19.4
Ghana	2022	47.9	33.9	6.4	40.7	8.6	10.4
Grenada	2013	37.2	54.6	14.4	20.1	N/A	10.3
Jamaica 2/	FY2009/10	71.3	6.8	6.8	47.5	N/A	7.3
Sri Lanka	2022	63.3	41.1	23.1	9.3	1.9	17.2
St. Kitts and Nevis	2010	108.2	68.0	16.0	15.0	N/A	2.0

Sources: Country authorities; IMF staff reports; IMF World Economic Outlook (database).

1/ The year and data indicate the year before the DDR took place.
2/ Data for Jamaica are as of end-September 2011. Nonbanks were dominated by securities dealers, followed by insurance companies. Large holdings by securities dealers constrained the scope of restructuring, as their high exposure to government securities were funded by short-term borrowing, leaving them vulnerable to mark-to-market disruptions and potential liquidity runs.

Table 5. Composition of Domestic Debt Instruments

	Year before DDR	Total domestic debt	LC T-bills	LC T-bonds	FX-denominated	Nonmarketable
		In percentage of	In percentage of total domestic debt			
Argentina	2019	47.0	25.0	45.0	20.0	10.0
Barbados	2017	107.8	33.4	58.5	0.0	8.1
Ghana	2022	47.9	14.7	65.9	3.0	16.4
Grenada	2013	37.2	39.8	23.7	0.0	36.6
Jamaica (2010)	FY2009/10	66.0	0.4	86.4	12.5	0.6
Jamaica (2013)	FY2011/12	72.4	0.4	83.1	15.9	0.5
Sri Lanka	2022	63.3	17.3	53.3	9.1	12.7
St. Kitts and Nevis	2010	108.2	11.4	2.6	0.0	86.0

Sources: IMF staff reports and country authorities.

Note: The year and figures indicate the year before the DDR took place.

25. **Next, loss allocation must be determined.** Domestic loss allocation is a complex process, where economic and financial considerations interact with political, legal, and social welfare considerations. A narrow, technical consideration would suggest that loss allocation should be determined by assessing the capacity of different categories of creditors to absorb losses, while the choice of specific domestic debt instruments to include in the DDR would depend on factors such as the debt profile and investor base. However, careful analysis that accounts for broader considerations can enabled losses to be distributed across creditor groups, thereby minimizing negative spillover effects.

26. **Integral to the DDR design are the mitigation measures needed to safeguard financial stability.** Prior to executing the DDR, preparatory work to preserve financial sector stability must be carried out to assess the possible impacts and establish contingency plans. In practice, this typically includes sensitivity analyses and/or stress tests conducted by supervisory authorities to estimate potential capital needs and quantify the potential need for public sector support (e.g., for state-owned banks);

identification of sources to provide liquidity support, possibly including emergency liquidity assistance; and preparation of a gap analysis of crisis-management and bank recovery and resolution frameworks.

27. **The sequencing of domestic debt restructuring (DDR) and external debt restructuring (EDR) is a critical strategic decision**. In countries facing both domestic and external distress, DDR was implemented ahead of EDR in Barbados, Ghana, and Sri Lanka, all of which were pre-emptive restructurings, as in Jamaica. In contrast, Argentina and Grenada pursued both simultaneously, as domestic debt was already in default.[17] Early and decisive DDR—especially in a favorable political climate—can reduce market uncertainty, stabilize macroeconomic conditions, and strengthen the government's hand in EDR negotiations. Delaying DDR increases refinancing risks due to short maturities, driving up borrowing costs and potentially triggering a disorderly default. A disorderly default can lead to a surge in NPLs, provoke bank runs, and freeze credit, as banks become reluctant to lend amid uncertainty over DDR's impact on their balance sheets. Timely DDR also creates space for tighter monetary policy by reducing the need to refinance large volumes of domestic debt at elevated interest rates and risk premia. This helps break the inflation–exchange rate spiral and avoids reliance on monetary financing. Once maturities shorten, inflation can no longer erode debt values, and markets may refuse to roll over obligations—leaving few viable policy options.

C. Designing a DDR: Perimeter, Loss Allocation, and Risk Mitigation Measures

28. **The restructuring cases examined in this paper indicate, on average, a higher coverage for domestic debt (70 percent of total domestic debt) than for external debt (50 percent of total external debt; Table 6)**. The lower coverage for external debt is due to the exclusion of international financial institutions with preferred creditor status in most cases, except Jamaica, which chose to exclude all external debt from its restructurings. The rationale for this decision in Jamaica was partly that domestic banks held a majority of the Eurobonds and in order to that the government sought to preserve access external markets.[18] Argentina, Barbados, and Jamaica executed the most comprehensive domestic debt restructurings, while Ghana, Grenada, and Sri Lanka restructured between 50 and 60 percent of total domestic debt.

[17] Argentina only restructured foreign currency-denominated debt.

[18] It was estimated at about 80 percent of the total outstanding (IMF 2010).

Table 6. Domestic and External Debt Prior to the Restructuring and Treated Debt

		Total Debt			Domestic Debt			External Debt		
	Year	Total	Treated 1/	Ratio 2/	Total	Treated 1/	Ratio 2/	Total	Treated 1/	Ratio 2/
		In percent of GDP			In percent of GDP			In percent of GDP		
Argentina	2019	89	59	0.7	51	40	0.8	40	19	0.5
Barbados	2018	158	147	0.9	130.8	130	1.0	28	17	0.6
Ghana	2022	90	55	0.5	48	28	0.6	42	27	0.6
Grenada	2013	110	65	0.6	37	22	0.6	73	42	0.5
Jamaica	2010	128	65	0.5	66	65	1.0	62	0	0.0
Jamaica	2013	147	64	0.4	79	64	0.8	68	0	0.0
Sri Lanka	2022	126	72	0.6	65	29	0.5	64	43	0.7
St. Kitts & Nevis	2010	164	96	0.5	114	64	0.6	50	27	0.5
Simple average		**121**	**71**	**0.6**	**69**	**51**	**0.7**	**52**	**20**	**0.4**

Sources: Country authorities; National annual debt reports; IMF staff reports and staff calculations.

1/. Treated debt refers to the modification of debt instruments aiming to deliver NPV relief.
2/ Ratio refers to the share of treated debt in total debt.

29. **The structure of domestic debt played a key role in defining the DDR perimeter.** In countries where T-bills accounted for a high share of total domestic debt, their inclusion was unavoidable, as they triggered rollover crises (Argentina in 2019; Barbados in 2018). Grenada and St. Kitts and Nevis included only privately placed T-bills, excluding those issued in the Regional Government Securities Market, to avoid regional spillovers. Ghana and Jamaica (2013) excluded T-bills from the DDR perimeter to preserve budget financing sources during the crisis, while Sri Lanka excluded local-currency T-bills and T-bonds held by commercial banks, which resulted in less than a quarter of commercial bank holdings of domestic debt being restructured.[19] Local-law, foreign currency-denominated, or foreign currency-linked debt was included due to pressure on FX reserves (Argentina, Ghana, Grenada, Jamaica, and Sri Lanka).

30. **Understanding the loss absorptive capacity of different categories of creditors and account for possible second-round effects were important considerations.** The roles that different types of investors play in the economy—their time horizons, financial strength, availability of financial backstops, and residency—were among the key considerations. Safeguarding the banking sector was a priority to contain financial stability risks and support economic recovery. Institutional investors such as pension funds and insurance companies had longer time horizons than banks to absorb losses, and central banks could devise recapitalization strategies without jeopardizing their independence and credibility. The total NPV loss, expressed as percent of the original face value and calculated based on discount rates set by local accounting standards, varied significantly (Table 7), reflecting different financial, political, and social justice considerations. Table 7 also illustrates how the DDRs apportioned losses to each creditor group.

[19] Sri Lankan bank also held 14 percent of the international bonds that were restructured. These were in part converted into local currency bonds under the Invitation Memorandum for the exchange of international sovereign bonds.

Table 7. Perimeter and Treatment of Domestic Debt Restructuring, by Investor Type

		Domestic Debt														
	Total NPV	Banks			Non-Banks			Pension/			Central Bank			Non-residents		
Country	loss 3/	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Argentina	52%	...	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Barbados 1/	43%	28%	√	√	31%	√	√	41%	√	√	76%	√	√	...	√	√
Ghana 2/	32%	...	√	√	...	√	√	...	√	√	50%	√	√	...	√	√
Grenada	50.3%	50%	√	√	50%	√	√	...	√	√	EXCLUDED			50%	√	√
Jamaica, JDX	25-30%	...	√	√	...	√	√	...	√	√	...	√	√	EXCLUDED		
Jamaica, NDX	7-8%	...	√	√	...	√	√	...	√	√	...	√	√	EXCLUDED		
Sri Lanka	12%	...	√	√ 2/	EXCLUDED			...	√	√	27%	√	√	EXCLUDED		
St. Kitts and Nevis	65%	...	√	√	...	√	√				EXCLUDED			...	√	√

Sources: Anthony, Impavido and van Selm (2020); Asonuma et al. (2017); Grigorian, Alleyne, and Guerson (2012); IMF staff reports and calculations.

Note: (1) NPV loss to face value of treated debt by creditor, including transactions involving a haircut; (2) maturity extension; or (3) lower coupon. NPV calculations are based on local accounting.
1/ The new exchange bonds had an initial 4% coupon (first 3 years), rising to 8% thereafter
2/ Local short-term FX debt converted into long-term FX debt below market coupon, and into long-term local currency floating rate long-term bond.
3/ Total NPV loss to face value of treated debt.

31. **The following section reviews key considerations and risk-mitigation measures for each investor class, along with country-specific approaches**. Table 9 summarizes the loss allocation trade-offs across creditor groups.

i. Banking sector

32. **Financial stability considerations influenced the design of the DDR.** Banks cooperated with governments, recognizing that the alternative could be worse—a government default would significantly damage bank balance sheets, especially in jurisdictions where the bank-sovereign nexus had tightened, thereby fueling financial stability risks. Banks also understood that providing NPV debt relief upfront would ultimately bring broad economic benefits. In Barbados and Ghana, banks were mostly well capitalized and highly profitable, benefitting from their holdings of government securities. State-owned banks in Ghana and Sri Lanka, however, faced greater challenges, due to smaller pre-DDR buffers and larger holdings of government securities and SOE loans. In the Caribbean, most banks were foreign-owned subsidiaries (e.g., from Canada) that benefited from parental support.[20] The recapitalization cost was estimated based on bank-by-bank stress tests of different debt exchange scenarios, valuation methods, and regulatory treatments. Overall, DDR was designed to preserve banks' capital adequacy ratios above the minimum requirement, avoiding onerous recapitalization plans or public fund injections, although a minority of weaker banks may have been hit hard and regulatory forbearance sometimes played a role.

33. **Managing FX risks in DDR required an assessment of banks' net open positions (NOPs).** Local-law FX liabilities were restructured through coupon reductions and maturity extensions (Argentina,

[20] In the Argentina (2001) and Uruguay (2003) debt crises, foreign banks "walked away" from their investments, and the banks they abandoned had to be taken over by the state. The involvement of foreign banks is no guarantee that governments will deploy their deep pockets.

Grenada) or partial conversion to local-currency debt (Sri Lanka). In Sri Lanka, converting FX debt to local currency led to a large increase in FX NOPs, forcing banks to purchase FX. This caused FX market volatility and prompted central bank intervention, which undermined the ability to meet the reserve targets agreed with the IMF.

34. **Importantly, the loss allocation among debt holders also depended on the measures to mitigate that could be put in place to mitigate financial stability risks.** Risk assessments were carried out through stress testing and sensitivity analyses, and risk mitigation was implemented through the identification of sources to provide liquidity support, the development of bank-specific recapitalization plans, and measures to strengthen crisis management safety net arrangements (e.g., bank resolution, deposit insurance, and establishment of a crisis management committee).

- **Bank-by-bank stress testing and sensitivity analyses.** To assess possible spillovers from the DDR, bank supervisors conducted stress testing and sensitivity analyses (Barbados, Ghana, Jamaica, Sri Lanka, and St. Kitts and Nevis). As part of the IMF-supported program, the banking sector in St. Kitts and Nevis was required to receive quarterly stress testing by the Eastern Caribbean Central Bank.

- **Liquidity support.** The Bank of Ghana was prepared to provide liquidity support to banks through its ELA, established in 2021.[21] It also established the Ghana Financial Stability Fund in 2023 to provide solvency and liquidity support as needed.[22] The Eastern Caribbean Central Bank established comprehensive framework for liquidity provision for St. Kitts and Nevis—including a discount windows, repo facilities, and an ELA framework through the establishment of the Banking Sector Reserve Fund—while the Central Bank of Sri Lanka expanded eligible collateral beyond government securities for ELA, and the Central Bank of Barbados developed the ELA framework in the context of its contingent planning. The Bank of Jamaica established the Financial Sector Support Fund in 2010 and 2013 with resources from multilateral lenders. These measures were designed to provide liquidity support to banks and securities dealers affected by the DDR.

- **Recapitalization plans.** A bank recapitalization strategy is needed in advance to deal with potential recapitalization needs resulting from the DDR. Fiscal resources may be needed for recapitalization of systemically important banks or state-owned banks. Sri Lanka developed a strategy to inject public capital into domestic banks to address the capital impact from the DDR. The Bank of Ghana required banks to develop and submit plans for recapitalization for approval, and it banned dividend distribution.

- **Asset Quality Review (AQR)**. In general, an AQR is not needed to assess the impact of the DDR. However, the program in Sri Lanka introduced a structural benchmark to conduct a comprehensive AQR, taking into account concerns about asset quality deterioration and FX exposures.

[21] See Bank of Ghana (2021). Liquidity Assistance Framework. Ghana's financial stability fund was planned to be co-financed with the World Bank.

[22] See Ghana Ministry of Finance (2023), GFSF Operational Framework.

- **Resolution frameworks.** In addition to the above, the primary legislators, the central bank, or the supervisory agency introduced or amended legal toolkits for bank resolution—in Grenada, through the revision of the Banking Resolution Act in 2015, and in Sri Lanka, through the issuance of the Banking (Special Provisions) Act, No. 17 of 2023. Ghana's resolution framework has been in place since 2016 (the Banks and Specialized Deposit-Taking Institutions Bill), as the authorities had already begun implementing a banking system clean-up in prior years.

- **Crisis management committee.** An intra-agency coordination committee, including the fiscal authority, financial regulators, and the central bank was set up to formulate and implement contingent measures for crisis management. Such a committee had already been established in Ghana for the financial sector clean-up during 2017 – 2019. In Sri Lanka, the Financial Sector Crisis Management Committee was formed in 2023, comprising the central bank and the Ministry of Finance, to manage systemic financial crises.

ii. Pension funds

35. **The impact of a DDR on the local pension funds depends on the characteristics, and financial health of the funds, as well as the time horizon of their obligation.** Defined benefit plans, where pension payouts are based on a formula, face different challenges from defined contribution plans, where individuals have their own accounts or pooled accounts. With long-term liabilities, especially in countries with younger populations, pension funds can absorb greater maturity extensions than banks. However, coupon reductions can erode asset values and widen pension gaps in defined benefit plans, potentially requiring parametric reforms. Hence, DDRs with pension funds generally involved maturity extension with minimal face value and/or coupon reductions.

- **Defined benefit plans.** DDR losses in these plans could require adjustments to pension formulas or retirement age, effectively passing the burden on to beneficiaries. In Barbados and Grenada, where the National Insurance Scheme held 70 and 30 percent of assets in government securities, respectively, DDR led to substantial losses: an NPV haircut of 40 percent for Barbados and 59 percent for Grenada resulted in the depletion of reserves 10 years earlier for Barbados and five years for Grenada (IMF 2017, 2018).

- **Defined contribution plans.** DDR losses in these plans directly affected individual retirement accounts. In Sri Lanka, where pension assets are concentrated in the Employees' Provident Fund managed by the central bank, the maturities of T-bonds held by pension funds were extended, and new coupons were set near the historical average. The local accounting authority ruled there was no accounting loss; thus, the new instruments were recorded at par. After the DDR, outflows from the pension fund in Sri Lanka were negligible, despite the legal option to withdraw funds for major expenses or early retirement. In Ghana, pension assets are more dispersed among publicly and privately managed pension funds. Negotiations with pension funds involved three rounds of public offerings, ultimately resulting in higher coupons than those received by banks, in exchange for a longer maturity extension.

iii. Central banks

36. **Apportioning losses from a DDR to a central bank's holdings of government debt requires careful consideration of its financial position and the implications for policy credibility.** Involving the central bank in DDR effectively brings forward future central bank dividends, helping to alleviate the government's immediate need to borrow at high cost under distressed market conditions. This can mitigate vicious debt dynamics. While negative equity is not an immediate threat if supported by a credible recapitalization plan and supporting reforms, it can nonetheless undermine a central bank's independence, credibility, and policy effectiveness. Losses must be weighed against the risk that negative equity can erode confidence in the local currency, potentially triggering the central bank to monetize liabilities and fuel inflation. A central bank with negative equity may hesitate to raise interest rates if concerns over operational costs outweigh the objective of controlling inflation, further damaging its policy credibility. If losses are moderate, the central bank can rebuild capital over time through retained earnings. More severe losses will require future recapitalization by the government, and the expected fiscal cost should be factored into projections. To assess these trade-offs, stress testing of central bank balance sheet is conducted (IMF 2024f). Credibility-enhancing reforms—such as prohibiting monetary financing and strengthening governance—are essential to prevent future fiscal dominance from re-emerging.

37. **The DDRs in the sample of countries had a significant impact on central bank balance sheets (Table 8).** Because of their large holdings of government debt, DDRs inflicted large losses on central banks in Argentina, Barbados, Ghana, and Sri Lanka. The Bank of Ghana's negative equity dipped to -6 percent of GDP due to DDR losses, aggressive monetary tightening (by 1,550 bps), and sterilization to absorb liquidity. The central bank is evaluating options, including recapitalization via budgetary or asset transfers, suspension of profit transfers, and/or use of any buffers generated. The Central Bank of Barbados faced negative equity of 14 percent of GDP resulting from a 76 percent NPV loss from the DDR. The recapitalization plan involved two stages: an initial stage of profit retention, followed by a transition to a gradual, predetermined payment plan (after approximately seven years). In Sri Lanka, central bank losses were more limited, with the prospects for recovery through future operational income, although the valuation of newly restructured instruments was uncertain. However, looking at the consolidated public sector balance sheet, restructuring government debt held by the central bank may not reduce the overall debt level. Central bank losses should be treated as "free money" when evaluating DDR trade-offs, as they are essentially transfers within the public sector and will be repaid with future income of the central bank. Any treatment of the central bank balance sheet should not introduce distortions with long-lasting implications.

38. **Beyond recapitalization, reforms to strengthen central bank independence and limit future monetary financing were crucial to restoring credibility.** Restructuring domestic government debt held by central banks involves making credible plans to gradually unwind the stock of monetized public debt while prohibiting further new financing—a step that is crucial for restoring credibility. Barbados and Sri Lanka enacted a new Central Bank Act with provisions limiting central bank credit to the government.[23] In Ghana, monetary financing was prohibited under the IMF-supported program; in June

[23] In Sri Lanka, the new central bank law includes a clear prohibition on monetary financing (direct or indirect credit) under Section 86(1). The transitional provision in Section 127 still allows the central bank to provide new direct provisional advances to the government, with safeguards, for financing expenditures authorized from the Consolidated Fund. This allowance remains in effect until legal provisions are enacted to enable the government to meet its immediate fiscal requirements.

2025, the authorities submitted amendments to the Bank of Ghana Act to Parliament, which, once enacted, will de jure safeguard the central bank from monetary financing. With the accumulation of FX reserves, the gradual reduction of government debt held by the Central Bank of Sri Lanka is embedded in the IMF-supported program.

Table 8. Central Bank Capital: Before and After the DDR

	Pre-DDR		Post-DDR	
	Year	Percent of GDP	Year	Percent of GDP
Argentina 1/	2018	0	2021	-5 ~ -7
Barbados	2017	0.8	2019	-13.8
Ghana	2021	1.8	2024	-8.8
Sri Lanka	2021	1.2	2024	1.0
Jamaica	2010	1.9	2014	0.9

Sources: Central bank financial statements; IMF International Finance Statistics (database); IMF staff reports.

Note: Grenada and St. Kitts and Nevis did not restructure advances from the regional central bank.
1/ Starting at end-December 2019, the Central Bank of Argentina abandoned International Financial Reporting Standards (IFRS) accounting and revalued its holdings of government debt at book value, leading to a significant boost to its assets. IMF (2022) estimated its 2021 capital position using the IFRS valuation to reflect the true economic value of these securities.

iv. Nonresident investors and nonbank institutions

39. **Nonresident investors tend to liquidate their holdings of government debt before a DDR due to fears of capital controls and potential losses.** With fiduciary duties but no political leverage, concerns over inconvertibility and pricing distortions can accelerate their exit, increasing FX demand as they repatriate capital. In parallel to EDRs, external creditors may pressure the authorities to include nonresident investors in the restructuring perimeter, to reduce their financial losses as they compete directly for FX resources and domestic revenues. To curb outflows, Argentina introduced capital controls prohibiting FX outflows amid dwindling international reserves. In Sri Lanka, where the share of nonresident holdings was insignificant, nonresidents' holdings were excluded from DDR. In Barbados, Ghana, Grenada, and Jamaica, nonresidents were treated equally with resident investors according to the instruments they held.[24]

40. **Nonbank institutions (other than pension funds) generally shared the burden of DDR.** Nonbank institutions included insurance companies, corporate treasuries, high-net-worth individuals and mutual funds. Except in Sri Lanka, they were equally treated according to the instruments they held. Retail investors were excluded in Argentina and Grenada. In Ghana, individual bondholders were initially excluded to protect household savings and avoid public backlash. However, the government later amended the DDR program to include individual domestic investors, citing the need for broader burden-sharing. Individual bondholders were offered slightly better terms than institutional investors, with shorter-maturity bonds and higher coupons.

[24] For comparison, in Zambia, nonresidents initially exited but returned to the local market, attracted by high real interest rates and expectations of exchange rate appreciation.

Table 9. Pros and Cons of Loss Allocation by Creditor Types

	Banks	Pension	Central bank	Nonresident investors	Nonbanks
Pros	Typically large holders of T-bonds and T-bills; captive investors via regulation or state ownership	Can offer large debt relief and take in long-term debt generally friendly to maturity extensions	Advancement of future central bank dividends; no immediate spillovers; can warehouse bridge finance during crises	Bring in FX during EDR	Can absorb losses and pass them to end-investors with limited spillovers
Cons	Financial stability risks, bank runs, credit crunch; major drivers of economic recovery; counterparty risk	Risk of social unrest, early redemptions, and fewer inflows to pension funds	May lead to negative cash flows and a downward spiral of central bank balance sheet; undermine policy credibility and autonomy; high sterilization costs	Easy to reverse; volatile flows; costly funding	Front –running and bond market turmoil

Source: IMF staff.

Note: Banks include both state-owned and privately owned institutions; nonbank financial institutions include mutual funds, insurance, and individual investors; pension funds include provident funds, corporate pensions, and social security funds. EDR = external debt restructuring.

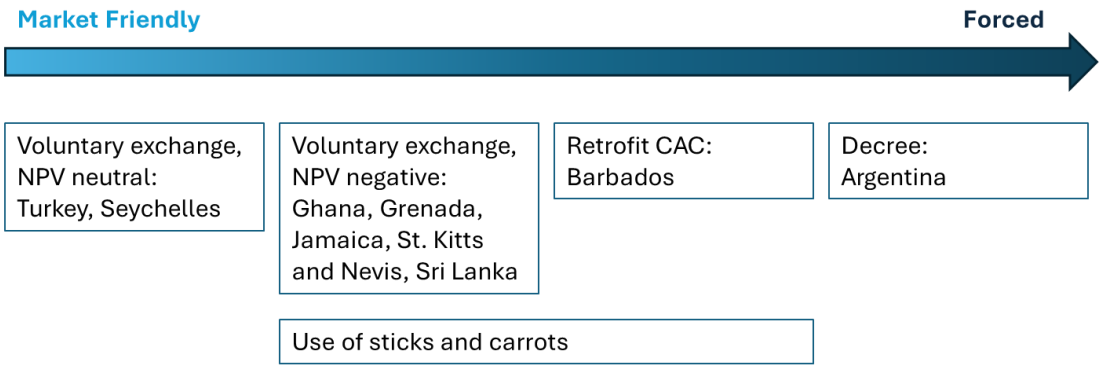
IV. Execution and Complementary Policies

This section discusses DDR execution strategies, ranging from market-friendly approaches to forceful measures such as mandatory restructuring, depending on local legal frameworks and the political landscape.

A. Execution

41. **The modalities for executing DDR range from market friendly to varying degrees of coercion, depending on the domestic legal framework and political landscape** (Figure 10). As domestic debt is under local jurisdiction, Parliaments authorized the DDR, which helps establish a clear legal basis for debt restructuring. The content of parliamentary authorization differed by country, with some approving the restructuring plan or framework, while the actual restructuring terms were determined through negotiations with creditors (Ghana, Grenada, Jamaica, Sri Lanka), and others determined in the approved legislation (Argentina, Barbados). The goal is to achieve a quick resolution, minimizing potential execution and litigation risks, while ensuring that the DDR process is consistent with the domestic legal framework.

Figure 9. DDR Execution: Legal Framework and Operational Process



Source: IMF staff.

- **Voluntary exchange, NPV neutral.** In a voluntary exchange, the government offers each bondholder the option to swap old bonds for new bonds with different maturities, coupons, or principal amounts. Voluntary exchanges with no NPV losses are not considered a DDR in this paper, as they are liability management operations that are part of regular debt management tools.
- **Voluntary exchange, NPV negative.**[25] A DDR imposes NPV losses on bondholders in order to achieve savings for the government, but it can still be implemented through a voluntary exchange. In Jamaica, the constitution stipulates the seniority of government debt service over all other government spending. This required that the debt restructuring be strictly voluntary. Ghana, Grenada, and Sri Lanka also pursued this mechanism and implemented voluntary debt exchanges.[26]
- **Retro-fit Collective Action Clauses (CAC).** CACs are a legal mechanism by which an agreement by a supermajority of bondholders to participate in an exchange that binds all bondholder to participate. While these provisions are common in international bond contracts, they may also be added through legislation to domestic debt. Barbados retrofitted CACs to domestic bonds and activated them in its DDR.[27] In 2019, Argentina's outgoing government submitted a bill to Congress to introduce CACs retroactively, but the bill lapsed without adoption.[28]
- **Decree/Legislative approach.** Argentina employed a legislative approach, whereby an emergency law was adopted to authorize the restructuring of the domestic debt, and a subsequent executive decree specified the new terms and conditions of the restructured securities. While the new terms were defined in the decree, the restructuring took place in the form of a voluntary exchange, where

[25] According to Standard and Poor's (2025), at a lower credit rating, it is "more difficult to ascertain whether investors are exchanging securities on a voluntary basis. Bondholders who consider a sovereign default to be an imminent possibility may feel pressured into accepting an exchange offer because they fear more adverse consequences if they were to decline it. In such a distressed scenario, investors may accept less than the original terms because of the risk that the government would otherwise fail to honor its existing obligations. As such, the voluntary aspect of an offer is largely irrelevant from a credit perspective."

[26] In Sri Lanka, under the Registered Stocks and Securities Ordinance 1937—the law under which Treasury bonds are issued—there was no legal mechanism for mandatory restructuring (see Breuer et al. 2025). The overall strategy was approved by the cabinet (on June 28, 2023) and parliament (on July 1, 2023) to mitigate the risk of legal challenges. In Ghana, in the budget statement presented to parliament on November 24th, 2022, it was announced that government would undertake a debt operation program. Parliament approved the budget statement on December 5, 2022.

[27] See "Debt Holder (Approval of Debt Restructuring) Act, 2018-24."

[28] The restructured domestic bonds in Barbados, Ghana, and Grenada contained CACs base on the 2014 International Capital Market Association model provisions.

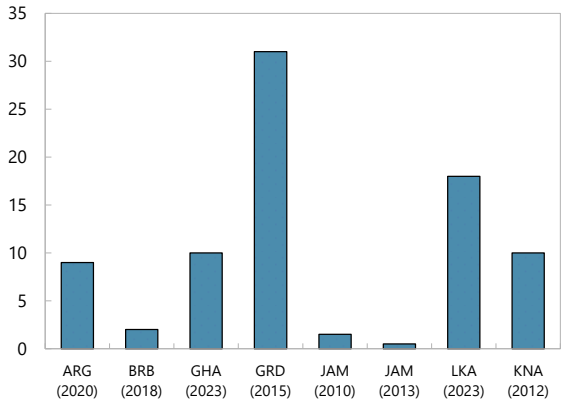
investors could choose not to participate. There has been no litigation following the legislative approach in Argentina, with a participation rate of over 99 percent. The residual was mainly explained by unidentified holders who did not come forward to exchange their holdings (and not because of holdouts).

42. **To mitigate execution risks, particularly in cases where the DDR involved voluntary participation, carrots and sticks were deployed** to encourage participation and minimize holdout risks, balancing market confidence against disruption risks. The use of regulatory tools, however, raised questions about whether the transactions were truly voluntary.

- **Sticks.** Tax and regulatory policies pressured creditor participation in the DDR. Sri Lanka introduced withholding and income tax on the source (old) bond, penalizing nonparticipants. Ghana's banking regulator introduced risk weights of the source bond and delisted it from the stock exchange. These measures made it unattractive to continue holding such bonds and incentivized participation in the exchange offer.
- **Carrots.** Incentives to participate included the availability of central bank credit at favorable rates, regulatory forbearance, capital buffer releases, and extended recovery timelines. In Ghana, banks were allowed to spread the recognition of losses over three years in capital adequacy ratios. In Barbados, the restructured debt remained de jure T-bills to minimize valuation losses, but de facto maturities were extended through an agreement to automatically roll them over for 10 years. Sri Lanka granted banks more time to close FX NOPs and restore capital buffers. Economic oversight committees were created in Jamaica and Barbados, giving some creditors a seat at the table and helping secure their participation in the exchange (Box 1).

43. **The time to complete a DDR varied widely, depending on factors such as the complexity of the debt structure, creditor diversity, government capacity, and political will.** The duration of DDRs ranged from 30 months (Grenada) to only a couple of months (Barbados, Jamaica, Figure 11), where swift and decisive action, assisted by strong political will, accelerated the process. Grenada's DDR was delayed because it was synchronized with the EDR, which took longer to negotiate. It took almost 20 months to complete the DDR in Sri Lanka, owing to the complexity of the debt structure and creditor diversity (Breuer, Dhungana, and Li 2025), whereas Argentina negotiated its debt restructuring in nine months despite its complexity and scale. In general, DDR execution times have been shorter than Eurobond restructurings, which have lasted more than 24 months in recent cases. In Argentina, Barbados, and Grenada, DDRs and EDRs took place simultaneously, whereas in Ghana and Sri Lanka, DDR was completed first.

Figure 10. Duration of DDR
(Months)



Sources: Country authorities; IMF staff reports.
Note: The duration is measured from the announcement to the completion of the restructuring.

Box 1. Monitoring Government Reform Implementation

The Economic Programme Oversight Committee (EPOC) was created in Jamaica after the second DDR in 2013 to monitor government compliance with economic reforms. The committee was comprised of members from the private sector, public sector, and civil society, and was co-chaired by the Governor of the Central Bank and the Chief Executive Officer of Sagicor Group, a large financial institution. The terms of reference included the following objectives: (i) to receive and review information from the government on the progress of implementing of the Memorandum of Economic and Financial Policies agreed with the IMF; (ii) to assist in ensuring that the agreed targets are achieved; and (iii) to advise the public, where appropriate, of any concerns (EPOC Communique 2013).

The committee provided an extra layer of protection for creditors to ensure that the debt would be sustainable going forward. While the committee had no authority over government policy, it held indirect power through press releases and its ability to affect public opinion, which helped ensure that its requests for information were fulfilled and its analysis was taken seriously. Arslanalp, Eichengreen, and Henry (2024) argue that that this committee contributed to the social partnership between the government, the opposition, and civil society, ensuring that the costs of the fiscal adjustment were distributed fairly and facilitating a continuation of the economic reform program across changes in government.

Barbados formed a similar committee in 2018 after its own debt restructuring. The Barbados Economic Recovery and Transformation Plan Monitoring Committee (BERT MC) was tasked with monitoring the government's progress in meeting its commitments and targets under the Memorandum of Economic and Financial Policies agreed with the IMF. Just as with the EPOC, the BERT MC included participation of private sector business associations and labor unions, and it received information from the government and issued public reports with its assessments and recommendations.

44. **Overall, the participation rates of the DDRs were high.** Participation rates in most of the cases were over 90 percent, and many achieved close to 99 percent, indicating the carrots and sticks strategies described above have worked. Litigation was not an issue in any of the cases.

B. Complementary Policy Measures During the DDR Transition Period

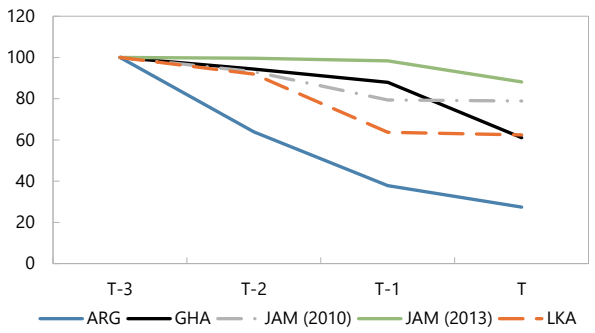
45. **DDRs were undertaken as part of a comprehensive policy package.** DDR was part of a broader burden-sharing framework designed to restore macroeconomic stabilization and debt sustainability. The mix and distribution of burden sharing varied among the cases, including EDRs, fiscal and monetary policy adjustments, new financing from international financial institutions, and other structural reforms to unleash the potential for growth.

46. **Countries with flexible and fixed exchange rate regimes adopted different policy paths.** In countries with flexible exchange rate regimes—such as Argentina, Ghana, and Sri Lanka—sharp

currency depreciation acted as a shock absorber, helping to correct imbalances and partly reducing the burden of fiscal adjustment. Jamaica, though a managed float in practice, also experienced a large currency depreciation (Figure 12). For countries with fixed exchange rate regimes (Barbados, Grenada, and St. Kitts and Nevis), the fiscal adjustment was much larger—7.6 percent of GDP over four years, compared with 3.6 percent of GDP for flexible exchange rate countries—as the burden of adjustment fell squarely on fiscal policy (Figure 13).

Figure 11. Nominal Effective Exchange Rates

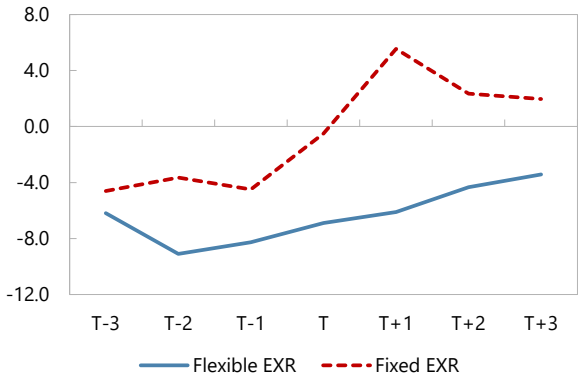
(T-3 = 100, index)



Sources: IMF International Financial Statistics (database); IMF staff calculations.

Figure 12. Primary Fiscal Balance

(In percent of GDP)



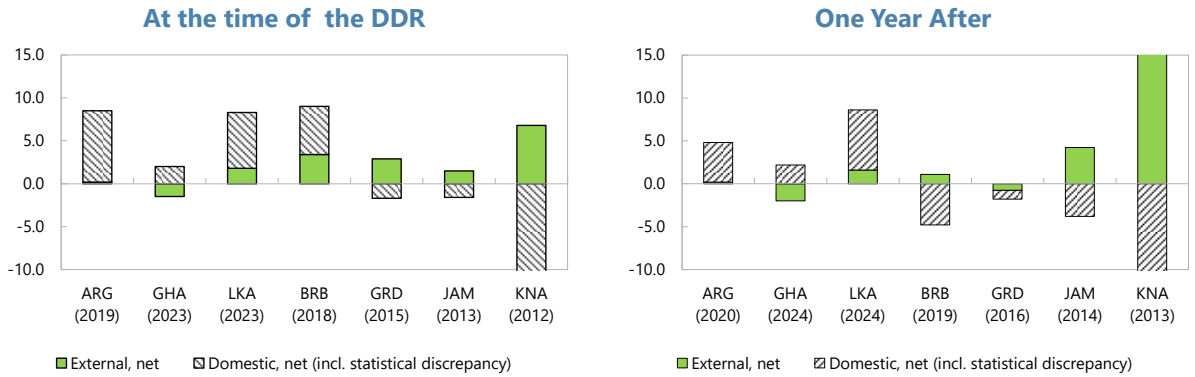
Sources: IMF staff calculations; IMF World Economic Outlook (database).

47. **Monetary policy was tightened to contain the inflationary impact of depreciating exchange rates.** In Ghana, inflation surged to 39 percent in 2023 (reaching 55 percent by year-end), up from 10 percent two years earlier; in Sri Lanka, it jumped to 46 percent in 2022, from 6 percent the previous year. In response, the Bank of Ghana raised its policy rate from 14.5 percent in 2021 to 30 percent by the time of the DDR announcement in 2023, although this was still lower than the inflation rate at the time (40 percent). Subsequently, monetary policy rates remained tight, with real interest rates hovering around 10 percent through mid-2025. Similarly, Sri Lanka hiked its policy rate by nearly 1,000 bps to 15 percent in 2022, before gradually lowering it to 10 percent as inflation quickly turned to deflation (reaching -4 percent) starting in September 2024, in the context of an already deeply recessionary environment. In Argentina (2019), the DDR (and EDR) coincided with the COVID-19 pandemic and was conducted without the support of an IMF arrangement. In all the cases the inflation spikes helped erode the real value of the debt. With no external financing, the fiscal deficit was financed through monetary financing, which led to an inflation-depreciation spiral. Countries with fixed exchange rate regimes were able to maintain stable inflation rates.

48. **The financing mix that followed the DDR varied across countries.** In Argentina, Ghana, and Sri Lanka, net domestic financing continued to be positive through the DDR process, while net external financing was negative or slightly positive owing to support from international financial institutions (Figure 14). Amid limited external funding, these governments relied on costly domestic debt—mostly in the form of T-bills. Reliance on net issuance of T-bills, in turn, increased the GFN that had to be refinanced at high interest rates, partially undoing the benefits of the DDR. In contrast, in Barbados, Grenada, Jamaica, and

St. Kitts and Nevis, net domestic financing remained mostly negative, supported by external official sector financing, which contributed to lower GFN that required less financing at high interest rates.

Figure 13. Fiscal Financing Composition, Net
(In percent of GDP)



Sources: Central banks; country authorities; IMF staff reports.

Note. Net figures include debt forgiveness.

V. Assessment

This section reviews the outcomes of domestic debt restructuring (DDR) in the seven cases examined, focusing on debt sustainability, financial stability, and macroeconomic recovery. It compares program targets with actual results, highlighting the trade-offs between restructuring costs and the risks of inaction. The analysis underscores the importance of timely execution, sound design, and complementary policies in achieving durable DDR outcomes.

A. Macroeconomic Outturns

49. **Isolating the precise contribution of DDR to macroeconomic outturns is challenging because the restructurings were only one of many changes taking place.** The outcomes also reflect concurrent EDRs, policy reforms, financial conditions, and external shocks. Additional factors—such as financing sources, the pace of fiscal policy adjustment, and the DDR designs—further complicate attempts to identify the effects of the DDRs. Recognizing these factors and their interactions, we present the economic outcomes in programs that involved DDRs solely to assess whether the main concerns that preceded the DDRs materialized or were avoided (Table 10).

- **Output Growth.** Real GDP growth deteriorated leading up to DDR, with sharp declines around the restructuring year. Nonetheless, post-DDR growth rebounded. Barbados, Ghana, Sri Lanka, and St. Kitts and Nevis saw a solid growth recovery the year after, while growth in Jamaica and Grenada recovered more gradual.

- **Inflation.** Before DDR, countries relied on central bank financing, which fueled inflation. Sharp currency depreciation on the back of depleted FX reserves—seen in Argentina, Ghana, and Sri Lanka—further worsened inflation. While the inflation spike helped to alleviate the real domestic

debt burden, the subsequent currency depreciation increased the external debt burden. During and after DDR, IMF-supported programs introduced fiscal adjustments and prohibited central bank financing, helping inflation subside.[29] In countries under a fixed exchange rate regime, such as Barbados, Grenada, and St. Kitts and Nevis, inflation remained relatively stable throughout the episode.

- **Public debt to GDP.** The headline debt-to-GDP ratio fell sharply in the year of DDRs in Barbados, Grenada, and St. Kitts and Nevis, involving large nominal principal haircuts (including those from the external debt restructurings). Within two to three years of their respective debt restructurings, the debt-to-GDP ratio declined by 30, 15, and 40 percentage points in Barbados, Grenada, and St. Kitts and Nevis, the latter largely driven by a debt-land swap.[30] In contrast, no principal haircuts were applied in Ghana and Jamaica, and debt reduction was more gradual.

- **GFN to GDP.** The DDRs contributed to lower interest payments and refinancing needs through reduced coupons, principal haircuts, maturity extensions, and the conversion of variable rates to fixed interest rates. Barbados lowered GFN by 35 percentage points of GDP through a haircut and the issuance of new instruments with step-up coupon rates. Grenada reduced GFN by 15 percentage points, and Jamaica saved interest costs equivalent to 2.5 percent of GDP from 2010 to 2013. While longer-term outcomes remain to be seen, preliminary 2024 data suggest a six-percentage point decline for Sri Lanka from 2023 to 2024—still five percentage points higher than the original IMF-supported program projections for 2024, mostly due to high interest costs on T-bills and lack of T-bond issuance.

[29] Average inflation has risen because of Argentina, but median inflation has trended down. In Sri Lanka, it is acknowledged that "the DDO made a major contribution towards the progress of the IMF supported reform programme and the debt restructuring process, which has enabled the stabilization of the economy including reduction in inflation, reduction in interest rates, currency appreciation, and a return to economic growth." (see Breuer et al. 2025).

[30] The government swapped the debt of the Sugar Manufacturing Corporation for 1,200 acres of land as collateral (June 2013) and that of another state-owned entity for an additional 496 acres (August 2014). The creditor received illiquid land, with proceeds available only upon sale by a separate entity. However, the first land sale occurred in 2016, leaving the large illiquid assets on the bank's books until the government began repurchasing them (2018).

Table 10. Macroeconomic Outcomes: 3-year change post DDR

	Percent Change		Percent Change
Output Growth		**Inflation**	
ARG	4.3	ARG	91.5
BRB	0.9	BRB	-1.6
GHA	0.6	GHA	-18.4
GRD	-1.0	GRD	1.3
JAM (2010)	1.7	JAM (2010)	-3.3
JAM (2013)	1.3	JAM (2013)	-7.0
LKA	2.9	LKA	3.7
KNA	0.2	KNA	-19.7
Average	1.3	Average	5.8
Public Debt to GDP		**GFN to GDP**	
ARG	51.6	ARG	-9.4
BRB	-35.2	BRB	-33.5
GHA	-15.2	GHA	-1.1
GRD	-29.8	GRD	-11.1
JAM (2010)	-2.7	JAM (2010)	-8.7
JAM (2013)	-25.0	JAM (2013)	7.9
LKA	-1.0	LKA	-2.8
KNA	-62.0	KNA	-16.0
Average	-14.9	Average	-9.3

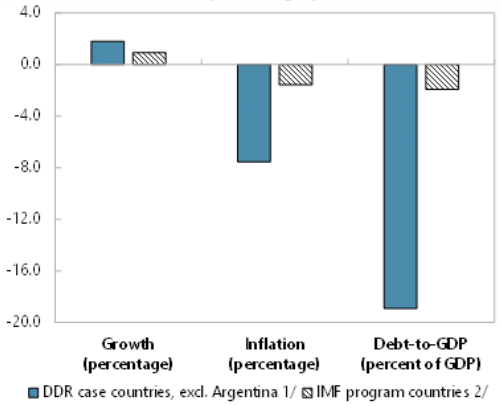
Sources: IMF staff calculations; IMF International Financial Statistics (database); IMF World Economic Outlook (database).

Note: For Ghana and Sri Lanka, only actual data are included.

50. **The short-term macroeconomic impact of DDRs in these countries broadly mirror the positive trends seen under IMF arrangements, but with even more favorable outcome.** For example, Kogan et al (2024) found that, three years after the approval of an IMF arrangements—most of which did not involve a DDR—, macroeconomic conditions improved, with higher growth and lower debt ratios and inflation, though with large variation across countries. Compared to these IMF program cases, the six DDR cases supported by IMF arrangements exhibited slightly higher growth, and significantly lower inflation and debt ratios (Figure 15). Sovereign rating upgrades seem to recognize this improving long-term economic performance, as ratings typically fall to selective default (SD) at the onset of a DDR and are gradually upgraded thereafter (Barbados, Jamaica; Table 11).

Figure 14. Three-year change during IMF arrangements

(average)



Sources: IMF staff calculations; Kogan et al. (2024).
1/ For DDR cases, the change is over three years since the start of the DDR. Argentina was not under an IMF arrangement.
2/ Emerging market and frontier economies with access to international capital markets and rated below investment grade, covering the period 2002–2022.

Table 11. Standard and Poor's Local Currency Rating (Long-Term/Outlook)

	SD date	DDR date (completed)	Before SD	Post-DDR, immediate	Post-DDR 1YR	Post-DDR current 1/
Argentina (2019)	Aug. 29, 2019	Aug. 30, 2019	B-/Negative	CCC-/Negative	SD/--	CCC/Stable
Argentina (2020)	Jan. 21, 2020	Sep. 07, 2020	CCC-/Negative	CCC+/Stable	CCC-/Negative	CCC/Stable
Barbados (2018)	Aug. 7, 2018	Nov. 16, 2018	CCC/Negative	B-/Stable	B-/Positive	B/Positive
Ghana (2023)	Dec. 06, 2022	Feb. 24, 2023	CCC+/Negative	CCC+/Stable	CCC+/Stable	CCC+/Stable
Jamaica (2010)	Jan. 14, 2010	Feb. 24, 2010	CCC/Negative	B-/Stable	B-/Negative	BB-/Positive
Jamaica (2013)	Feb. 12, 2013	Mar. 06, 2013	B-/Negative	CCC+/Stable	B-/Positive	BB-/ Positive
Sri Lanka (2023)	Sep. 19, 2023	Sep. 25, 2023	CCC-/Negative	CCC+/Stable	CCC+/Stable/C	CCC+/Stable

Source: Standard and Poor's.

Note: SD = selective default. 1/ Current data as of March 31, 2025. No rating available for Grenada or St. Kitts and Nevis.

B. Debt and GFN: Ex-Ante (Program) Targets and Outturns

51. **Earlier restructuring cases (Barbados, Grenada, Jamaica, and St. Kitts and Nevis) broadly met their respective public debt and GFN-to-GDP targets.** With nearly a decade having passed, data are now available to assess the outcomes against the debt targets set at the programs' inception.[31] While it is not possible to isolate the effects on outcomes, the DDRs were comprehensive, featuring substantial NPV haircuts—including T-bills in some cases—that significantly lowered GFN. At the same time, ample official external financing limited net domestic financing needs, helping avoid new issuances of high-cost, short-term domestic debt. Together with strong fiscal adjustments and bailout financing, these countries were able to achieve (or are on track to achieve) their program targets (Figure 16).

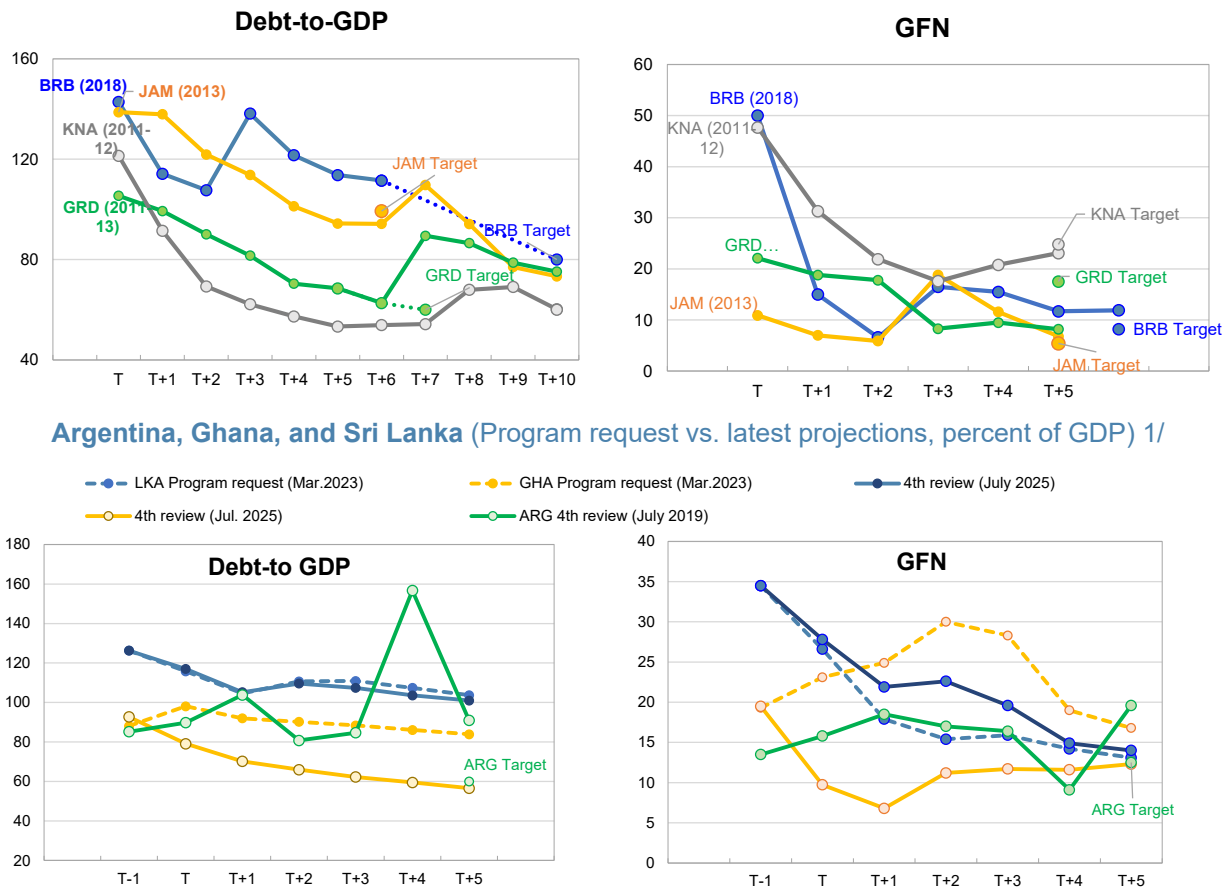
52. **It is too early to assess the outturns of the more recent cases.** The more recent DDRs have been narrower in terms of perimeter (Argentina, Sri Lanka) and shallower in terms of NPV haircuts (Ghana, Sri Lanka). Since local-currency domestic debt was excluded in Argentina in 2020, and combined with fiscal laxity, the country faced a constant domestic refinancing crisis and continued to rely on monetary financing in the following years.[32] In Sri Lanka, having excluded commercial banks' holdings of T-bills and T-bonds, GFN remained elevated (27.6 percent of GDP, of which 26.5 percent of GDP was for domestic debt service in 2023; see IMF 2025), partially eroding the benefits of the DDR. In Ghana, the DDR substantially reduced GFN from 19.3 percent of GDP in 2022 to 11 percent of GDP in 2024. Nevertheless, net domestic financing continued to be substantial, at 4 percent of GDP in 2024, the year

[31] When debt is assessed to be unsustainable and a debt restructuring becomes inevitable, the IMF, under its financial arrangement, sets a medium-term debt target which helps to anchor the debt restructuring negotiations between the debtor and the creditors. These may be expressed in terms of public debt to GDP, GFN to GDP, and at time foreign currency debt service to GDP at a pre-defined future time period.

[32] Standard and Poor's registered six distressed domestic exchanges between 2022 and 2024. See S&P Global Ratings, Argentina Local Currency Rating Lowered To 'SD' On Another Distressed Exchange; "CCC-" Foreign Currency Rating Affirmed, March 13, 2024; S&P Global Ratings, Argentina Local Currency Rating Lowered To "SD" On Another Distressed Exchange; and "CCC-" Foreign Currency Rating Affirmed, June 8, 2023.

after the completion of the DDR. With the domestic bond market still closed, all financing needs were met with T-bills, increasing refinancing risk. T-bills increased fivefold between 2022 and 2024 in domestic currency terms. However, high inflation effectively helped lower the debt-to-GDP and GFN-to-GDP ratios.

Figure 15. Public Debt and GFN. Actual vs. Targets: Earlier DDR Cases
(5 to 10 years after the program request, percent of GDP)



Source: IMF staff reports.

1/ For Argentina, the latest actual data are 2024 from the 2025 Extended Fund Facility Request. In the case of Ghana, the first-review projections incorporated the actual amounts from the domestic debt restructuring (DDR) and assumed no external debt restructuring (EDR), whereas the program request included no debt restructuring at all. As a result, the targets presented in the first and third reviews are, by design, not directly comparable. For Ghana and Sri Lanka, the latest projection data from T+2 from the IMF 4th review (July 2025).

53. **Analyzing the drivers of debt dynamics helps identify the contribution of various factors in converging to the targets.** Table 11 presents the four-year-ahead projection—made at the time of the IMF program request and actual outcomes—for three key variables: primary balance (pb), real interest burden (r), and real growth (g). The interplay among these variables is central to explaining the debt dynamics. Typically, the four-year-ahead projection is relevant, as this is when the economy is generally expected to stabilize, including reaching potential output and meeting inflation-target objectives. Fiscal consolidation is also expected to be completed during that period. The difference between the projected primary surplus and the differential between the projected interest burden and growth rates (r-g) helps

determine whether the fiscal effort and the debt relief (external and domestic) were sufficient to generate a positive debt dynamic.[33]

54. **In all DDR cases, the debt burden was eased, but through different mechanisms** (Table 12)**.** Argentina, Grenada, and St. Kitts and Nevis outperformed their projected primary balance—partly due to revenues from citizenship-by-investment programs and land sales[34]—and benefited from negative r-g, resulting in a higher-than-expected debt reduction. The contribution to debt reduction from the primary balance did not materialize as projected for Barbados, Ghana, and Jamaica. An optimism bias on real growth was observed in Ghana and Jamaica. Argentina's debt dynamics were assisted by high inflation, which eroded the value of domestic debt. The overall positive primary balance and interest-growth rate differential indicate that the debt dynamics were on a declining path in steady state, not taking into account real exchange rate paths and other one-off items.

Table 12. Contribution of Primary Balance, Real Interest Rate, and Real Growth Rate to Debt Reduction: Four-Year-Ahead Projection and Actual/Latest Projection since Program Inception

(Percent of GDP)

			Projection at program request					Actual or latest projection				
	1/	2/	pb	r	g	r-g	pb-(r-g)	pb	r	g	r-g	pb-(r-g)
Argentina	2020	2024	-1.1	1.7	2	-0.3	-0.8	1.8	-30.8	2.7	-28.1	29.9
Barbados	2018	2022	6	1.2	1.9	-0.7	6.7	2.5	-2.8	9.8	-12.6	15.1
Ghana	2023	2027	1	2.9	4.2	-1.3	2.3	0	1	2.9	-1.9	1.9
Grenada	2013	2017	3.5	2.3	2.1	0.2	3.3	5.7	1.4	3.9	-2.5	8.2
Jamaica	2010	2014	9.1	2.4	1.9	0.5	8.6	7	1.8	0.9	0.9	6.1
Jamaica	2013	2017	7.5	2.4	2.1	0.3	7.2	7	1.8	0.9	0.9	6.1
Sri Lanka	2023	2027	2.3	1.8	3.2	-1.4	3.7	2.3	2.5	3.2	-0.7	3.0
St. Kitts and Nevis	2011	2015	6.5	7.6	5.7	1.9	4.6	16	3.9	6.2	-2.3	18.3

Sources: IMF staff reports and calculations.

Note: pb = primary balance; r = real interest rate; g = real growth rate. The pb-(r-g) calculation is a partial debt decomposition and does not account for changes in the real exchange rate or other effects. It measures the contribution to debt reduction from primary balance and the real interest rate and growth differential. Consistent with the DSAs, the primary balance is measured on a cash basis.

1/ Year of program request. Argentina did not have a program at the time of restructuring but received IMF technical assistance on the DSA in March 2020.
2/ Projection year, four years from the program request. For Ghana and Sri Lanka, the figures are the latest published projections as of July 2025; actuals are shown for the rest.

C. Burden Sharing and Comparability of Treatment

55. **Fiscal consolidation is a critical component of the burden-sharing arrangement supporting a successful debt reduction.** While a DDR addresses the debt-stock overhang by shifting part of the burden to debt holders, sustained primary surpluses are essential to achieve a durable debt-sustainability outcome. A DDR accompanied by fiscal consolidation reinforces policy credibility, restores investor

[33] The measure is only an approximation, as it does not account for the effects of exchange rate changes and other factors, such as materialization of contingent liabilities; hence, the pb-(r-g) is not the same as the debt-dynamics calculations in the debt sustainability analysis (IMF 2018b).

[34] Citizenship-by-Investment programs offer citizenship to foreign nationals in exchange for qualified donations or investments.

confidence, and eventually lowers financing costs, contributing to a faster return to international capital market access and domestic bond issuances. When paired with a strong fiscal policy, a DDR is seen as a one-time event, helping to avoid concerns of repeated restructuring. Table 13 shows that the impact of DDR on debt reduction has been much larger than that of fiscal consolidation during IMF-supported programs in Barbados and St. Kitts and Nevis, followed by Jamaica and Grenada. For Jamaica, the marginal effort was low, as the primary balance at the beginning was already high. In Ghana and Sri Lanka, the contribution from DDR and from the fiscal consolidation were comparable.[35] In all cases, fiscal consolidation was front loaded.

Table 13. Burden Sharing of DDR and Cumulative Fiscal Consolidation over Three Years

	Treated Domestic Debt	NPV Haircut	Contribution from DDR 1/	Contribution from Cumulative Fiscal Consolidation 2/		Primary Balance in Base Year	Consolidation Period
	(Percent of GDP)	(Percent)	(Percent of GDP)	(Percent of GDP)		(Percent of GDP)	(Year)
				Projection 3/	Actual 4/		
Barbados	130	43	55.9	2.7	-4.2	3.3	FY2018/19-FY2021/22
Ghana	28	32	9.0	5.1	4.2	-3.6	2022-2025
Grenada	22	50.	11.1	7.8	9.5	-4.3	2013-2016
Jamaica (2010)	65	26	16.7	2.1	1.4	6.2	FY2009/10-FY2013/14
Jamaica (2013)	64	8	4.8	2.3	2.4	5.2	FY2013/14-FY2016/17
Sri Lanka	29	12	3.5	6.1	5.1	-3.8	2022-2025
St. Kitts and Nevis	64	65	41.6	5.4	2.8	-0.4	2010-2013

Source: Various IMF Staff Reports, Anthony, Impavido and van Selm (2020), Grigorian, Alleyne, and Guerson (2012, Asonuma et al. (2017), Li, Papaioannou, Thomas and Togo (2017), and staff calculations.

1/ Contribution of the DDR is measured as the NPV relief times the treated domestic debt as percent of GDP. The NPV relief draw from the first column in Table 7. The treated domestic debt as percent of GDP is taken from Table 6. The NPV relief is based on the formula 1-(NPV of new bonds/100). A better measure would be the NPV relief calculated as 1-(NPV of new bonds/NPV of old bonds), as the latter would capture the NPV of the exact cash flow relief obtained. Comparison across countries should be interpreted with caution as the NPVs of the DDRs are country specific, including due to different accounting standards and regulatory forbearance for determining the discount rates. The smaller the NPV haircut, the smaller the contribution from DDR. The broader the perimeter of DDR, the greater the contribution from DDR, given NPV haircut.

2/ Cumulative fiscal consolidation measures the cumulative percentage change in the level of primary balance hence the effort the authorities make during the program period. Fiscal consolidation typically take place over a 3- or 4-year period, and it is assumed that no further consolidation is carried out (with projection of primary balance assumed to remain steady thereafter), hence the comparison between NPV debt reduction and fiscal consolidation provides a sense of burden sharing between creditors and the domestic taxpayers. For Ghana, measured on commitment basis.

3/ Projection at the time of program request, cumulative consolidation over three years. For St. Kitts and Nevis, based on rebased GDP.

4/ The end of the consolidation period for Barbados coincided with the beginning of unwinding of the COVID-19 pandemic shock. For Ghana and Sri Lanka, projection for end-2025 as of July 2025. For Grenada and St. Kitts and Nevis, includes inflows from citizenship by investments.

[35] For example, Ghana's IMF-supported program assessed that fiscal consolidation, when combined with debt restructuring, "strikes an appropriate balance between ambition and social and economic feasibility" (IMF 2023b). Jamaica's program indicated that "the burden of adjustment is appropriately spread across revenue enhancement, primary expenditure restraint, and improved public enterprise balances. Through the debt exchange, creditors are also called upon to assume a part of the burden, while the neediest are protected by the provisions in the program for an enhanced social safety net" (IMF 2013).

56. **The burden sharing between domestic and external creditors (defined by residency) has elicited much debate**.[36] In all the cases studied in this paper, except Jamaica, the DDR was accompanied by an EDR. Thus, governments had to address the question of burden sharing between domestic and external creditors. From the external creditors' perspective, including domestic debt in the perimeter of the restructurings can reduce their debt restructuring burden when debt restructuring targets are set on (i) foreign currency debt service (where domestic debt is in foreign currency); (ii) gross financing needs; or (iii) external debt service (where debt is defined on a residency basis and non-residents hold foreign- or domestic-currency debt).[37] More generally, where domestic debt absorbs excessive fiscal resources, this can reduce the capacity to service external creditors; hence, it may be in the interest of external creditors for the country to undertake a DDR.[38] On the other hand, while restructuring domestic debt can create critical fiscal space and relief from debt-service obligations, if such restructuring ends up triggering bank runs, a sharp decline in bank credit, and a sharp fall in economic activity, it could undermine the country's ability to meet external debt obligations—making it counterproductive even from the perspective of external creditors. A deep haircut that hurts saving poor can provoke social unrest, while a restructuring requiring significant public funds to recapitalize banks can also be counterproductive.[39]

57. **Reflecting these complex trade-offs, external creditors have typically not insisted on comparability of treatment between DDR and EDR**.[40] While burden sharing including holders of domestic debt would be welcome, external creditors are generally agreeable that DDR be implemented according to the loss-absorptive capacity of domestic creditors.[41] Comparability of treatment between external and domestic creditors is also hampered by technical difficulties in establishing discount rates with which NPV losses can be calculated and compared. External creditors voiced significant unhappiness when the sovereign excluded domestic debt from restructuring despite a significant presence of nonresident investors (e.g., the exclusion of local-currency debt with significant presence of nonresident investors in Argentina's 2020 restructuring, and Zambia's restructuring, which did not involve a DDR; see Box 1). Resident holders of external debt are subject to the same deal as external holders, even if they are domestic banks that have to take a capital hit (Sri Lanka). If non-resident holders of domestic debt suffer losses, then intercreditor equity between resident and nonresident holders of domestic debt becomes relevant. Finally, not all commercial bank creditors are domestic: foreign bank

[36] Burden sharing between creditors refers here to whether a particular set of creditors is included in the perimeter of the debt restructuring. Comparability of treatment, discussed in the next paragraph, refers to inter-creditor equity in the financial and legal terms of the debt treatment of those included in the perimeter.

[37] The Global Sovereign Debt Roundtable (2024) notes: "Discussions underlined emerging consensus on the need to treat NRHs on a caseby-case basis in the event of a restructuring. Some participants advocated for the inclusion of NRHs in the restructuring envelope if they are included in the DSA. Others underlined that, while NRHs are external creditors from the perspective of the DSA (since they receive payments flowing out of the country, being non-resident), NRHs hold debt instruments that are governed by domestic law. As such, NRHs are intrinsically linked to the decision of the authorities to include or exclude "domestic debt" from the restructuring perimeter."

[38] Some external creditors have demanded that domestic debt be restructured on burden sharing grounds in Sri Lanka and Zambia.

[39] See IMF (2021a) and Grigorian (2023).

[40] "Pursuing a single metric of comparable treatment for both DDR and EDR seems unlikely to be appropriate—rather, scenario analyses, communication and transparency are essential. While DDR and EDR are often part of the same broader restructuring strategy, they have different characteristics and follow different constraints." Global Sovereign Debt Roundtable (2024).

[41] Diwan and Kessler (2023) note that DDR should not be considered by default, nor should criteria for allocating losses be automatic, such as comparability-of-treatment principles.

subsidiaries are classified as domestic investors, but the financial stability implications of such banks differ from those of indigenous domestic banks.

D. Impact on the Financial Sector

58. **Overall, financial stability was preserved in the DDR cases examined.** Despite concerns, there were no deposit runs or signs of financial stress. Banks' capital positions weakened due to DDR losses, but public funds were only used to recapitalize state-owned banks in Ghana. Credible recapitalization strategies and backstop mechanisms helped preserve confidence, with regulatory forbearance playing a role in some cases (Table 13).[42] While some argue that domestic creditors had already incurred losses due to inflation, real interest rates on T-bills were significantly positive before the DDR in Argentina, Ghana, and Jamaica, and more so for T-bonds (Table 14). While real interest rates declined sharply when inflation spiked in the run-up to the DDR, they returned to positive territory afterward. Bank profits generally rose during and after the DDR, driven by high yielding government securities and monetary policy instruments (Barbados, Ghana, and Sri Lanka) which were favored over private lending due to high NPL ratios and zero capital risk weights (Table 15).

Table 14. Real Interest Rates
(average)

	Years				
	T-2	T-1	T	T+1	T+2
Argentina (2020)	9.0	5.6	-18.9	-17.5	-25.7
Ghana (2022)	4.2	2.8	-8.4	-12.5	3.3
Barbados (2018)	-0.7	-3.4	0.2	-1.8	0.1
Jamaica (2010)	0.0	6.4	-5.2	-1.3	0.8
Jamaica (2013)	-1.3	0.8	-1.8	-1.3	2.3
Sri Lanka (2023)	-1.2	-27.4	4.5	8.0	...

Sources: IMF staff calculations; Kogan et al. (2024)
Note: Computed as treasury bill or money market rates against inflation.

Table 15. Pre- and Post-DDR Financial Health of the Banking Sector 1/2/3/4/

	Pre-DDR					Post-DDR					
	Year	CAR	NPL	RoA	Real private credit 3/	Year	CAR	NPL	RoA	Real private credit 3/	Real private credit growth (10yr)
Argentina	2019	17.5	5.7	5.4		2021	25.7	4.3	1.1		
Barbados	2017	19.1	5.9	1.7	0.5	2019	14.0	6.1	1.8	-1.6	-10.2
Ghana	2022	16.6	14.8	3.2	3.3	2024	14.0	21.8	5.0	-75.6	-12.1
Grenada	2012	12.6	10.0	1.5	-0.3	2016	14.2	6.7	1.5	-3.1	0.9
Jamaica	2012	14.1	6.8	0.4	-1.1	2014	16.0	4.9	0.6	5.0	7.3
Sri Lanka	2022	16.2	11.3	0.8	3.0	2024	20.3	12.3	1.6	-5.8	2.0

Source: Country authorities; country financial stability reports; IMF Financial Soundness Indicators (database); IMF staff reports.

Note: Indicators may not be comparable across countries because of different forbearance policies for loss recognition and NPL standards.

1/ Banking systems differ markedly across cases: they are dominated by foreign banks (Barbados and Grenada); by an approximately equal mix of strong foreign and domestic banks (Ghana); and by an even split between state-owned and locally owned private banks (Sri Lanka). For Ghana, the 2022 data already reflected impairment provisions in anticipation of the DDR in 2023.

2/ Because of different forbearance policies for loss recognition and NPL standards, some indicators may not be comparable across countries.

3/ Adjusted for inflation and averaged over three years before and after DDR.

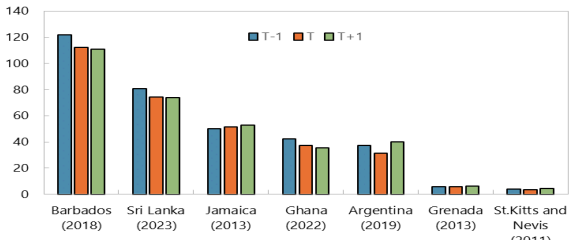
4/ In Jamaica, banks were allowed to spread losses over time to maintain capital-adequacy ratios.

[42] The minimum Tier 1 capital ratio is 6 percent (Bank for International Settlement 2011). In some countries, a number of individual banks fell below the minimum capital ratio—in particular, four domestically owned and one foreign-owned banks in Ghana (see BMI 2023a; Moody's 2023). See BMI 2023b for bank-by-bank results in Sri Lanka.

59. **The short-term negative impact of the DDR on banks' balance sheets may have adverse effects on bank lending to the private sector**. The overall size of bank balance sheets declined in Barbados, Ghana and Sri Lanka (Figure 17). Without timely recapitalization, weakened banking sector balance sheets will persist, exacerbating credit constraints. Even before a DDR, economic uncertainty made banks risk averse, prompting them to preserve capital and withdraw from credit intermediation. Post-DDR, unrepaired capital losses and limited access to new capital worsened the credit crunch, and credit growth recovery has been slow (Table 16). The unwinding of the sovereign-bank nexus will also likely be slow, as the economy takes time to recover.

Figure 16. Banking Sector Size

(In percent of GDP)



Sources: Country authorities' financial stability reports; Eastern Caribbean Central Bank; Financial Stability Board; IMF World Economic Outlook database and staff calculations.

Table 16. Commercial Bank Credit to the Private Sector: Before and After DDR

NPL		Pre-DDR		Post-DDR		10-year historical average
		Year	Percent of GDP	Year	Percent of GDP	Percent of GDP
Low	Argentina	2018	15.4	2021	11.2	13.5
	Barbados	2017	82.1	2019	77.2	79.7
	Jamaica	2008	30.2	2010	26.4	42.3
	St. Kitts and Nevis	2011	58.4	2013	55.3	55.8
High	Ghana	2022	10.4	2024	7.6	13.6
	Grenada	2012	82.8	2014	74.3	56.6
	Sri Lanka	2022	30.8	2024	27.3	32.4

Source: IMF International Financial Statistics (IFS) and IMF staff Article IV reports.

60. **The valuation of new debt instruments was central to assessing the financial impact of DDR, particularly for estimating NPV relief and recapitalization needs.** Under IFRS 9 if revised cash flows exceed a 10 percent change in NPV, the instrument must be revalued at the new market value, with the difference recorded as a loss. Conceptually, unlike the restructuring of a private company, a public sector debt restructuring has externalities which alters broader economic and market conditions, making valuation complex. For external debt, market practice is to mark to market at the expected exit yield, rather than the distressed yield on existing bonds. In the absence of reliable benchmarks, Ghana and Sri Lanka used historical average yields (15.5-21 percent and 10-12 percent, respectively). Regulators, domestic accounting authorities, and market participants collaborated to agree on the valuation approach for the exit bonds.

61. **Financial Sector Stabilization Funds were established in some cases to reassure markets and provide liquidity and solvency backstops.** These funds were created as contingent facilities: Jamaica's 2010 and 2013 DDRs introduced Financial System Support Funds, and St. Kitts and Nevis set up the Banking Sector Reserve Fund to address the significant sovereign-bank nexus. However, the banking sectors proved more resilient than expected, with adequate capital buffers, private recapitalization, and emergency central bank liquidity facilities. The funds also enhanced credibility by

restoring market confidence. At the beginning of the IMF-supported programs, the central banks of Ghana and Sri Lanka were asked to develop time-bound recapitalization strategies, supported by structural benchmarks. None of the banking sectors in the case studies used public money to recapitalize banks, except in Ghana, where recapitalization of state-owned and indigenous financial institutions adversely affected by the DDR was financed through the Ghana Financial Stability Fund.[43]

E. Impact on the Domestic Debt Securities Market

62. **T-bill issuance costs surged after the DDRs due to both a high policy rate and a sovereign risk premium during and immediately following the DDR (Figure 18).** In most cases, T-bills were exempted from the DDR and remained the only viable domestic financing option. In Sri Lanka, market disruption began before the announcement of the DDR (June 2023), following the external debt default (April 2022). Despite the exemption of T-bonds held by the banks from the DDR, disruption in the domestic securities market was comparable to that in Ghana, where T-bonds were restructured. In Argentina, Ghana, and Sri Lanka, high rollover needs at high interest rates risked undoing the fiscal space created by the DDRs. In Ghana, policy rates that were high relative to T-bill rates meant that T-bills competed with central bank securities used for monetary policy operations, leading to difficulties meeting the financing needs.

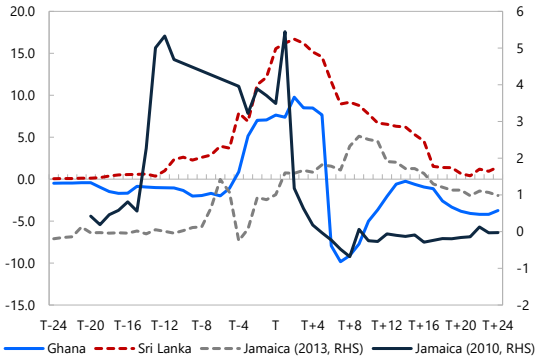
63. **T-bond markets largely remained closed during and shortly after DDRs (Table 17).** While domestic market access tends to recover faster than access to international capital markets, as local investors are less constrained by sovereign ratings, the pace and scope of the domestic market recovery varies across cases. Jamaica's 2010 DDR stands out for its swift recovery in domestic debt issuance, with bond market access restored within three months. However, other cases demonstrate the challenges in reviving medium- to long-term domestic bond issuance. Even in Jamaica, following the second DDR in 2013, it took nearly three years to restore confidence and resume bond issuance. Barbados resumed bond issuance four and a half years post-DDR, and Grenada took about three years to issue a two-year T-bond. As of 3Q2025, Ghana had not resumed bond auctions, as it was constrained by the "Limitation of Future Issuance Clause" in the new bond contract.[44] Sri Lanka managed to issue long-term bonds at a reasonable cost and subscription amount one year after the completion of the DDR, albeit purchasers were mainly captive investors.

64. **The persistence of net domestic financing needs, combined with high T-bill rates and the absence of T-bond issuance, has reversed some of the benefits of DDR (Figure 18).** Domestic interest payments post-DDR, while lower than pre-DDR, remained significant, mainly owing to new T-bills issued (Argentina, Ghana, Sri Lanka). These created higher-than-expected domestic financing needs, leading to a rapid increase in the stock of T-bills. GFN remained above 20 percent of GDP in Sri Lanka two years after the DDR, while in Ghana, the GFN almost doubled after dropping significantly following the DDR; and in Argentina, GFN increased a year after the DDR (Figure 16). In Ghana, the share of short-term debt as a percent of total domestic debt continued to rise (Figure 19).

[43] Recapitalization of a previously insolvent state-owned bank was addressed outside of the Ghana Financial Stability Fund.
[44] See the Exchange Memorandum (2023).

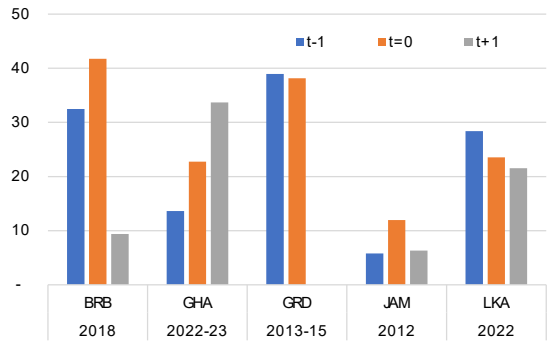
65. **The long-term financial impact of DDR should account for the prolonged effects of financial repression and the level of financial-market development.** In most DDR cases, the interbank market froze during and after the DDR. During the DDR, trust among banks eroded due to high uncertainties about the DDR. In the period after the DDR, banks were reluctant to accept the restructured bonds as collateral, inhibiting the functioning of the repo market. Illiquid secondary markets and a nascent market-pricing mechanism meant that financial repression continued to shape the primary market. Artificially lowering financing costs may provide short-term relief but ultimately distort markets. The continued suppression of financial markets can have detrimental long-term consequences, including inefficient resource allocation and reduced growth.

Figure 17. T-Bill Spreads over Policy Rate
(Basis Points)



Sources: Haver Analytics; IMF staff calculations based on country authorities' data.

Figure 18. Share of Short-Term Debt
(In percent of total domestic debt)



Sources: Central banks; IMF debt statistics bulletins and Medium-Term Debt Management Strategy (MTDS) reports.

Table 17. Impact of DDR on Domestic Bond Market Access

	Perimeter of DDR	Time to re-access domestic bond market	Notes	c.f. Time to re-access international capital market
Argentina (2020)	Only FX local debt restructured	Continued to access inflation- and foreign-currency-indexed local-currency bonds	LC debt market remained open, but limited to T-bills and indexed debt	None so far. In 2025 Argentina issued a local law bond to be paid in local currency, targeted at non-resident investors
Barbados (2018)	Local currency T-bond, local loan	4 years	In September 2022, the Central Bank launched the BOSS+ bond retail program at 4.5% for a 5-year maturity.	7 years (June 2025, rated B)
Ghana (2022-23)	Local- and foreign-currency T-bond and Cocobill	No issuance of local-currency T-bond (as of September 2025)	Constrained by the "new bond issuance clause" which limits issuance of new bonds for three years after DDR completion	None so far
Grenada (2013-15)	Local-currency T-bond, local loan, privately placed T-bills	3 years	A two-year T-bond ($3.7 million at 5.5 percent) was issued in March 2018 and oversubscribed	None so far
Jamaica (2010)	Local currency T-bond, T-bills	3 months	Investors welcomed DDR as it addressed unsustainable interest burdens; bond markets rallied shortly after DDR, but confidence waned as the IMF program went off track	1 year (February 2011)
Jamaica (2013)	Local currency T-bond, T-bills	3 years	With the 2010 IMF program off track, investor confidence was reduced b the repeated DDR, judicious fiscal consolidation and a successful 2013 program helped restore access within three years.	1.3 years (July 2014, rated B-)
Sri Lanka (2023)	Local-law FX debt and T-bonds held by pension funds	T-bond issuance resumed within a year	Volume was limited for long-term securities; spreads were initially high	None so far
St. Kitts and Nevis (2011-12)	Local-currency T-bond, local loan	No issuance of local-currency T-bond	No need to issue bonds; supported by the citizenship-by-investment program, fiscal surplus continued	None so far (St. Kitts and Nevis has never issued an international bond)

Sources: Auction announcements for each country; central bank of each country; central bank annual reports..
.

Time to re-access domestic bond market excludes the exit bond issued as part of the domestic debt restructuring.

VI. Conclusions

66. **This study contributes to our understanding of DDRs through detailed analysis of the following cases:** St. Kitts and Nevis (2011-12), Jamaica (2010, 2013), Grenada (2015), Argentina (2019-20), Ghana (2023), and Sri Lanka (2023).

67. **The decision to undertake a DDR, as well as its design, is part of a larger burden-sharing exercise the authorities must manage in response to a crisis.** Whether a DDR is carried out or not, the authorities must take the political decision on how to apportion the burden to resolve the debt overhang and restore macroeconomic stability. Inaction shifts the cost to the broader economy through greater fiscal adjustment, financial repression, and/or higher inflation, and to external creditors through greater haircuts, whereas DDR apportions losses among the domestic creditors. International financial institutions, including the IMF, when called upon as lenders of last resort, contribute to the burden sharing by providing concessional or below-market financing.

68. **While DDRs are inherently costly, the cost of inaction and delays can be greater.** Despite signs of rising domestic debt vulnerabilities, governments in the cases studied did not heed them, opting instead to muddle through until it became unavoidable. To contain the persistently high interest costs, sustained and high fiscal consolidation—including cuts in social expenditures and infrastructure investment—would have been needed, but was not feasible economically or politically. When markets began to lose the appetite for government securities, continued financial repression and monetary financing added to the distortions in domestic financial sectors through higher inflation, currency depreciation, and higher interest rates. Thus, delays in dealing with the debt overhang can undermine macroeconomic stability and depress growth, with the burden falling mostly on savers and the poor. Once muddling through became untenable, the risk of disorderly default ultimately forced governments to enter into a DDR.

69. **A fundamental macroeconomic adjustment is required to handle the crisis, and DDR only buys space for this adjustment.** As such, domestic citizens will still bear the burden of fiscal consolidation (though less if there were no DDR) and tight monetary policy, including its negative impact on economic growth. DDR can also help restore macroeconomic stability by building a more resilient debt portfolio, with short-term instruments converted to long-term debt, eliminating the need for monetary financing and creating space for the central bank to pursue tight monetary policy. DDR limits the impact of high interest rates on the fiscal path in the initial stabilization period and helps avoids the re-accumulation of debt. In turn, macroeconomic stability supports the DDR, as a fiscal consolidation increases the credibility of the debt-reduction plan, lowers financing costs, improves the recovery value of the restructured debt for investors, and paves the way for the sovereign's return to the bond market, as exemplified by Jamaica (2013).

70. **The political and economic resilience of stakeholders ultimately determines whether they are part of the burden-sharing.** For example, in many of the cases studied, DDR imposed a burden on the banking sector when it was strong and profitable, with sufficiently large capital buffers to absorb the losses. In such cases, most banks do not need government recapitalization and normalize quickly on their own in terms of credit provision and capital adequacy, either because losses can be absorbed by existing capital or because private shareholders are willing to support profitable banks. In contrast, when the banking system is undercapitalized and on the verge of a deposit run anyway, a DDR is less advisable. Thus, the worst harm from DDR can be avoided simply by choosing not to undertake one in vulnerable cases. The same consideration applies to the decisions to allocate losses to a country's central bank or pension system. DDR can be seen as borrowing time from creditors at a sub-market interest rate until repayment capacity is restored. The longer the time borrowed, the greater the resilience that can be built, conditional on implementing prudent policies. Thus, loss allocation among creditors should consider the nature of the business and the time horizon of their investments.

71. **If the cost-benefit analysis favors a DDR, clear objectives and processes for a DDR should be established and communicated to garner public support.** Once the decision to undertake a DDR is made, it should be communicated effectively and decisively to the public at an early stage to reduce market uncertainty and rally support. Communication should present clear objectives for the DDR and its rationale, explaining why the DDR is in the best interest of the country. The implementation processes and timelines should be clear and realistic. Communication should also emphasize the need for creditor collaboration and public support (IMF 2023a). Repeated negotiations of DDR should be avoided to

maintain confidence and credibility. The authorities should build support around their economic program with market participants through active investor-relations efforts that prepare the market for future issuance after a sufficient pause.

72. **A multi-year domestic borrowing break after a DDR reinforces its gains while creating space to achieve macroeconomic stabilization.** A healing process of two to three years might be needed to re-access the local government bond market following a DDR. In anticipation of the market disruption caused by a DDR, the financing mix should maximize loans from external official creditors while frontloading fiscal adjustment. Domestic debt issuances, while the market is in disrepair and monetary policy is tight and interest rates are high, will undermine the gains made through the DDR and fiscal adjustment, as the primary surplus generated will be absorbed by high borrowing cost incurred during the market dysfunction. A domestic borrowing holiday will enable monetary policy to run its course in taming inflation without the fiscal consequences of increasing borrowing costs.

73. **Risk mitigation measures, particularly to minimize financial stability risk, are a critical component of a good DDR design.** When a DDR is contemplated, the financial sector should be stress tested for different DDR scenarios to assess its ability to absorb losess. A crisis management framework should be in place and include emergency liquidity facilities, deposit insurance schemes, a crisis management committee, a robust early intervention and resolution framework, and contingency planning for shoring up bank capital. With better preparedness to mitigate the risk of a bank run or capital flight, stakeholders can be more confident that a DDR can be executed successfully. A key consideration in this regard should be the independence of the auditors and regulators conducting these exercises. By considering the negative impacts of a DDR in the macroeconomic plan, mitigation costs such as recapitalization costs can also be incorporated.

74. **Another lesson is that comprehensive, deep, and swift DDRs are preferred over selective, shallow, and lengthy ones.** A shallow DDR will likely have similar costs to those of a comprehensive DDR in terms of sovereign rating downgrades, domestic market disruption, and sovereign reputation risk. Further, a shallow DDR may leave lingering debt sustainability concerns and fears of a repeat restructuring, and thus could delay the recovery of domestic market functioning. The government must continue to borrow under high costs and elevated uncertainties during a lengthy DDR, which could lead to a debt spike. A lengthy DDR will also slow growth, as economic activity tends to halt when faced with high uncertainties, resulting in households and corporates reducing consumption and investment, banks preserving capital and restraining lending, and tightening financial conditions. The government must continue to borrow under high costs and elevated uncertainties during a lengthy DDR, which could lead to a debt spike. With a deep and swift DDR, sufficient buffers could be preserved for future shocks. However, domestic political appetite and the financial positions of financial institutions are likely to determine the perimeter and depth of a DDR. A lengthy, shallow, and limited DDR is a more likely outcome where political constraints and vested interests play a strong role; this will make the tradeoff of a DDR less desirable, considering its substantial side effects.

75. **The DDR should be completed before the EDR.** If an EDR is also carried out, it is preferable to complete the DDR first, as the government has more policy tools and better control over the DDR process than over the EDR. Delaying the DDR increases the risk of a disorderly default with greater balance sheet consequences compared with mark-to-market losses in a pre-emptive restructuring. Early action reduces

domestic policy uncertainty and enables the process of economic repair to begin. External creditors are cognizant of the challenges associated with DDR; hence successfully implementing a DDR sends a strong signal that the government is doing its part and taking the necessary steps to restore debt sustainability and macroeconomic balance. Due to a complex external investor base and negotiation-based approach, EDR could take longer to complete. While burden sharing by domestic creditors is appreciated, comparability of treatment with external creditors is generally not expected, except perhaps in cases involving foreign-currency-denominated domestic debt and nonresident holders of domestic debt.

76. **While the decision to undertake a DDR rests with sovereign authorities, the IMF plays an important role.** The decision to enter a DDR and to determine the burden-sharing arrangements is a sovereign decision. Most past debt restructurings took place in the context of an IMF-supported program, because these arrangements provide an anchor for macroeconomic stability, restore long-term viability, and safeguard vulnerable populations. Without an IMF-supported program, often seen as a neutral referee, creditors may not be willing to participate in negotiations. At the technical level, the IMF conducts debt sustainability assessments, setting targets for debt restructuring when debt is assessed to be unsustainable. It makes macroeconomic projections, taking into account the intertemporal trade-off of the effects of fiscal adjustment, debt restructuring, and new low-cost financing, to assist the country restoring macroeconomic balance and debt sustainability. The IMF also helps assess and monitor financial stability risks and design mitigation strategies, both during the planning of the DDR and after its implementation. A DDR is such a rare occurrence that most authorities will have little or no experience with it. As a result, the IMF's ability to share relevant experiences from other countries can prove invaluable.

Annex 1. Table of Summary

Depth of DDR, by Investor Type and Instruments

Country	Eurobond (date)		Domestic debt restructuring			NPV loss 3/	Change from t+1 to t-1					Coverage: Domestic debt in exchange			CACs
	Last issuance	Default	Announce(date)	End (date)	Duration (yrs)	(%)	Debt (% of GDP)	GFN (% of GDP)	Inflation (%yoy)	Growth (%yoy)	Interest payments (% of GDP)	Instrument type 2/	Investor type: biggest hit	Exclusion: Instrument and Investors	
Argentina	Jan-2018	May-2020	Aug-2019	Aug-2020	0.9	52%	18.6	18.6	-11.5	-7.3	-0.8	FC Loans	Institutional investors, retail investors	T-bills held by individuals.	only proposed
Barbados	Jul-2010	Jun-2018	Jun-2018	Oct-2018	0.3	43%	-35.2	0.7	-1.3	0.5	-4.8	T-bills, Bonds, loans, CB advances	Central Bank, Pension funds	-	yes
Ghana	Mar-2019	Dec-2022	Dec-2022	Sep-2023	0.7	32%	-15.2	-1.0	-16.3	1.9	-3.5	Bonds, Loans, CB advances	Central Bank	T-bills	no
Grenada	Nov-2005	Mar-2013	Mar-2013	Nov-2015	2.7	50%	-15.3	-0.9	0.5	4.1	-0.5	T-bills, Bonds, loans, CB advances	Banks and private bond holders	T-bills issued in the RGSM and debt held by ECCB.	no
Jamaica Debt Exchange (JDX)	Feb-2006	-	Jan-2010	Feb-2010	0.1	25-30%	-2.5	-1.5	-5.1	4.8	-7.7	T-bills, Bonds, loans, CB advances	Domestic financial sectors	-	no
Jamaica, National Debt Exchange (NDX)	Feb-2006	-	Feb-2013	Feb-2013	0.0	7-8%	-6.0	-0.4	-1.1	1.1	-1.5	T-bills, Bonds, loans, CB advances	Domestic financial sectors	-	no
Sri Lanka	Jun-2019	Apr-2022	Jul-2022	Sep-2023	1.2	12%	-12.1	-0.7	-10.4	9.3	1.2	T-bills held by central bank, FC Bonds, Loans, CB advances	Pension funds	T-bills and T-bonds held by commercial banks	no
St. Kitts and Nevis1/	Oct-2010	-	Apr-2011	Jul-2012	1.2	65%	-13.5	-1.5	-5.0	-0.6	-0.8	Bonds, Loans	one commercial bank	T-bills, and debt held by ECCB	no

Sources: IMF International Finance Statistics (database); IMF staff reports and calculations; World Economic Outlook (database)

1/ St. Kitts and Nevis never issued Eurobonds; the dates reflect the last issuance in the Regional Government Securities Market (RGSM).

2/ LC bonds refer to local currency bonds, and FC bonds include foreign currency-denominated or foreign currency-linked bonds.

3/ NPV loss relative to face value of treated debt. The NPV calculation is based on local accounting.

Annex 2. The Treatment of Suriname's Domestic Debt (2021-24)

Suriname's domestic debt treatment was characterized by arrears clearance rather than a DDR. The country successfully completed the IMF Extended Fund Facility program in March 2025, alongside a comprehensive debt restructuring totaling about $1.5 billion (26 percent of 2024 GDP). At the onset of discussions on the EDR, a DDR was ruled out due to financial sector stability concerns (IMF 2021). However, the authorities opted to clear outstanding domestic arrears and restructure legacy debt owed to the Central Bank of Suriname.

Initial macro conditions. Suriname entered external debt restructuring amid severe fiscal and external imbalances, worsened by the COVID-19 pandemic. The government had already been in default on domestic debt. By 2020, the parallel exchange rate had depreciated by over 130 percent, inflation surged to 61 percent due to continued monetary financing, and public debt rose to nearly 150 percent of GDP, with GFN reaching 18 percent of GDP. The IMF (2021a) concluded that overall public sector debt was unsustainable—even under the maximum feasible fiscal adjustment over the next 15 years—and was expected to remain above 100 percent of GDP even after restructuring. While DDR was initially excluded, the IMF-supported program went off track in late 2022, and fiscal loosening led to a further accumulation of domestic debt arrears.

Motivation. Domestic debt accounted for one-third of total government debt. Initially, the gains from DDR were deemed limited—given undercapitalized banks and potential recapitalization costs of up to 5 percent of GDP. However, over time, the cost of inaction became evident. Asset quality reviews revealed that government debt overhang was weakening bank balance sheets, while government arrears on domestic debt and expenditures were driving up NPLs and capital shortfalls (Table 1; IMF 2023c).

Perimeter and execution. The government began clearing delayed T-bills and notes arrears in 2020, assumed full control of the process by 2023, and completed the arrears clearance by January 2024. The total amount is estimated at around 2.5 percent of GDP, with external funding from international financial institutions. The arrears clearance covered all instruments held by domestic debt holders, including commercial banks, pension funds, and individual investors, with settlements negotiated individually, prioritizing weaker banks (Figures 1 and 2). Legacy debts to the Central Bank of Suriname were also restructured into a 27-year loan with a two-year grace period, and short-term advances (about 2 percent of GDP) were cleared in 2023 . EDR covered debt owed to the bilateral official sector, state-guaranteed commercial debt, Eurobonds, and commercial loans.

Outcome. While the full impact of the arrears clearance is still unfolding, early signs suggest modest improvements in the banking sector, with NPLs falling by half (Table 1). Between 2020 and the end –of 2024, domestic debt-to-GDP fell by 25 percentage points to nearly 10 percent of GDP, and GFN fell by 10 percentage points to 7.5 percent of GDP. Efforts have been made to prevent recurrent debt arrears, including the implementation of an Indicative Target under the IMF-supported program and the strengthening of domestic debt recording and reporting systems through structural conditionality and technical assistance. Spreads fell to a historic low, and, combined with continued fiscal discipline, market confidence has been recovering. After being closed since 2021, the authorities plan to reopen and develop a domestic government securities market.

Box 2. Figure 1. Suriname: Public Debt Development

Figure 1. Public Debt, By Holders
(in percent of GDP)

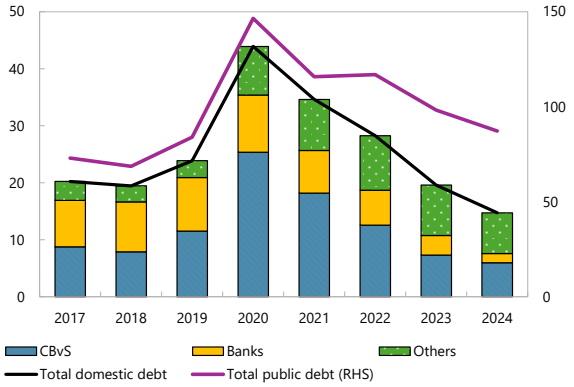


Figure 2. Public Debt, By Instruments
(in percent of GDP)

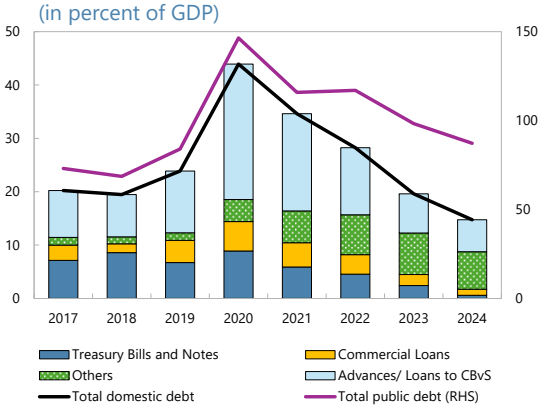


Figure 3. Total Arrear Payment
(in percent of GDP)

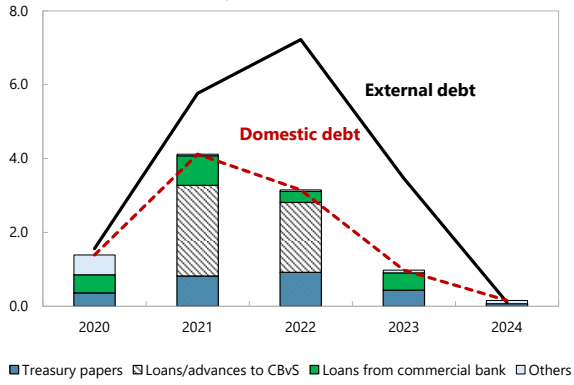


Figure 4. Arrears payment on domestic debt
(Cumulative 2020-2024, in percent of 2024 GDP)

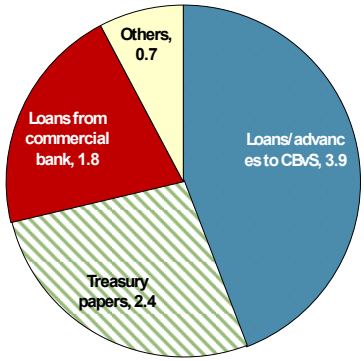


Table 1. Suriname: Financial Soundness Indicators (percent)

	2020	2021	2022	2023*	2024 Oct.
Capital Adequacy					
Regulatory capital/Risk weighted assets	11.8	14.5	16.8	20.3	22
Regulatory Tier 1 capital to risk weighted assets	10.5	13.1	15.5	18.4	20.5
Asset Quality					
NPLs to gross loans	14.6	12.8	12.4	13	6.9
NPLs net of provisions to capital to Tier 1 capital	68.1	43.6	35.2	33.7	13.1
Profitability					
Return on assets (ROA)	2	1.8	2.7	2.7	2
Return on equity (ROE)	34.8	29.6	44.8	36.5	24.2
Liquidity					
Liquid assets to total assets	51.5	58.8	54.3	53.6	52
Total loans to total deposits	40.2	...	35.1	34.1	34.7

Sources: Central Bank of Suriname; IMF staff report (2025); and Suriname Debt Management Office (2025) and quarterly debt reports.

Annex 3. Domestic Debt Treatments in Ghana and Zambia: Divergent Paths

In many ways, the domestic debt vulnerabilities in Ghana and Zambia in the run-up to the sovereign debt restructurings were very similar. While Zambia had higher overall public debt levels than Ghana, both had similar domestic debt levels (55-60 percent of GDP in 2022 in Ghana and 2021-22 in Zambia). Both had high gross financing needs of about 30 percent of GDP, of which domestic amortization stood at about 10 percent of GDP and domestic interest payments stood at 5.5-6 percent of GDP in both countries. Both countries also faced high net domestic financing of 8.5-9% of GDP in 2022 and accumulated domestic arrears. The sovereign-bank interconnectedness was also similar, with 35 percent of total banking sector assets held in sovereign debt in Ghana and 30 percent in Zambia.

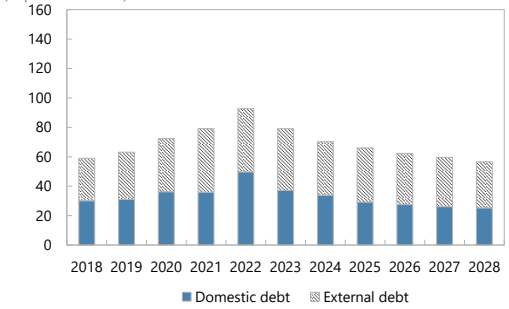
Where they diverged were in the authorities' willingness to continue paying high real interest rates and, consequently, in their ability to continue domestic bond issuances. Bond auctions had been failing and were abandoned in 2022 in Ghana as investors, particularly non-resident investors began to retreat from the Ghanaian market. While the holdings of domestic debt by non-resident investors stood at over 10 percent of GDP in 2019, they had dwindled to 3 percent of GDP by 2022. The Ghanaian authorities abandoned the bond auctions, relied exclusively on T-bills, and resorted to monetary financing. In contrast, in Zambia, non-residents held 5 percent of GDP in domestic government debt in 2019, rising to 15 percent of GDP by 2021. Zambia continued to issue bonds at high real interest rates, attracting non-resident investors, although the subscription rates fell from 84 percent in 2018 to 34 percent in 2024. They also diverged in the timing of external default; Ghana continued to service external debt obligations through 2022, while Zambia had already defaulted in 2020, making the domestic debt market a lifeline for government financing until an IMF arrangement was finalized.

Ultimately, the Zambian authorities determined that the risks to financial sector stability outweighed the benefits from domestic debt restructuring. Stress testing of the financial sector in Zambia indicated that domestic debt restructuring could be destabilizing. This shifted the focus to the possible treatment of non-resident investors who do not have financial stability implications, but separating them from the rest of the investor base proved difficult. In contrast, the Ghanaian authorities determined that the financial stability risk could be managed by excluding T-bills, containing losses commensurate with the loss-absorptive capacity of the banking sector, and by setting up mitigating measures that safeguarded financial stability.

Annex 3 Figure 1: Comparisons between Ghana and Zambia

Ghana: Public Debt

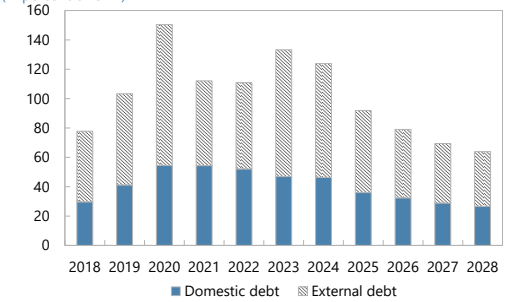
(In percent of GDP)



Source: IMF Staff Report Fourth Review of ECF, July 2025.

Zambia: Public Debt

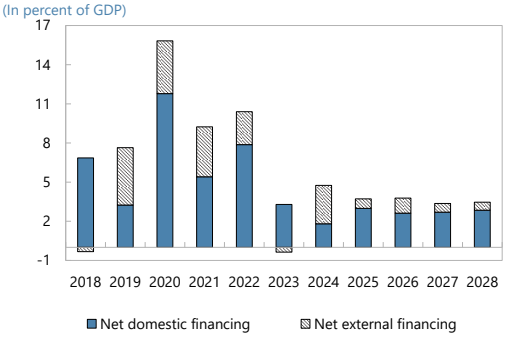
(In percent of GDP)



Source: IMF SR Fifth Review of ECF, August 2025.
Note: Domestic debt includes non-resident holdings.

Ghana: Net Financing

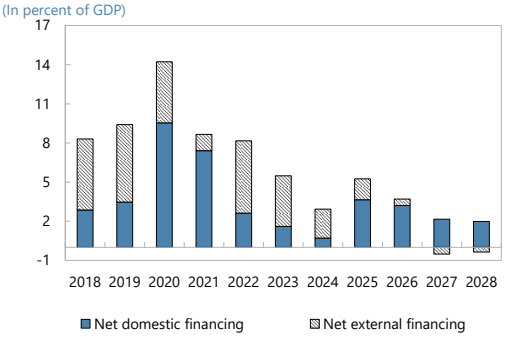
(In percent of GDP)



Source: IMF Staff Report Fourth Review of ECF, July 2025.

Zambia: Net Financing

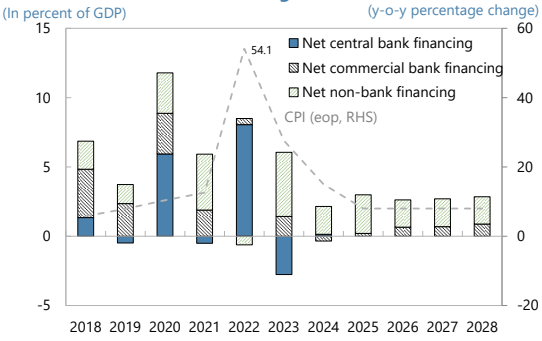
(In percent of GDP)



Source: IMF SR Fifth Review of ECF, August 2025.

Ghana: Net Domestic Financing

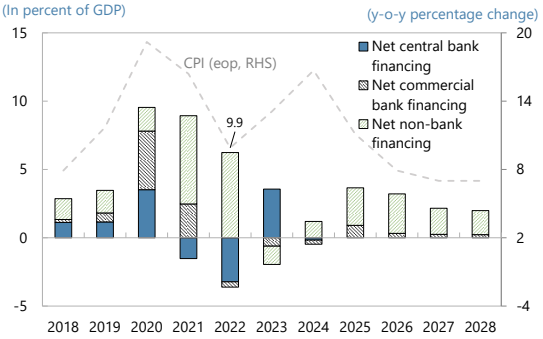
(In percent of GDP) (y-o-y percentage change)



Source: IMF Staff Report Fourth Review of ECF, July 2025.

Zambia: Net Domestic Financing

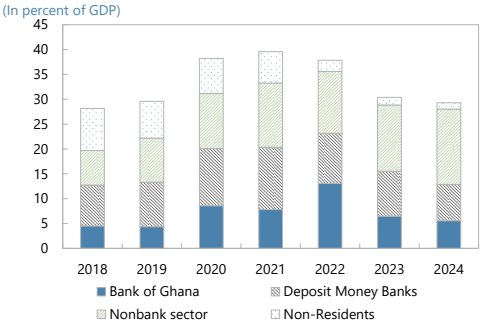
(In percent of GDP) (y-o-y percentage change)



Source: IMF SR Fifth Review of ECF, August 2025.

Ghana: Holders of Central Government Domestic Debt

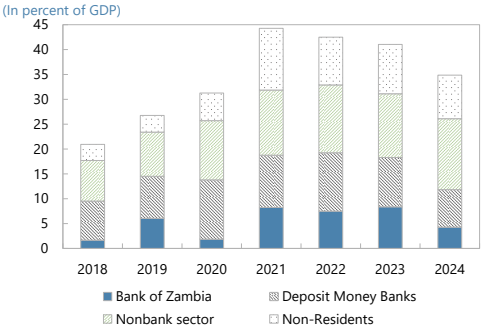
(In percent of GDP)



Source: Bank of Ghana, Statistical Bulletin.

Zambia: Holders of Central Government Domestic Debt

(In percent of GDP)



Source: Bank of Zambia, Annual Reports and MOFNP Debt Statistical Bulletin.

References

Agur, I., D. Capelle, G. Dell'Ariccia, and D. Sandri. 2022. "Monetary Finance: Do Not Touch, or Handle with Care?" IMF Departmental Paper 2022/001, International Monetary Fund, Washington, DC.

Ando, S., T. Asonuma, P. Mishra, and A. Sollaci. 2025. "Sovereign Debt Restructuring and Reduction in Debt-to-GDP Ratio." SSRN Working Paper, Social Science Research Network, Rochester, NY.

Anthony, M., G. Impavido, and B. van Selm. 2020. **"**Barbados' 2018-19 Sovereign Debt Restructuring-A Sea Change?" IMF Working Paper 20/34, International Monetary Fund, Washington, DC.

Arslanalp, S., B. Eichengreen, and P. B. Henry. 2024. "Sustained Debt Reduction: The Jamaica Exception." *Brookings Papers on Economic Activity* (Spring): 133–81.

Asonuma, Tamon, M. Xin Li, M. G. Papaioannou, S. Thomas, and E. Togo. 2017. "Sovereign Debt Restructurings in Grenada: Causes, Processes, Outcomes, and Lessons Learned." IMF Working Paper 17/171, International Monetary Fund, Washington, DC.

Atsebi, J.-M., and J. Menkulasi. 2025. "Tread with Care: Costs and Benefits of Domestic Debt Restructurings." IMF Working Paper 2025/179, International Monetary Fund, Washington, DC.

Bank for International Settlement (2011). "Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems." Basel: Bank for International Settlements, June (rev. version).

Bank of Ghana. 2021. "Liquidity Assistance Framework." Available at https://www.bog.gov.gh/wp-content/uploads/2021/02/Bank-of-Ghana-Liquidity-Assistance-Framework-February-2021.pdf' Accra: Bank of Ghana.

Barrail, Z., S. Dehmej, and T. Wezel. Forthcoming. "The Sovereign-Bank Nexus in Emerging Markets and Developing Economies: Trends, Determinants and Macrofinancial Implications." International Monetary Fund, Washington, DC.

BERT (Barbados Economic Recovery and Transformation) Monitoring Committee. 2019. "Barbados Economic Recovery and Transformation Plan Monitoring Committee Public Report #1." Available at https://tradeteam.bb/resources/download/246/czozODoiL2RvY3VtZW50cy9CRVJUX01DX1B1YmxpY19SZXBvcnRfMS5wZGYiOw.

BMI (Business Monitor International). 2023a. "Ghana Banking and Financial Services Report". London: BMI

BMI (Business Monitor International). 2023b. "Sri Lanka Banking and Financial Services Report.*"* London: BMI.

Breuer, P., S. Dhungana, and M. Xin Li. 2025. "Sri Lanka's Sovereign Debt Restructuring: Lessons from Complex Processes." IMF Working Paper 2025/175, International Monetary Fund, Washington, DC.

Buchheit, L. C., G. Chabert, C. DeLong, and J. Zettelmeyer. 2019. "How to Restructure Sovereign Debt: Lessons from Four Decades." Working Paper 19-8, Peterson Institute for International Economics, Washington, DC.

Clifford Chance. 2023. "Restructuring Sovereign Domestic Debt and the International Financial Architecture." Clifford Chance Briefing, London.

Dell'Ariccia, G., C. Ferreira, N. Jenkinson, L. Laeven, A. Martin, C. Minoiu, and A. Popov. 2018. *"*Managing the Sovereign-Bank Nexus." IMF Staff Discussion Note /18/04, International Monetary Fund, Washington, DC.

Diwan, I., and M. Kessler. 2023. "A Principled Approach to Domestic Debt Restructuring." Finance for Development Lab, Paris.

Erce, A., E. Mallucci, and M. Picarelli, 2022. "A Journey in the History of Sovereign Defaults on Domestic-Law Public Debt." International Finance Discussion Paper 1338, Board of Governors of the Federal Reserve System, Washington, DC.

Fitch Ratings (2013). "Why Sovereigns Can Default on Local-Currency Debt. Printing Money No Panacea as High Inflation is a Costly Policy Option." Special Report, May 10, New York and London.

Government of Barbados. 2018. Debt Holder (Approval of Debt Restructuring) Act, 2018-24.

Government of Ghana, Ministry of Finance. n.d. "Debt Operations." Accra: Ministry of Finance. Available at: https://mofep.gov.gh/debt-operations.

Government of Sri Lanka. 2025. Sri Lanka's Public Debt Restructuring. January. Colombo: Government of Sri Lanka.

Government of Sri Lanka, Ministry of Finance. 2023. *Domestic Debt Optimization Program.* Colombo: Ministry of Finance. Available at: https://www.treasury.gov.lk/api/file/dop

Grigorian, D. A., T. Alleyne, and A. Guerson. 2012. "Jamaica Debt Exchange," IMF Working Paper 12/244, Washington, DC.

Grigorian, D. A. 2023. "Restructuring Domestic Sovereign Debt: An Analytical Illustration." IMF Working Paper 2023/024, International Monetary Fund, Washington, DC.

Guscina, A., S. Malik, and M. Papaioannou. 2017. "Assessing Loss of Market Access: Conceptual and Operational Issues." IMF Working Paper 2017/246, International Monetary Fund, Washington, DC.

IMF (International Monetary Fund). 2010. "Jamaica: 2009 Article IV Consultation and Request for a Stand-By Arrangement." Staff Report; Staff Supplement; Public Information Notice and Press Release on the Executive Board Discussion. IMF Country Report 10/267, International Monetary Fund, Washington, DC.

———. 2010b. "Grenada: Fifth Review Under the Extended Credit Facility, Request for Waivers of Nonobservance of Performance Criteria and Request for a Three-Year Arrangement Under the Extended Credit Facility, and Financing Assurance Review." Staff Report; Staff Supplement; and Press Release. IMF Country Report 10/139, International Monetary Fund, Washington, DC.

———. 2013. "Jamaica: Request for an Extended Arrangement Under the Extended Fund Facility." IMF Country Report 13/126, International Monetary Fund, Washington, DC.

———. 2014. "Jamaica: Article IV Consultation and Fourth Review under the Extended Arrangement under the Extended Fund Facility and Request for Modification of Performance Criteria." Staff Report; Press Release; and Statement by the Executive Director of Jamaica. IMF Country Report 14/169, International Monetary Fund, Washington, DC.

———. 2018a. "Barbados: Request for an Extended Arrangement Under the Extended Fund Facility." Press Release; Staff Report; Staff Supplement; and Statement by the Executive Director for Barbados. IMF Country Report 18/290, International Monetary Fund, Washington, DC.

———. 2018b. "Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries." International Monetary Fund, Washington, DC.

———. 2020a. “Argentina: Staff Technical Note on Public Debt Sustainability.” Technical Assistance Report. IMF Country Report 20/83, International Monetary Fund, Washington, DC.

———. 2020b. “The Role of State-Contingent Debt Instruments in Sovereign Debt Restructurings.” International Monetary Fund, Washington, DC.

———. 2021a. “Issues in Restructuring of Sovereign Domestic Debt.” International Monetary Fund, Washington, DC.

———. 2021b. Barbados: Fifth Review Under the Extended Arrangement Under the Extended Fund Facility, Request for Waiver of Nonobservance of Performance Criterion, and Modification of Performance Criteria-Press Release; Staff Report. IMF Country Report 21/128, International Monetary Fund, Washington, DC.

———. 2021c. “Suriname: Request for an Extended Arrangement Under the Extended Fund Facility.” Press Release; Staff Report; Staff Supplement; and Statement by the Executive Director for Suriname Staff Report. IMF Country Report 21/180, International Monetary Fund, Washington, DC.

———. 2022. “The Sovereign-Bank Nexus in Emerging Markets: A Risky Embrace.” In *Global Financial Stability Report*, April, Chapter 2l. Washington, DC: International Monetary Fund.

———. 2023a. “Information Sharing in the Context of Sovereign Debt Restructurings.” Staff Guidance Note, International Monetary Fund. Washington, DC.

———. 2023b. “Ghana: Request for an Arrangement under the Extended Credit Facility.” Press Release and Staff Report. IMF Country Report 23/168, International Monetary Fund, Washington, DC.

———. 2023c. “Suriname: Third Review Under the Extended Arrangement Under the Extended Fund Facility-Press Release; Staff Report; and Statement by the Executive Director for Suriname.” IMF Country Report No. 23/350, International Monetary Fund, Washington, DC.

———. 2024a. “Policy Reform Proposals to Promote the Fund’s Capacity to Support Countries Undertaking Debt Restructuring.” Policy Paper 2024/017, International Monetary Fund, Washington, DC.

———. 2024f. “Central Bank Stress Testing—Guidance Note.” International Monetary Fund, Washington, DC.

———. 2025a. “Sri Lanka: Third Review under the Extended Arrangement under the Extended Fund Facility, Financing Assurances Review, and Monetary Policy Consultation Clause.” Press Release and Staff Report. IMF Country Report 25/56, International Monetary Fund, Washington, DC.

———. 2025b. “Sri Lanka: Fourth Review under the Extended Fund Facility, Request for Wavier of Applicability of Performance Criteria, Modification of Performance Criteria, and Financing Assurances Review.” Press Release and Staff Report. IMF Country Report 25/162, International Monetary Fund, Washington, DC.

———. 2025c. “Ghana: Fourth Review under the Extended Credit Facility, Request for Modification of Performance Criterion and Financing Assurances Review.” Press Release and Staff Report. IMF Country Report 25/175, International Monetary Fund, Washington, DC.

IMF (International Monetary Fund) and World Bank. 2021. Guidance Note For Developing Government Local Currency Bond Markets.

———, European Bank for Reconstruction and Development, Organisation for Economic Co-operation and Development, and World Bank. 2013. “Local Currency Bond Markets—A Diagnostic Framework.” Washington, DC.

Kogan, J., R. Kazandjian, S. Luo, M. Mbohou, and H. Miao. 2024. “The Role of IMF Arrangements in Restoring Access to International Capital Markets.” IMF Working Paper 2024/173. Washington, DC: International Monetary Fund.

Lazard Sovereign Advisory Group. 2023. “Domestic Debt Restructuring: An Exercise in Laser Surgery.” Policy Brief presented at the IMF-led Global Sovereign Debt Roundtable Workshop, September 2023.

Lazard Sovereign Advisory Group. 2025. “The 2020-25 Sovereign Debt Crisis: What have we learnt and what lies ahead?”, Policy Brief, January.

Melville, J. 2021. “Barbados Domestic Debt Restructuring: A Retrospective Look at the Distributional Impact on Creditors.” Social and Economic Studies, Vol. 70, No. ¾.

Mitchener, K. J., and C. Trebesch. 2022. Sovereign Debt in the 21st Century, NBER Working Paper Series, Working Paper 28598.

Moody’s Investors Service. 2023. “Banking System Outlook: Africa.” Sector In-Depth. New York: Moody’s Investors Service.

Okwuokei, J. C., and B. van Selm. 2017. “Chapter 8. Debt Restructuring in the Caribbean—The Recent Experience.” *Unleashing Growth and Strengthening Resilience in the Caribbean.* IMF.

Reinhart, C. M., and C. Trebesch. 2018. “Sovereign Haircuts: 200 Years of Creditor Losses.” Working Paper No. 25373. Cambridge, MA: National Bureau of Economic Research.

Reinhart, C. M., and K. Rogoff. 2013. “Financial and Sovereign Debt Crises: Some Lessons Learned and Those Forgotten.” Working Paper No. 13/266. Washington, DC: International Monetary Fund.

Reinhart, C. M., K. Rogoff, and M. Savastano. 2003. “Debt Intolerance.” Working Paper No. 03/44. Washington, DC: International Monetary Fund.

Salmon, J.. 2021. “The Impact of Public Debt on Economic Growth.” Cato Journal, Vol. 41, No. 3: 489-514. Washington, DC: Cato Institute.

Schmid, Juan Pedro. 2016. Addressing Debt Overhang: Experiences from Two Debt Operations in Jamaica. Policy Brief No IDB-PB-259. Washington, DC: Inter-American Development Bank.

Standard and Poor’s, 2025. “Sovereign Debt Liability Management and Distressed Exchanges.” June 11.

Suriname Debt Management Office. 2025. “Suriname Debt Restructuring Process in 2020-2025. Recovering from a Debt Crisis.”

PUBLICATIONS