



Debt Sustainability Analysis: Re-evaluating Debt Sustainability Analyses in the Context of Hegemonic Power and Sovereign Debt Restructuring

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Abstract

This article critiques the limited scope and potential biases of the Debt Sustainability Analysis (DSA) framework, particularly as employed by the International Monetary Fund (IMF). Despite its widespread use in assessing a country's debt sustainability, the DSA has been criticized for its inherent limitations in accurately measuring its true debt capacity. The study argues that the DSA framework often serves as a tool to maintain the hegemonic power of international financial institutions and their investors. By prioritizing fiscal consolidation and other strategies that may not align with sustainable economic development, the DSA can exacerbate debt repayment difficulties in developing countries. Through a literature review, the article analyzes the disconnect between the purported objectivity of IMF's DSA and its role in perpetuating institutional dominance in sovereign debt restructuring. It demonstrates how DSAs' limited scope and focus on short-term stability can disadvantage developing nations by aligning with the interests of powerful institutions rather than promoting long-term sustainable development.

Keywords Debt restructuring · Debt relief · Common framework · Conditionality

Debt Sustainability Analyses (DSAs) serve several purposes. They determine the nature and scale of resource flows to debtor countries, including their access to concessional financing, guide the international financial institutions' lending decisions, programme conditionality, influence access to non-concessional financing, and contribute to the graduation criteria used by the International Monetary Fund (IMF) and World Bank. DSA risk assessments signal a country's creditworthiness, giving investors a basis for country risk evaluation, including accessing countries' debt servicing capacity and other risks and influencing debtor and creditor decisions during debt restructuring negotiations.

Historically, the IMF was originally created to provide short-term lending to help countries survive macroeconomic storms while the World Bank to provide longer-term loans

for specific projects (Boughton 2014: 5). External debt was not the IMF's main purview, and as such did not have a thorough analytical framework to deal with debt. Instead, they viewed balance of payment problems as arising from excessive domestic credit expansion, providing rationale for its loan programmes to target reductions in domestic credit to restore balance of payment viability, entirely lending to the idea that excessive domestic expenditure was the main cause for public sector deficits. This was a view of the IMF's long time chief economist and director of research, Jacques Polack (Laskaridis 2021: 200) and the main architect of IMF financial programming. During the 1980s debt crisis, the IMF and World Bank shifted their operations to low-income countries; to provide new concessional lending to debt distressed countries repay their debts (Mangani 2022: 11).

Complementary to this, the IMF played a mediating role in sovereign debt restructuring between its member countries in need of relief and their creditors, mostly Paris Club creditors and commercial creditors also known as the London Club by assisting in designing an overall financing plan for countries. Indeed, one of the foundations of the Paris Club was that the debt rescheduling it granted would not weaken debtors' moral and legal obligation to repay their

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debts in full. It provided rescheduling when maturities fell due in a ‘consolidation period’ where an IMF programme established the postponement of debt service that would be necessary to close debtor’s financing gap (Mangani 2022: 7). Debtor countries seeking relief at the time were required to conclude a standby agreement with the IMF since the policy commitments in the agreements and the related balance of payments projections influenced the amount of relief Paris Club creditors were willing to offer).

The principle of conditionality which was at the core of Paris Club negotiation where debtor nation had to have an IMF programme in place before debt rescheduling which signalled a country’s commitment to economic programme of reforms. Similarly, debt relief through the London clubs in the mid-1970s required a debtor country to agree to an IMF programme as a necessary condition for participating banks. As the debt crisis persisted, the role of the IMF and World Bank in conditional lending increased as it became a growing consensus that debt problems persisted because countries faced structural as opposed to temporary financing problems (Smith 2021). In their view, new loans would not work unless policies as determined by them, were put in place to restore economic and debt sustainability (Smith 2021). They outlined the need for ‘structural adjustment programmes’ that involved privatization and liberalization policies embedded as part of multilateral lending to assist low-income indebted countries in paying off their debts through what was known as the ‘Washington Consensus’.¹ The sovereign nature of the debt held by developing countries at the time meant they were legally immune to the collection mechanisms applicable to private agents (Gelpern 2016: 48). The Washington Consensus provided cause for the entry of IMF and World Bank, in addition to their already growing role at the time of the crisis as financial manager to help the bilateral commercial lenders whose commercial banks were settled in the G7 (now G8 with the addition of Russia in 1997) countries and who had controlling stakes on the boards of the IMF and World Bank to get some of their loans repaid (Lee 2012). Basically, the approach to the debt crisis in the 1980s was driven by a concern for the state of financial systems in G7 countries, which eventually prevented a banking crisis in the United States (Laskaridis 2021: 23).

On the other hand, introducing the structural programmes yielded little benefits to debtor countries. African countries, as part of the programmes were forced to pursue liberalization policies while protectionism persisted in

the global market for low-tech manufactured goods and agriculture making it difficult for African countries to increase the value of their exports and to keep up with debt repayment obligations. In Latin America, it led to what became known as the ‘lost decade of development’ (Ocampo 2014). As the twin institutions influence rose in debt crisis management often accompanied by far-reaching conditionalities so did the use of their debt sustainability Analysis (DSA) as a key technical tool of debt assessments since its inception. Debt repayment difficulties were reconceptualized as a budget constraint challenge which fit well with their structural adjustment policies to address repayment problems rather than provide relief or financing free from conditions or low-cost financing for indebted countries. Currently, more than half of African countries are assessed to be vulnerable with eleven countries classified in ‘debt distress’ and 17 classified under ‘high risk of debt’, and 18 classified as ‘moderate risk of distress’ as of October 2024² based on IMF’s LIC DSA from PGRT eligible Countries.

The DSA, as a tool of analysis, as this article will attempt to illustrate is based on assumptions and models that are shaped by the IMF’s understanding of what constitutes ‘sound’ economic policy relying heavily on judgement over hard rules which are often times ‘malleable’. These assumptions have prioritized market-driven solutions, focusing on fiscal prudence and structural reforms that align with the interests of global capital, including multinational corporations and international investors, while strengthening IMF’s and World Bank’s influence over the economic policies of borrowing countries. The use of the DSA in this context allows the IMF to present its recommendations as objective and based on sound economic principles, masking the political dimensions of the policies it imposes. The IMF, in effect, legitimizes its interventions and deepens its control over economic decisions by framing them as necessary for restoring debt sustainability.

Historical, Economic, and Legal Foundations of IMF and World Bank Debt Sustainability Assessments (DSA) in the Context of Sovereign Debt Restructurings

Historical Foundation

The 1980s debt crisis provoked new thinking on debt sustainability from one that considered debtor’s ability to pay to one that looked at willingness to repay (Eaton

¹ The ‘Washington Consensus’ were policy prescriptions popular among Washington-based policy institutions for improving economic performance that centred around privatization, fiscal discipline, trade openness to correct domestic policy induced distortions in prices.

² List of IMF LIC DSA for PGRT eligible countries; <https://www.imf.org/external/pubs/ft/dsa/dsalist.pdf>



and Grsovitiz 1981; Sachs 1984; Krugman 1988; Bulow and Rogoff 1989). New theoretical literature of the 1980s portrayed the debt problem as a debtor's choice between adjustment and default, with adjustment portrayed as a solution, supporting the view that creditors held that debtors experienced problems because of their own failings. Thus, as foreign borrowing became a concern in the 1970s, the IMF introduced more explicit conditionality to curtail resources flowing to the public sector ultimately shaping the structure of external debt. The focus on adjustment as the main means of resolving the debt crisis was already entrenched in the creditors' strict adherence to IMF programmes and case-by-case approach (Laskaridis 2021). In 1977, just before the 1980s debt crisis, the IMF as part of its obligations to monitor exchange rate policies, introduced monitoring debt policies explicitly as a mandate through its legal decisions (cite) and firmly integrated in its guidelines as external debt conditionality in 1979. Thus, the IMF began introducing policy conditionality on external debt way before it had an adequate framework to examine it, only covering projected debt service payments as the 1980s debt crisis took center stage. The weakness of its short-run balance of payments approach forced IMF to extend its framework into the medium term. IMF staff proposed therefore that its Article IV reports on debt matters be strengthened to include forward-looking external debt analysis, which would form the background against which the staff would report upon and assess the member's intended external debt policies. The Staff intended to determine whether present and prospective levels of external borrowing were sustainable, drawing from the intertemporal understanding of sustainability (Laskaridis 2021: 202) which involved studying the medium-term debt servicing capacity of the economy. This extension became profoundly influential on the Fund's work on debt analysis and sovereign debt restructuring as it operationally had to satisfy the requirement that a defaulting country must have an IMF programme.

The Staff were also adamant that the Fund's role should not be formalized beyond the routinized practice of debt restructuring that was dominant in the 1980s where it operationally had to satisfy the requirement that a defaulting country should have an IMF programme before embarking on debt rescheduling before seeking Paris Club relief, nor should there be establishment of routinized policies and guidelines in that respect. It was becoming increasingly evident, however that this restructuring approach was inadequate and inefficient as there were many repeated applications to the Paris Club for debt restructuring. The first criteria for sustainability were instituted in 1996 in the Highly indebted Poor Country Initiative (HIPC) following even deeper rescheduling through the Paris Club. The HIPC initiative was launched to provide a qualifying criterion to calculate debt levels as a basis for calculating the amount

of debt relief for individual countries as a measure to comprehensively bring down foreign debt stock of highly indebted African countries.

Access to relief under the HIPC initiative was determined by the eligibility threshold of present value (PV) of debt/export threshold of 200%-250% and present value (PV) of debt-budget revenue threshold of 280%. The enhanced HIPC initiative brought down the ratios to 150% PV debt exports and 250% PV debt-budget revenue to bring debt service exports low to a guideline of 15–20%. However, both initiatives did not give systematic attention to setting maximum thresholds for debt-service-budget revenue ratios but only aimed for a debt-service-revenue ratio that was low and declining (UNCTAD 2004) in their intended goal to reduce debt ratios for eligible countries and achieve an equitable and politically acceptable basis for the treatment of debtors and participation of creditors, the initiatives did not consider differentiated ratios for countries (Hjertholm 2001). Further, the lengthy and highly conditional policy programmes that countries were required to implement, majorly focusing on reinstating repayment only confirmed the creditors' trivial approach to development problems (Laskaridis 2021: 222).

Amidst severe criticisms of the failure of its policy conditionalities, the IMF explored the use of a tool, in the form of a template, that would be used to find the balance between austerity and potential of default and regulate its own loan approval and more formally, mediate between the private sector and debtor country. The forward-looking approach to sustainability became fully operational as a policy tool in 2002 by the IMF through the Debt sustainability analysis (DSA) where sustainability became about the future and expectations based on future trajectories (IMF 2002: 24). The DSA template it uses is based on a theoretical condition of solvency where expected future surpluses cover current debt. This means that current debts cannot be larger than what in present value terms all future primary balances must service. The DSA template focuses on the debt-to-GDP ratio as a product of the evolution of deficit, growth rate, interest rate, inflation and exchange rate (Laskaridis 2021: 228). Then through the debt dynamics equation, the future time path of the debt-to GDP ratio over a suggested time horizon of five years (medium term) would be calculated to determine if the debt-to-GDP ratio was on a stable or declining path and meet the solvency criterion. The DSA considers a few micro variables namely, the real GDP growth, exchange rate appreciation, GDP deflator in US dollars, nominal external interest rates, growth of exports, and growth of imports which would be subjected to stress tests either separately or combined to identify possible underlying optimism in the baseline projection (Rehbein 2023).



The 2002 DSA was criticized for a number of reasons; first it did not incorporate the volatility of commodity prices, a key determinant of export earnings which determines part of debt repayment abilities. Second, the economist view underpinning the debt dynamic equation in the template was criticized to rely heavily on primary balances ignoring non-primary balances that inform evolution of the debt-to-GDP ratio thus undermining alternative routes to financing deficits. Further, the expectation to return to primary surplus, and often a high one to achieve debt reduction, a debtor country is usually expected to increase its revenue or cut expenditures and thus need to undertake fiscal consolidation. In fact, in a 2019 review of its own programmes from 2011 to 2017 the IMF indicated that real interest rate or primary deficits forecasts had less impact on the overall errors that lead to inaccurate projections, confirming the inadequacy of the components of the debt dynamic equation (IMF 2019; Hasan et al. 2024). Third, the DSA template which is still in use to date, does not consider sustainability in the context of a country prioritizing debt service over providing basic social services and protection of human rights. Instead, it is used as a loan approval process that enables creditors prioritize the cost of restructuring over that of failing to restructure debt to alleviate debtors' situation (Laskaridis 2021: 235).

While the DSA framework has undergone several changes since then and most recently in 2018,³ a review of debt sustainability analyses since 2020 in the middle of the COVID-19 pandemic, has shown IMF has displayed reluctance to discuss debt treatments as a better option for highly indebted countries.⁴ This reluctance has in the past often led prolonged debt crises and bailing out other creditors and continues to play out under the G20 common Framework as this paper will illustrate in subsequent sections.

Economic and Legal Foundation

As illustrated, the involvement of the IMF in sovereign debt restructuring processes emerged as a response of the 1980s debt crisis and is inextricably linked to the interrelation of G7 countries, with the United States at the core, international

financial institutions, and large commercial banks situated within the territories of the G7 countries (Manzo 2020). Over time, the IMF's functions in restructuring have evolved and can be categorized into two: surveillance functions and lending functions. The lending function entails the Fund's processes in managing and resolving debt crisis while the surveillance function informs IMF's role in financial crisis prevention in trying to avoid or anticipate a possible sovereign debt restructuring of its member states. The IMF surveillance process that the IMF currently pursues (Boughton 2014: 7) greatly involves evaluation of consistency of policies across countries, advising member states on how to implement their policies and transmitting core messages concerning what is happening to member states and warn them when their policies are off track (Manzo 2020): The IMF over the last decade has refined its surveillance tools namely to assess Market access (MAA) and debt sustainability (DSA) to increase its capacity to develop and send accurate signals to member states and interested parties to avoid sovereign debt restructuring by reversing the factors that can trigger one. The basis of these signals is done through its DSA frameworks which are highly theoretical-conceptual folding.

In her thesis, Laskaridis (2021) points that the theoretical grounds guiding IMF's DSA seem to be disconnected from economics discipline where debt sustainability is not determined by the economics of the present value budget constraint, but rather the cautious balance of finding the adjustment path that lies just shy of preferring default and halting debt service. Nevertheless, at the stage of prevention, the IMF relies on information collected from its Article IV consultation by its staff members of the state being evaluated. The information from the DSAs form specific country reports in the frame of the multilateral surveillance framework (IMF 2017). These reports are usually presented to IMF's Managing Director and the Executive Board for approval. Afterward, they are sent to the member state, and their contents are made public generally with recommendations for the involved government to make to prevent the observed problem that might affect its debt sustainability. It is through these reports that the Fund relays messages to the international community on the economic state of member countries, give warnings where policies are considered off track and go further to give recommendation to the government to make changes in policies to prevent worsening of the observed problem, eventually affecting debt sustainability. Manzo (2020) suggests, that the intention of the surveillance reports as sustained by the information provided by DSAs provides the IMF control to the extent of adequacy of a government to the preceding warnings or recommendations.

While IMF's role in sovereign debt restructuring begins with its surveillance function, its lending or financing

³ Early reviews were done between 2006 and 2009 (IMF 2006a; 2006b; 2009) and later in the second half of 2000s (IMF 2007; 2008; 2010). The LIC DSF was reviewed in (IMF 2012), updated in (IMF 2013), with a final review in 2027 with its latest guidance note released in 2018 (IMF 2018).

⁴ Between November 2020 and September 2022, 179 IMF country reports in 117 countries have been assessed that include debt sustainability analyses. Only ten countries were mentioned where debt treatment was a potentially necessary option while in all other cases recommendation of debt treatments.



function defines when, how and how much of restructuring will be implemented if difficulties in accessing and excessive levels of indebtedness appear as warning signals (Manzo 2020). The decision on ‘when’ to restructure, though is always a political decision, IMF’s opinion is certainly influential, heavily supported, and triggered by its DSA since in its conceptual framework, the activation of restructuring is linked to the notion of unsustainability (Laskaridis 2021). This is also dependent on the need for flexibility on the Fund to activate programmes before restructuring commences (IMF 2016). Similarly, the aspect of ‘how’ debt will be restructured is dependent on the information provided by DSA. Lastly, the IMF influences ‘how much’ debt to restructure with its fiscal and monetary conditionalities. Under these circumstances, restructuring occurs by means of making operative its lending policy by means of financing programmes incorporating conditionalities which are essentially instruments through which the severely indebted state will commit itself to adopt determined set of policies to access the Fund’s resources, which as briefly illustrated in the previous section, was formalized during the 1980s crisis, where it acted as a financial agent, transferring huge amounts of resources to debt-distressed countries, thus operating as a defacto ‘lender of last resort’ (Babb and-Buira 2004; Gelpern 2014).

The financing programmes consisting of fiscal and monetary adjustments are motivated by neoliberal intellectual influences since the mid-1970s which embraced the notion of ‘free trade’ as the main engine of economic growth to determine how an indebted state should destine to repay their debt. The norms of the neoliberal system favor predominance of the market over the state, development pursued through privatization and trade, assumption of personal responsibility for failure, and measuring development by national statistics lie growth of GDP. This system reflects a moral value system that favors individualism and belief that capitalism is the best economic system, and freedom is viewed more favourably than equality. The IMF has managed to legitimize these norms through research, its surveillance functions and tools namely the DSA and policies advising its policy programmes (Gill 1993). De Angelis (2003) alludes to the ‘prevention’ mandate of the IMF as simply a way for the Fund to expand and impose its neoliberal ideologies, which ultimately has been the cause of crises in the era of financial globalization.

While the IMF has made efforts to suggest its policies are now flexible following its admission that neoliberalism has been oversold, in practice a re-empowered IMF is operating on the same ideological positions more so in Africa.⁵

⁵ A review of 37 IMF loan documents and Article iv reports between July 2021 and January 2022 for ten African countries showed that the new lending arrangements enforced deeper austerity that constrained public sector wage bills and mined progress in social sector spending

It is important to note that, legally, the IMF does not have an international bankruptcy framework, or any specifically designed process guided by international law to organize sovereign debt restructurings including from its Articles of Agreement.⁶ Rather it articulates its modules of restructuring frameworks created by itself for other purposes arising from prescriptions established from the Fund’s Articles of Agreement (Art, 12, Sec ‘Conclusion’b), its arrangements with other forums or financial institutions, reports approved by its governing body and lastly, guidelines directed to its own staff or to a more general public (Manzo 2020). Countries often use domestic bankruptcy laws to guide the orderly restructuring and discharge of debts. The laws define how restructuring will proceed, who will get paid first, and firm control among other restructuring proceedings, usually to protect corporations and their creditors. Currently, no comprehensive international bankruptcy procedure or international framework guides the efficient resolution of sovereign debt crises (Manzo 2020: 4). Similarly, there is no homogenous international sovereign debt regime (Gelpern 2016: 25) Instead, the existing system features a decentralized market-based process in which debtor countries engage in complex and often lengthy negotiations with their creditors with diverse interests.

Role of IMF’s DSA in Sovereign Debt Restructuring Within the G20

While sovereign debt restructuring consists of a host of players, the Bretton Woods institutions remain key influencers in the success or failure of the process. Yet, their participation remains relevant through their adeptness at reinventing and experimenting by making rules, procedures, and policy innovations. Besides the IMF’s modular process of sovereign debt restructuring, the G20 considers the Paris Club as the major platform for restructuring official bilateral debt.⁷ The origins of Paris Club, an informal group of official creditors with 21 permanent members⁸ is placed in

Footnote 5 (continued)

such as health and education. https://actionaid.org/sites/default/files/publications/Fifty%20Years%20of%20Failure%20-%20The%20IMF%20C%20Debt%20and%20Austerity%20in%20Africa_0.pdf

⁶ Manzo (2020) Annex list of IMF Conditionalities Guidelines.

⁷ In Hamburg, July 2017, leaders of the G20 endorse the ‘Hamburg Action Plan’ developed by the G20 International Financial Architecture Working Group. In view of supporting financing for development in low-income countries, the G20 supported the Paris Club work as the principal international forum for restructuring official bilateral trade, towards the broader inclusion of others. https://g20.utoronto.ca/2018/g20_ifa_wg_2018_-_final_report.pdf

⁸ They are now 22 Permanent Member States: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, South Korea (since 2016), Ireland, Israel, Japan, Netherlands, Norway, Russia,



1956. Following a military coup in 1955, Argentina sought membership in the IMF which required regularizing its debt situation with its principal creditor countries. On invitation by the then-French Minister, Argentina's bilateral creditors met as a founding act of the Paris Club.⁹ The governments that became members of the Paris Club operate informally, with no statutes or judicial existence. Fast forward to the current debt crisis (United Nations 2024) exacerbated by the vulnerabilities and economic disruptions of the COVID-19 pandemic that has pushed over 100 million people, one-third of whom are in sub-Saharan Africa and described as 'new poor', the G20 Common Framework for Debt treatment came into force in 2021 to address the debt crises of low-income countries. The Framework is meant to fast-track deep relief for low-income countries and offer cross-cutting provisions for enhanced debt management. The framework only considers the treatment of public and publicly guaranteed debts but allows private creditors to provide comparable relief on the debt owed to them. Guided by the principles of the Paris Club, all official bilateral creditors and all G20 and Paris Club creditors with claims on a debtor country coordinate the debt restructuring conditions. The extent of debt treatment and IMF-supported programmes required for eligible countries is based on the outcome of the IMF's Debt Sustainability Analysis which has been problematic. The G20 Common Framework decision-making processes do not allow debt conclusions and financial commitments without consensus among participating and non-participating creditor countries. The comparability of treatment principle requires a debtor country agreement not to accept from non-Paris Club commercial and bilateral creditors terms of treatment of debt less favourable to the debtor than those agreed by the Paris Club.¹⁰

Additionally, the use of DSA is far from being politically neutral since borrowing countries with high foreign direct investments face harsher austerity conditions while extenuating long negotiation process that extends a debt crisis and prolonged suffering as is the case with Zambia for example, whose restructuring process has been wrought with delays since it applied in 2021. 21 months after defaulting on its Eurobond repayments and applying to the Common Framework, Zambia received IMF approval for its 38-month loan

programme under the Extended Credit Facility arrangement to receive funding equivalent to 1.3 billion in August 2022. The loan was meant to legitimize the temporary suspension of its external debt servicing subject to obtaining financing assurances from its bilateral creditors¹¹ and negotiate debt restructuring deals that meet IMF's DSA standards. Before the IMF approved the loan, Zambia needed to show policy intent to demonstrate a reduction in its borrowing needs but increased its capacity to repay past and future debts. The policy plans included the elimination of fuel subsidies, slashing agricultural subsidies and privatization of public investments.¹²

While Zambia's authorities had made it clear from the start that they would not include local currency debt in restructuring which the IMF supported stating that restructuring of domestically induced debt would trigger significant financial stability and potentially require public resources to support the sector, IMF's DSA for Zambia was conducted according to IMF's LIC-DSF framework which is based on a residency criterion (Maret 2023). This means local currency debt held by non-residents is included in a country's external debt stock analysis.¹³ This decision created a sharp discrepancy between the scope of the DSA and that of restructuring which would have meant additional debt relief requirements from official creditors and Eurobond holders if non-restructurable debt increased in the external debt stock. Indeed, China voiced its displeasure and demanded a restructuring of the debt held by non-residents (non-resident holdings) with similar demands voiced by Zambia's Eurobond holders. Uncertainty around potential restructuring of the non-resident holdings led to huge foreign outflows that drained Zambia's reserves which led to pressure on its local currency as investors sold off their holdings (Maret 2023). The exit of foreign investors led to dysfunction of Zambia's domestic market which raised difficulties for the country's government in raising much-needed financing while still implementing IMF austerity policies.

In October 2023, following nearly three years of talks between its sovereign and bondholders, Zambia finally reached a debt restructuring deal. However, official bilateral

Footnote 8 (continued)

Sweden, Switzerland, United Kingdom and United States, Spain, Italy and South Africa (prospective member since 2022).

⁹ In its formative years, the Paris Club, was not designed to become a permanent player in international financial architecture. Discussions about whether IMF or World Bank should take over its duties in the 1960s and 1970s was rife with proposal of a 'Washington Club' to conduct bilateral debt reschedulings. However, the French prevailed in negotiations and the Paris club was not moved to Washington.

¹⁰ <https://clubdeparis.org/en/communications/page/the-six-principles>.

¹¹ Zambia's creditors in the Official creditor committee under the G20 Common framework, chaired by China and France reached in July 2022 and committed to negotiating a restructuring of its debt which would unlock adoption of IMF's 1.4 billion funding programme. <https://www.reuters.com/world/africa/g20-chair-says-zambia-as-creditors-commit-negotiate-restructuring-terms-2022-07-30/>

¹² IMF press release <https://www.imf.org/en/News/Articles/2022/08/31/pr22297-imf-executive-board-approves-new-extended-credit-facility-arrangement-for-zambia>

¹³ IMF staff report on Zambia's request for an arrangement under the Extended Credit Facility; <https://www.imf.org/-/media/Files/Publications/CR/2022/English/1ZMBEA2022001.ashx>



creditors vetoed the agreement in November 2023 on the basis that the ‘agreement in principle’ with bondholders would breach the DSA targets based on IMF’s updated debt assessment in July 2023, which featured significant changes compared to the one published in September 2022 (Grigorian and Bhayana 2024) which signalled Zambia’s suitability for debt restructuring. The decision to veto the agreement is concerning since historically, bilateral creditors represented by the Paris Club have always supported comparability of treatment, which Zambia aptly demonstrated. Zambia’s experience in the G20 common Framework underpins how IMF policies, more so, its DSA criterion, together with geopolitics and negotiations among external stakeholders mostly creditors, have an unjust impact on developing countries in debt distress.

IMF’S Debt Sustainability Analysis Framework

In 2002, the IMF introduced a DSA template into all member states reports as part of its article IV review to assess countries predominantly reliant on international capital markets (Market Access Countries, MAC), followed by a Low- Income-Countries (LIC) framework in 2005. The two debt sustainability frameworks have common features for instance having two separate assessments, one focusing on total external debt and the other on public debt in general. The analytics involved are pegged on a notion of solvency, cropping from the satisfaction of an inter-temporal budget constraints (Laskaridis 2021: 33). This is aimed at checking whether the future path of the debt-to-GDP ratio is on a stable, declining or explosive path. The trajectory of the future debt-to-GDP ratio is provided by an intertemporal budget, and sustainability is rooted in solvency. It is critical to note that both frameworks are organized around a baseline macro-economic scenario that is used to produce a projected future time path of the annual debt-to-GDP ratio and they both stress-test the baseline macroeconomic projections as part of a realism check for underlying optimism. Policy templates to assess debt sustainability are organized around the notion of sustainability stemming from economics of the intertemporal budget constraint, based on national income identities where the assessments of debt sustainability begin. Taking the example of using the government’s budget, that ultimately focuses on public debt, the initial equation unfolds as:

$$D_t - D_{t-1} = G_t + iD_{t-1} - R_t + OT_t \quad (1)$$

where: D_t is the change in debt from year to year due to current government expenditure G_t and nominal interest payments i , less revenues R_t and other transactions, OT_t . Other transactions highlighted could refer to non-debt sources of financing, such as seigniorage or privatization

receipts, entered with a negative sign, or asset purchases, such as bank recapitalizations. Other transactions could refer to non-debt sources of financing, such as seigniorage or privatization receipts, entered with a negative sign, or asset purchases, such as bank recapitalizations.

Based on equation (i), if OT_t is assumed to be zero, and PB_t the primary balance to be $R_t - G_t$, the flow budget will become:

$$D_t = (1 + i)D_{t-1} - PB_t \quad (2)$$

Equation (ii) shows that debt in one period is equal to the previous period’s debt, plus the interest paid on it, less the primary balance. If there was a deficit in the previous period, PB_t would be a negative number, D_t would be equal to the previous period debt plus the amount borrowed to cover the deficit. This can be generalized to show the accumulation of debt in a future period n , where the intertemporal budget connects stock of debt in year n with all the flows from the first period. The intertemporal budget constraint is:

$$D_n = (1 + i)^n D_0 - \sum_{j=1}^n (1 + i)^{n-j} PB_j \quad (3)$$

D in period n is the result of cumulative debt, interest payments and cumulative sum of primary balances. Rearranging in terms of the first period debt, from the intertemporal budget constraint, we can derive the solvency condition, which is given below in Equation (iv), when the second term is set to zero.

$$D_0 = \sum_{j=1}^n \left(\frac{1}{1 + i} \right)^j PB_j + \left(\frac{1}{1 + i} \right)^n D_n \quad (4)$$

The period budget constraint is presented in dynamic form and solved through the transversality condition. Debt in the initial period is the discounted sum of all future primary balances and present discounted value of the last period’s debt. The last term is the terminal condition, at $t = n$. To ensure solvency, a condition known as the transversality condition needs to be imposed, shown in Equation (v). As n approaches infinity, provided that $i > 0$, then $(1/1 + i) < 1$, and $(1/1 + i)^n$ approaches zero. So long as D_n — the terminal period debt— does not grow faster than i , the limit of the product shown in Equation (v) goes to zero.

$$\lim_{n \rightarrow \infty} \left(\frac{1}{1 + i} \right)^n D_n = 0 \quad (5)$$

With the second term of equation (iv) taken as tending to zero, debt is defined as sustainable if today’s debt, principal and interest is covered through future surpluses; meaning the theoretical condition of solvency is fulfilled. This captures the idea that current debts cannot be greater than what in present value

terms all future primary balances must service. Having excluded other sources of financing the deficit (seigniorage for instance), it entrenches the idea that over the infinite time horizon, debts will be repaid through surpluses. The above highlighted analysis is usually conducted in real and in ratio terms within debt sustainability assessments. Comparing the evolution of the debt to a measure of capacity to pay, we can rewrite the budget as a share of GDP. With the real growth rate being $g_t = (Y_t - Y_{t-1}) / Y_{t-1}$ and hence, real output $Y_t = Y_{t-1}(1 + g_t)$ and substituting for r the real rate of interest using the Fischer equation, stated as follows:

$$(1 + i_t) = (1 + \pi_t) \cdot (1 + r_t) \quad (6)$$

Besides this, the flow budget constraint can be used to express the debt dynamics as in equation(ii) in real terms and as a share of GDP, as:

$$\frac{D_t}{P_t Y_t} = \left[\frac{(1 + i_t)}{(1 + \pi_t)(1 + g_t)} \frac{D_{t-1}}{P_{t-1} Y_{t-1}} \right] - \frac{PB_t}{P_t Y_t} \quad (7)$$

This can then be simplified as:

$$d_t = \frac{(1 + r_t)}{(1 + g_t)} d_{t-1} - pb_t \quad (8)$$

The equation above decomposes the factors behind the evolution of the debt ratio into the evolution of the primary balance (second term), as well as the contributions of the growth rate, the interest rate and inflation. These three elements i , g and π , fall into what can be called automatic debt dynamics, capturing the evolution of debt from period to period that does not arise from primary balances. It also outlines the debt-dynamics equation and is the centre piece of DSA templates. The solvency requirements are analytically identical whether referring to public or external debt sustainability so that when discussing the debt of a country or that of a government, sustainability is respectively linked to the evolution of the current account and the evolution of the budget deficit. Sustainability is therefore portrayed as a forward-looking idea, in which future primary balances matter. Additionally, the balance (fiscal or non-interest current account) could develop in various ways and remain consistent with the solvency criterion. Within this formal theoretical definition, borrowers with any size of debt could be solvent provided that sufficient primary balances satisfying the solvency criterion can arise at some point in the future. Therefore, as imprinted in the policy tools that measure debt sustainability, one cares to see whether the dynamics of the debt ratio are on a stable, declining or explosive path within a specified time horizon, achieved through equation (viii).

This article will focus on unpacking IMF's DSA Frameworks, specifically IMF-World Bank Joint Debt Sustainability Framework for Low-Income Countries and its current weakness through a literature review.

The IMF-World Bank Joint Debt Sustainability Framework for Low-Income Countries

Most recently, in 2017, the IMF and World Bank reworked its 2005 DSF model, in its fourth review, for Low-income countries, following critiques of the including its unduly and mechanical approach, errors in estimating the impacts of fiscal adjustment and future growth, and the framework's inflexibility to country-specific debt vulnerabilities, including exchange rate and export price vitality. In this framework, the IMF executive Board defines debt sustainability as;

public debt can be regarded as sustainable when the primary balance needed to at least stabilize debt under both the baseline and realistic shock scenario is economically and politically feasible, such that the level of debt is consistent with an acceptably low rollover risk and with preserving potential growth at a satisfactory level (IMF 2021: 6).

Low-income countries (LICs) are usually those eligible for IMF's Poverty Reductions and Growth Trust (PGRT) concessional financing and have access to zero rate interest financing from the International Development Association (IDA), the World Bank's low-income arm. Though the LIC Debt Sustainability Framework (DSF) retains the focus on public and publicly guaranteed (PPG) debt of the original framework, the new model identifies external debt distress based on arrears on commercial debt restructuring. It estimates the probability of distress with explanatory variables that include a debt burden indicator (such as the present value of public and publicly guaranteed external debt to GDP or exports), the country's growth rate, foreign exchange reserves, and the country's policy and institutional Assessment (CPIA) rating by running a probit model.

The 2017 DSF LIC begins by building a composite indicator (CI) of debt-carrying capacity. This indicator is a weighted average of the World's Index of the Quality of Policies and institution (CPIA), GDP growth (GR), the share of remittances over GDP (REM), international reserves over imports (RES), and world GDP growth (WGR); defined as;

$$\begin{aligned}
 CI = & 0.3.85 \times CPIA + 2.712 \times GR + 2.022 \\
 & \times REM + +4.052 \times RES - 3.99 \\
 & \times RES2 + 13.52 \times WGR
 \end{aligned}$$

The *CI* score is then used to categorize countries into three debt carrying capacity groups (weak, medium, and strong) and debt thresholds are established each for each of the groups. It estimates the probability of distress with explanatory variables that include a debt burden indicator (such as the present value of public and publicly guaranteed external debt to GDP or exports), the country's growth rate, foreign exchange reserves, and the country's policy and institutional Assessment (CPIA) rating by running a probit model.

All the variables in the model are averaged over a ten-year period split into five years of historical data and five years of projections from the IMF World Economic Outlook Data set. The DSF assumes that the CPIA value remains constant over the five-year forecast period since there are no projections for it. The coefficients in the model infer that the marginal effects of reserves on debt-carrying capacity turn negative when reserves surpass 50% of imports and the overall effect becomes negative when imports exceed 100% of imports (Table 1; IMF, 2017).

Afterward, risk ratings are assigned by comparing the actual debt burden indicator with the thresholds derived for each country group. The assessment of external debt-burden indicators concerning thresholds mirrors the ability of an LIC to service a certain level of external debt. A country is classified as weak, medium, or strong and a rule for the level of debt distress is designed. If none of the thresholds are breached under both the baseline projections and the most extreme stress tests, the country is classified as being at low risk of debt distress. On the other hand, if the thresholds are never breached under the baseline projections but at least one indicator breaks the threshold under the stress tests, a country is then classified as being at moderate risk of debt distress. A country is deemed at high risk of debt distress if at least one indicator violates the threshold in the baseline projection.

Table 1 DSF thresholds

Debt carrying capacity	PV of PPG Ext. Debt as % of		PV of PPG Ext. debt service as % of		PV total public debt as % of
	GDP	Exports	GDP	Exports	GDP
Weak ($CI < 2.69$)	30	140	10	14	35
Medium ($2.69 < CI < 3.05$)	40	180	15	18	55
Strong ($CI > 3.05$)	55	240	21	23	70

Critique of the International Monetary Fund's LIC-DSF Debt Sustainability Analysis

Missing Climate Change Risk Analysis

Africa greatly bears the direct and indirect expenses of the climate change crisis despite being the least contributor to its causes. The financial consequences of climate change in Africa are estimated by the African Development Bank to be between \$289.2 billion and \$440.5 billion. Furthermore, because climate change poses a threat to their destruction, the productive potential of debt, which has been utilized to finance significant infrastructure developments in Africa, is at risk. In addition, most African nations have significantly increased their debt following climate shocks as a result of their poor sovereign credit risk ratings. According to IMF research, nations that are more vulnerable to climate change have a larger probability of failing than countries that are thought to be resilient, even after accounting for traditional predictors of sovereign defaults (IMF 2020: 12). A stress test, which focuses mostly on physical risks like climate-induced natural calamities, is currently one of the IMF's DSA instruments for low-income countries. But because these scenarios only cover three to five years, they overlook climate hazards and extend beyond medium horizons. Only mid- to long-term scenarios can adequately represent the characteristics of climate risks, when many important physical climate consequences are expected to occur. Furthermore, as recent events have demonstrated, climate change risks significantly exacerbate debt distress and limit low-income countries' access to international capital markets because most of them are highly dependent on fossil fuels and are therefore vulnerable to climate risks. These frameworks fail to take climate change risks into account when evaluating sovereign debt and credit ratings of nations (Dunz et al. 2021).

Overlooking Gender in IMF's Debt Sustainability Analysis

While there is a growing body of literature examining the IMF's Low-Income Countries Debt Sustainability Framework (LIC DSF) and its integration of gender considerations, specific critiques focusing solely on the lack of a gender lens within the LIC DSF are limited. However, there is a growing body of scholarly research examining how IMF programmes often stemming from DSA assessments affect gender equality. To counter the balance of payments problems, IMF advise for cash stripped countries has frequently focused on shifting toward broad based consumption taxes, while lowering trade taxes and corporate income taxes. In their study, Donno et al. (2024),



provide systematic cross-national evidence that IMF tax conditionality, specifically with the introduction of Value added Tax (VAT) has negative consequences for women's socio-economic wellbeing. The study uniquely focuses on the revenue-side of conditionality of IMF polices, via the introduction of a VAT, offering theoretical and empirical support for a specific channel of influence that is not typically emphasized in gender-based critiques of IMF conditionality. By conducting causal inference methods to examine the variegated effects of VAT introduction on women's life chances relative to men's in terms of economic participation, from a sample of 147 countries between 1980 and 2029, the study finds that women's life deteriorates relative to men's in terms of economic participation, education and health. The study further affirms that during an IMF programme with tax conditionality, women are significantly less satisfied with home life and report more material hardships compared to years under an IMF programme without tax conditionality. Scholars have also interrogated IMF DSA From a feminist economics perspective, which redefines the analytical and indicator categories, and the epistemological and methodical transformation of economics and incorporates social reproduction in the theoretical structure. According to their study, Miranda and Geoghegan (2024) debt sustainability is viewed as a political fact more than a technical and economic calculation given that it implies to value and then decides over whom the burden of financial and fiscal consequences fall. This directly affects women who are viewed as mainly responsible for the social reproduction of life and as generators of the flows of material and symbolic resources contributing towards guaranteeing debt sustainability. The budget restrictions resulting from the need to reduce deficits or guarantee debt repayment prevent the financing of policies that ensure rights and satisfy women's needs. This illustrates that the priority given to financial protection of the interests of financiers over the interests of the population of the borrower countries, including women, deepens a condition and position that was already subordinated prior to indebtedness or the debt crisis. The consequences of ensuring debt sustainability from an androcentric perspective promotes a greater pressure over the work of women, paid or unpaid. Additionally, fiscal consolidation generates indebtedness of households and overloads women with work aimed at providing these services in a private or family way and thus debt sustainability deepens social reproduction and care crisis. Thus, the study affirms a greater pressure over women because of IMF debt sustainability.

Limited Scope to Forecast Long-term Debt Sustainability

By conducting a counterfactual analysis, Ugo Panizza (2022), reviews debt sustainability frameworks used by

the main international financial institutions to determine whether the definitions of debt sustainability focus on long-term sustainability. The study discusses the conceptual difficulties of assessing solvency in developing and emerging economies. According to the author, long-term debt sustainability relates to the concept of solvency i.e. a government is deemed solvent when the PV of its future income streams is at least as large as the current debt level plus the PV of future expenditure. The author argues that even though the IMF's definition of debt sustainability focuses on both solvency and illiquidity, it is not appropriate in assessing long-term debt sustainability. The author acknowledges that assessing debt sustainability in EMDEs is especially difficult since they are subject to large real and financial shocks. The author relates the concept of long-term debt sustainability using an intertemporal budget constraint equation, where the stock of debt does not exceed the present value of future budget balances. He suggests that the intertemporal budget constraint (as used in the study) determines long-term sustainability as a purely fiscal problem, whereas in the presence of large external debt, a country might be unable to pay its debt even if implements a tight fiscal policy. In a counterfactual analysis, he examines a sample of emerging countries.¹⁴ Between 1970 and 2020 to determine what their actual debt levels would be if all countries had continuous access to the international capital market at low rates and whether countries default because they borrow too much. After all, investors perceive they will default. He finds that from 1970 to 2020, most of the countries under study did not have solvency problems and if they had been able to access the international capital market, the majority would have paid less to international creditors without restructuring their debt and enjoyed lower debt levels.

The study effectively demonstrates the absence of long-term solvency in the definition of debt sustainability analysis as used by IMF, which focus mainly on restoring market access in the short term while promoting the use of instruments like local currency debt bonds, clearly minimizes the likelihood of countries, especially EMDEs in solving their debt crisis. Civil society organizations have expressed a similar position. While the IMF defines a country as being in debt distress when it has defaulted on external debt, the same definition as used in the LIC DSF

¹⁴ The study examines actual cashflows of selected emerging economies to estimate actual internal rates of return and counterfactual internal rates of returns and debt levels with the assumption that the countries; i) the countries honor their debts ii) never lose access to the international capital market and iii) and don't pay a premium over US treasuries. The countries are Argentina, Brazil, Colombia, Ecuador, Egypt, Jordan, Pakistan, Thailand, Turkey, Morocco, Mexico, Panama, Peru, Philippines.



has been questioned for being used to assess debt prior to loan programmes since IMF loans are meant to prevent defaults. Instead, it opts to use levels of classifying debt rather than declare debt as ‘unsustainable’ to justify loan programmes rather than restructurings which forces unfair and unsuccessful austerity on people in the debtor country, prolongs the period of¹⁵ a debt crisis, and risks public money being needed for debt relief rather than original lenders having to pay.

Lacking Assessment of Availability and Funding for National Development Goals

Brian Pinto (2019), in his study, reviews DSAs for Ghana, Rwanda, and Ethiopia and the challenges associated with IMF’s 2017 LIC DSF. As the author notes, Ghana at the time of the study (2017) was already experiencing macroeconomic difficulty with its public debt at 74% of GDP compared to a projected 70.4% by the IMF-World Bank Debt Sustainability Analysis in October 2016. The IMF analysis projected that new oil production in the country would raise growth rates, primary surpluses, and foreign exchange reserves while pushing for a depreciation of the cedi/USD rate and issuing Eurobonds to prevent soaring interest costs in the domestic market. According to the author, the move to issue Eurobonds would only enhance the currency risks on Ghana’s balance sheet. Interestingly, the IMF report did not mention the ease of public resources or the misuse of natural resources as a concern and only captured it as a concern later in its 2017 report, where it noted irregularities in Ghana’s public spending that were against PFM systems. In the case of Rwanda, the author notes that in 2016, the IMF 2017 Article IV report, rates the country to be at low risk of debt distress with an external debt-to-GDP ratio of 39% at the end of 2016. The Fund’s report indicates that Growth-enhancing infrastructure by the country would help in maintaining its low debt risk rating. The analysis fails to consider fundamental drivers of external debt, i.e. Foreign Direct Investment (FDI) change, and endogenous debt dynamics such as effects of interest rates, exchange rates, and growth rates.

The author indicates that, had the 2016 analysis captured ‘identified net debt-creating flows’ in its analysis, then the external debt-to-GDP would have been 53.4% at the end of 2016 instead of the conservative figure of 39%. Upon closer scrutiny, the author finds in the case of Ethiopia, its public sector deficit, primarily driven by large infrastructure

investments, is the main cause of its debt distress contradicting IMF’s 2018 LIC DSF analysis, which downgraded it to high-risk debt distress on account of its ratio of PPG external debt service to exports (DSE) being above its threshold in the baseline projection. According to the author, the DSE breach was on account of a maturing principal on non-concessional loans, occasioned by a maturity deduction of a bilateral deposit at the central bank. The fact that IMF’s 2018 DSA mentioned nothing about Ethiopia’s public debt without flagging any ‘additional risks’ draws some concerns about the viability of IMF’s LIC DSF.

The study further critiques the obsolete nature of the 2017 DSF which still focuses on PPG’s external debt as a measure of debt sustainability, failing to consider widening fiscal deficits, slow growth, slump in commodity prices, exchange rate depreciations, and optimistic growth forecasts as the main driver of debt increase in many low-income countries. Additionally, the act of simply grafting domestic debt onto the PV of external public debt as it persists in the 2017 DSF fails to connect the causal flow to unsustainable public finances to external debt, confusing the symptom with the disease. Most crucially, the study affirms extensive research detailing the weakness of IMF DSF in reconciling debt sustainability and development at a time when public debt problems are now more dire than ever, while investment needs for Sustainable Development Goals (SDGs) are immense.

Large Forecast Errors

Given the severity of the current debt crisis in low-income countries in Sub-Saharan Africa, the current DSF framework would appear inadequate to project public debt accurately. Flores et al. (2022) in the study seek to understand whether the accuracy of public debt forecasts can be relied upon. In doing so, they compile datasets of medium-term public debt forecasts for an unbalanced panel of 174 countries based on IMF forecasts between 1995 and 2020 and compared with projections from the Economic Intelligence Unit (EIU) from 2007 to 2020, for a sample of 174 countries, covering advanced economies (AEs) and Emerging Markets and Developed Economies (EMDEs) to assess how forecasts vary across countries and identify country-specific factors related to debt forecast errors, where forecast errors are (defined as the realized minus the forecasted debt ratio) in debt projections. The study found that the magnitude of forecast errors is similar between countries with IMF programmes and countries without, in AEs and EMDEs. However, positive errors in EMDES are systemic, irrespective of the occurrence of recessions while positive errors in AEs are usually associated with unforeseen recessions in the forecast horizon. Additionally, it found that the forecast error is

¹⁵ Joint position from 34 civil society organizations on resolving sovereign debt crises: https://debtjustice.org.uk/wp-content/uploads/2019/10/IMF-policy-on-debt-restructurings_English_10.19-1.pdf



significantly larger when the projection is for debt ratios to decline than when increasing debt is projected. The study also found that forecast errors are larger in countries with higher debt ratios. The study concludes that public debt projections by IMF and the EIU tend to underestimate actual debt ratios, with the forecast error increasing over the forecast horizon, by close to 10 percent in the five-year ahead projection.

Conclusion

Debt Sustainability Analysis (DSA) framework, as employed by the International Monetary Fund (IMF), reveals a significant contradiction between its claimed objectivity and its role in reinforcing the hegemonic dominance of international financial institutions. While designed to assess a nation's debt sustainability, the DSA often fails to account for the complexities of long-term economic development and instead prioritizes fiscal consolidation measures that may not align with the needs of developing countries. This limited scope, coupled with its inherent biases, frequently exacerbates the debt challenges faced by developing countries. By focusing on short-term stability and aligning with the interests of powerful institutional stakeholders, the DSA inadvertently reinforces a cycle of dependency that undermines true economic sovereignty. Ultimately, The IMF, as illustrated, plays a key role in facilitating negotiation between debtor countries and creditors has not always been successful in ensuring timely restructuring and those ultimately carried out have not been deep enough to restore sustainability. Debt sustainability analysis frameworks as used by the IMF to determine have not also been useful but can presumed instead to be an always-present option to pressure or coerce debtor countries to accept unfavorable policies in exchange for debt relief.

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