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Debt and Asset Waves: Why Focusing Only on Debt Surges? Rethinking the Foundations of Debt Sustainability Assessment

Giovanni Piersanti

gpiersanti@unite.it

University of Teramo https://orcid.org/0000-0003-2109-0298

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Debt and Asset Waves: Why Focusing Only on Debt Surges? Rethinking the Foundations of Debt Sustainability Assessment.*

Giovanni Piersanti

Department of Political Science, University of Teramo, Via R. Balzarini 1, 64100 Teramo, Italy

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Abstract

This paper calls for a fundamental rethinking of how debt sustainability is assessed, advocating a more holistic approach that considers both assets and liabilities. Moving beyond conventional output-based indicators like the debt-to-GDP ratio, it introduces a wealth-based indicator that is both theoretically sound and internally consistent. When applied to global debt data covering both advanced and emerging market economies, this new metric offers a more balanced and less alarming perspective on debt trends worldwide. The findings reveal that relying solely on debt-to-GDP ratios can result in misleading assessments and potentially harmful policy choices. By focusing on wealth dynamics rather than simplistic output measures, the proposed approach equips policymakers with more accurate and reliable tools to design strategies that support economic stability and foster sustainable long-term growth.

Keywords: Debt sustainability, Debt and Assets dynamics, Debt-GDP ratio, Debt-Wealth ratio

JEL classification: B22, E01, E60, F62, G51, H60, H63.

1 Introduction

The sharp increase in global debt - both public and private - following the global financial crisis and pandemic shock has reignited discussions about its long-term sustainability, future burdens, and potential risks. How best to manage this expanding debt burden has become a subject of intense debate, dividing policymakers and academics alike. Broadly, two contrasting perspectives have emerged that we can describe, for convenience, as pessimistic and optimistic views.

The pessimistic or more cautionary view, frequently echoed by national and international policy institutions, is grounded in conventional thinking about the adverse effects of high debt levels on financial stability and economic growth (e.g., Alchidi and Gros , 2019; Fuest and Gros , 2019; Riedl , 2019; Rogoff , 2019a,b; Wyplosz , 2019; Mauro and Zhou , 2021; Kose et al. , 2021, 2022a,b; Badia et al. , 2022; Schuster et al. , 2024; Jalles and Medas, 2024; Fernández-Gallardo and Payá , 2025).

In contrast, the optimistic or more relaxed view situates current debt levels within a broader, multi-decade trend of rising gross savings, expanding total wealth, and a persistently low interest rate environment. Proponents of this perspective emphasize the beneficial role of debt in cushioning short-term economic shocks and supporting long-term growth, while calling attention to the positive effects that higher saving rates and wealth accumulation tend to exert on debt holding, borrowing conditions, and debt-servicing costs (e.g., Blanchard, 2019; Blanchard and Summers , 2019; Blanchard and Tashiro , 2019; Blanchard and Ubide , 2019; Eichengreen , 2019; Furman and Summers , 2019, 2020; Krugman , 2019, 2020; Rachel and Summers , 2019; Boone et al. , 2022; Orszag et al. , 2022).

This divide over the sustainability and risk of current debt trajectories has propelled the issue of debt governance and the appropriate policy mix to the forefront of the global economic agenda. However, it has also introduced significant uncertainty around the appropriate timing and scale of needed policy adjustments, particularly over fiscal consolidation, with some advocating for more contractionary, risk-averse measures, while others pushing

for more expansionary, growth-oriented policy approaches. This surge in policy-induced uncertainty was a key factor behind the sluggish pace of global recovery and, notably, the weak performance of the euro area after the Great Financial Crisis (GFC) (e.g., Bloom , 2009; Kose and Terrones , 2012; Gertler and Gilchrist , 2018; Baker et al. , 2020; IMF, 2020; Caggiano et al. , 2021; Licchetta et al. , 2022).

Economic theory and empirical evidence generally find a negative relationship between uncertainty, economic activity, and policy decisions, although the interactions among these variables are often complex and mutually reinforcing (e.g., Gilchrist et al. , 2014; Baker et al. , 2016; Faigelbaum et al. , 2017; Plante et al. , 2018; Arellano et al. , 2019; Alfaro et al. , 2022; Straub and Ulbricht , 2024). Nonetheless, a central insight emerging from this literature is that well-timed and carefully designed policy interventions can help mitigate policy-induced uncertainty and limit its adverse effects on economic performance. This, in turn, underscores the need for a reliable set of indicators - both theoretically sound and internally consistent - to evaluate the risk, effectiveness, and credibility of alternative policy choices.

In the existing literature, debt sustainability is most commonly assessed using the time path of the debt-to-GDP ratio (DGR), which compares a stock variable (debt) to a flow variable (GDP). In this paper, we argue that this widely used metric is fundamentally flawed and can lead to misguided and potentially harmful policy decisions.

We identify several theoretical issues that challenge the validity of the DGR as a reliable indicator of debt sustainability.

First, comparing a stock variable to a flow variable lacks logical consistency, despite the apparent relationships between the two. The temporal mismatch between these variables introduces significant interpretive challenges (Canofari et al. , 2020a; Furman and Summers , 2020; Boone et al. , 2022; Piersanti et al. , 2023).

Second, GDP is an imperfect proxy for the resources available to service outstanding debt. This limitation is well acknowledged in the literature, prompting efforts to identify

more appropriate scaling variables, such as government revenue, exports, or gross national income (GNI) (e.g., Giammarioli et al. , 2007; Aizenman and Jinjarak , 2010; Greenwood, 2018; Blot , 2018). However, these alternatives suffer from the same conceptual flaw of comparing a stock to a flow.

Third, the DGR focuses solely on liabilities, ignoring the asset side of the national balance sheet. This omission neglects a key component of national financial health. A more recent body of research (e.g., Arrow et al. , 2012; Piketty and Zucman , 2014; Piketty , 2015; Dasgupta , 2015; Stiglitz , 2016; Henao-Arbelaez and Sobrinho , 2017; IMF, 2018; Stiglitz et al. , 2018; Yousefi , 2019; Canofari et al. , 2020a,b; Ball et al. , 2021; Levy-Yeyati and Sturzenegge , 2023; Piersanti et al. , 2023) has highlighted the importance of national wealth and its composition, specifically the shares of productive capital and financial assets, in evaluating a country's debt-carrying capacity. Countries with similar levels of national income may differ significantly in their accumulated capital and, consequently, in their capacity to sustain debt.

Lastly, debt sustainability cannot be meaningfully assessed outside the broader context of a dynamic general equilibrium framework, linking policy choices to their macroeconomic consequences (e.g., Barro , 1990; Bruce and Turnovsky , 1999; Turnovsky , 2004; Blot , 2018; Canofari et al. , 2020a,b; Piersanti et al. , 2023).

To address the inherent limitations of the DGR, this paper introduces a novel approach to debt evaluation grounded in wealth-based metrics rather than output-based measures. Conceptually straightforward and firmly anchored in the core principles of measurement and economics, this alternative indicator offers a more comprehensive view of the economy's balance sheet and its vulnerability to adverse shocks. In addition, it provides a more nuanced and less alarming interpretation of current global debt levels compared to standard DGR-based assessments.

Importantly, the scale variable used in the wealth-based indicator refers to national wealth, understood as the combined wealth of the private (households) sector and the public

(government) sector.

The structure of the paper is as follows. Section 2 provides an overview of global trends in debt and asset accumulation over the last two to three decades. Section 3 outlines the conceptual difference between the new and traditional approaches and details the empirical implementation. Section 4 concludes.

2 Framing the Landscape: Evolution of Debts and Assets since the 2000s

2.1 Debts

Figures 1 and 2 chart the trajectories of global debt since the year 2000 [1].

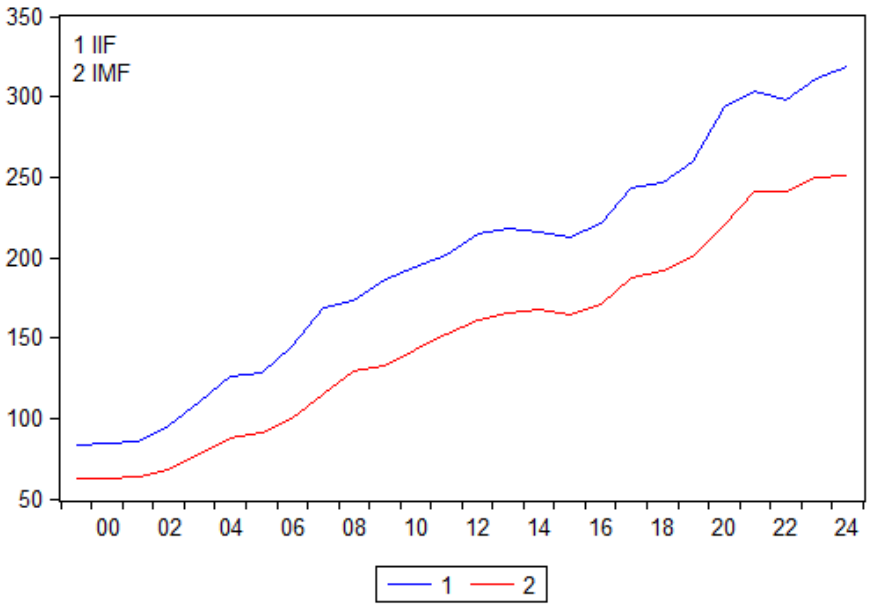


Figure 1: World Debt Levels (USD Trillions). The blue line represents the IIF definition, while the red line reflects the IMF definition. Sources: IIF and IMF, *Global Debt Monitor*; *Global Debt Database*.

[1] To ensure alignment with the comprehensive global wealth database in the household sector compiled by the Union Bank of Switzerland (UBS, 2023), our analysis of worldwide debt and asset trends begins in 2000.

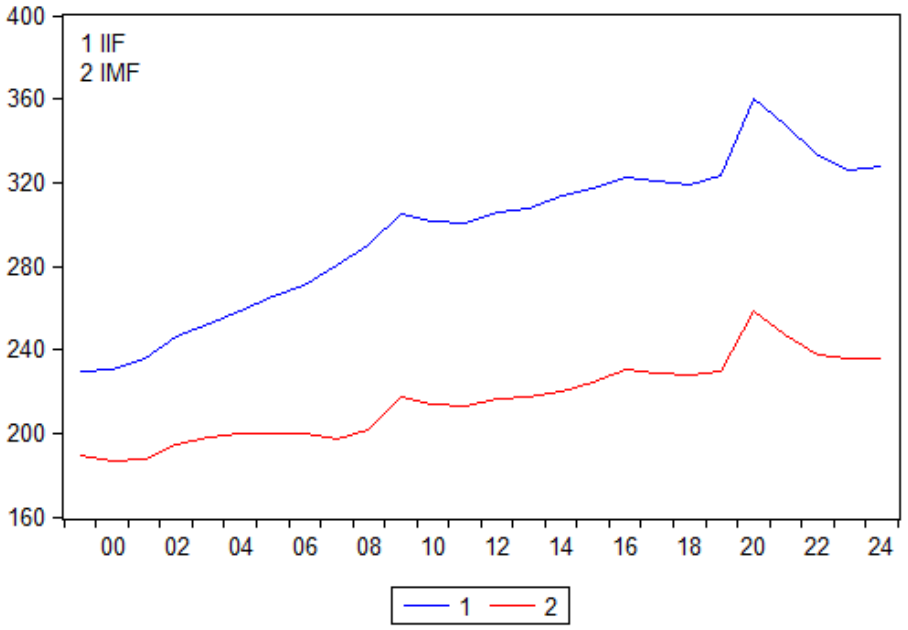


Figure 2: World Debt Ratios (% of GDP). The blue line refers the IIF definition, while the red line reflects the IMF definition. Sources: IIF and IMF, *Global Debt Monitor*; *Global Debt Database*.

Figure 1 shows a steady increase in global debt levels, reaching over $318 trillion in 2024 according to the Institute of International Finance (IIF). In comparison, the International Monetary Fund (IMF), which excludes the financial sector, estimated the total debt to be around $251 trillion for the same year.

Figure 2 presents the debt as a share of global GDP, revealing a similar trajectory. In 2024, the debt-to-GDP ratio stood at 328% based on IIF data, and 235% according to IMF figures, although both measures were below their 2020 peaks of 360% and 258%, respectively[2].

This upward trend is widespread, with both public and private debt reaching record highs across advanced and emerging market economies alike (see Figures 3 - 6). In advanced

[2]The IIF and IMF rely on different datasets: the IIF includes debt from both financial and non-financial sectors (public and private) in 21 advanced economies, the Euro Area, and 30 emerging markets. In contrast, the IMF tracks non-financial sector debt in nearly all countries (about 190 in total), with separate classifications for advanced economies, emerging markets, and low-income developing countries (see, e.g., Mbaye et al. , 2018; IIF, 2023).

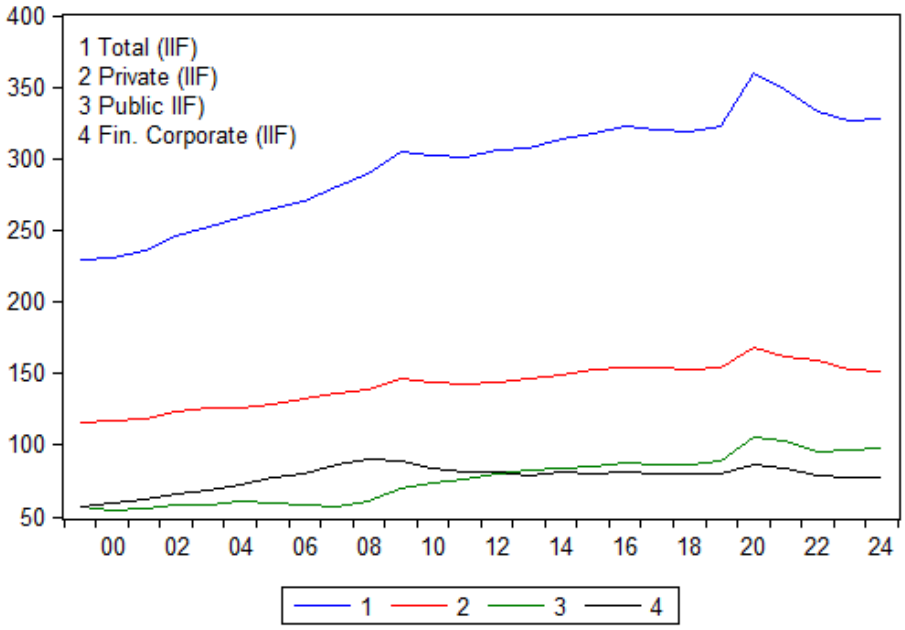


Figure 3: World Debt Ratios by Sectors (% of GDP). Sources: IIF, *Global Debt Monitor*.

economies, Figure 5 illustrates that debt ratios have risen by more than 30% in all categories over the past two decades, with public debt rising particularly sharply by approximately 70%. The pace of accumulation accelerated rapidly up to 2009, stabilized between 2009 and 2019, and then surged again in the wake of the pandemic shock. In emerging markets, the trend has been even more pronounced, with a steep rise beginning around 2007 (see Figure 6). However, despite this acceleration, the average debt ratios in these economies remain well below those of advanced economies, although they have continued to climb beyond 2021.

Taken together, these patterns point to a broad and persistent escalation in debt ratios across all countries and sectors. Two major and fast-expanding debt waves - spanning the 2002-2009 and 2010-2020 - stand out as particular notable. Such waves are a recurring feature of global economy dynamics.[3] Nevertheless, they remain a persistent source of concern and debate among policymakers, international institutions, economic stakeholders, and the media. Consequently, the growing anxiety over the long-term sustainability of ongoing

[3]See, e.g., Kose et al. (2021), who identified four major waves since 1970: 1970-1989, 1990-2001, 2002-2009, and 2010-2020.

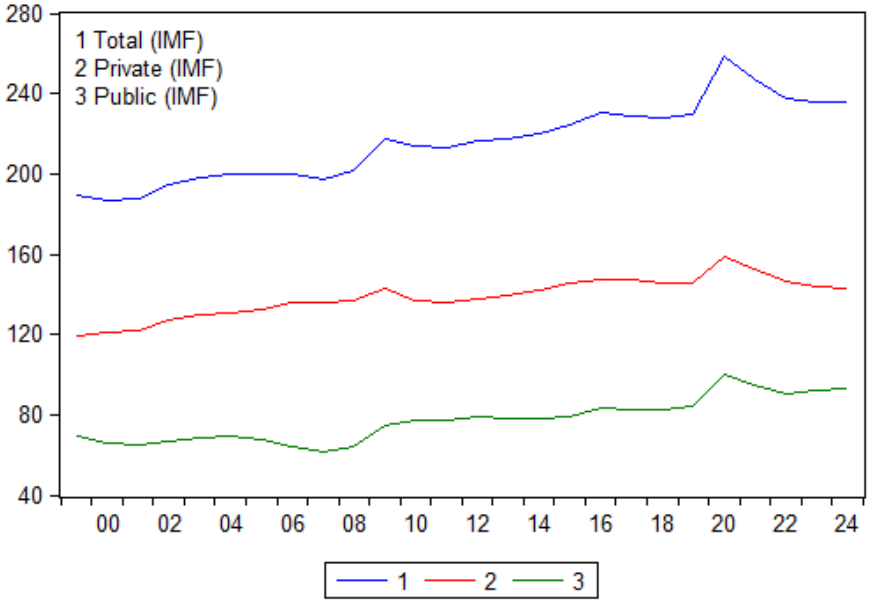


Figure 4: World Debt Ratios by Sectors (% of GDP). Sources: IMF, *Global Debt Monitor*; *Global Debt Database*.

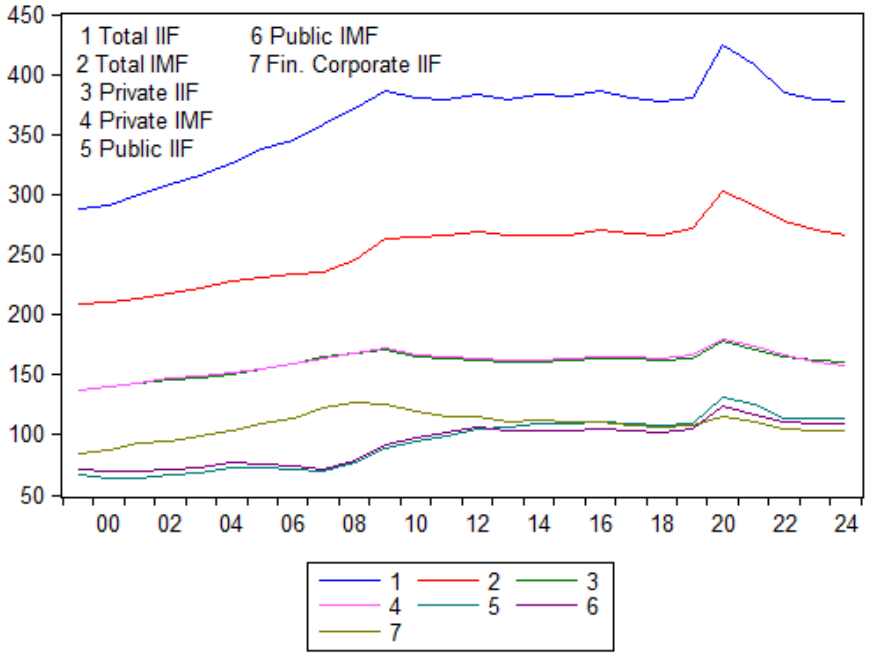


Figure 5: Advanced Economies Debt Ratios by Sectors (% of GDP). Sources: IIF and IMF, *Global Debt Monitor*; *Global Debt Database*.

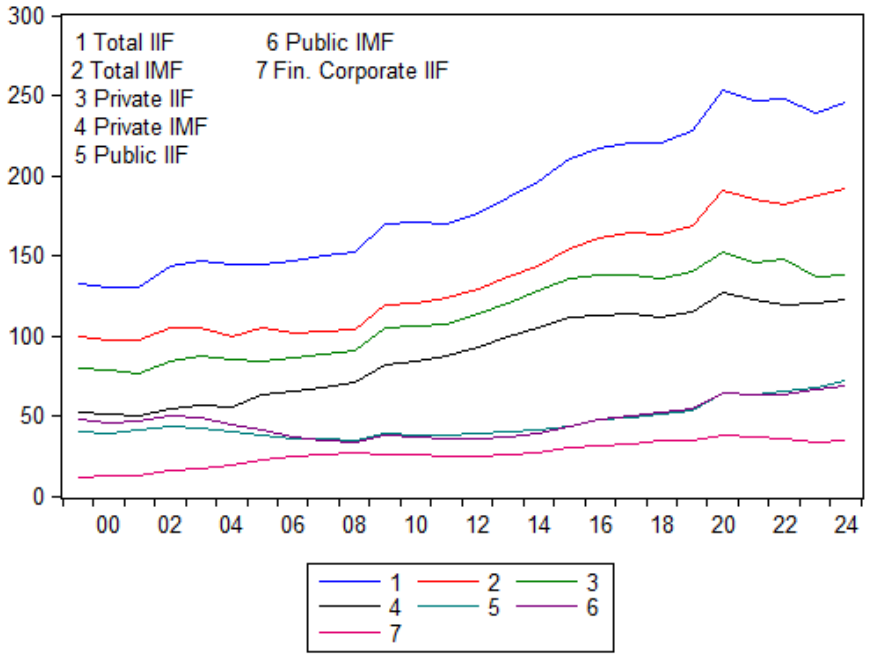


Figure 6: Emerging Market & Developing Economies Debt Ratios by Sectors (% of GDP). Sources: IIF and IMF, *Global Debt Monitor*; *Global Debt Database*.

debt build-up and the potential threats it poses to macroeconomic and financial stability is unsurprising and central to the pessimistic outlook described in the introduction.

From this perspective, today's high debt levels may harbor the seeds of a future financial crisis and a deep economic downturn. Driven by a prolonged period of negative interest rate-growth differential (or r-g) and bolstered by aggressive fiscal and monetary support, the major risks to debt sustainability now stem from potential future interest rate increases and the erosion of the fiscal space needed to manage future shocks. Therefore, careful management of the current debt landscape is emphasized as crucial, especially with the substantial public spending commitments governments are expected to face in the coming years on areas such as pensions, healthcare, defence, and climate change.

2.2 Assets

The evolution of global assets, both at the worldwide level and within advanced and emerging market economies, is illustrated in Figures 7 and 8. Leveraging household-sector wealth data from the Union Bank of Switzerland (UBS, 2023), the analysis tracks these trends from 2000 onward [4]

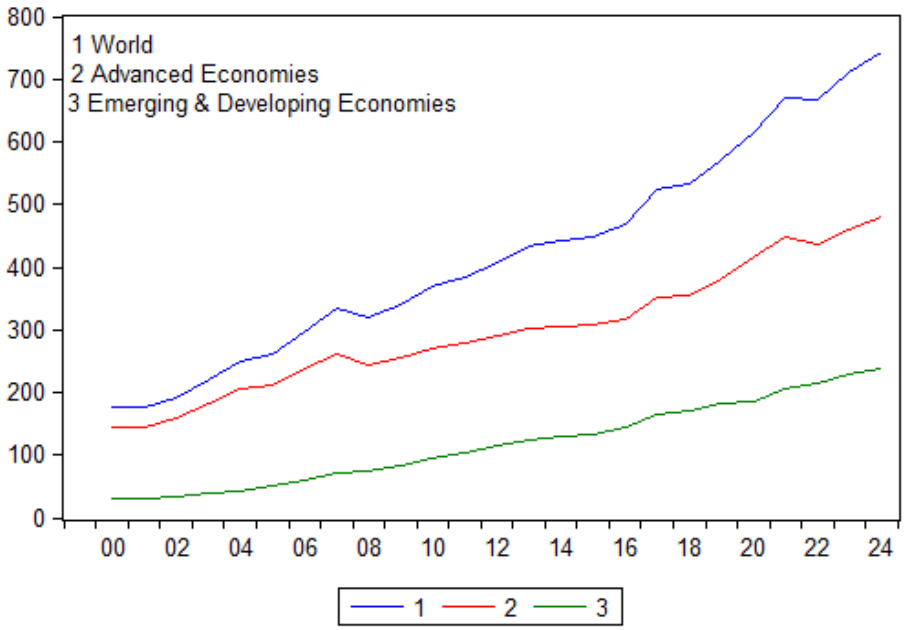


Figure 7: World Asset Levels (USD Trillions), based on own calculations. Source: UBS, *Global Wealth Databook*; IMF, *Public Sector Balance Sheet* (*PSBS*) *Database*; *Government Finance Statistics* (*GFS*) *Database*.

Figure 7 reveals a substantial expansion in global asset holdings, reaching $743 trillion in total value in 2024. This marks an impressive 320% increase since 2000, with consistent upward momentum evident in both advanced and emerging & developing economies.

Figure 8 contextualizes this expansion in relation to economic output, further confirming this trend. By 2024, global assets had risen to more than 672% of GDP, with both advanced

[4]In this context, global assets are defined as the combined assets of the private (households) sector and the consolidated general government sector. An alternative measure would have been total public sector assets; however, this would have required corresponding data on total public sector debt to ensure consistency in the comparison.

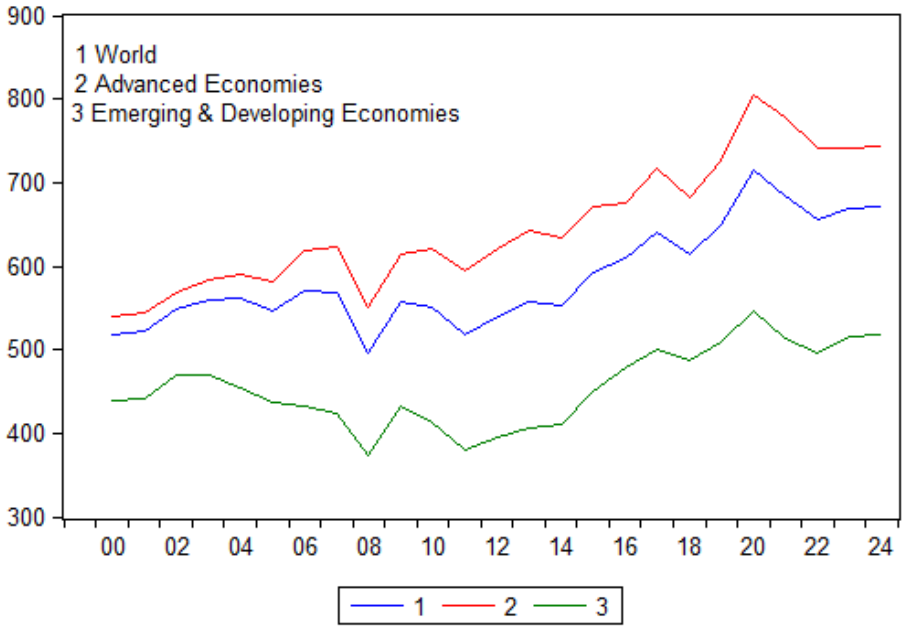


Figure 8: World Asset Ratios as % of GDP, based on own calculations. Sources: UBS, *Global Wealth Databook*; IMF, *PSBS & GFS Database*; IMF (2025), *World Economic Outlook*.

and emerging & developing economies exhibiting parallel upward trajectories.

Collectively, these figures underscore a sustained and broad-based increase in asset-to-GDP ratios across nearly all countries, with especially pronounced growth during the periods 2000-2007 and 2008-2020, both marking distinct waves of rapid asset accumulation.

Recent research increasingly points to structural factors as key drivers behind this sustained growth in asset accumulation. These include higher saving rates due to longer retirement periods, increased income and wealth inequality, and increased economic uncertainty (e.g., Summers , 2014; Rachel and Smith , 2017; Rachel and Summers , 2019; Mian et al. , 2021; Boone et al. , 2022; Rannenberg , 2023). Within a lifecycle income framework, the core channels through which these factors operate can be summarized as follows.

- Longer retirements without a corresponding extension in working years lead individuals to save more during their working lives to sustain consumption over a longer post-retirement period.

- Rising income and wealth inequality enables wealthier individuals, who are both inclined and able to save more, to accumulate a disproportionate share of assets.

- Increased uncertainty - whether economic, geopolitical, or environmental - prompts both households and firms to reduce spending and increase precautionary savings.

Together, these forces have taken on an increasingly prominent role in recent years, driving not only the sustained upward movement in global asset holdings but also the persistent decline in real interest rates. [5]

These asset-side dynamics are instrumental to a comprehensive understanding of an economy's balance sheet and should be factored in when evaluating its resilience to shocks, as well as the sustainability of its debt levels. Viewed through this lens, the dramatic rise in global debt over the past decades can be seen as the counterpart to the parallel growth in gross savings and asset accumulation. As suggested in the more optimistic view introduced earlier, this broader structural context implies that current elevated debt levels may be less alarming than they appear and could, in fact, be manageable within the current macroeconomic environment.

3 The Wealth-Based Sustainability Index

3.1 A Stock-to-Stock Perspective

The data analysed in Section 2 highlight a broad macroeconomic context where an unprecedented global rise in debt over the past two to three decades occurred alongside a simultaneous increase in asset accumulation. These parallel trends underscore the need for

[5] A central strand of current research links the downward trend in interest rates observed in the past few decades to phenomena such as a global "saving glut" or "secular stagnation" (e.g., Summers , 2014; Rachel and Summers , 2019; Furman and Summers , 2020; Boone et al. , 2022). Nevertheless, Schmelzing (2020) documents that real interest rates and the r-g gap have been on a secular decline since the 14th century, regardless of monetary and fiscal regimes or episodes of secular stagnation. In contrast Barro (2023), using data from 1870 onward, finds that condition $r > g$ generally holds when r is measured as the realized rate of return on equity.

a more holistic approach to evaluating the economy's overall risk and its ability to meet debt obligations - one that accounts for both assets and liabilities, much like a corporation evaluates its financial health by analysing changes on both sides of the balance sheet and monitoring its leverage ratio. Failing to do so and looking at these dynamics in isolation, in contrast, risks producing a skewed picture, as evidenced by the conflicting interpretations of the long-term viability and risk implications associated with contemporary debt patterns discussed earlier.

In line with this broader perspective, an influential and growing body of recent research on sustainability analysis has begun to shift its focus from traditional income- or GDP-based indicators toward measures grounded in the total stock of wealth. This conceptual change is driven by the recognition that total wealth, which encompasses all accumulated assets, including natural, physical, financial, and human capital, provides a more comprehensive and long-term picture of the economic resilience and strength of a nation compared to conventional flow-based metrics.[6]

The literature offers a range of compelling theoretical and empirical rationales for this approach (e.g., Bruce and Turnovsky , 1999; Arrow et al. , 2004, 2012; Piketty and Zucman , 2014; Piketty , 2015; Dasgupta , 2015; Stiglitz , 2016; Henao-Arbelaez and Sobrinho , 2017; Stiglitz et al. , 2018; Yousefi , 2019; Canofari et al. , 2020a,b; Levy-Yeyati and Sturzenegge , 2023; Piersanti et al. , 2023).

- Within analytical frameworks focused on sustainable growth and human well-being, total wealth serves as a measure of an economy's productive capacity and as a key benchmark for intergenerational welfare. Under this lens, a country's growth and debt trajectory is deemed sustainable if its total wealth is non-decreasing over time.

- Comparing debt stock to national wealth offers a fuller picture of a country's balance

[6] As noted by Taylor in response to comments from various panellists and discussants, this shift highlights a broader crisis in the dominant macroeconomic paradigm, which tends to focus on flows while neglecting stock positions. In fact, "balance sheets, and the acquisition of assets and liabilities are important and they need to be kept in mind" when evaluating the gross financial position of an economy (see Boone et al. , 2022, p. 100).

sheet, helping to assess whether it holds sufficient assets to service its liabilities or provide collateral - critical indicators of debt sustainability.

- Looking at the total capital base (natural, produced, human, social and financial) that supports intertemporal welfare, it indicates how robust and diversified is its wealth base, thus signaling the nation's ability to withstand shocks and maintain welfare over time.

- From a policy standpoint, a wealth-based lens enhances decision making by identifying unsustainable paths (e.g., rising GDP alongside declining wealth), helping prioritize investment (e.g., in education, clean energy, or conservation), evaluating trade-offs between growth and resource depletion, and designing strategies to preserve or increase total wealth, thus promoting intergenerational equity.

- In dynamic general equilibrium frameworks featuring endogenous growth and forward-looking, optimising agents, sustainability conditions are better captured by a wealth-based rather than an output-based indicator.

Crucially, this novel approach introduces a stock-to-stock perspective on debt sustainability, thereby addressing a key conceptual inconsistency inherent in conventional metrics that compare a stock variable (debt) with a flow variable (output), a mismatch that often leads to significant interpretive issues. In doing so, it promotes a more reliable, theoretically sound, and internally consistent metric for capturing the risks associated with debt dynamics.

The next section applies this wealth-based index empirically, drawing on the data presented in Section 2.

3.2 Empirical implementation

To start off, let us revisit the global debt and asset ratios explored in previous sections and conveniently encapsulated in Figure 9. The figure not only reiterates the pronounced and

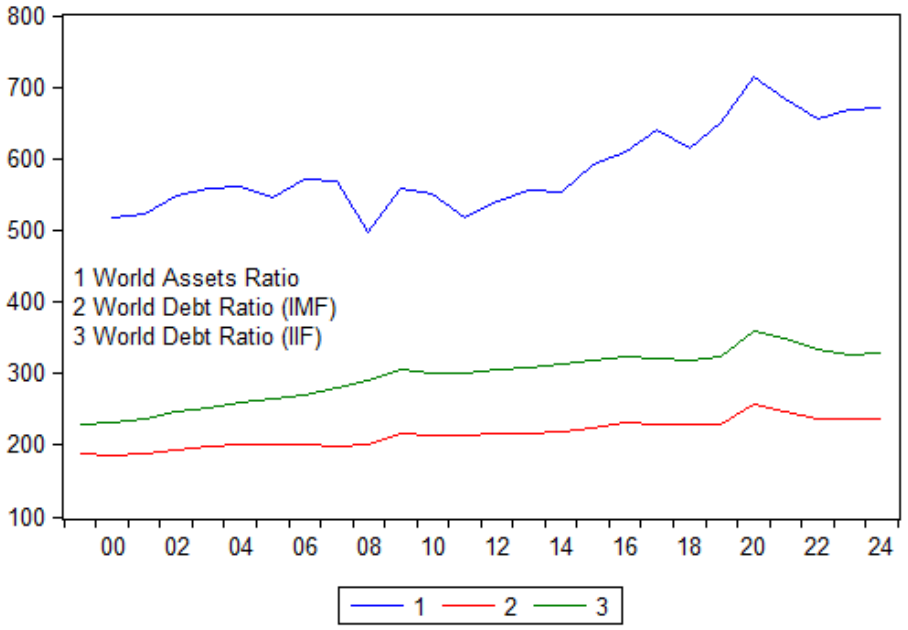


Figure 9: World Debt and Assets Ratios (% GDP), based on own calculations. Sources: UBS, IMF, IIF.

sustained upward trajectories observed in both ratios over recent decades, but also provides a critical comparative lens: assets ratios have consistently remained well above debt ratios. According to data from IIF, asset ratios have been on average about 2.0 times higher than debt ratios, while IMF figures point to an even wider gap, with asset ratios exceeding debt ratios by about a factor of 2.7.

Importantly, this divergence is not limited to particular regions or a select group of countries; rather, it constitutes a pervasive structural feature observable across all major economic groupings. Both advanced economies and emerging & developing economies display similar patterns, with asset ratios significantly outpacing debt ratios in each case (see Figures 10 and 11).

The persistence of this global structural feature underscores the relative strength of the world's assets position vis-à-vis its liabilities and implies a substantial degree of systemic financial resilience, even in the context of escalating global indebtedness. Basically, the world

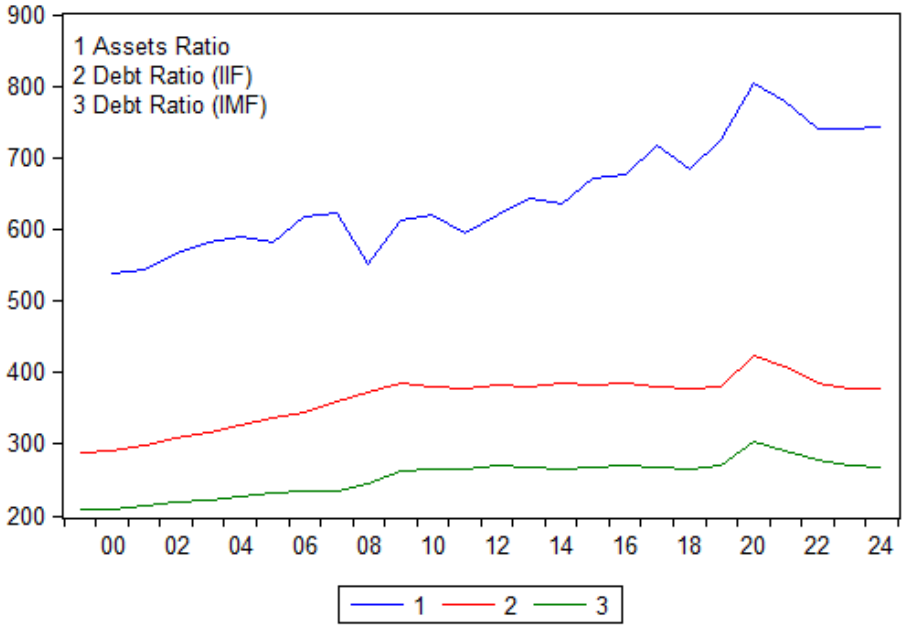


Figure 10: Advanced Economies Debt and Assets Ratios (% GDP), own calculations. Sources: UBS, IMF, IIF.



Figure 11: Emerging & Developing Economies Debt and Assets Ratios (% GDP), own calculations. Sources: UBS, IMF, IIF.

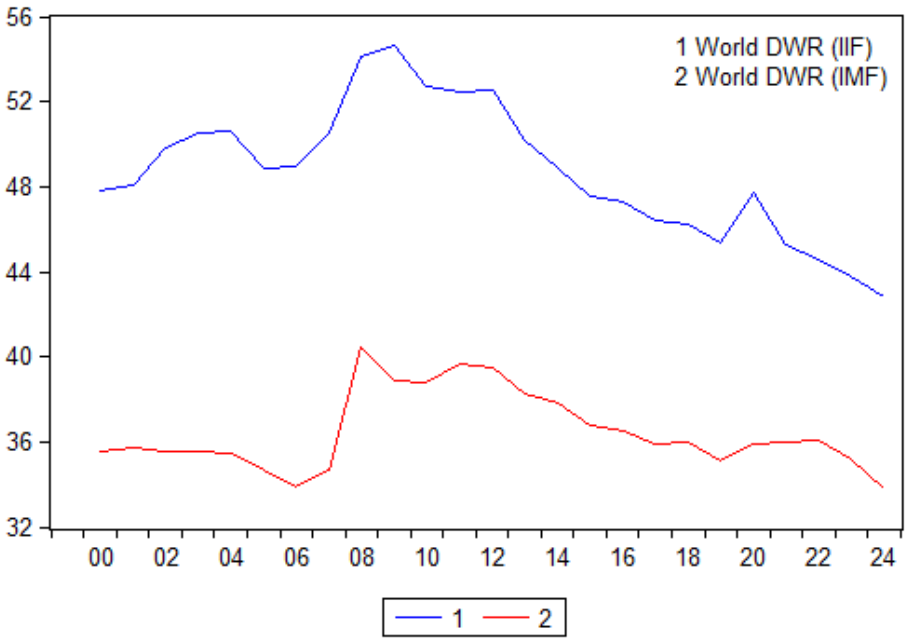


Figure 12: World Debt-to-Wealth Ratios (%), based on own calculations. Sources: UBS, IMF, IIF.

economy retains a significant buffer of assets to service and manage its debt obligations.

Clearly, such deeply embedded structural dynamics cannot be adequately captured by conventional metrics such as the DGR, which focuses exclusively on the liability side of the balance sheet. As previously argued, a more comprehensive and analytically consistent diagnostic framework is afforded by a wealth-based metric that compares the stock of debt with national wealth. This brings the focus to the debt-wealth ratio (DWR), a metric better suited to reveal the underlying financial strength and potential risks in the current debt landscape.

The empirical trajectories of the DWR from 2000 to 2024 are depicted in Figures 12 through 20. Figures 12 to 14, in particular, trace the temporal evolution of this ratio at the global aggregate level, as well as in key country groups. The data substantiate that the upward shift in assets holdings during this time frame has been a broadly based phenomenon, which in many cases contributed to a decline in the DWR following its peak in 2008. A

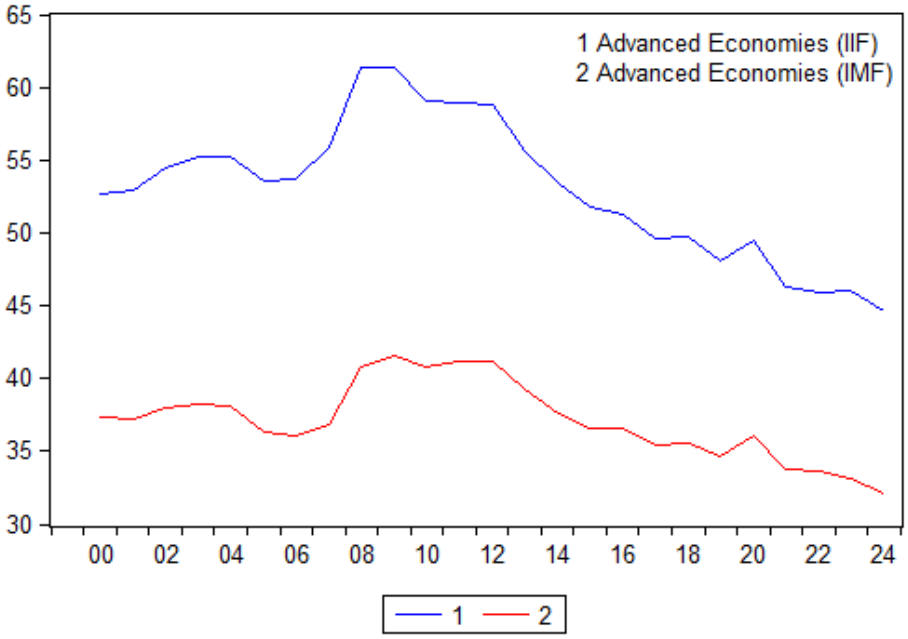


Figure 13: Advanced Economies Debt-to-Wealth Ratios (%), based on own calculations. Sources: UBS, IMF, IIF.

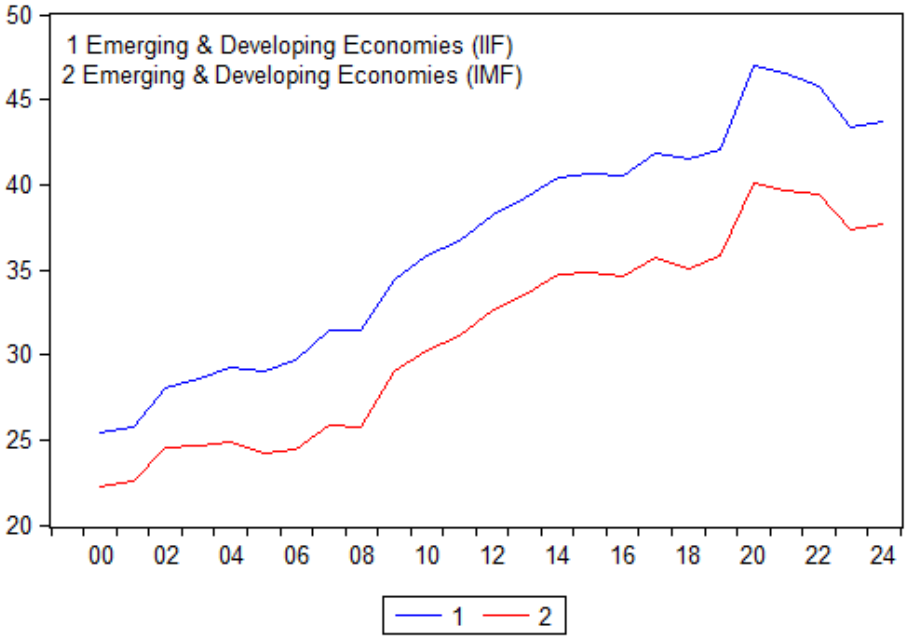


Figure 14: Emerging & Developing Economies Debt-to-Wealth Ratios (%), based on own calculations. Sources: UBS, IMF, IIF.

notable exception to this pattern is observed in emerging & devloping economies, where the DWR has continued to climb after 2008, indicating a divergent and potentially more vulnerable debt path.

To get a more granular sense of the changes in these patterns, Figures 15 to 17 break down the DWR by institutional sector, separating public and private components across global and regional aggregates. This sectoral decomposition largely mirrors the patterns seen in Figures 12 to 14. Specifically, it reveals a general decline in both private and public DWRs globally and within advanced economies, while emerging markets once again exhibit a distinct and divergent path. However, it should be noted that

- On a global scale, the average DWRs are approximately 24% for the private sector and 13% for the public sectors.
- In advanced economies, these figures are 25% and 14%, respectively.
- In emerging & developing economies, they are 22% and 10%.

These proportions imply that prevailing concerns over excessive sectoral leverage - especially sovereign debt burdens - may be overstated, as public liabilities represent at most seven fiftieths (14%) of national wealth.[7] In light of projected structural challenges on public finances arising from ageing population, climate transition financing, defence requirements, and other long-horizon public expenditure, this information on available fiscal space is not only analytically salient but also potentially relevant for guiding policy decisions on a path of long-term sustainability. Importantly, as Furman and Summers (2020) stress, the cost of failing to undertake such investments exceeds the risks associated with insufficient deficit reduction.

[7]It is worth noting, that calling into play sustainability gaps, as commonly done in the dominant fiscal framework, to gauge the adjustment needed to meet debt targets may distort the picture even further. In fact, such measures are inherently forward-looking and highly sensitive to the assumptions underlying scenario construction, while also being open to the complications of multiple equilibria and self-fulfilling devilish dynamic (see, e.g., Wyplosz , 2011; Guzmann and Heymann , 2015; Debrun et al. , 2019; Guzmann and Stiglitz , 2024). In addition, they typically rest on the highly questionable premise that the economy's growth rate is not affected by public spending and its composition, a point already emphasised by Domar (1944) in his seminal work on the subject.

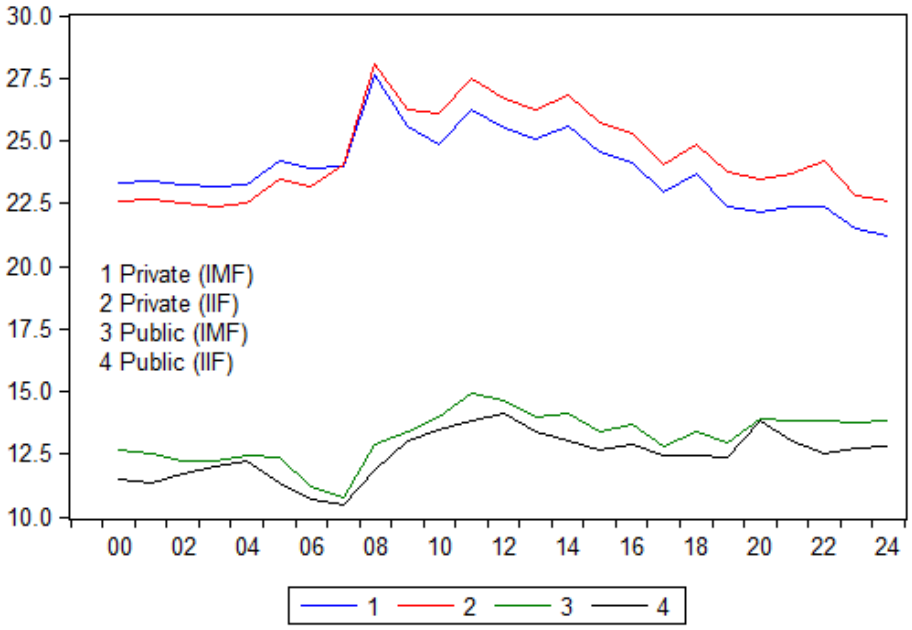


Figure 15: World Debt-to-Wealth Ratios by Sectors (%), based on own calculations. Sources: UBS, IMF, IIF.

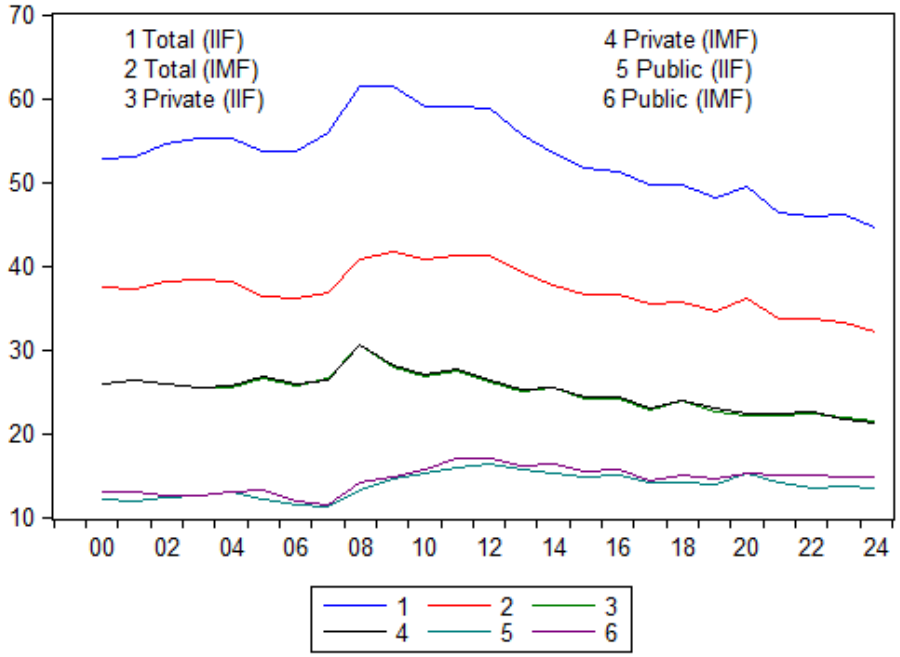


Figure 16: Advanced Economies Debt-to-Wealth Ratios by Sectors (%), based on own calculations. Sources: UBS, IMF, IIF.

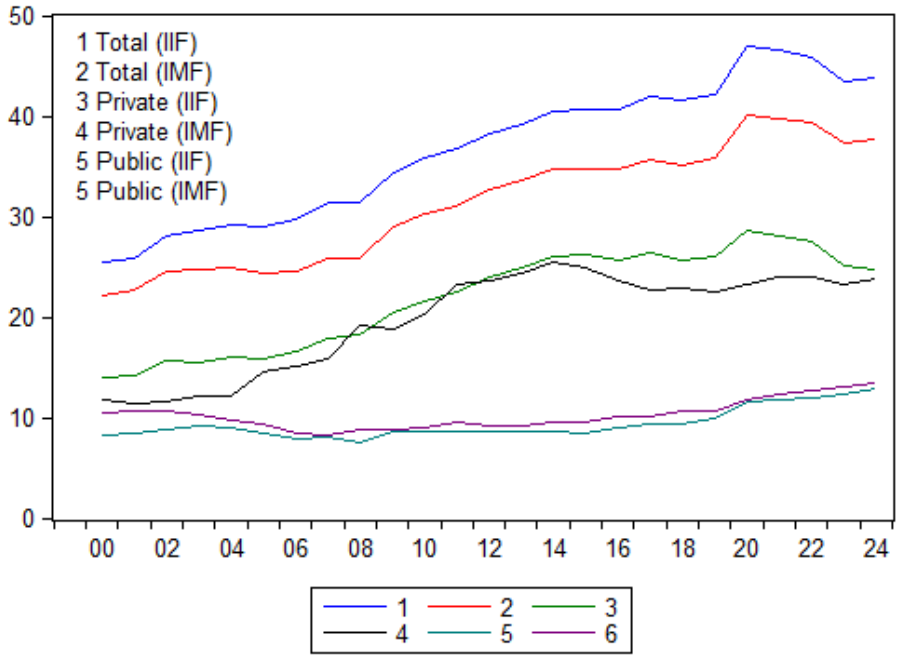


Figure 17: Emerging & Developing Economies Debt-to-Wealth Ratios by Sectors (%), based on own calculations. Sources: UBS, IMF, IIF.

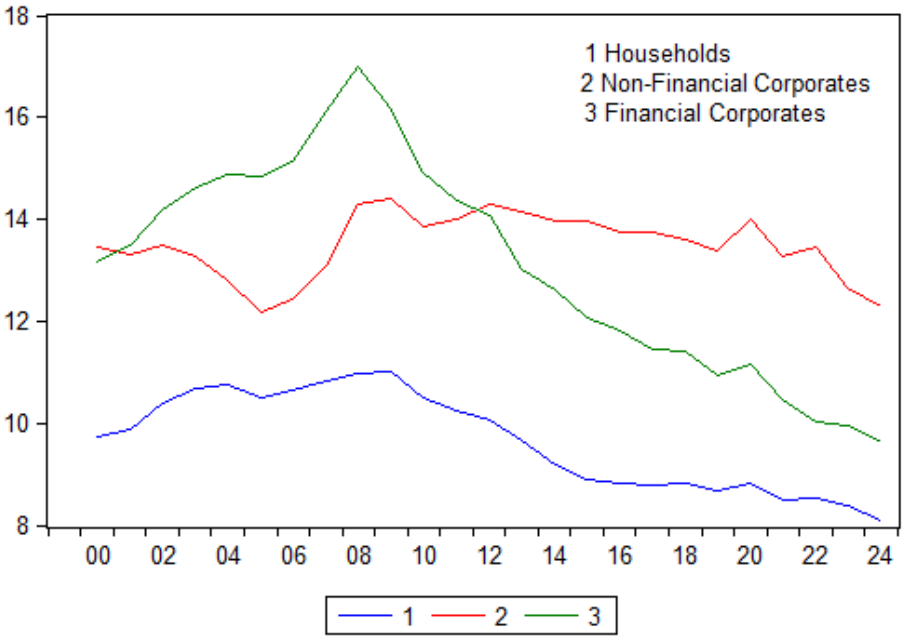


Figure 18: World Debt-to-Wealth Ratios by Aggregate Units (%), based on own calculations. Sources: UBS, IMF, IIF.

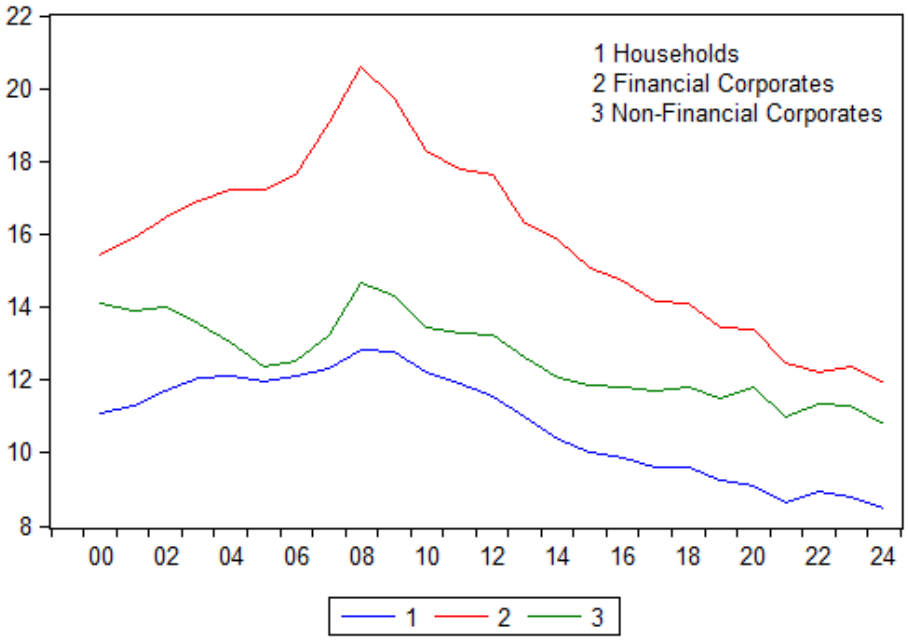


Figure 19: Advanced Economies Debt-to-Wealth Ratios by Aggregate Units (%), based on own calculations. Sources: UBS, IMF, IIF.

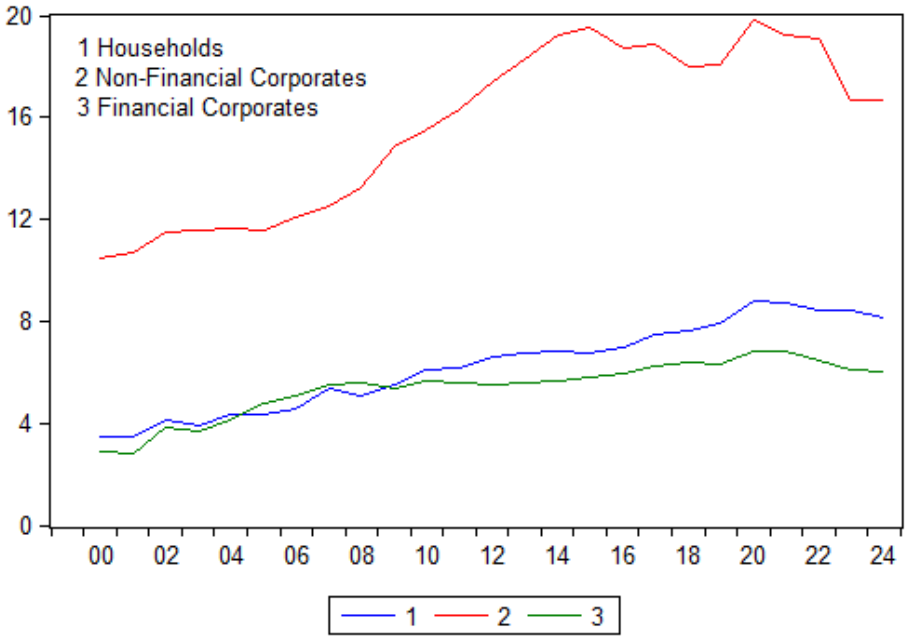


Figure 20: Emerging & Developing Economies Debt-to-Wealth Ratios by Aggregate Units (%), based on own calculations. Sources: UBS, IMF, IIF.

Finally, Figures 18 to 20 delve further into this structural decomposition by disaggregating the private sector into households and corporate entities, and splitting the corporate category into financial and non-financial institutions.[8] This disaggregation is motivated by the well-documented prominent role of excessive household and corporate debt in amplifying financial fragility and exacerbating the depth and duration of recessions (e.g., Mian and Sufi , 2009; Dynan , 2012; Schularick and Taylor , 2012; Jordà et al. , 2016, 2022; Mian et al. , 2017).

Consistent with previous findings, the figures highlight substantial heterogeneity between advanced and emerging market economies. In particular, they indicate that households and corporates in the world and the advanced economy engaged in significant deleveraging in the aftermath of the global financial crisis. This process contributed to a pronounced decline in DWRs (Figs. 18 and 19), especially when evaluated against the backdrop of a concurrent surge in wealth accumulation. In advanced economies, in particular, the DWR of financial corporates fell by about 9 percentage points from its 2008 peak of 21%, while the decline among households and non-financial corporates was more moderate, around 4 percentage points. By contrast, emerging markets followed a different path, showing a less evident sign of deleveraging. Over the 2008-2024 period, the DWR of financial corporates remained broadly stable, whereas those of households and non-financial corporates even increased (Fig. 20), potentially signaling a source of financial vulnerability.

The overall picture to emerge from this novel and diagnostically powerful wealth-based metric is then one of a general downward trend in debt ratios across most sectors and country groupings over the past three decades or so, though this global pattern masks substantial cross-country heterogeneity between advanced and emerging & devloping economies. This perspective stands in stark contrast to conventional debt diagnosis rooted in output-based metrics rather than wealth, underscoring the imperative to move beyond conventional DGR metrics. The core issue is that focusing solely on liabilities and output flows can offer a skewed

[8]We present only IIF data here, as the IMF dataset does not include financial-sector debt.

perception of debt viability that fails to account for the full structure and composition of an economy's balance sheet. This narrow lens can result in two types of diagnostic error: overstating solvency risks when asset buffers are substantial, and understating them when liabilities are collateralized by a fragile or high volatile asset base. As a result, such traditional metrics risk misidentifying hidden vulnerabilities and lead to misguided or even harmful policy actions, ultimately exacerbating economic volatility, financial and social instability, and uncertainty around the appropriate timing, scale, and credibility of medium- to long-term debt consolidation strategies.

These conceptual and empirical challenges are clearly evident in the ongoing debate over the fast-expanding debt levels around the world and contribute significantly to the persistence of the two sharply opposing views on this complex issue, as discussed in earlier sections.[9] Importantly in this contest, the theoretical and empirical insights gained from the application of this new wealth-based metric lend unequivocal support for a less alarmistic and more tempered interpretation of long-term debt sustainability and fiscal manageability.

4 Conclusions

This paper has advanced a novel wealth-based sustainability index that goes beyond the conventional focus on debt levels in isolation. Rather than focusing on income flows or GDP, the index centers on the total stock of wealth, offering a more holistic measure of long-term macroeconomic and financial health. The rationale is straightforward: by grounding the analysis in total wealth - a measure of the economy's productive capacity and its potential to support intergenerational well-being - the index provides a more accurate depiction of a country's or region's balance sheet, helping to determine whether there are enough assets to cover existing liabilities or serve as collateral over time. Additionally, by adopting a stock-to-stock analytical framework, the index addresses the dimensional inconsistency inherent in

[9]For a representative set of differing perspectives on the risks posed by the current debt buildup and the potential for a major financial crisis, see IE (2024). Strikingly, what remains consistently absent from these assessments is any consideration of assets or wealth accumulation and their connection to debt sustainability.

conventional debt metrics that typically compare a stock variable (debt) with a flow variable (output), a mismatch that often leads to problematic interpretations.

Empirically, when applied to global debt and wealth data over the past decades, the new index yields insights that diverge significantly from those suggested by the prevailing narrative based on conventional metrics. In particular, it reveals that the growth in gross liabilities has been largely matched by a parallel expansion in asset holdings, resulting in relatively stable or even declining DWRs across most countries and sectors. Nevertheless, this global pattern masks substantial heterogeneity: while advanced economies tend to exhibit more robust asset growth relative to liabilities, emerging markets display greater variability, and, in some cases, increasing leverage relative to their wealth.

Overall, the new approach paints a less dire - and potentially more optimistic - picture of global debt sustainability than traditional DGRs suggest. It counters the widespread alarmism surrounding global debt levels frequently echoed in policy circles, academic debates, and media narratives. The index thus holds promise as an antidote to the prevailing debt obsession that dominates the discussion within institutions such as the IMF, World Bank, OECD, and European Commission.

By offering empirical support for a more balanced and growth-oriented perspective, this framework encourages a shift in policy thinking, away from a reflexive fear of debt and toward a deeper understanding of the structural dynamics behind it. It highlights how conventional sustainability tests, heavily reliant on DGRs, are biased and misleading and have been an important factor behind the boost in policy-induced uncertainty observed after the Great Recession. To mitigate this uncertainty and its adverse impact on economic performance, the framework calls for a more reliable, theoretically sound, and internally consistent set of indicators able to assess the risks, effectiveness, and credibility of policy alternatives.

While acknowledging that high debt levels carry significant risks, amplifying financial, economic, social, and political vulnerability, this approach argues that such risks call for nuance, not panic. Debt should be carefully monitored and managed, but not feared, and

the analysis must go beyond the deeply entrenced debt obsession and the narrow, liability-focused lens that dominates much of the existing literature. A sound assessment instead requires balancing debt against asset positions in order to avoid a distorted and potentially harmful portrayal of the underlying financial reality.

In conclusion, the DWR index offers a conceptually sound and empirically grounded alternative to conventional debt metrics. It lays the foundation for rethinking debt sustainability analysis in a way that better reflects the underlying economic fundamentals and allows for more pragmatic and forward-looking policy designs. Within this framework, debt is not inherently problematic; rather, it becomes unsustainable only when it diverges from the underlying wealth dynamics that support it.

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