The Princeton-NYU Debt Transparency Index

Nicolas Bau, Zoe Ge, Layna Mosley, and B. Peter Rosendorff

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The call for more transparency around sovereign debt is widespread and increasingly urgent. The full and timely disclosure of debt by borrowers, creditors, and international financial institutions is now an essential element of attempts to reform the international architecture for resolving debt crises, ensuring responsible debt management, and safeguarding debt sustainability. Several attempts to compile relevant debt data have emerged,[1] and numerous recent initiatives aim to improve governments' capacity to collect and disseminate debt statistics.[2]

In order to evaluate the effectiveness of these efforts, a rigorous and reproducible measurement of transparency is necessary. Such a measure should capture changes over time and differences across countries in a standardized way, consistently applied, and independent of political or bureaucratic influence.

The Princeton-NYU Debt Transparency (PNDT) measure offers a country-year index that achieves these objectives. It reflects the degree to which low- and middle-income country governments are willing and able to report debt and debt-related data to the World Bank's Debtor Reporting System (DRS). The PNDT index will offer an annual measure for 113 countries from 1994 to 2022, providing the opportunity to explore how and where transparency has improved or declined. PNDT reveals insights for policymakers and civil society by highlighting the political incentives that both promote and hinder sovereign debt transparency.

The remainder of this brief describes the construction of the PNDT index and offers an initial analysis of the key determinants of debt transparency. We focus on three crucial sets of factors: economic conditions, domestic politics, and international political dynamics. We intend to make country-year PNDT data publicly available in early 2026.

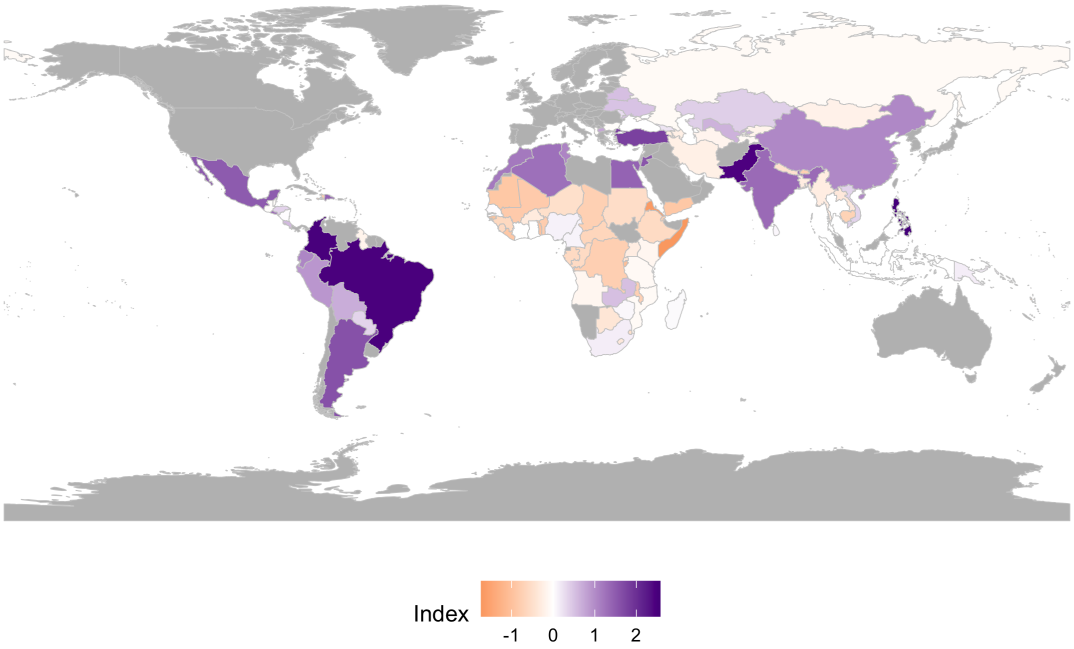
PNDT: A Novel Measure of Debt Transparency

Our new measure of debt transparency leverages missing data in the World Bank's Debtor Reporting System (DRS) using an item response theory (IRT) model. Commonly used in standardized testing, the IRT model estimates countries' latent debt data availability, much like SATs that estimate a college applicant's latent "aptitude." This is based on whether a respondent (in this case, a country providing data for a particular variable) provides any positive value (equivalent to the "correct" answer on a standardized

test like the GRE or SAT).

The items used to compile the PNDT index are those reported by governments within the DRS process. These indicators offer a range of information about a country's debt-related activity in the reporting year. These include commitments, disbursements, and outstanding debt; interest payments, principal repayments, and total debt service; as well as net flows and net transfers. Governments report such activity across a range of sectors, such as the central bank, general government, other public sector, and private sector; for various creditor types (bilateral official, multilateral official, commercial banks, bonds, other private); and for concessional, as well as non-concessional loans.

This approach allows us to create a country-year measure of debt transparency for 113 low- and middle-income countries from 1994 to 2022. Figure 1 shows the country average of the debt transparency index in this entire period. Consistent with the set of countries identified as good performers in a 2023 report by the International Monetary Fund (2023), Kenya, Ghana, Thailand, and Jamaica all have relatively high transparency scores compared to their neighboring countries.



Note: Countries in gray color are not in our IRT model estimation.

Figure 1. Princeton NYU Debt Transparency Index: Country Average (1994-2022)

Figure 2 lists the top, middle, and bottom ten countries by their average PNDT score from 1994 to 2022. Figure 3 reveals a trend of over time improvement in debt transparency across all countries, albeit with a slight downward trend since 2015.

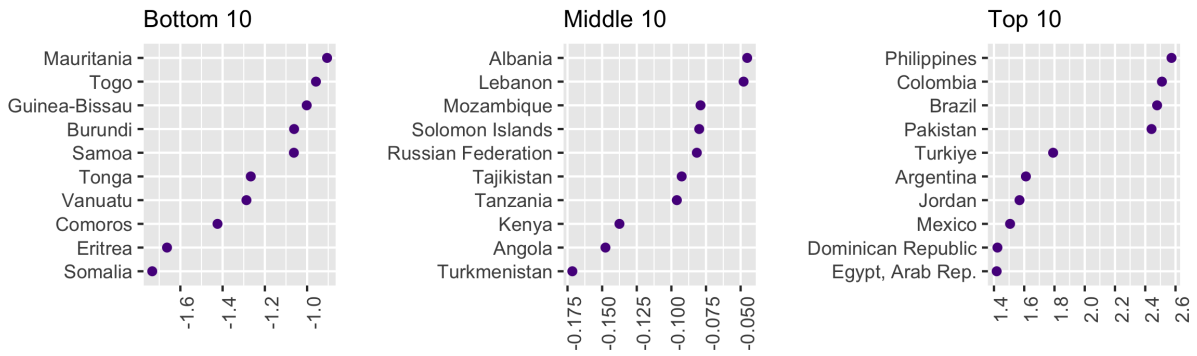


Figure 2. PNDT Index (Country Average): Top, Middle, and Bottom 10 Countries

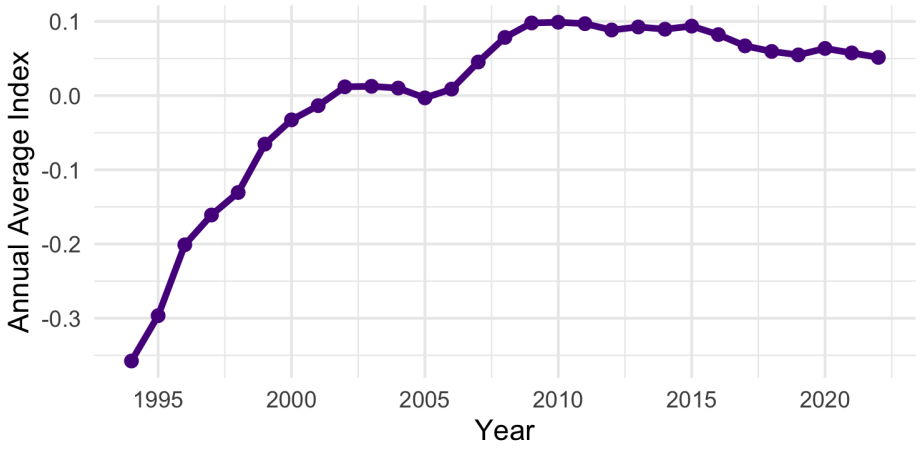


Figure 3. PNDT Index: Trend (1994-2022)

The IRT approach identifies two parameters for each item (here, a specific debt statistic): *difficulty* and *discrimination*. More difficult items are those that are missing more often by more countries, suggesting that they are systematically less likely to be measured, and hence generate less of a penalty in the PNDT score when absent. However, if a low-difficulty item is absent for a country-year, this suggests intentional withholding or very low capacity, and a greater penalty is applied when generating the PNDT score for that country-year. We find that debt statistics related to private debt guaranteed by public sectors are among the most difficult items to report, while variables at a highly aggregated level, i.e., external debt, are the least difficult.

The discrimination parameter reflects how strongly an item separates transparent from opaque countries. For highly discriminative items, transparent countries are much more likely to report than opaque countries, whereas this contrast is muted for low-discrimination items. Consequently, outcomes on high-discrimination items carry greater weight in the calculation of the PNDT score. Our model estimation shows that items related to debt servicing are highly informative of a country's overall transparency, po-

tentially revealing the political sensitivity of such information. The debt service-to-GDP ratio is critical for evaluating a country's debt sustainability and hence may be less likely to be revealed for countries facing debt distress. As such, the availability of this information can distinguish transparent from opaque reporters. By contrast, concessional borrowing and borrowing from official creditors are the least discriminative of countries' disclosure practices.

Determinants of Debt Transparency

What shapes debt transparency? We examine three categories of factors that may be related to debt transparency: domestic politics, international politics, and economic factors. In the analyses summarized below, we also control for income per capita. Our results suggest that, once we account for other factors, GDP per capita may play a less important role in explaining variation in debt transparency.

The Domestic Politics of Debt Transparency

While existing efforts to improve debt transparency have focused primarily on capacity building (IMF-WBG, 2018; Saavedra, Francisco, and Rivetti, 2024), the development of transparency norms through national legal reforms (International Monetary Fund, 2024), and the design of incentive structures (Rivetti, 2021, p.32), one relatively overlooked aspect is the role of domestic politics.

A long-standing claim among political scientists is the "democratic advantage" – **democracies** tend to receive more favorable borrowing terms (Beaulieu, Cox, and Saiegh, 2012; Schultz and Weingast, 2003), in part because of their greater transparency (Copelovitch, Gandrud, and Hallerberg, 2018; Hollyer, Rosendorff, and Vreeland, 2011). We confirm that the PNDT measure correlates positively with overall measures of economic transparency (Hollyer, Rosendorff, and Vreeland, 2014). At the same time, we do not find a significant relationship between the level of democracy and debt transparency. This may reflect the conditional nature of the "democratic advantage" argument (Ballard-Rosa, Mosley, and Wellhausen, 2021; Cormier, 2023; DiGiuseppe and Shea, 2015; Saiegh, 2005). Or it may reflect the presence of electoral considerations in democracies: the need to win re-election may sometimes lead government toward opacity, rather than transparency, in their debt reporting.

The **electoral cycle** often plays an important role in sovereign borrowing. Governments may be tempted to increase spending (often funded via borrowing) in advance of elections. They also may worry that opposition leaders and civil society actors will criticize debt-financed pre-election spending. Hence, we expect that governments have incentives to reduce debt reporting as elections approach. Indeed, we find that election years (vs. non-election years) in democracies are correlated with lower debt transparency; we do not find a similar pattern in autocracies (many of which hold elections). For democracies, the effect of elections is clearest in presidential systems, where elections occur on a fixed and predictable schedule (in most cases). In these systems, the election date is known in advance and is out of the government's control; the government is better able to anticipate election timing and to adjust debt reporting accordingly. Figure 4 shows that in election years in countries with presidential systems, the PNDT score is systematically lower.

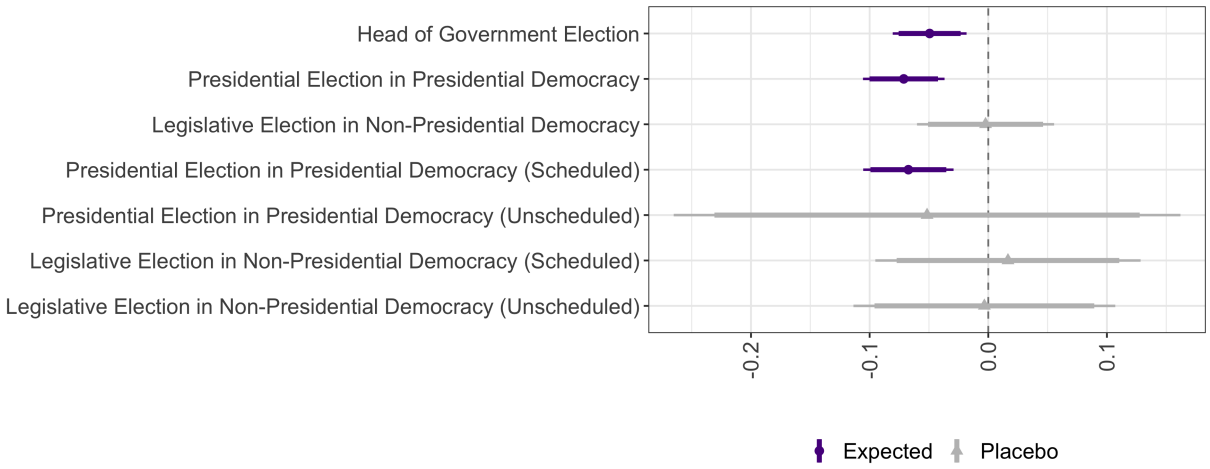


Figure 4. Effect of Elections on PNDT in Democracies

At the same time, in non-presidential (typically, parliamentary) systems, where legislative elections are most relevant for electing and forming a government, there is no significant association between debt transparency and election years. And when presidential systems experience unscheduled elections, we similarly see no significant link between election years and debt transparency.

We find that governments that anticipate elections in the near future appear to reduce the degree to which debt data is publicly available; the exception is when elections are unexpected or irregular, in which case there has not been enough time for incumbents to adjust their information revelation processes (the third row in Figure 4). The decline in debt transparency during elections is more pronounced in presidential democracies than in non-presidential systems.

International Political Dynamics

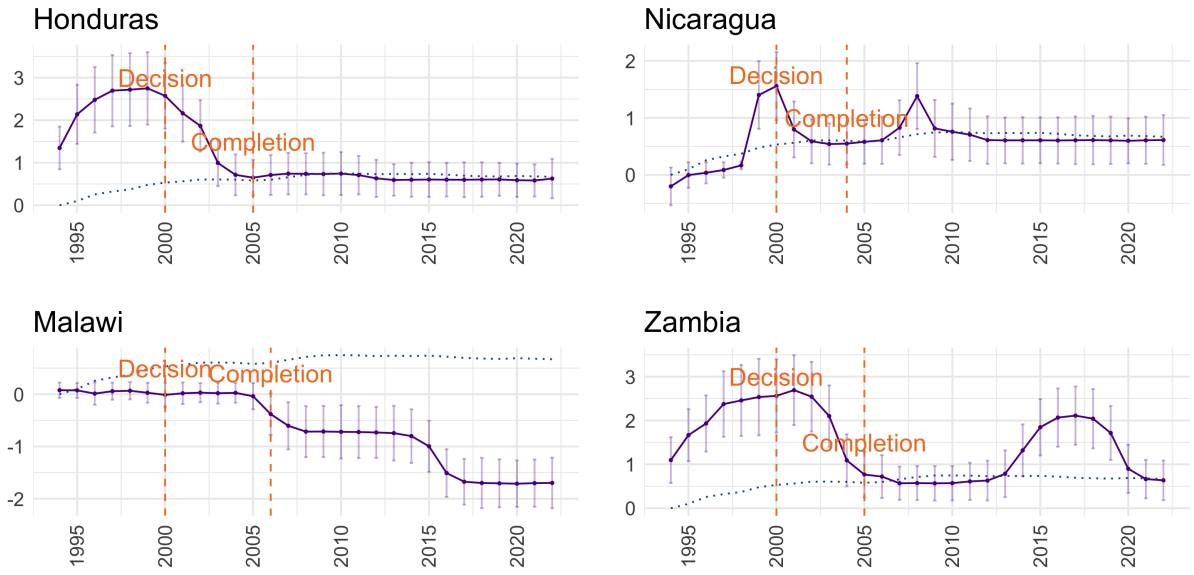
Geopolitical relationships affect various outcomes in international politics, ranging from membership in international institutions (Voeten, 2021; Davis, 2023) to loans from the IMF (Dreher et al., 2022) and the World Bank (Clark and Dolan, 2020). Countries that are aligned with the U.S. often receive more favorable treatment from the international financial institutions. We therefore might expect such countries to also be less subject to pressures for debt transparency. We find no significant relationship, however, between political alignment with the US (Bailey, Strezhnev, and Voeten, 2017) and debt transparency.

Financing from international financial institutions also could further incentivize governments' information sharing behaviors (Ge, 2025). Targeted **international initiatives** may provide incentives and capacity assistance to improve debt transparency. For example, technical assistance to enhance data collection capacity can also enhance transparency in reporting. IMF programs require regular debt reporting from participating countries, and the Heavily Indebted Poor Countries (HIPC) Initiative required countries to meet certain macroeconomic and structural reforms to qualify for debt relief.

We do not find significant effects of technical assistance or IMF programs on debt transparency; we

note, however, that IMF programs are typically agreed in the context of crises and crisis resolution. With respect to the HIPC program, we find that transparency is significantly higher in HIPC countries prior to the decision point for debt relief; but once the decision point is reached, HIPC countries have significantly lower levels of debt transparency. Figure 5 displays a selection of countries following these patterns, which could be explained by governments' efforts in the early stages of their HIPC programs. Once a country is along the path to debt relief, the incentives to remain focused on transparency may fade.

During **wars**, countries are more constrained in terms of capacity; both interstate war and civil war reduce debt transparency.



Note: The solid line is the country PNDT index. The dotted line is the cross-country average.

Figure 5. Trends in Transparency for some HIPC participants

Economic Factors

Countries with an **open economy** tend to be sensitive to market reactions and, therefore, have incentives to provide better information on their economic and financial status. We find that both total trade volume and the Chinn-Ito financial openness index (Chinn and Ito, 2008) are correlated with greater debt transparency, but financial openness may have a stronger effect.

Access to sovereign bond markets is expected to increase debt transparency due to data disclosure requirements and investor relations practices (Rivetti, 2022). We find that being rated by one of the three major ratings agencies is negatively correlated with debt transparency, which is opposite to the findings by Rivetti (2022). We do not find any significant relationship between new bond issuance or Eurobond issuance and debt transparency.

Economic crises also shape debt transparency. Horn et al. (2024) find that hidden debt tends to accumulate during good times and be revealed during bad times. Our analyses suggest the opposite: financial

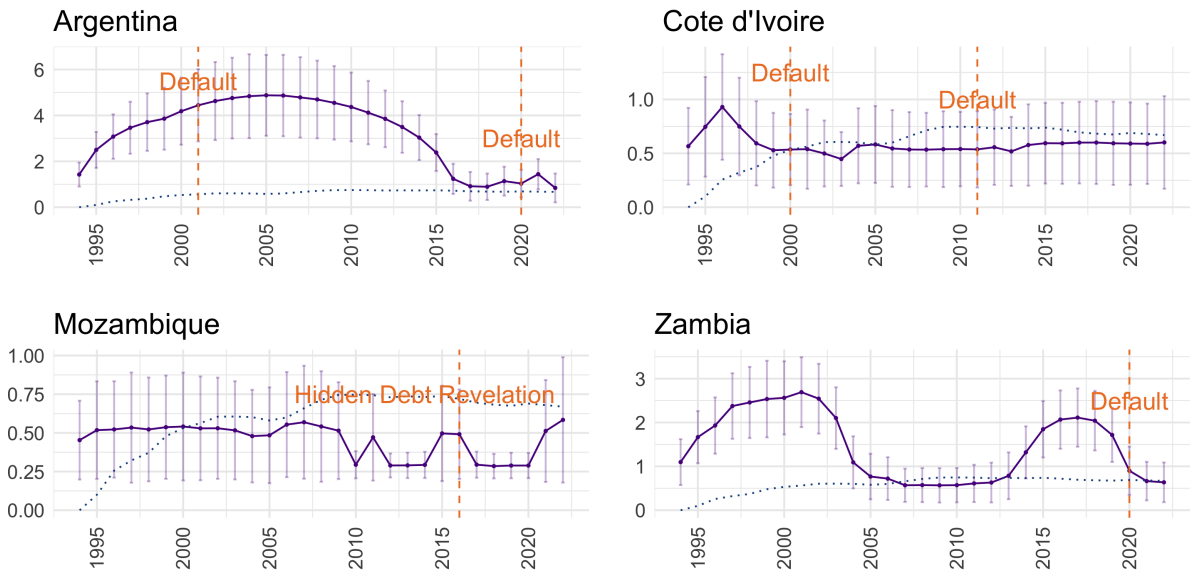


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Figure 6. PNDT Index: Default Episodes

crises (Nguyen, Castro, and Wood, 2022) are correlated with more opaque debt reporting. Looking further into country-specific trends in Argentina, Cote d'Ivôire, Mozambique, and Zambia in Figure 6, we find a downward trend in debt transparency during some episodes of default. This could be due to both a lack of capacity and a political will to conceal sensitive information when economic performance is particularly salient.

What do these results reveal? Although the technical capacity for data collection is essential for effective debt reporting (UNCTAD, 2025), political will ultimately can be a very decisive factor in determining whether a state and its government are transparent about their debt. Debt transparency is not only about capacity, legal frameworks, and norms; it is also a political choice.

Notes

1 The World Bank offers the Debt Reporting Heat Map, which records countries' debt reporting practices since 2020 (Rivetti, 2021). Horn et al. (2024) track countries' ex post revision of their debt stocks and flows from 1970 to 2020 to reveal the status of hidden debt. The Public Expenditure and Financial Accountability (PEFA) framework provides periodic assessments on the strengths and weaknesses of public financial management from 2005 to 2024. Lastly, #PublicDebtIsPublic is an ongoing web-based searchable database of public debt contracts, which, by making full-text legal documents available and standardized, aims to shift debt transparency norms and practices.

2 Many of these target capacity-building, such as the Joint IMF-World Bank Multipronged Approach to Address Debt Vulnerabilities (MPA) and the Debt Management Performance Assessment (DeMPA). The G-20 has also encouraged transparency, via its Global Sovereign Debt Roundtable, as well as by calling

on commercial creditors to voluntarily disclose transactions with sovereigns. Additional initiatives, such as those run by the International Budget Partnership, as well as the IMF's long-running Special Data Dissemination Standard (SDDS), target fiscal transparency more generally. In June 2025, the World Bank noted that bolder efforts – "Radical [Debt] Transparency" – are needed.

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