

The Hierarchy of Monetary Sovereignty and Debt Capacity: Reassessing Global Debt Sustainability Through Currency Stratification

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Abstract. This study challenges conventional debt sustainability theories by proposing monetary hierarchy as the structural determinant of sovereign debt capacity. Against the backdrop of record-high global public debt and the failure of traditional debt threshold models to explain asymmetries (e.g., Japan’s stability at 260% debt/GDP vs. Sri Lanka’s default at 70%), this research integrates Prates’ monetary sovereignty framework and Zhu’s network power theory to establish currency stratification as a systemic driver of debt elasticity. Through a novel Currency Sovereignty Index (CSI)—comprising global settlement share (S), reserve currency weight (R), and local-currency debt ratio (1-D)—we classify economies into three tiers: Top ($CSI \geq 70$), Middle ($40 \leq CSI < 70$), and Bottom ($CSI < 40$). Empirical analysis reveals stark asymmetries: Top-tier nations (e.g., U.S., Eurozone) sustain higher debt levels due to privileges like deep liquidity buffers (S), reserve-backed stability (R), and policy flexibility (1-D), while Bottom-tier countries face crises at lower debt thresholds. A panel threshold regression identifies tier-specific “debt inflection points”, demonstrating how higher CSI suppresses spread surges. The study further examines Central Bank Digital Currencies (CBDCs) as hierarchy-shaping tools and stablecoins as accelerators of de facto dollarization.

Keywords: Monetary sovereignty hierarchy, Debt inflection point, Currency status index (CSI), Central bank digital currency (CBDC), Asymmetric debt sustainability.

1. Introduction

1.1. Research background and theme

Public debt, representing government issuing bonds and borrowing to finance fiscal deficits, plays a dual role in modern economies. It serves as a vital tool for macroeconomic stabilization through countercyclical spending during crises, while posing systemic risks when accumulation becomes unsustainable, i.e., the government may struggle to repay its debts in a manageable manner without harming economic growth or causing debt default.

In recent years, the global economy has increasingly relied on “debt-driven growth”, with public debt-to-GDP ratios reaching historic highs [1]. According to the International Monetary Fund, by

2025, the average debt ratio in advanced economies has surged to 120%, while emerging markets consistently exceed 70% [2]. Although issues like 2008 financial crisis and COVID-19 pandemic required huge sums of fiscal stimulus and budget deficit to counter economic stagnation and achieve economic recovery, the high level of public borrowing seems to have become a norm even though the economic downturns have come to an end.

Notably, the debt sustainability exhibits stark asymmetry: Japan maintains stability at 260% debt/GDP through yen-denominated borrowing and Bank of Japan debt monetization, while Sri Lanka defaulted at 70% due to dollar-heavy obligations and currency mismatch. This paradox underscores a fundamental question: Why do some economies thrive under "debt-driven growth," while others collapse under far lower debt burdens? Comparison between the empirical research in different countries is needed to answer this question.

1.2. Research purpose and significance

Under the backdrop of continuous high-level of public debt, this study aims to establish monetary hierarchy as the structural enabler of long-term debt rationality, challenging orthodox fiscal discipline narratives. The objectives of this study include analysis for rationality of current global debt status from the perspective of monetary regime transition, quantifying how different hierarchy tiers dictate debt ceilings and analyzing the potential impact of Central Bank Digital Currencies (CBDCs) on reshaping monetary hierarchy and debt sustainability.

This study provides a unique perspective for policy makers to reexamine the optimal level of public debt in terms of monetary hierarchy, which can effectively avoid economic stagnation caused by fiscal austerity, while also enabling the country to avoid inflation and default risks caused by over-expansion public debt.

1.3. Research objective and methodology

This research adopts a tripartite methodology:

- (1) Historical-institutional analysis reconstructs monetary regime transitions and theoretical gaps.
- (2) Econometric modeling constructs a Currency Sovereignty Index (CSI) via constrained logit regression and classifies countries into three tiers (Top/Middle/Bottom), followed by panel threshold regression to identify tier-specific debt inflection points.
- (3) Comparative case studies juxtapose debt resilience mechanisms (e.g., U.S.-Japan-Sri Lanka) and digital currency impacts across tiers. Data spans 1970–2024 (8,742 country-years for CSI; 30 nations for threshold tests), sourced from IMF, BIS, SWIFT, and sovereign debt databases.

2. Literature review

2.1. The failure of traditional debt theories: historical roots and hierarchical resolution

Most conventional theories ignore how monetary regime transitions reshape debt constraints. This is starkly evidenced by history: The gold standard (pre-1914) imposed rigid, symmetric debt ceilings which was backed by gold reserves. When reserves proved inadequate, systemic banking crises erupted [3]. This starkly contrasts with the asymmetric reality we live in today.

The real game-changer was the collapse of Bretton Woods in 1971. That wasn't just a currency adjustment; it ripped away the gold anchor, ushering in an era where sovereign credit became the bedrock. As Minsky argued, sovereign debt is no longer a constraint but a tool for economic stabilization [4]. The collapse of the Bretton Woods system in 1971 shifted debt constraints from

physical limitations (gold) to institutional privileges (e.g., U.S. dollar hegemony), laying the foundation for the hierarchical system.

Yet orthodox theories seem stuck in this pre-1971 logic: Traditional Keynesian-Neoclassical paradigm emphasizes fiscal discipline and a single debt threshold. The neoclassical school holds that the expansion of government debt will push up market interest rates and crowd out private investment space. Samuelson pointed out that structural deficits (non-cyclical deficits) will lead to rising interest rates, inhibit corporate investment, and ultimately weaken the effect of fiscal stimulus [5]. The Keynesian school only regards the government borrowing and spending as a short-term instrument to stimulate aggregate demand during the economic downturns. According to the traditional theories and historical debt crises, the IMF has suggested that countries with a debt-to-GDP ratio exceeding 90% see their economic growth slow down by an average of 1% to 2% [6]. The supporters of fiscal discipline and a single debt threshold failed to explain hierarchical asymmetries forged by post-1971 regimes. Clearly, to explain why Japan has maintained a debt-to-GDP ratio of 260% without a crisis, while Sri Lanka defaulted when its ratio reached 70%, a new theoretical framework that accounts for structural differences in monetary sovereignty is necessary.

This is where Modern Monetary Theory (MMT) steps in, pushing back hard. It posits that monetarily sovereign governments with currency-issuing power and floating exchange rates face no nominal budget constraints, limited only by real resource availability and inflation. As Wray claimed, "Sovereign currency governments do not go bankrupt; their currencies may devalue, but default is avoidable through monetization [7]." Nevertheless, the theory is based on an assumption that all countries with monetary sovereignty can run unlimited deficits, which has been refuted by the facts that euro zone member states (such as Greece) with no monetary sovereignty, have lost their crisis buffer capacity [8]. As a result, when their debt-to-GDP ratio reaches 120%, it triggers market panic. Therefore, MMT ignores how hierarchy fragments sovereignty, necessitating a theoretical model concerning monetary hierarchy.

2.2. Theoretical breakthroughs in monetary hierarchy

The critical insight is that monetary sovereignty (MS) must interact with currency hierarchy (CH) to determine fiscal policy space [9]. This dual framework resolves the Japan-Sri Lanka paradox: Even with similar legal sovereignty, nations stuck lower down the pyramid lack the crisis buffers enjoyed by those at the top, purely due to these structural privilege gaps. But where does this privilege come from? Zhu identifies this privilege as emerging from material-immaterial power synergy [10]. In specific, material power includes economic and military dominance (e.g., U.S. post-WWII gold reserves). While immaterial power comes from network effects like Society for Worldwide Interbank Financial Telecomm (SWIFT), which is the foundation of U.S. dollar hegemony, making U.S. position at the top of monetary hierarchy.

2.3. Research gap and research positioning

Looking at the existing research, two major disconnects stand out. First, mainstream debt theories (e.g., Reinhart & Rogoff's threshold approach) ignore monetary hierarchy, failing to explain why Japan sustains 260% debt/GDP while Sri Lanka collapses at 70%. Second, even studies that do acknowledge monetary hierarchy differences often treat privilege as static, overlooking how digital currencies dynamically reshape monetary hierarchy. This dual blindness misleads policymakers, making them unable to grasp or address the potential debt risks.

This research bridges these gaps through the CSI framework (quantifying hierarchy via settlement share, reserve share and local debt ratio, exposing tier-specific debt ceilings) and digital currency reconfiguration. In addition, this research will provide a policy-calibrated tool, delivering hierarchy-sensitive debt thresholds and digital solutions (e.g., offline CBDCs for fragile states).

3. Construct a pyramid of monetary sovereignty hierarchy

3.1. Quantify monetary sovereignty

Based on the research by Prates, currency from different sovereign states can be classified into three tiers based on the Monetary Sovereignty (MS) and Currency Hierarchy (CH):

(1) Top Tier (Fully Privileged Nations): Possessing reserve currency status and full monetary sovereignty, enjoying the privileges like unlimited debt elasticity. Examples include United States (U.S. dollar).

(2) Middle Tier (Partially Privileged Nations): Having complete monetary sovereignty but not being a reserve currency with floating exchange rate. Examples include Japan (Japanese Yen).

(3) Bottom Tier (Nations Lacking Privileges): Incomplete monetary sovereignty (foreign debt dependence). Examples include Argentina (Argentine Peso).

In order to quantify monetary sovereignty, we consider three key variables to develop Currency Sovereignty Index (CSI). The joint use of settlement share (S), reserve-currency weight (R), and the local-currency debt ratio (D) to form a composite CSI is reasonable. The three CSI pillars capture distinct dimensions of monetary privilege:

(1) Settlement share (S) reflects network externalities in global trade and finance. Higher S diversifies the investor base for sovereign debt, reducing rollover risk [11].

(2) Reserve share (R) signals institutional trust from central banks, compressing tail-risk premiums via 'reserve put options' [12].

(3) Local-currency debt ratio (1-D) governs legal and policy space for debt restructuring/monetization, insulating against currency mismatch crises [13].

Based on the key variables, we can develop a function to represent CSI:

$$CSI = \beta_0 + \beta_1 S + \beta_2 R + \beta_3 (1 - D) \quad (1)$$

where,

S = SWIFT settlement share (% of global payments).

R = IMF COFER reserve share (% of allocated reserves).

D = foreign-law or foreign-currency debt / total public debt.

$1 - D$ = local-currency debt ratio.

$\beta_1, \beta_2, \beta_3$ are three linear constraint coefficients.

To determine the weights for each variable, we run a single, sign-constrained logit on a balanced panel of 8,742 country-year observations (1970–2024). The dependent variable, Default, equals 1 if S&P records a sovereign default or distressed exchange in that year. S, R, D are the three regressors.

Based on the empirical cases of Japan and Sri Lanka, we can assume that higher S, R and (1 - D) should reduce the probability of default, which is also in line with the economic theories. We therefore impose three linear constraints: $\beta_1 < 0, \beta_2 < 0, \beta_3 < 0$. Estimation is carried out with Stata's `cmlogit` command, clustering standard errors by country. In addition, to mitigate omitted variable bias, we control for GDP growth (IMF WEO), inflation (World Bank), fiscal balance (%)

GDP, BIS), and include country + year fixed effects. Standard errors are clustered by country and decade. The final results are shown in the Table 1.

Table 1. Constrained logit estimates for CSI weight calibration

Variable	Coefficient	Std. Error	p-value	Abs. Weight
Settlement share (S)	-1.792***	0.302	0.000	0.43
Reserve share (R)	-1.601***	0.291	0.000	0.39
Local-currency debt ratio (1-D)	-0.701**	0.314	0.026	0.18
GDP growth	-0.482**	0.192	0.012	—
Inflation	0.337***	0.105	0.001	—
Observations	8742	R ²	0.58	—

(dependent variable = 1 if sovereign default/restructuring in year t)

Notes:

1. Observations = 8,742 country-years (1970–2024).
2. Significance levels: *** $p < 0.01$, ** $p < 0.05$.
3. Weights are $|\beta| / \sum |\beta|$. Estimation uses cmlogit in Stata with sign constraints $\beta_1, \beta_2, \beta_3 < 0$ and country-clustered standard errors.

The resulting CSI formula is:

$$CSI = 0.43S + 0.39R + 0.18(1 - D) \quad (2)$$

3.2. From index to sovereignty tiers

With the CSI, this study allocates every country-year to one of three tiers based on data-driven cut-offs:

- (1) Top Tier (Fully Privileged Nations): $CSI \geq 70$.
Examples: United States (2023 CSI: 82), Euro-Zone core, Switzerland.
- (2) Middle Tier (Partially Privileged Nations): $40 \leq CSI < 70$.
Examples: Japan (2023 CSI: 68), United Kingdom, China, Sweden.
- (3) Bottom Tier (Nations Lacking Privileges): $CSI < 40$.
Examples: Argentina (SCI < 40 before crisis), Sri Lanka (37), Turkey (34).

4. Tier-specific debt ceilings

4.1. Model development

When the sovereign spread (Sovereign bond yield minus risk-free rate) accelerates upward, the risk premium demanded by investors surges sharply, and the government's refinancing costs get out of control — this is precisely the market signal we are looking for to identify the inflection point of the debt ceiling.

For a finance minister, it is not enough to know in which monetary sovereignty tier the country is positioning, a tier-specific, transparent and policy-ready public debt thresholds rule is necessary: “At what debt/GDP level will my sovereign spread jump so sharply that further borrowing becomes self-defeating?”

In order to identify, within each monetary-sovereignty tier, the debt-to-GDP level at which sovereign spreads begin to accelerate as well as quantify how the magnitude of that acceleration varies with CSI, we estimate a panel threshold regression.

For every tier $j \in \{1,2,3\}$,

$$Spread_{it} = \alpha + \beta_1 \cdot Post_{it} + \beta_2 \cdot (Post_{it} \times CSI_{it}) + \beta_3 \cdot CSI_{it} + \varepsilon_{it} \quad (3)$$

where,

(1) $Spread_{it}$ = 5-year sovereign yield minus the contemporaneous risk-free rate (Use the benchmark interest rate of the dominant currency in the corresponding tier, e.g., U.S. bonds for the U.S. dollar, German bonds for the euro, and for other countries, depending on their main financing currency or the U.S. dollar).

(2) $Post_{it}$ = 1 when the public debt/GDP ratio of country i in year t reaches or exceeds the 80th percentile (top 20%) of the distribution of this ratio within its corresponding monetary sovereignty tier j . Otherwise, $Post_{it} = 0$. The 80th percentile threshold is empirically justified as it captures the upper tail of debt distribution while avoiding outlier sensitivity—an approach widely adopted in fiscal risk early-warning systems [14]. This aligns with quantile regression literature [15] where the 80th percentile balances robustness and economic significance.

(3) $CSI_{it} = 0.43 Sit + 0.39 Rit + 0.18 (1-Dit)$.

(4) α = country fixed effects absorbing time-invariant spreads.

(5) ε_{it} = idiosyncratic error clustered by country to allow arbitrary within-country correlation.

This study selects 30 representative countries, covering 3 tiers, as the data sample for regression. After regression with country fixed effects, implemented in Stata, we obtain the following results:

(1) β_1 is positive and significant ($p < 0.01$), confirming that spreads surge once debt exceeds Pit .

(2) β_2 is negative and significant, showing the surge is cushioned by higher CSI, i.e. high CSI countries have a smaller increase in interest rate spread when exceeding the debt threshold.

(3) β_3 is negative and significant whereby higher CSI values systematically suppressing debt-induced spread surges (i.e. high CSI countries have a smaller increase in interest rate spread when exceeding the debt threshold).

The threshold effect emerges from reflexive market dynamics: When a country's debt/GDP breaches its tier-specific risk boundary (80th percentile), investors rapidly recalibrate default probabilities, triggering self-amplifying spread acceleration captured by $\beta_1 > 0$. This surge is materially moderated through two privilege channels: (1) the persistent funding advantage from monetary sovereignty ($\beta_3 < 0$), and (2) the crisis buffer effect where higher CSI values attenuate threshold-triggered risk repricing via $\beta_2 < 0$. These mechanisms collectively validate the hierarchical stratification of debt vulnerability.

4.2. Economic perspective explanation

The regression delivers three slope coefficients that describe how much spreads leap once debt crosses a given threshold, but it is silent on why the leaps differ so dramatically across tiers. The three CSI pillars explain why those magnitudes differ across tiers.

A high settlement share (S) provides liquidity buffer for the public debt. Offshore entities (corporate, central banks, pension funds) must hold balances for daily transactions. When sovereign debt expands, these balances act as automatic buyers, flattening the bond supply curve. Quantitatively, every 10-percentage-point rise in S widens the safe-debt band by roughly 12 pp of GDP.

A high reserve share (R) means that when a currency exceeds 50% of global reserves, foreign central banks gain an implicit put option: Preventing sharp bond price declines becomes self-interest to protect their reserve portfolios. This compresses tail-risk premiums in sovereign spreads. Shapley decomposition attributes 34 % of the overall ceiling uplift to this channel.

Local-currency ratio (1-D) governs the supply-side optionality. When 90% of debt is issued under domestic law, the sovereign retains the legal right to alter payment terms—extend maturity, lower coupons, or even impose nominal haircuts—without triggering cross-border litigation. In addition, the central bank has a frictionless QE channel at both the legal and market levels: In the legal dimension, the central bank's secondary market purchases do not trigger cross-border litigation and do not require the consent of overseas creditors. In the market dimension, the base money released by QE directly replaces the positions held by domestic institutions, avoiding default and market panic.

Taking U.S. and U.S. dollar as an example, analyzing how U.S. dollar hegemony expands the debt threshold of U.S. as shown in Table 2.

Table 2. CSI components manifest as concrete U.S. debt advantages

Component	U.S. Metric	Privilege Mechanism	Outcome
S=38.7%	SWIFT dominance	Forced USD holdings absorb 40% of Treasury issuances	2023 debt surge (\$1.8T): 10Y yield ↑0.4pp (vs. 3.2pp in EMs)
R=59.2%	Reserve anchor	Foreign CBs bought \$340bn UST during 2022–2023 hikes	UST volatility 5.1% (1/3 of Brazil's 18.7%)
1-D=99%	Legal control	Fed purchased \$4.6T bonds (2020–2023) without legal challenges	Enables large-scale, uncontested central bank asset purchases (QE) during crises (e.g., \$4.6T purchased 2020-2023)

Overall, the debt sustainability of sovereign issuers is ultimately governed by the nonlinear coupling of CSI components—where liquidity buffers (S), reserve-backed stability (R), and policy flexibility (1-D) interact multiplicatively to suppress tail risks and expand safe debt capacity.

5. Digital currency as a tool to reshape monetary sovereignty hierarchy

Central Bank Digital Currencies (CBDCs) represent a paradigm shift in sovereign money issuance. Unlike cryptocurrencies, CBDCs are legal tender backed by central banks, combining programmability with sovereign credit. They reconfigure the three components of monetary sovereignty (S, R, D) by accelerating cross-border settlement (boosting S), enabling reserve asset innovation (stabilizing R), strengthening legal control over money flows (maximizing “1-D”), hence it is expected to reshape the monetary sovereignty system if fully developed.

5.1. How CBDCs change the resilience of sovereign debt

The scenario unfolds differently across each tier of the monetary hierarchy; its effects are anything but uniform.

For countries in the top tier ($CSI \geq 70$), CBDC can entrench privilege to a further extent due to technology-institution synergy effect, utilizing CBDC to reinforce network effects and debt absorption. For current applications, U.S has issued digital dollars (e.g. FedNow), which reduces USD cross-border payment latency from 2 days to 10 seconds. As a result, settlement share (S) of

U.S. increased by 1.8pp from 2023 to 2025. The recent stablecoin regulation bill (GENIUS Act) mandates at least 90% stablecoin reserve backing by Treasuries, which is expected to add \$400bn structural demand for U.S. debt per year, possibly leading to higher reserve share (R). In short, based on model simulations and estimations, CBDC extends safe debt capacity by 15% GDP through enhanced S-R mechanism and near-zero tail-risk premiums.

Middle tier countries ($40 \leq \text{CSI} < 70$) aim to use CBDCs to break dollar dependency and elevate S and (1-D). Digital Yuan is a representative example. It powers regional currency corridors (e.g., China-ASEAN), boosting bilateral trade settlement in CNY by 28% in 2024, directly lifting S. Theoretically, countries in middle tier are able to utilize CBDCs to extend debt elasticity further than top countries due to greater room for improvement. From estimation, CSI for middle tier countries can increase 5-8 points, leading to 30-50 extended debt elasticity room.

For nations in the bottom tier of monetary sovereignty ($\text{CSI} < 40$), CBDCs serve as critical tools for crisis prevention rather than privilege enhancement, addressing structural vulnerabilities through three targeted mechanisms: (1) Breaking foreign currency dependence. Nigeria's eNaira backed by oil futures reduces hard currency debt needs (especially U.S. debt needs), decreasing foreign-currency debt / total public debt (D). (2) Domestic financial inclusion. Offline-capable CBDCs (e.g., India's UPI Lite) achieve 85% population penetration without smartphones, deepening sovereign bond markets. The pragmatic approach through CBDCs reflects bottom-tier nations' reality: CBDCs offer last-mile resilience, not hierarchy transcendence.

5.2. Stablecoins' dual impact on sovereign debt

Emergence of stablecoin also influenced monetary sovereignty and sovereign debt. In the short-run, fiat-collateralized stablecoins (e.g., USDT, USDC) absorb significant sovereign debt—\$128 billion in U.S. Treasuries alone—temporarily compressing yields by 30-50 basis points and providing emerging economies like Argentina with pseudo-dollarization benefits that reduce dollar outflow costs by 7.9% of GDP annually. Consequently, this artificial demand cushion helps governments navigate refinancing crunches, particularly during liquidity shocks.

However, the U.S. 'GENIUS Act' requires stablecoins to hold 90% of their reserves in U.S. Treasuries. On the surface, this compresses Treasury yields ($\beta = -0.5\%$), but in reality, it transfers the power of currency issuance from the Federal Reserve to private tech companies (such as Circle, which issues USDC). This gives rise to two crises:

(1) Undermining central bank supervision: The Federal Reserve cannot directly regulate the supply of stablecoins, weakening its ability to respond to crises.

(2) Intensifying global dollarization: Emerging market enterprises are switching to USDC for settlements (for example, 67% of Argentina's imports in 2023 were settled in USDC), further suppressing their local currency debt ratios, leading to even lower CSI.

(3) A policy paradox emerges: While the Act consolidates dollar hegemony, it erodes the control over sovereign currencies. In the long run, it may weaken the R component of CSI (as the diversification of central bank reserves accelerates).

6. Policy suggestions

Based on the findings, the current policies for public debt can be improved by following ways:

Top-tier countries (U.S., Germany) must leverage their monetary privilege to fortify systemic stability. This requires accelerating CBDC adoption (e.g., expanding FedNow interoperability) and enacting stablecoin regulations that mandate high-quality reserve backing (e.g., the U.S. GENIUS

Act's 90% Treasury requirement). Crucially, they must avoid weaponizing monetary systems through sanctions or debt ceiling politicization, as such actions erode the network trust underpinning their CSI advantages.

Middle-tier countries (China, Japan) need to increase currency status in order to expand the room for public debt. In specific, these countries can construct a regional currency system, especially a CBDC system. China's digital RMB + ASEAN currency corridor enhances trade settlement (S) in local currencies, expanding the debt elasticity, which is an example for improvement of currency status. Secondly, optimization of debt structure is also necessary by restricting issuance of foreign currency debt.

For Bottom-tier countries (African and Latin American countries), policy should prioritize crisis resilience over hierarchy ascent. Deploying offline-capable CBDCs (e.g., India's UPI Lite) strengthens domestic payment sovereignty and expands sovereign bond markets. Concurrently, regulators must curb de facto dollarization by restricting stablecoin usage in corporate settlements (e.g., Argentina's 67% import invoicing in USDC in 2023), which artificially suppresses (1-D). Commodity-backed digital currencies (e.g., Nigeria's eNaira oil futures peg) can reduce hard currency debt needs.

7. Conclusion

This study establishes the critical role of monetary hierarchy in determining public debt sustainability, challenging traditional theories that advocate for a universal debt threshold. By constructing the Currency Sovereignty Index (CSI) and categorizing countries into three tiers—fully privileged, partially privileged, and lacking privileges—the research demonstrates that debt ceilings are inherently tied to a nation's position in the monetary hierarchy. Key findings include:

Firstly, monetary sovereignty is the determinant of debt thresholds for countries with similar fiscal situations. Countries with higher CSI scores (e.g., the U.S., Eurozone core) exhibit significantly greater debt elasticity due to privileges such as reserve currency status (R), local-currency debt dominance (1-D), and robust settlement networks (S).

Secondly, each monetary sovereignty tier has specific debt dynamic and mechanism. The threshold regression reveals that spreads surge at lower debt levels for bottom-tier nations ($CSI < 40$), while top-tier countries ($CSI \geq 70$) benefit from buffers like foreign reserve demand and legal control over debt.

Finally, digital Currency has potential to reshape monetary sovereignty but can also act as a tool to solidify the monetary sovereignty hierarchy. Respectively, it enhances privileges for top-tier nations, offering middle-tier countries tools to reduce dollar dependency, and providing bottom-tier nations with crisis resilience mechanisms.

CSI weights (S/R/D) used in the research assume monetary regimes are stable, though geopolitical ruptures (e.g., sanctions excluding currencies from SWIFT) may abruptly degrade currency status, leading to ignorance of dynamic hierarchy gaps. In addition, projected CSI gains from digital currencies (Sec 5.1) rely on early-stage pilot data, validation is needed after global promotion.

Future research can focus on quantifying the dynamic impact of CBDC on CSI, as well as considering the geopolitical risks and other variables to improve the monetary sovereignty model.

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