Journal of International Economic Law, 2022, **25**, 424–446
DOI: https://doi.org/10.1093/jiel/jgac029
Advance Access Publication Date: 25 August 2022
Original Article

OXFORD

Sovereign Solvency as Monetary Power

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ABSTRACT

This article reconceptualizes sovereign insolvency from a money-centred perspective. Drawing on contemporary critiques of money and finance, it argues that as long as the international monetary system is structured upon a hierarchy of currencies, monetary power determines the solvency of sovereign states. The ability to issue debt in own currency and the degree to which such currency performs the functions of money at an international level are the most important factors underpinning solvency. Sovereign insolvencies are inherent to the asymmetric character of global liquidity, rather than solely the product of fiscal misfortunes or mismanagement. To correct those asymmetries, it is necessary to reset the international monetary system. Yet insofar as this reform does not materialize, an international sovereign bankruptcy mechanism is indispensable to ensuring a more equitable global economic order.

I. INTRODUCTION

This article reconceptualizes sovereign insolvency from a money-centred perspective. Drawing on contemporary critiques of money and finance, it argues that as long as the international monetary system is structured upon a global hierarchy of currencies, the solvency of sovereign states is set to be critically determined by their monetary power. Thus, a sovereign bankruptcy mechanism is a critical requirement for global equity and justice.

The mainstream literature on sovereign debt commonly attributes sovereign insolvency to the broad categories of either misfortunes or mismanagement, which are conceived as present to varying degrees in any given sovereign debt crisis.[1] Misfortunes, broadly understood as episodes that fall outside of the reasonable control of the state, include natural disasters, wars, economic and political shocks from abroad, and fluctuations in commodity prices. Mismanagement includes fiscal profligacy, inadequate financial statistics, corruption, dishonesty, or collapse of

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[1] See, eg, J Ams and others, 'Sovereign Default', in SA Abbas, A Pienkowski, and K Rogoff (eds), *Sovereign Debt: A Guide for Economists and Practitioners* (OUP 2019); International Law Association, 'State Insolvency: Options for the Way Forward', Report of the Sovereign Insolvency Study Group (2010) 6.

the banking system.[2] Such factors may result in the sovereign's inability or unwillingness to honour its financial obligations, thereby leading to defaults.[3] Within this context, the higher levels of solvency of developed states are often explained by the strength of their political institutions, which enables them more effectively to avoid mismanagement of public finance.[4] Conversely, developing and emerging economies (DEEs) are perceived as more subject to insolvency due to the purported inferior quality of their institutions, which is said to systematically cause mismanagement of sovereign debt, and thus solvency crises, or undermine their capacity to respond to their own misfortunes. Such views often serve as the basis for moralizing narratives that tend to blame the debtor for its own insolvency and call for the adoption of austerity programmes as a measure of 'responsibility' towards creditors.[5]

Whilst misfortune and mismanagement may bear some explanatory power in any sovereign debt crisis, this article challenges the orthodox view in scholarship and policy that tends to neglect the monetary factors at the root of sovereign insolvency. In so doing, it proposes a novel understanding of the meaning and causes of sovereign (in)solvency that considers the monetary hierarchy underlying sovereign debt crises. Crucially, it contends that liquidity is the key to understand what sovereign (in)solvency means and what it takes to ensure the performability of sovereign debt contracts. Sovereign (in)solvency should be conceived not as a state's (in)ability or (un)willingness to pay its debts, but rather as (in)ability to continuously ensure or otherwise access liquidity. However, liquidity is unevenly available to states with different levels of monetary power. Irrespective of any misfortunes or mismanagement that may influence their occurrence, sovereign insolvency episodes are inherent to the asymmetric character of global liquidity. Monetary power is critical to the occurrence of sovereign debt crises in the periphery of global capitalism. As long as the international monetary system is not reformed to correct such asymmetries, a sovereign bankruptcy mechanism is needed that distributes the costs and losses of sovereign debt crises in an equitable manner.

This article proceeds as follows. Section II draws upon recent critiques on the legal architecture of asset safety to postulate that sovereign (in)solvency is inextricably linked with a state's legal and institutional capacity to make sovereign debt safe or, in other words, to create certainty of full and timely performance of a state's financial obligations. Emerging in the aftermath of the 2008–9 global financial crisis (GFC), one of the most significant contributions of this line of enquiry is putting into evidence that asset safety is the product of a series of legal interventions to ensure the performability of legal commitments, particularly private debt contracts. An underexplored question, however, is what those legal interventions may be in sovereign debt contracts. This is what this article seeks to unpack through the critical lens of monetary power. Section III discusses the mainstream approach in sovereign debt scholarship and policy as to what types of legal interventions are required to make sovereign debt safe. In a nutshell, this is typically a fiscal-centred view that tends to associate safety—and therefore solvency—with a state's capacity to collect and allocate sufficient resources to debt repayment. The mainstream

[2] See, eg, P Mauro and others, 'A Modern History of Fiscal Prudence and Profligacy', IMF Working Paper No 13/5 (2013); C Reinhart and K Rogoff, 'From Financial Crash to Debt Crisis', 101 (5) American Economic Review 1676–1706 (2011).

[3] See E Fernández-Arias, 'International Lending of Last Resort and Sovereign Debt Restructuring', in CA Primo Braga and GA Vincelette (eds), *Sovereign Debt and the Financial Crisis: Will This Time Be Different?* (World Bank 2011) 334. The conceptualisation of sovereign insolvency as unwillingness to pay derives from a foundational paper by Eaton and Gersovitz, whose econometric model is based on the assumption that borrowers are 'inherently dishonest in that they will default if it is to their benefit', considering the enforcement difficulties that arise in relation to sovereign debt: J Eaton and M Gersovitz, 'Debt with Potential Repudiation: Theoretical and Empirical Analysis' (1981) 48(2) The Review of Economic Studies 289, 290. This article challenges the unwillingness-inability to pay dichotomy by proposing the idea of solvency as continuous liquidity throughout time, as discussed in detail in Section II.

[4] See, eg, International Monetary Fund, *Global Financial Stability Report 2012: The Quest for Lasting Stability* (18 April 2012) 105; C Van Rijckeghem and B Weder, 'Political Institutions and Debt Crises', 138 (3) Public Choice 387–408 (2009); E Kohlscheen, 'Why Are There Serial Defaulters? Evidence from Constitutions', 50 (4) Journal of Law and Economics 713–30 (2007).

[5] K Dyson, 'Moralizing Credit', in *States, Debt, and Power: 'Saints' and 'Sinners' in European History and Integration* (OUP 2014).

approach is reflected in most legal regulations governing sovereign debt in either national or foreign currency, including domestic, regional, and international frameworks. In contrast with such view, this article postulates that sovereign (in)solvency is critically determined by monetary factors.

Section IV explains the meaning of monetary power as defined in this article by discussing its two components—currency hierarchy and monetary sovereignty—and analyses why they are critical in determining a state's capacity to avoid sovereign debt crises. In addition, it introduces a framework that makes sense of the relationship between monetary power and the state's ability to make sovereign debt safe composed of three pillars: safety/solvency as fiscal capacity, safety/solvency as liquidity for debt rollover, and safety/solvency as capacity to guarantee. These interactions create two types of safety in sovereign debt contracts: a solid safety, which involves the three pillars of safety and is only available for core currency states, and a fragile safety—a partial combination of those pillars—for peripheral currency states. States with the ability to create solid safety can avoid sovereign debt crises. Conversely, fragile safety means that a state is subject to a higher risk of insolvency. Within this dichotomic classification, however, a state can ensure higher levels of safety/solvency the more monetarily sovereign it is. Section V draws upon the relationship between monetary power and sovereign debt crises to discuss the need for international sovereign bankruptcy rules, and Section VI concludes.

II. SOVEREIGN SOLVENCY AS SOVEREIGN DEBT ASSET SAFETY

Conceptualizing sovereign (in)solvency is a contentious subject in international economic law. This is because, to start with, there is no clear definition of sovereign (in)solvency in international law.[6] According to the International Monetary Fund (IMF)'s foundational instrument on Debt Sustainability Assessments (DSAs), a state is solvent when its current and future expenditure is no greater than its current and future path of income, net of any initial indebtedness.[7] In addition, a state is liquid if, regardless of whether it satisfies the solvency condition, its liquid assets and available financing are sufficient to meet or rollover its maturing liabilities.[8] As the IMF acknowledges, this distinction is often blurry because illiquidity may be manifested in rising interest rates, which eventually imperil the state's solvency.[9] Therefore, despite the distinction between solvency and liquidity, the IMF implicitly recognizes that a state's solvency is connected with its ability to ensure liquidity.[10]

From a legal perspective, the blurriness between liquidity and solvency can be perceived as a continuum that reflects the state's ability to fulfil its financial obligations as they fall due. As the International Law Association's Sovereign Insolvency Study Group defines it, a sovereign's solvency is ultimately a question of 'ability to pay'.[11] Thus, 'like a person, when a state is unable to pay its external debts as they fall due, that state may be considered to be insolvent'.[12] This analogy reflects a broader trend in sovereign debt scholarship of mirroring private insolvency theory,[13] in which insolvency is defined as the excess of liabilities over the fair market value of assets.[14] However, this analogy entails some difficulties in transliterating the boundary between illiquidity and insolvency from private entities towards public entities. States cannot be subject to liquidation, not least because most of their assets are protected by sovereign immunity.[15]

[6] International Law Association, above n 1.
[7] International Monetary Fund, 'Assessing Sustainability' (28 May 2002) 5.
[8] Ibid.
[9] Ibid.
[10] See C Wyplosz, 'Debt Sustainability Assessment: Mission Impossible', 2 (3) Review of Economics and Institutions 1 (2011).
[11] International Law Association, above n 1.
[12] Ibid.
[13] Ibid, at 18–36.
[14] E Schnee and H Burton, 'Insolvency: An Evolving Definition?' 63 (12) The Certified Public Accountants Journal 30 (1993).
[15] R Jennings and A Watts (eds), *Oppenheim's International Law* (CUP 1992) 341–76.

Rather, the solvency of a state is inextricably linked with its ability to offer or otherwise access continuous liquidity.

This article reconceptualizes sovereign (in)solvency from an innovative standpoint by drawing upon contemporary critiques that make sense of the legal construction of safe assets.[16] The term 'safe asset' has been used by academics, policymakers, and market participants since at least the 1980s to describe low-risk investments that are traded as if they are default risk-free.[17] Although there is no single definition of a 'safe asset', these are commonly described as encompassing government debt, bank deposits, commercial paper, repos, AAA-rated corporate debt, and asset-backed securities, among others.[18] The mainstream literature on safe assets commonly attributes their safety features to 'intrinsic characteristics'[19] and 'underlying qualities',[20] without a clear account of the legal infrastructures upon which they are built.

Recently, however, legal scholars began to explore the 'legal coding' of safe assets by conceptualizing the idea of 'asset safety' as the product of public interventions to ensure the performability of debt contracts, particularly during bursts in the liquidity cycle.[21] Thus, Pistor reflects upon the legal design elements that ensure the endurance of capital, one of them being the convertibility of private assets into public money.[22] Deep financial markets can only develop if there is sufficient backstopping of their activities by the state.[23] Convertibility is precisely the ability to access public backstopping, that is, an explicit or implicit guarantee that asset holders will be able to convert their assets into public money (cash) at face value when they can no longer find private takers. This attribute holds special relevance in the case of financial assets, particularly debt instruments, as these always carry a risk of not being able to be converted into public money, also known as 'liquidity risk'.[24]

In turn, Gelpern and Gerding investigate the legal infrastructures that shape the allocation of risk in the construction of safe assets, arguing that risk-free contracts do not exist. Instead, what we know as 'safe assets' are 'conjunctures' and 'fictions' created by law to place them at the foundation of institutions and markets.[25] Ultimately, the safety of any asset rests on the capacity (and willingness) of the state to deploy its powers in specific ways to benefit certain constituents,[26] and the primary way it does so is through different kinds of legal interventions. Although obscured by the language of safety, these legal interventions redistribute risk between key actors, which may include both private stakeholders and the public.[27]

As those discussions suggest, legal critiques on the architecture of safe assets were motivated by the public bailouts of private assets in the 2008–9 GFC.[28] They are concerned with, on the one hand, building effective macroprudential regulations to ensure financial stability and, on the other hand, unveiling the distributional effect of private asset de-risking through public institutions. Yet, in laying bare the proposition that private asset safety is the product of a series of legal interventions which, in turn, involve distributive choices shaped by law, those critiques provide

[16] See K Pistor, 'A Legal Theory of Finance', 41 (2) Journal of Comparative Economics 315 (2013); K Pistor, 'From Territorial to Monetary Sovereignty', 18 (2) Theoretical Enquiries in Law 491 (2017); P Mehrling, 'The Inherent Hierarchy of Money' (Duncan Foley Festschrift Conference, New York, 20–21 April 2012).

[17] See, eg, International Monetary Fund, above n 4, at 81; PO Gourinchas and O Jeanne, 'Global Safe Assets', BIS Working Papers 68 (2012).

[18] A Gelpern and EF Gerding, 'Inside Safe Assets' 33 Yale Journal on Regulation 363, 365 (2016).

[19] International Monetary Fund, above n 4, at 82.

[20] Ibid, at 84.

[21] Minsky HP, *Stabilizing an Unstable Economy* (first published 1986, McGraw-Hill 2008).

[22] K Pistor, *The Code of Capital: How the Law Creates Wealth and Inequality* (Princeton University Press 2019) ch 4.

[23] K Pistor, 'From Territorial to Monetary Sovereignty', above n 16, at 508.

[24] Pistor, above n 22, at 92.

[25] Gelpern and Gerding, above n 18, at 366–7.

[26] Ibid 367.

[27] Ibid 413.

[28] See M Kacperczyk and P Schnabl, 'When Safe Proved Risky: Commercial Paper during the Financial Crisis of 2007–2009', 24 (1) Journal of Economic Perspectives 29–50 (2010).

crucial insights into shedding a new light onto the meaning and legal underpinnings of sovereign (in)solvency.

The issue of whether sovereign debt can be regarded as a low-risk contract depends on whether repayment or rollover at maturity, and therefore continuous liquidity throughout time, is always expected. Thus, 'safety' can be understood as the long-term expectation that a state is to remain solvent. Based on such premise, sovereign (in)solvency builds upon a state's legal and institutional ability to make sovereign debt safe or, in other words, to create certainty of full performance of its financial obligations. Where this ability exists, the state is effectively able to avoid sovereign debt crises. In contrast, where it does not exist, the state is more likely to be subject to insolvency.

So far, the legal architecture that ensures the continuous performability of sovereign debt contracts remains underexplored. Although the contemporary critiques discussed in this section provide key insights on this matter, asset safety in sovereign debt should be distinguished from that of private assets. Crucially, the ultimate 'safety' element of private assets—the extension of public backing to such contracts—is no more than a tautological concept when it comes to sovereign debt. In contrast with private asset safety critiques, the legal architecture of sovereign debt safety requires a novel framework that incorporates both fiscal and monetary factors and accounts for the asymmetries of the international monetary system.

III. THE MAINSTREAM APPROACH TO SOVEREIGN (IN)SOLVENCY

The mainstream approach to sovereign (in)solvency, and therefore on what it means for sovereign debt to be regarded as safe, tends to conceive this question exclusively as a matter of fiscal discipline.[29] In this sense, a state is perceived to be solvent when the government is able to reduce the risk of default by ensuring a fiscal context in which sovereign debt can be repaid. In a nutshell, this means that the state should collect and allocate sufficient fiscal resources for the discharge of its principal and interest obligations. This view is reflected in most legal regulations on sovereign debt in either local or foreign currency, including domestic, regional, and international frameworks. In practice, those frameworks tend to neglect that the currency of denomination of a state's financial obligations is key in determining its ability to ensure the performance of such obligations.[30] Despite this acknowledgement, this section groups them all together to consider the mainstream view on this matter.

The mainstream literature on sovereign debt management deals with the effects of government debt and the optimal tax problem, ranging from theoretical approaches[31] to applied ones, which seek to provide guidelines for practitioners.[32] In government debt management studies, focus is commonly put on the debt-to-GDP ratio of a country. In legal political economy terms, this ratio reflects the problem of how much of a state's fiscal resources is to be allocated to the discharge of sovereign debt obligations, based on the theoretical assumption in that literature that taxation precedes spending.

In this equation, the concept of debt sustainability is crucial. The theoretical and applied literature on debt sustainability seeks to capture the performability of sovereign debt contracts by estimating, in the long term, the government's total discounted expenses and taxes and, in the short term, the debt-to-GDP ratio, which is expected to converge towards a target over some period.[33] As Balassone and Franco note, however, there is no agreement on a single theoretical benchmark to assess sustainability, which has historically favoured the use of ad

[29] See, eg, P Mauro and others, above n 2.
[30] See further on Section IV below.
[31] See, eg, R Dornbusch and M Draghi, *Public Debt Management: Theory and History* (CUP 1990).
[32] See, eg, G Wheeler, *Sound Practice in Government Debt Management* (World Bank 2004).
[33] R Neck and JE Sturm (eds) *Sustainability of Public Debt* (MIT Press 2008); H Bohn, 'The Sustainability of Budget Deficits in a Stochastic Economy', 27 (1) Journal of Money, Credit, and Banking 257–71 (1995).

hoc definitions.[34] As Gelpern argues, the difficulty in finding a single benchmark to evaluate debt sustainability stems from the inherently distributive nature of this concept, which is often neglected.[35]

Despite the complexities posed by the distributive dynamics of debt sustainability, it is undisputed that fiscal-centred approaches to what it takes to make sovereign debt safe—and therefore on what sovereign (in)solvency means and how to avoid it—have a strong influence on the regulation of sovereign debt. Legal frameworks that respond to the concept of debt sustainability by instituting mechanisms for sovereign debt management and fiscal discipline have adopted multiple forms.[36] This section outlines the most common types of legal frameworks on debt sustainability in either domestic or foreign currency at various levels. In doing so, I do not intend to discuss the economic soundness of such frameworks. The objective of this section is to highlight that, despite their differences, they respond to the idea of making sovereign debt safe by ensuring the performability of a state's financial obligations through fiscal rules.

A. National and regional legal frameworks

At a national or regional level, laws and regulations may establish either nominal debt limits or ceilings for aggregate debt based on indicators to secure enough fiscal resources for the repayment of sovereign debt.[37] The rationale of those rules is to establish a maximum level of debt at which government intervention is not required, which corresponds to a safe level of sovereign debt. If this threshold is surpassed, it is presumed that the government should reinsure safety by generating fiscal surpluses, that is, increasing revenue or reducing expenditure.[38] As for the legal hierarchy of such norms, they can adopt the form of supranational, international, or constitutional rules and primary or secondary domestic legislation. Many jurisdictions also regulate subnational debt although either constitutional or legislative rules.[39]

A nominal debt limit may be found in the Second Liberty Bond Act of 1917 in the USA, which fixes a nominal maximum amount (measured in US dollars) of federal debt,[40] whilst granting the Treasury wide discretion regarding how the funds available under the limit can be used.[41] Whilst the original text of the Act kept separate limits for previous debt issues, an overall aggregate debt limit evolved in the 1930s.[42] Although the debt ceiling has never caused the federal government to default on its obligations, it has often resulted in inconveniences and uncertainty as regards Treasury operations.[43] It is not surprising, therefore, that it has been suggested that the debt limit should be scrapped.[44] However, as Grey notes, the dual nature of the debt ceiling, 'simultaneously technical and deeply political', has made efforts to reform it 'difficult to achieve'.[45]

Ceilings for aggregate debt based on indicators, in turn, often adopt formal debt and deficit thresholds, generally, yet not only, measured as a percentage of GDP. An example can be found in Articles 121–126 of the Treaty on the Functioning of the European Union (TFEU). Article

[34] F Balassone and D Franco, 'Assessing Fiscal Sustainability: A Review of Methods with a View To EMU', in Banca d'Italia (ed), *Fiscal Sustainability* (2000) 29–30.

[35] A Gelpern, 'Sovereign Debt: Now What?' 41 (2) Yale Journal of International Law 85–86 (2016).

[36] EA Awadzi, 'Designing Legal Frameworks for Public Debt Management', IMF Working Paper No 15/147 (2015).

[37] See V Lledó and others, 'Fiscal Rules Dataset, 1985–2015′ (IMF 2017) 8.

[38] A Cadenillas and R Huamán-Aguilar, 'On the Failure to Reach the Optimal Government Debt Ceiling', 6 (4) Risks 138, 139 (2018).

[39] See O Canuto and L Liu, *Until Debt Do Us Part: Subnational Debt, Insolvency, and Markets* (World Bank 2013).

[40] First Liberty Bond Act, 24 April 1917, PL 65–3, 40 Stat 35; Second Liberty Bond Act, 24 September 1917, PL 65–43, 40 Stat 288; Third Liberty Bond Act, 4 April 1918, PL 65–120, 40 Stat 502; Fourth Liberty Bond Act, 9 July 1918, PL 65–120, 40 Stat 844.

[41] MA Robinson, *The National Debt Ceiling: An Experiment in Fiscal Policy* (Brookings Institution 1959) 1–6.

[42] See DA Austin, 'The Debt Limit: History and Recent Increases', Congressional Research Service, RL31967 (2015).

[43] R Grey, 'Administering Money: Coinage, Debt Crises, and the Future of Fiscal Policy', 109 (2) Kentucky Law Journal 253–60 (2020).

[44] See B Bartlett, 'Why Congress Must Now Abolish Its Debt Limit' (Financial Times, 22 October 2009).

[45] Grey, above n 43, at 231.

126 TFEU makes different provisions intended to ensure the budgetary discipline of its member states. Section 1 establishes that 'member states shall avoid excessive government deficits' and empowers the European Commission (EC) to examine compliance with budgetary discipline of the member states. Notably, section 2 provides that fiscal benchmarks must remain below certain reference values, which are specified in Protocol 12 on the excessive deficit procedure annexed to the Treaty as 3% of government deficit-to-GDP and 60% of debt-to-GDP. If those thresholds are surpassed, an excessive deficit procedure conducted by the EC may be triggered that may result in financial sanctions being imposed on the member state in breach of the rule. Finally, Article 3(2) of the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union requires that those debt and deficit thresholds be enacted in domestic law 'through provisions of binding force and permanent character, preferably constitutional'.

B. International soft law framework: the IMF's DSA

At an international level, an important framework responding to fiscal-centred approaches to sovereign (in)solvency is the IMF's DSA.[46] The IMF's debt sustainability framework is not regulated in the IMF's Articles of Agreement or any formal secondary law enacted by the institution. Rather, it is a form of soft law created by internal policy papers and staff guidance notes.[47] Although such regulations are not directly binding on member states, they are binding for management staff and, therefore, guide all the IMF's surveillance, lending, and disbursement monitoring activities.[48]

First, the surveillance mandate of the Fund is established in Article IV of the IMF's Articles of Agreement, which entrusts the IMF with the task of overseeing the international monetary system and monitors the economic and financial policies of its member states. Surveillance involves not only monitoring policies at the global, regional, and country levels but also advising on any adjustments needed to sustain economic growth and promote financial and economic stability. The DSAs are crucial in both monitoring and policy advice and ultimately influence the content of the country report issued under Article IV. Second, lending decisions are substantively influenced by the DSAs in that, in principle, access to an IMF programme is conditional upon debt sustainability. If debt is considered unsustainable, debt restructuring and fiscal adjustment should be conducted before any lending is approved. The DSAs often play a crucial role during debt restructuring negotiations to determine the size of haircuts; yet, there are no formal or informal regulations establishing how this calculation should be made.[49] Third, disbursement is conditional upon distinct performance indicators being reached throughout the programme, including debt sustainability.

When pursuing its surveillance, lending, and disbursement monitoring activities, the IMF seeks to enhance the performability of its member states' debt contracts by promoting the allocation of the highest possible level of fiscal resources to repayment. Equally, this approach is adopted in the DSA framework, whose primary policy preference to pursue sustainability is the state's capacity to apply fiscal adjustment in a way that is economically and politically feasible.[50] The assessment combines the level of country risk and the risk of a debt crisis, in both cases, measured on the grounds of quantitative indicators. In economic terms, the aim is to generate primary fiscal surpluses and reduce the debt-to-GDP ratio, notably through fiscal

[46] International Monetary Fund, 'Assessing Sustainability' (28 May 2002).

[47] International Monetary Fund, 'Review of the Debt Sustainability Framework for Market Access Countries' (3 February 2021); International Monetary Fund, 'Guidance Note on the Bank-Fund Debt Sustainability Framework for Low-Income Countries' (14 February 2018).

[48] RM Lastra, *Legal Foundations of International Monetary Stability* (OUP 2006) 398–412.

[49] L Simpson, 'The Role of the IMF in Debt Restructurings: Lending into Arrears, Moral Hazard and Sustainability Concerns', G-24 Discussion Paper Series No 40 (UN 2006).

[50] M Guzmán, 'Definitional Issues in the IMF Debt Sustainability Analysis Framework: A Proposal', CIGI Policy Brief No 77 (May 2016).

adjustment.[51] In legal terms, these goals are translated into either legislative and constitutional changes in tax rules or adjustments in budgetary rules to ensure enough resources are allocated to the full and timely discharge of sovereign debt.

C. Critique: an ill-fitting economic-legal approach

Despite their substantial influence in most legal frameworks governing sovereign debt, fiscal-centred approaches to what it takes to make sovereign debt safe, and therefore on sovereign (in)solvency, are conceptually incomplete. The practical significance of those premises and the legal frameworks built upon their influence have been brought into question by policy developments since the GFC and, most prominently, the COVID-19 crisis. To illustrate, a purely fiscal-centred approach is insufficient to explain the plumbing yields in sovereign bonds of the Eurozone's periphery despite record-high debt-to-GDP ratios, or the gaps between core states and DEEs in their abilities to fund emergency and recovery programmes during the COVID-19 crisis.[52] The latter discussion gains relevance as the economic impacts of the pandemic and the war in Europe, combined with monetary tightening by core central banks, are triggering a wave of sovereign debt crises in DEEs.[53]

Mainstream approaches to sovereign debt may utilize frameworks such as the concept of 'debt intolerance' to explain variations in the ability of core states, as opposed to DEEs, to sustain different levels of debt-to-GDP without falling into a sovereign debt crisis.[54] However, due to its fiscal-centred approach—which fails to account for the monetary hierarchy underpinning credit standing—this theory is unable to account for the structural determinants of 'debt intolerance' in the first place.

IV. A MONEY-CENTRED APPROACH TO SOVEREIGN (IN)SOLVENCY

The reason behind the conceptual limitations of fiscal-centred approaches to sovereign debt is that sovereign (in)solvency is determined not only by fiscal fundamentals but also by monetary factors. Crucially, a state's ability to make its sovereign debt safe, and therefore its solvency, is constituted by its monetary power. The concept of monetary power, as employed in this article, includes both the level of monetary sovereignty of the state and the place occupied by its currency in the global hierarchy. Whilst the relationship between constrained monetary sovereignty and sovereign debt crises can be said to belong to conventional wisdom,[55] currency hierarchy is neglected as a structural determinant of such crises.

This section explains the meaning and legal infrastructures of the two pillars of monetary power: monetary sovereignty and currency hierarchy (section A). It then presents a novel three-pronged framework on the relationship between monetary power and sovereign (in)solvency, which makes sense of the monetary determinants of sovereign debt crises (section B). The framework postulates that the legal interventions available for a state to make sovereign debt safe, and therefore to avoid an insolvency crisis, depend upon its level of monetary power, resulting in either solid or fragile types of safety. This typology suggests that sovereign insolvency episodes in the periphery of the international monetary system are a systemic consequence of its hierarchical structure.

[51] Ibid.
[52] World Bank Group, *Global Economic Prospects* (June 2021).
[53] S Maki, 'Historic Cascade of Defaults Is Coming for Emerging Markets' (Bloomberg, 7 July 2022).
[54] C Reinhart, K Rogoff and M Savastano, 'Debt Intolerance', NBER Working Paper No 9908 (2003). The concept of 'debt intolerance' is operationalised as a measure of the sovereign's credit rating and its debt-to-GDP (or alternatively, its debt-to-exports) ratio.
[55] See further in Section B below.

A. The key components of monetary power

This section considers the meaning and legal infrastructures of the key components of monetary power, defined as a state's level of monetary sovereignty and the place occupied by its currency in the global hierarchy of money.

1. Monetary sovereignty

The state's sovereignty over its own monetary and financial system is traditionally recognized by public international law as a crucial attribute of sovereignty.[56] Even though monetary sovereignty is not explicitly defined in any key international legal instruments, it is undisputed that it involves multiple legal prerogatives—including the rights to create money through the issuance of currency, regulate the use of currency within a state's territory, and maintain independent exchange rate and monetary policies.[57] In addition, the impact of economic globalization has motivated new accounts of monetary sovereignty that also include the rights to conduct current and capital account policies, financial regulation and supervision, and fiscal policy.[58]

Despite the plurality of legal prerogatives embedded within such concept, this article focuses on the idea of monetary sovereignty as the ability of a state to issue sovereign debt in its own currency. It builds upon the premise that entering debt obligations in a foreign currency is a surrender of sovereignty over money and finance, as it affects the state's capacity to exercise various attributes of monetary sovereignty such as regulating money, interest rates, and the exchange rate regime.[59]

In contrast with traditional notions of PIL that tend to conceive state sovereignty as a power that 'is either all at once or not at all',[60] this article adopts a spectrum approach to monetary sovereignty.[61] The aim of such view is to account for the various degrees to which states can effectively exercise their rights of sovereignty over money and finance. In practice, most states face systemic erosions of sovereignty over monetary, financial regulation, and fiscal affairs.[62] Thus, a spectrum can be conceived of as depicting the different ranges of effective exercise of each attribute of monetary sovereignty. This includes—as is the focus of this article—the power to engage in sovereign debt obligations denominated in a currency controlled by the sovereign. The greater the ability of a state to issue sovereign debt in its own currency, the closer to full monetary sovereignty it will be situated on the spectrum.

2. Currency hierarchy

Inspired by Keynesian theory, the concept of currency hierarchy is defined in international political economy (IPE) as the degree to which a national currency is able to perform the functions of money—unit of account, medium of exchange, and store of value—at an international level (in the latter sense, as an international reserve currency).[63] In particular, money that can function as an international reserve currency is highly sought after because it provides security in the face of economic uncertainty.[64]

[56] CD Zimmermann, *A Contemporary Concept of Monetary Sovereignty* (OUP 2013) 2.
[57] Lastra, above n 48, at 16–17; FA Mann, *The Legal Aspect of Money* (5th edn, OUP 1992) 460–78.
[58] Zimmermann, above n 56, at 1–6.
[59] Lastra, above n 48, at 32; Pistor, 'From Territorial to Monetary Sovereignty', above n 16, at 491–517.
[60] S Besson, 'Sovereignty', in R Wolfrum (ed), MPEPIL (OUP 2011) para 80.
[61] See, eg, J Van't Klooster and S Murau, 'Rethinking Monetary Sovereignty: The Global Credit Money System and the State' (12 November 2020).
[62] See, eg, A Viterbo, *International Economic Law and Monetary Measures: Limitations to States' Sovereignty and Dispute Settlement* (Edward Elgar 2012).
[63] BJ Cohen, *The Geography of Money* (Cornell University Press 1998); B Eichengreen, *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System* (OUP 2011).
[64] HP Minsky, 'Uncertainty and the Institutional Structure of Capitalist Economies: Remarks Upon Receiving the Veblen-Commons Award', 30 (2) Journal of Economic Issues 357–68 (1996).

In the IPE literature, the international monetary system is typically conceived as a hierarchical structure, in which domestic currencies sit according to their power to function as international money—that is, their degree of international liquidity.[65] This has been described as a core feature of the system from the pound sterling-gold standard to the current dollar hegemony.[66] At the summit of the hierarchy lies the US dollar, which performs the function of top currency in the system, and thus has the highest degree of liquidity. Secondly, sit other core currencies that are also used at the international level, such as the euro, the pound sterling, and the Swiss franc, among others ('core currencies'). These currencies hold an intermediate position, which means that they are also liquid currencies but have a lower degree of liquidity than the top currency. At the bottom of the system lies the currencies issued by DEEs ('peripheral currencies'), which do not perform the classical functions of money at an international level and, therefore, are only internationally demanded as financial assets.[67] At the root of such hierarchy lies a range of power relations established either through persuasion or coercion.[68]

Despite the importance of the global hierarchy of currencies, legal scholars have traditionally neglected this notion and its implications in legal theory and practice. Notwithstanding this gap, it seems uncontroversial that two legal infrastructures are crucial in the creation of a hierarchy of currencies at an international level. The first one concerns the national currency that is used as the money of account and payment of financial obligations incurred by both private and public persons in their transnational or international transactions. In this regard, international trade and finance may be conceived as a network of multiple contracts, a crucial element of which is the currency of account and payment of the obligations to which they give rise.[69] The aggregate level of use of a national currency determines its place in the hierarchy—by definition, the top state is the one whose currency is used as the predominant medium of exchange in contracts of sale of key commodities. The second legal infrastructure concerns the ability of a national currency to be used as a store of wealth and value at an international level.[70]

In sum, this article focuses on currency hierarchy as the result of aggregate choices on the money of account and payment of international financial obligations voluntarily assumed by states, either in the form of debt contracts celebrated with private persons or agreements with other subjects of international law, particularly other states and international financial institutions.

B. The legal architecture of sovereign (in)solvency: a framework

Having considered the concept and legal underpinnings of monetary power in the international monetary system, this section proposes a framework on the legal architecture of sovereign (in)solvency, which, as previously discussed, is based on the ability of a state to make its sovereign debt safe. The framework is composed of three pillars: first, safety/solvency as fiscal capacity (Section 1); second, safety/solvency as access to liquidity to rollover sovereign debt (Section 2); and third, safety/solvency as capacity to guarantee (Section 3).

The theoretical model introduced in this section discusses how monetary power determines the ability of a state to ensure each of those pillars. In addition, it postulates that the interaction between those pillars creates two types of safety: a solid one, which encompasses the three pillars of safety, and a fragile one, which is an incomplete combination of one or two of such pillars.

[65] Cohen, above n 63; LF de Paula, B Fritz, and DM Prates, 'Keynes at the Periphery: Currency Hierarchy and Challenges for Economic Policy in Emerging Economies', 40 (2) Journal of Post Keynesian Economics 183–202 (2017).

[66] Eichengreen, above n 63.

[67] BM De Conti, DM Prates, and D Plihon, 'The Hierarchy of Currencies and Its Implications for Peripheral Countries Exchange, Interest Rate Dynamics and Economic Policy', 23 (2) Economia e Sociedade 341–72 (2014).

[68] S Strange, 'The Politics of International Currencies', 23 (2) World Politics 215–31 (1971).

[69] For an account of such network of contractual obligations, see BIS Committee on the Global Financial System, 'US Dollar Funding: An International Perspective', CGFS Paper No 65 (June 2020).

[70] J Gold, *Legal and Institutional Aspects of the International Monetary System: Selected Essays*, vol II (IMF 1984) 194–237.

As the framework postulates, safety/solvency sits at the nexus of fiscal and monetary powers and is based upon the ability to ensure or otherwise access continuous liquidity.

1. First pillar: safety/solvency as fiscal capacity

The first pillar in the architecture of sovereign debt safety is given by a state's fiscal capacity. As discussed in section III, safety/solvency from a fiscal perspective means reducing the risk of default by ensuring a financial context in which sovereign debt can be discharged. However, whilst mainstream approaches to sovereign debt tend to conceive it exclusively as a matter of fiscal discipline, the issue of how monetary power affects a state's fiscal capacity is underexplored.

Drawing on economics research, this section argues that the level of monetary sovereignty and currency hierarchy of a state has a critical effect on its fiscal capacity, making the periphery more vulnerable to sovereign insolvency problems.

i. Monetary sovereignty and fiscal capacity

A state's capacity to collect and allocate fiscal resources to the repayment of sovereign debt is critically influenced by its level of monetary sovereignty. As traditionally identified in the sovereign debt literature, the more a state engages in financial obligations denominated in a foreign currency, the more it loses capacity to control the conditions that ensure the viability of discharge of both foreign and domestic currency-denominated debt. Most significantly, this issue has been described by Eichengreen, Hausmann, and Panizza as the 'original sin', which reflects the degree to which a country's borrowers are dependent on foreign currency-denominated debt to raise overseas funds.[71] This borrowing pattern significantly impacts the performability of sovereign debt contracts, particularly those denominated in foreign currency.[72] Whilst the 'original sin' literature tends to be fiscal-centred and adopts an institutionalist approach to sovereign debt management that this paper calls into question, it accurately captures the relationship between monetary sovereignty and fiscal capacity of the sovereign borrower.

Currency denomination matters in the performability of sovereign debt contracts because foreign debt exposure significantly affects the stability of output, the volatility of capital flows, and the management of the exchange rate.[73] It poses the risk of a currency mismatch, which occurs when borrowers suffer balance sheet deterioration if the exchange rate of their domestic currency falls in relation to the issuing currency. Exchange rate depreciation reduces the purchasing power of domestic output over foreign currency-denominated obligations. As a result, variations in the real exchange rate of states at the lower spectrum of monetary sovereignty will have aggregate wealth effects and thus directly affect the ability of the state to meet its financial obligations. Essentially, this is because the state's repayment capacity of foreign currency-denominated debt, instead of being linked with its GDP growth in local currency units, will be associated with the value of its GDP in the foreign currency. Hence, the rate of its GDP growth will be more unstable, making it more difficult to ensure stable levels of debt sustainability despite fiscal planning through domestic law.[74]

[71] B Eichengreen and R Hausmann, *Other People's Money: Debt Denomination and Financial Instability in Emerging Market Economies* (University of Chicago Press 2005); B Eichengreen, R Hausmann, and U Panizza, 'Currency Mismatches, Debt Intolerance and Original Sin: Why They Are Not the Same and Why It Matters', National Bureau of Economic Research Working Paper Series No 10,036 (2003). The 'original sin' comprises a situation in which the domestic currency cannot be used to borrow abroad ('international original sin') or to borrow at long maturities domestically ('domestic original sin').

[72] However, less original sin also reduces the risk of default on domestic currency-denominated obligations: M Amstad, F Packer, and J Shek, 'Does Sovereign Risk in Local and Foreign Currency Differ?' 101 (C) Journal of International Money and Finance 1, 9–11 (2020).

[73] Eichengreen and Hausmann, above n 71.

[74] B Eichengreen, R Hausmann, and U Panizza, 'The Pain of Original Sin', in Eichengreen and Hausmann, above n 71, at 29.

Thus, the less a state is indebted in a foreign currency, the higher its ability to control the macroeconomic variables that will ensure the full and timely performance of its financial obligations. In contrast, a state that is vulnerable to foreign exchange fluctuations can only hope to adopt domestic legal rules that will ensure the maximum amount of collection and allocation of fiscal resources to repay its debts. However, the actual possibility of collecting those resources depends upon external conditions that fall outside its control. Furthermore, in scenarios of foreign currency scarcity, the distributive dynamics of the state's fiscal rules at a domestic level may become politically unsustainable.[75]

Whilst the relationship between the degree of monetary sovereignty of the sovereign borrower and its fiscal capacity is well explored, currency hierarchy is not as often considered in the sovereign debt literature as a structural determinant of sovereign (in)solvency.

ii. Currency hierarchy and fiscal capacity

The issue of how currency hierarchy affects the ability of states to make their sovereign debt safe is inextricably linked with global liquidity dynamics, further explored below. Here, it is sufficient to note that global liquidity has a cyclical character in the periphery and a countercyclical effect in the core of global capitalism. Peripheral currency states are more vulnerable to suffering quick withdrawals from contracts denominated in their currency.[76] The illiquidity of peripheral currencies explains why sovereign debt contracts denominated in those currencies are often subject to higher interest rates—in other words, peripheral currency states find themselves in a position in which they must 'sweeten the deal' for foreign capital to stay embedded in their currency system and thus lose control over interest rate policy.[77] However, higher interest rates might not be enough to prevent outflows during bursts, when capital typically seeks 'flight from risk' towards more liquid, safer assets, which are generally contracts denominated in core currencies.[78]

Consequently, perceptions of safety regarding peripheral currency-denominated sovereign debt may quickly deteriorate as money moves to safer assets. The result of such outflows, alongside significant and sudden currency depreciations,[79] is a loss of capacity to ensure the performability of sovereign debt contracts through fiscal rules due to an increase in fiscal policy constraints.[80] Furthermore, exchange rate volatility heightens the dependence of debt service on the evolution of the exchange rate, which results in lower credit ratings.[81] This may undermine the state's credibility as the guardian of public money's safety, causing another fly from its currency towards other currencies or assets that may not be tradable but promise more lasting value.[82] To offset this trend, in the last decades, central banks in DEEs have been avoiding variations in the exchange rate by holding more reserves and intervening in the foreign exchange market or adjusting short-term interest rates.[83]

In sum, having a peripheral currency makes a state more vulnerable to exchange rate instability created by international liquidity booms and busts, making it more likely to experience an insolvency crisis. This jeopardizes the safety of peripheral currency states' sovereign debt, which to some extent depends on external factors rather than on domestic fiscal measures. In fact, the peripheral status of a currency affects what is perceived as sound fiscal fundamentals. The idea of

[75] J Frieden, 'The Political Economy of Adjustment and Rebalancing' (2015) 52 Journal of International Money and Finance 4–14.
[76] De Conti, Prates, and Plihon, above n 67.
[77] Ibid.
[78] Minsky, above n 21.
[79] A Kaltenbrunner, 'A Post Keynesian Framework of Exchange Rate Determination: A Minskyan Approach', 38 (3) Journal of Post Keynesian Economics 426–48 (2015).
[80] R Vergnhanini and BM De Conti, 'Modern Money Theory: A Criticism from the Periphery', 3 (2) Brazilian Keynesian Review 16 (2017).
[81] Eichengreen, Hausmann, and Panizza, above n 71, at 30.
[82] K Pistor, 'From Territorial to Monetary Sovereignty', above n 16, at 496.
[83] G Calvo and C Reinhart, 'Fear of Floating', 117 (2) Quarterly Journal of Economics 379–408 (2002).

'debt intolerance', previously mentioned in this article, reflects the inability of DEEs to manage levels of external debt that are manageable for advanced economies.[84] Even though this is not part of the original claim or theoretical framework adopted by the creators of this concept, their research indicates that ratings fall more rapidly with debt in peripheral currency states, causing them to struggle to manage levels of debt that would be manageable for core currency states.

2. Second pillar: safety/solvency as liquidity for debt rollover

Another pillar in the legal architecture of sovereign debt safety relates to a state's ability to access liquidity in the market to rollover its financial obligations. This dimension of asset safety has gained significant importance in the last decades, which has seen an increase in the scope and deepness of capital markets—a phenomenon commonly referred to as 'financialization'.[85] In an international monetary system where currencies are hierarchically structured, financialization has critical effects in the timing and geography of sovereign insolvency crises. Crucially, the performability of financial contracts responds to a procyclical dynamic in the periphery of global capitalism, which makes peripheral states more vulnerable to sovereign debt crises.

The emergence of financialization has affected the way states finance themselves, with a significant turn to capital markets as a source of funding.[86] In DEEs, the relaxation of restrictions on cross-border capital flows during recent decades has opened access to debt instruments—such as bonds and international syndicated loans—that had been beyond the reach of foreign creditors.[87] Bond financing to GDP has experienced a substantial rise, having largely surpassed bank lending as the main source of financing for developing countries.[88] Furthermore, there has been an increasing turn to capital markets as a source of funding among low-income countries.[89]

In a context of increasing financialization of sovereign debt management, perceptions of safety in sovereign debt contracts have considerably shifted towards the question of whether asset holders will be willing to refinance at maturity, rather than whether the sovereign has fiscal capacity to repay.[90] A favourable level of market trust that cash will be available at maturity translates itself into a sovereign's ability to rollover its debt, that is, to renegotiate the due date of their principal obligation at equal or similar interest rates and maturity periods. Yet, the more sovereign debt loses its liquidity attributes, the more the associated yields increase, thereby raising the cost of borrowing.

Whenever pessimistic expectations prevail, the state may be at risk of expecting the equivalent of a bank run or an investor strike—also known as debt rollover strike, sovereign funding strike, or 'sudden stop'.[91] Investor strikes consist of either the withdrawal of asset holders from the credit relationship or a significant change in the terms of the original contract at maturity, e.g. an exorbitant increase in the interest rate or a significant decrease in the maturity period. Debt rollover strikes in the sovereign bond market may arise when there is fear that cash may not be available for repayment, making them self-fulfilling crises that are likely to degenerate

[84] C Reinhart, K Rogoff, and M Savastano, above n 54.

[85] G Epstein, *Financialization and the World Economy* (Edward Elgar 2005) 3.

[86] F Fastenrath, M Schwan, and C Trampusch, 'Where States and Markets Meet: The Financialisation of Sovereign Debt Management', 22 (3) New Political Economy 273, 293 (2017).

[87] G20, 'Long-Term Investment Financing for Growth and Development: Umbrella Paper' (2013). On the increasing role of trade and investment regimes in capital account liberalisation, see RD Thrasher, S Sklar, and KP Gallagher, 'Policy Space for Capital Flow Management: An Empirical Investigation', 24 (4) Journal of International Economic Law 779–98 (2021).

[88] M Uy and S Zhou, 'Sovereign Debt of Developing Countries: Overview of Trends and Policy Perspectives' in M Guzmán, JA Ocampo, and JE Stiglitz (eds), *Too Little, Too Late: The Quest to Resolve Sovereign Debt Crises* (Columbia University Press 2016) 37.

[89] International Monetary Fund, 'Macroeconomic Developments and Prospects in Low-Income Developing Countries', Policy Paper (22 March 2018).

[90] B Bonizzi, C Laskaridis and J Toporowski, 'Global Liquidity, the Private Sector and Debt Sustainability in Sub-Saharan Africa', 50 (5) Development and Change 1430–54 (2019).

[91] S Edwards, 'Capital Controls, Sudden Stops, and Current Account Reversals', in S Edwards (ed), *Capital Controls and Capital Flows in Emerging Economies: Policies, Practices, and Consequences* (University of Chicago Press 2007).

into insolvency crises.[92] This is because a state that can only refinance itself at very high interest rates will see its debt burden increase rapidly.[93]

Currency hierarchy plays a crucial role in access to liquidity for rollover, and therefore, on perceptions about sovereign debt safety. Top or core currency issuers have a significant advantage in relation to peripheral currency issuers, particularly those at the lower end of the spectrum of monetary sovereignty. The level of cash available in the economy that the sovereign can use to settle its financial obligations can substantially vary among core and peripheral currency states and must be understood in light of each one's position in global liquidity cycles.[94]

During boom periods, when many assets look safe, private actors will be more willing to purchase assets denominated in peripheral currencies, which reward higher interest rates.[95] This trend may be accentuated when money creation by major core central banks is used to purchase assets in the periphery of global capitalism, as occurred in the aftermath of the GFC.[96] However, during bursts, perceptions of asset safety quickly change. Only a few assets will look safe, and the currency denomination of contracts becomes crucial. Private actors seek to fly to the safest assets in the global economy, which typically offer lower interest rates than in the periphery, but at least guarantee the most valuable attributes of safety: low credit and market risks, high market liquidity, limited inflation, exchange rate, and idiosyncratic risks.[97] The vast majority of those assets, however, are denominated in the top or core currencies. Moreover, a substantial amount of them comprise sovereign debt issued by top or core currency issuers, which, as discussed below, is guaranteed by those core states.

To conclude, capital flows have a cyclical character in the periphery of global capitalism and a countercyclical effect in the core. As a result, the performability of sovereign debt contracts from the least monetarily sovereign states, especially peripheral currency states, is significantly affected by global movements that lie beyond their fiscal rules. Ultimately, it depends upon their ability to access financial markets dominated by private and institutional investors and lenders.

3. Third pillar: safety/solvency as capacity to guarantee

Guaranteeing sovereign debt involves ensuring the performability of contractual obligations through the central bank's capacity to act as a lender of last resort (LOLR) (section i) or, otherwise, by accessing an international LOLR (ILOLR) (section ii). Although the limitations of current ILOLR facilities to address both liquidity and insolvency problems in DEEs are well known,[98] the core–periphery dynamics embedded in asymmetric provision and access to liquidity are underexplored in the sovereign debt literature. This is largely because, as previously noted, scholarship and policy in the field tend to attribute sovereign (in)solvency primarily to fiscal factors, thereby neglecting the core contribution of monetary hierarchies towards such phenomenon.

This section focuses on the third pillar of safety/solvency, constituted by a state's guaranteeing capacity. Crucially, it discusses how the state's guaranteeing capacity through a LOLR and different types of ILOLR is determined by its level of monetary power, which has critical implications over its ability to avoid insolvency.

[92] U Bindseil, *Monetary Policy Operations and the Financial System* (OUP 2015) 161–164.

[93] P De Grauwe, 'The European Central Bank as Lender of Last Resort in the Government Bond Markets', 59 (3) CESifo Economic Studies 520, 521 (2013).

[94] Bonizzi, Laskaridis and Toporowski, above n 90.

[95] De Conti, Prates, and Plihon, above n 67.

[96] J Aizenman, M Binici, and MM Hutchison, 'The Transmission of Federal Reserve Tapering News to Emerging Financial Markets', NBER Working Paper No 19,980 (2014).

[97] Y Akyuz, *Playing with Fire: Deepened Financial Integration and Changing Vulnerabilities of the Global South* (OUP 2017).

[98] E Fernández-Arias, 'International Lending of Last Resort and Sovereign Debt Restructuring', in CA Primo Braga and GA Vincelette (eds), *Sovereign Debt and the Financial Crisis: Will This Time Be Different?* (World Bank 2011).

i. Safety/solvency as capacity to guarantee through a LOLR

Guaranteeing through a LOLR involves the state, typically through its central bank, acting as a LOLR in the government bond market to ensure the performability of sovereign debt contracts.[99] This is a precondition for the development of capital and money markets, which have historically depended upon the issuance of government debt guaranteed by central bank money.[100] Crucially, the LOLR has full regulatory and supervision power over the financial institutions to which it lends and the securities market operating within its own jurisdiction.[101]

The government bond market operates in a similar way to the banking system, which requires a LOLR to suppress liquidity crises by acting as a liquidity re-insurer situated at the apex of the payments system.[102] In conventional banking systems, solvency problems faced by one bank may cause deposit holders to withdraw their deposits. When everybody does this at the same time (that is, during a 'bank run'), banks may run out of cash. This can lead to a liquidity crisis in many sound banks as they need to fire sell their assets in order to obtain liquidity, thereby pulling down the prices of such assets.[103] As asset prices collapse, many banks can go insolvent.[104] This challenge to financial stability can be tackled by mandating the central bank to act as a LOLR to the banking system. When deposit holders are confident that this function exists, it only sparsely has to be used.[105]

Similar to what occurs in the banking system, the absence of a LOLR in the government bond market makes it prone to being hit by self-fulfilling liquidity crises.[106] Like banks, a state can experience liquidity and maturity mismatches between its assets and liabilities.[107] If there is fear that cash will not be available for repayment at maturity, bondholders will seek withdrawal from their creditor relationships by quickly disposing of their assets. This will cause interest rates in sovereign debt to go up, thereby increasing the debt burden and potentially leading to an insolvency crisis. In such circumstances, it is also likely that domestic banks holding sovereign debt as collateral will experience funding problems, which, in turn, may degenerate into solvency problems. Hence, a liquidity crisis in the government bond market may create a coordination failure in which there will be insufficient liquidity for both the government and the banking sector.[108] The state can prevent this self-fulfilling crisis by acting as a LOLR in the government bond market, thereby guaranteeing the performability of sovereign debt contracts with central bank money.[109]

The legal infrastructures of the LOLR may involve the purchase of sovereign bonds by the central bank directly from the Treasury or, most commonly, monetary policy operations conducted in the open market. Whilst monetary financing involves the direct financing of the government by the central bank, monetary policy operations enable the monetary authority to influence the

[99] See W Bagehot, *Lombard Street: A Description of the Money Market* (first published 1892, CUP 2012); Bindseil, above n 92, ch 11–18; S Ugolini, *The Evolution of Central Banking: Theory and History* (Palgrave Macmillan 2017) 101–64.

[100] V Chick, 'The Evolution of the Banking System and the Theory of Saving, Investment and Interest', in P Arestis and others (eds), *On Money, Method and Keynes* (Macmillan 1992).

[101] This, in contrast, is not the case of the ILOLR, discussed in Section ii below. Instead, the ILOLR may provide liquidity under conditionality (with various degrees of enforcement). As discussed below, however, the use of conditionality as a requirement for accessing liquidity is crucially shaped by monetary power.

[102] Bagehot, above n 99. See also RM Solow, 'On the Lender of Last Resort', in CP Kindleberger and JP Laffarque (eds), *Financial Crisis: Theory, History, and Policy* (CUP 1982).

[103] See Bindseil, above n 92, ch 11.

[104] V Acharya and T Yorulmazer, 'Information Contagion and Bank Herding', 40 Journal of Money, Credit and Banking 215–32 (2008).

[105] Bindseil, above n 92, ch 11.

[106] De Grauwe, above n 93.

[107] W Buiter and E Rahbari, 'The European Central Bank as Lender of Last Resort for Sovereigns in the Eurozone', 50 Journal of Common Market Studies 6, 8 (2012).

[108] De Grauwe, above n 93, at 521.

[109] Bindseil, above n 92, at 161.

price and yield of sovereign debt securities by buying and selling them in the open market.[110] These operations are directly reflected in the central bank's balance sheet, which expands or contracts according to whether it is buying or selling securities, respectively. The most remarkable of those policies since the GFC, quantitative easing (QE), involves large-scale asset purchases, particularly of (yet, increasingly, not only) public assets.[111]

Unlike monetary financing, open-market operations and QE are not conceived as mechanisms to finance fiscal deficits, but rather to pursue monetary policy objectives such as influencing the money supply and interest rates. This is because when a central bank buys sovereign debt in the secondary market, it does not provide credit to the government. Yet, in performing this function, the central bank guarantees the safety of sovereign debt contracts and the proper functioning of sovereign bond markets by providing liquidity to the holders of those bonds.[112] In doing so, it contributes to drive sovereign debt bond yields down, thereby lowering the government's funding costs and guaranteeing sovereign solvency.

During both the GFC and the COVID-19 crisis, the world's core central banks injected vast amounts of liquidity into the financial system by engaging in monetary financing, open-market operations and QE to de-risk financial assets, including the sovereign debt of their respective states.[113] To illustrate, the Federal Reserve (Fed) implemented large-scale purchases of assets—including, most significantly, Treasury securities—in multiple rounds from 2008 to 2014.[114] When the COVID-19 crisis hit in 2020, the Fed announced the unlimited purchase of Treasuries.[115] Similarly, the Bank of England (BoE) has been purchasing UK government bonds as part of its QE programme since 2009.[116] During the COVID-19 crisis, it engaged in monetary financing to enable unlimited fiscal expenditure.[117] The sum of public-sector assets purchases by the BoE in 2020 amounted to 7.4% of the UK's GDP.[118]

Finally, the ECB's reaction to the GFC was based on the pillars of QE and, subsequently, the Outright Monetary Transaction (OMT) programme.[119] The QE programme included purchases of private assets but, most significantly, sovereign debt.[120] Under the OMT programme, the ECB engaged in open-market operations to buy bonds of distressed European states. In doing so, it offered an unconditional source of liquidity to de-risk those assets, which resulted in a decrease in yields.[121] During the COVID-19 crisis, the ECB announced large-scale purchases of both private and public assets.[122] As a result, the safety of sovereign debt of the Eurozone's periphery has drastically shifted from high yields in the aftermath of the GFC to near to zero yields in 2020.[123]

Those examples illustrate the capacity of core states (or, in the case of the Eurozone, the ECB) to make sovereign debt safe by guaranteeing its performance with central bank money. Core central banks can conduct large-scale purchases of sovereign debt, thereby keeping bond yields

[110] S Gray and N Talbot, 'Monetary Operations', in Bank of England, *Handbooks in Central Banking* (Bank of England 2006) 36–45.

[111] P Cavallino and F De Fiore, 'Central Banks' Response to Covid-19 in Advanced Economies', BIS Bulletin No 21 (5 June 2020); Bank for International Settlements, *Annual Economic Report 2020* (30 June 2020) ch 2.

[112] De Grauwe, above n 93, at 529.

[113] Cavallino and De Fiore, above n 111; Bank for International Settlements, above n 111.

[114] Federal Reserve Bank of New York, 'Large-Scale Asset Purchases', https://nyfed.org/2ZQLcfF (visited 20 July 2022).

[115] Bank for International Settlements, above n 111, at 42, 44–46.

[116] Bank of England, 'Consolidated Market Notice: Asset Purchase Facility: Gilt Purchases' (11 June 2019).

[117] Cavallino and De Fiore, above n 111, at 5–6.

[118] Ibid, at 4.

[119] A Winkler, 'The ECB as Lender of Last Resort: Banks versus Governments', LSE Financial Markets Group Special Paper Series, Special Paper 228 (2014); De Grauwe, above n 93; Buiter and Rahbari, above n 107, at 21.

[120] S Dow, 'The Relationship between Central Banks and Governments: What Are Central Banks For?' in C Goodhart and others (eds), *Central Banking at a Crossroads: Europe and Beyond* (Anthem Press 2014) 238.

[121] Winkler, above n 119, at 4.

[122] Bank for International Settlements, above n 111, at 38.

[123] S Corradin, N Grimm, and B Schwaab, 'Euro Area Sovereign Bond Risk Premia During the COVID-19 Pandemic', Working Paper No 2561 (European Central Bank, May 2021).

low even when in face of massive bond supply increases in the wake of increased fiscal spending. A significant part of the new debt issued by those governments during the COVID-19 crisis was matched by central bank purchases,[124] which confirms the fiscal–monetary nexus involved in the making of sovereign debt safety/solvency.

However, the ability to act as LOLR is not equally available to least monetarily powerful states. As discussed in the following subsections, the more limited the capacity of a state to perform the function of LOLR—either by constrained monetary sovereignty or due to having a peripheral currency—the more significant the difficulties it will experience in avoiding sovereign insolvency crises.

a. Monetary sovereignty and guaranteeing capacity through a LOLR

As widely known in the money and finance literature, central bank guaranteeing through a LOLR is substantially constrained for states within the lower spectrum of monetary sovereignty. States that either lack their own currency or issue a substantial amount of debt in a foreign currency[125] face significant limitations in their capacity to de-risk sovereign debt through their own institutional means. They cannot conduct monetary policy operations in the currency needed to settle their financial obligations—and may not individually hold enough foreign currency for the purpose of providing the necessary liquidity assistance to ensure the performability of those contracts.[126] In this context, they are only left with three alternatives to secure access to foreign currency.[127]

The first alternative is accumulating enough foreign reserves in the denomination and amount needed for providing liquidity assistance to their domestic financial system in case it needs that foreign currency to settle short- or medium-term liabilities. However, this may be a costly decision as central banks will be subject to the exchange rate fluctuations between their currency and the foreign currency. Furthermore, injecting foreign currency into the domestic financial system by selling it for domestic currency (also known as 'sterilization') will be costly where the yields on government securities exceed the yield on the central bank's foreign reserve holdings.[128]

The second alternative is to purchase foreign currency in the open market at any given time when it is needed. Whilst this alternative is viable for dealing with specific liquidity problems or other localized shocks, this source of foreign currency liquidity may be not sufficient when central banks face systemic shocks—particularly the breakdown of international wholesale funding and foreign currency markets. In such circumstances, central banks will have no alternative rather than seeking liquidity support from the central bank that issues the foreign currency needed.

The third alternative, in turn, consists in negotiating an open-ended right to purchase foreign currency from the foreign central bank if required. In this case, the foreign central bank would perform the function of an ILOLR. However, as discussed in section ii, access to such arrangements is not freely or equally available for all states. The less monetarily powerful a state is, the more limited will be its access to the global swap network.

In sum, states that either lack their own currency or are predominantly indebted in a foreign currency lack their own institutional means to make sovereign debt safe by guaranteeing

[124] Cavallino and De Fiore, above n 111, at 6.

[125] This group of states also includes those that issue a convertible peripheral currency, where the value of their currency is pegged to a core or top currency. See S Kelton, 'Limitations of the Government Budget Constraint: Users vs Issuers of the Currency', 1 Panoeconomicus 57–66 (2011).

[126] R Chang and A Velasco, 'Financial Fragility and the Exchange Rate Regime', 92 (1) Journal of Economic Theory 1–34 (2000).

[127] These insights draw on D Awrey, 'Brother, Can You Spare a Dollar? Designing an Effective Framework for Foreign Currency Liquidity Assistance' Columbia Business Law Review 934 (2017), at 969–72.

[128] E Denbee, C Jung, and F Paternò, 'Financial Stability Paper No 36: Stitching Together the Global Financial Safety Net' (Bank of England 2016) 9.

their performability. They are in an analogous situation of vulnerability to insolvency as a private agent in the market, which may at some point become unable to discharge or rollover its monetary obligations as they fall due—in Minskyan terms, they are unable to manipulate their own 'survival constraints'.[129] Guaranteeing the performability of those contracts may become impossible in face of a systemic shock. Thus, the less monetarily sovereign a state is, the more fragile will be the safety of its sovereign debt.

b. Currency hierarchy and guaranteeing capacity through a LOLR

In contrast with the largely documented influence of monetary sovereignty in a state's guaranteeing capacity through a LOLR, the constraints to such capacity posed by currency hierarchy are neglected. Crucially, a state's ability to guarantee the performability of its sovereign debt contracts whilst maintaining macroeconomic stability depends on the hierarchy of its currency. As previously discussed, the essential legal infrastructure underlying currency hierarchy is the monetary denomination of financial obligations entered into by either the state or the private residents in its economy. Contracts denominated in core currencies are the preferred destination of investors, particularly in times of crisis. Given the higher propensity of asset holders to dispose of creditor relationships in peripheral currency during bursts in the liquidity cycle, the ability of peripheral central banks to make sovereign debt safe by acting as a LOLR in the sovereign bond market is limited compared to core central banks.

The key factor determining the scope and scale of a central bank's guaranteeing power is its ability to absorb losses.[130] Issuing a currency that performs the function of international money gives the state wider space for absorbing losses without balance-of-payment constraints, and therefore, without jeopardizing its macroeconomic stability.[131] To illustrate, in the COVID-19 crisis, the Fed kept the interest rate on long-term US Treasury bonds at a low level with the QE policy. By doing so, not only did it ensure the stability of bond prices and interest rates, which allowed the US Treasury to maintain high fiscal deficits on a sustainable basis—it also provided a guarantee that government debt would remain a safe asset.[132] This suggests that the safety of sovereign debt contracts does depend not exclusively on a state's fiscal capacity but also on its guaranteeing capacity at low credit, market, idiosyncratic, inflation, and exchange rate risks.

To be sure, peripheral currency states also launched bond purchase programmes during the COVID-19 crisis, acting as a LOLR in their own sovereign bond markets.[133] However, the scale of their programmes was modest compared to those of core currency states, ranging from below 0.2–2.8% of GDP.[134] This is because their room for policy manoeuvre is constrained by the exchange rate effects of having a peripheral currency. Cutting interest rates tends to compound the willingness of asset holders to withdrawal from their creditor positions in peripheral currency to seek safety in a core currency. At an aggregate level, this propensity may cause adverse macroeconomic effects such as foreign exchange instability.

Core currency states are better able to guarantee the performability of their sovereign debt whilst upholding their central bank's macroeconomic stability mandate. Despite being multifactorial, macroeconomic stability is heavily influenced by two factors: the offer-demand for currency and the foreign exchange rate.[135] An internationally liquid currency has a superior

[129] H Minsky, *Induced Investment and Business Cycles* (Edward Elgar 2004) 96.
[130] C Goodhart, 'Myths about the Lender of Last Resort', 2 (3) International Finance 339–60 (1999).
[131] S Schulmeister, 'Globalization without Global Money: The Double Role of the Dollar as National and World Currency', 22 (3) Journal of Post Keynesian Economics 365–95 (2000).
[132] On the Fed's de-risking policies during the GFC, see D Fields and M Vernengo, 'Hegemonic Currencies during the Crisis: The Dollar versus the Euro in a Cartalist Perspective', 20 (4) Review of International Political Economy 740–59 (2013).
[133] Bank for International Settlements, above n 111, at 51–54.
[134] Ibid, at 53.
[135] Winkler, above n 119, at 14–23.

capacity of acting as a reserve of value because demand for it is more stable. As a result, domestic deficits in a top or core currency country can be substantively higher without affecting the foreign exchange rate. In contrast, peripheral currency states face higher constraints in guaranteeing sovereign debt contracts, including in domestic currency. Although central banks can, in rigour, ensure the discharge of monetary obligations in domestic currency by exercising their LOLR capacity, economic considerations may guide the decision of public authorities in an opposite direction in times of macroeconomic turbulence caused by massive withdrawals from contracts denominated in peripheral currency.[136] Thus, as Reinhart and Rogoff report, defaults in domestic debt are not uncommon in peripheral currency states. Price instability is the main element behind this decision—defaults in domestic currency were reported to occur 'in times of severe macroeconomic distress' and galloping inflation, averaging 170% in the year of the default.[137] Thus, currency hierarchy ensures the ability of guaranteeing sovereign debt through the coordination of monetary and fiscal policy tools whilst maintaining macroeconomic stability.

ii. Safety/solvency as access to guarantee by an ILOLR

Whenever a state is not able to guarantee the performance of its financial obligations denominated in foreign currency through its own institutional framework, it may seek access to international money.[138] Any ILOLR is, by definition, a body outside the scope of the state's sovereignty that provides liquidity to guarantee the performability of its financial obligations. This invariably places the sovereign in a relative position of fragility vis-à-vis the ILOLR. Yet monetary power is a crucial factor determining whether, and under which conditions, a state can access various types of ILOLR.

This section discusses the core–periphery dynamics of asymmetric access to international liquidity and their effect over the solvency of states by distinguishing between two types of ILOLR: reciprocal currency arrangements (Section a) and IMF financing (Section b). Whilst core currency states are able to tap on non-conditional and unlimited swap lines with the world's top central bank, peripheral currency states are left with limited—and often highly conditional—sources of international liquidity.

a. Reciprocal currency arrangements

The level of access to international liquidity is a critical element in determining the solvency constraints of a state. Unlimited, unconditional access to international liquidity amounts to extraordinary flexibility, whilst the lack of access to it signals a strong boundary in a state's ability to avoid insolvency. A state's sources of international liquidity are crucial in determining the performability of its sovereign debt contracts. These may take the form of Regional Financing Arrangements (RFAs)[139] or, most importantly, direct access to the foreign central bank of the requested currency in the form of a swap line.

Swap lines are arrangements between governments or other public authorities that take the form of a sale by one party of its own currency or other foreign currencies to the other party, for which the latter pays an equivalent amount of its own currency.[140] Currency swaps serve to create a temporary arrangement; hereby, the holder of a currency is entitled to exchange that

[136] See E Parker and D Riley, 'Why Sovereigns Can Default on Local-Currency Debt', Fitch Ratings Special Report (10 May 2013).

[137] CM Reinhart and KS Rogoff, 'The Forgotten History of Domestic Debt', NBER Working Paper No 13,946 (2009) 23.

[138] O Jeanne, 'The IMF: An International Lender of Last Resort?' 1 (2) IMF Research Bulletin 1–3 (2000).

[139] U Volz and A Caliari (eds), *Regional and Global Liquidity Arrangements* (German Development Institute 2010). Given the complexities of multiple RFAs in the international monetary system, these lie beyond the scope of this article. Admittedly, the core-periphery dynamics produced by asymmetric conditions of access to RFAs constitute a valuable (and underexplored) question.

[140] RSJ Martha, *The Financial Obligation in International Law* (OUP 2015) 307–11.

currency for an equivalent amount of another currency, at an agreed exchange rate, to improve the market liquidity of a currency owned or to obtain bank financing at a lower rate.[141]

Although the first swap networks date back from 1962 to protect central banks from unfavourable dollar positions,[142] the GFC has spurred the formalization and extension of such network.[143] Most prominently, the Fed has set up a network for unconditional, unlimited swap lines with the world's leading central banks (or, as Mehrling defines them, the 'C6').[144] Although those arrangements were originally made for a fixed period, they have been subsequently extended until the present. The effect of reciprocal swap arrangements is to increase the liquidity available for the parties involved, and therefore, to strengthen the solidness of sovereign debt safety by avoiding coordination problems. As a result, creditors will be more prepared to hold their contractual positions due to the strengthened perception that liquidity in the market is sufficient, and therefore, those other creditors are also likely to keep their contractual positions.[145] This reduces the likelihood of investor strikes in the foreign currency of the swap arrangement.

Even though the post-2008 extension of the swap network in US dollars was so significant that the Fed has been deemed to have become an ILOLR,[146] access to swap lines is not equally available for all states. Typically, access to the Fed's swap arrangements has only been available to a select group of core currency states, with some temporary exceptions to a selected group of peripheral currency states in times of crises.[147]

In sum, the global swap network reflects a hierarchical structure in which the C6 has established an unlimited, perennial swap network. This allows core central banks to ensure the performability of financial contracts in their domestic systems by being able to tap on the world's top central bank—the Fed—whenever necessary. This reflects the global hierarchy of money in which the core—and sometimes a select group in the periphery—of the system can access non-conditional liquidity backstops (and in the case of the C6, unlimited ones).[148] In contrast, the periphery has significantly more limited access to swap arrangements, and most states find themselves excluded from the network.[149] Instead, as discussed below, emergency liquidity for the periphery often takes the form of conditional IMF lending.

b. IMF financing

When foreign central bank guaranteeing is not available, the only available source of emergency liquidity for sovereigns may be the IMF.[150] It is broadly recognized that the IMF performs, *de facto*, the role of an ILOLR within a context of capital account liberalization and increased interdependency of financial markets.[151] Similarly to a national LOLR, the role of IMF financing as an ILOLR is to provide the liquidity necessary to discharge contractual duties, ensuring asset

[141] RW Edwards, *International Monetary Collaboration* (Transnational Publishers 1985) 135–66.

[142] M Bordo, O Humpage, and A Schwartz, 'The Evolution of the Federal Reserve Swap Lines since 1962', NBER Working Paper No 20,755 (2014).

[143] WA Allen, *International Liquidity and the Financial Crisis* (CUP 2013) ch 6.

[144] These are the Federal Reserve, the Bank of England, the ECB, the Swiss National Bank, the Bank of Japan, and the Bank of Canada. See P Mehrling, 'Elasticity and Discipline in the Global Swap Network', INET Working Paper No 27 (Institute for New Economic Thinking 2015).

[145] DW Diamond and PH Dybvig, '*Bank Runs, Deposit Insurance, and Liquidity*', 91 (3) The Journal of Political Economy 401, 402–3, 417–8 (1983).

[146] JL Broz, 'The Politics of Rescuing the World's Financial System: The Federal Reserve as a Global Lender of Last Resort', 13 (2) Korean Journal of International Studies 323–351 (2015).

[147] Bordo, Humpage, and Schwartz, above n 142.

[148] P Mehrling, 'Financialization and Its Discontents', 3 (1) Finance and Society 1–10 (2017).

[149] See B Steil, 'Central Bank Currency Swaps Tracker' (Council on Foreign Relations, 5 November 2019).

[150] This is so unless the state can access some form of RFA. See Volz and Caliari, n 139 above.

[151] RM Lastra, 'Lender of Last Resort, an International Perspective', 48 (2) International and Comparative Law Quarterly 340–361 (1999).

holders that their claims will be timely and fully met. Yet the circumstances in which IMF liquidity is made available—both in terms of the limited character of its general resources and typical conditions for its provision—create core–periphery effects in the international monetary system.

The liquidity provided by reciprocal currency arrangements and IMF financing has been found to be functionally equivalent and of analogous legal nature.[152] As regards their functional equivalence, Edwards argues that there are various ways through which central banks can obtain foreign currencies in order to augment their reserve holdings, make payments, supply commercial banks of the country requiring foreign exchange, or conduct monetary policy operations.[153] Whilst one of those ways is to establish a swap arrangement with a foreign central bank, this objective can also be achieved through IMF lending.[154] Thus, as Martha highlights, both reciprocal currency swap arrangements and IMF lending 'purport to enable countries to keep their current account free from restrictions and to maintain a unified exchange rate system'.[155] In turn, as regards their legal nature, both reciprocal currency arrangements and IMF lending consist in international arrangements for the purchase of foreign currencies. The arrangement for the purchase of currency from the pool of currencies the IMF holds is referred to as a Stand-By Arrangement or Extended Stand-By Arrangement (Article XXX (b) of the IMF Articles). Such arrangements are made for a short-term period not exceeding 5 years, at the end of which the debtor must repurchase the Fund's holdings of its own currency (Articles V (3) (a) and (b) and (7) (c) of the IMF Articles).

Despite the analogies between those arrangements, the conditions upon which they operate produce entirely different results. A non-conditional, unlimited ILOLR such as the Fed in the C6 is close to providing the same levels of sovereign debt safety as the guaranteeing power of the LOLR, at least as far as swap network arrangements remain unmodified. Similarly, the more limited is access to ILOLR liquidity, the more fragile the solvency constraints of the state. This is the case of IMF financing, which is subject to the liquidity constraints of the Fund's General Resources Account. Furthermore, approval of most IMF lending facilities is conditional upon IMF conditionality, which may substantially constrain autonomous decision-making by the debtor state.[156]

Those asymmetrical dynamics produce a global hierarchical structure in which core currency states can access unlimited, non-conditional reciprocal swap arrangements as an ILOLR, whilst peripheral currency states may be left with (mostly highly conditional) IMF arrangements as a source of liquidity to ensure the performability of their financial obligations, including sovereign debt.

V. GOVERNING SOVEREIGN INSOLVENCY: THE NEED FOR INTERNATIONAL SOVEREIGN BANKRUPTCY RULES

As discussed in Section IV, the monetary periphery is structurally constrained in its ability to ensure the safety/solvency of its sovereign debt, which makes it significantly more vulnerable to insolvency problems.

To correct the monetary determinants of sovereign debt crises, it is essential to reset the international monetary system.[157] This would mean, first, redesigning the system so that no

[152] Edwards, above n 141, at 128; Martha, above n 140, at 308; J Fawcett, 'Trade and Finance in International Law', 123 Recueil des Cours 129, 236–37 (1968).
[153] Edwards, above n 141, at 128.
[154] Fawcett, above n 152.
[155] Martha, above n 140, at 308.
[156] A Kentikelenis, TH Stubbs, and LP King, 'IMF Conditionality and Development Policy Space, 1985–2014', 23 (4) Review of International Political Economy 543 (2016).
[157] See, eg, D Moggridge (ed), *The Collected Writings of John Maynard Keynes*, vol 25 (Royal Economic Society and CUP 1980) 169–89.

national currency is able to fully perform the functions of money at an international level, as the top currency—the US dollar—currently does. Under such system, an international unit of account and means of payment would be adopted for the settlement of international transactions between central banks, being unable to serve as store of value. Second, the system would be designed to spread the burden of balance of payments adjustment equally between deficit and surplus countries, thereby incentivizing balanced flows at an international level.

The most prominent example of such plan was John Maynard Keynes' unrealized proposal for an International Clearing Union (ICU), made in the prelude to the 1944 Bretton Woods Conference.[158] Within this proposal, each country would hold an account denominated in an international unit of account called 'Bancor'. This unit, rather than national currencies, would be used to settle international trade transactions.[159] The system would allow countries to access overdraft facilities, enabling them to obtain Bancor without having to have earned it through previous trade. A country's balance within the ICU would determine whether that country was in deficit or surplus. Consequently, the use of the overdraft facility by a deficit country would create Bancor, whilst the transfer of Bancor from a surplus country to deficit country would erase Bancor from this abstract international accounting system.

Ultimately, Keynes' ICU was designed to prevent the international unit of account from contemporaneously functioning as a store of value (and therefore, as an international reserve currency).[160] To achieve this purpose, international money would be created every time a deficit country used the overdraft facility to pay for imports from a surplus country, and likewise, international money would be destroyed whenever a surplus country transferred Bancor to a deficit country. Any transfers of Bancor between deficit countries or between surplus countries would not alter the volume of money outstanding. The system would prevent the accumulation of systemic deficits and surpluses by imposing limits, interests, and fees on Bancor surpluses and deficits. Surplus countries would have limited capacity to use their positive Bancor balances to purchase financial assets, for which prior approval would be required. This system was designed to encourage countries to converge towards balanced trade whilst avoiding short-term speculative flows.[161]

The adequacy of Keynes' original plan to the contemporary context merits further consideration if any reforms are to be adopted in the international monetary system. Yet, a reform based on the underlying principles of such plan, however adaptations may be required in its design, would structurally correct the monetary asymmetries that currently lie at the root of sovereign insolvency crises in the periphery of the system.

Admittedly, a structural reform of such type would require a major change in the geopolitics of global money that may not be viable in current circumstances. Yet, the asymmetries and developmental gap posed by the current international monetary order—amidst the prospect of a new wave of sovereign debt crises in DEEs—are set to produce an increasing level of social unrest, with unpredictable political consequences for the international community. A shorter-term mechanism that establishes a fair, rule-based, expedited solution for sovereign debt crises is urgently required. So long as the conditions for a structural reform in the international monetary system do not materialize, an international bankruptcy mechanism for sovereigns should be conceived as indispensable to ensuring a more equitable global economic order.

The quest for a sovereign bankruptcy mechanism is not new in the academic, policy, and diplomatic spheres. In the last decades, academics and policymakers of various traditions and backgrounds have made several proposals to create a statutory international sovereign debt

[158] Ibid.
[159] M Amato and L Fantacci, 'Back to Which Bretton Woods? Liquidity and Clearing as Alternative Principles for Reforming International Money', 38 (6) Cambridge Journal of Economics 1431, 1443–45 (2014).
[160] Ibid.
[161] Ibid.

restructuring regime, either established by a convention or a treaty, that echoes private insolvency models from comparative and transnational corporate law.[162] The range of proposals within this literature is broad, including the internationalization of basic elements of municipal insolvency, resorting to either arbitration or a permanent sovereign insolvency court as adjudication bodies.[163] The IMF has also presented its own plan of a Sovereign Debt Restructuring Mechanism (SDRM) in 2001, which comprised a set of *ex ante* rules and procedures for conducting debt restructurings.[164] However, the Fund abandoned the proposal in 2003.[165] Importantly, the need for an international SDRM has been reflected in the UN Resolutions 68/304[166] and 69/247[167]—approved by the General Assembly in September and December 2014, respectively—as well as in Resolution 69/319—approved by the same body in September 2015.[168]

Whilst the procedural and substantive merits of those proposals are beyond the scope of this article, a commonality underpins all of them—the shared orientation towards adopting sovereign bankruptcy rules, either through the creation of a new international institution or under the auspices of an existing one. At present, however, there has not been enough political consensus for the adoption of any of them. The harmful socioeconomic effects of sovereign debt crises, increasingly exacerbated by the multiple crises of the present, call for a prompt reconsideration of the legal governance of sovereign insolvency that builds upon those experiences.

VI. CONCLUSION

In contrast with the mainstream literature on sovereign debt, this article has argued that the effectiveness of a state's institutional framework in avoiding insolvency crises is not necessarily attributable to the quality of its political institutions, nor is it solely associated with its level of fiscal discipline. Instead, a state's ability to safeguard the safety/solvency of its sovereign debt by ensuring—or otherwise accessing—continuous liquidity depends on its degree of monetary sovereignty and the place where its currency sits in the international monetary system. Insofar as the system is structured upon a global hierarchy of currencies, sovereign debt crises will not disappear. Irrespective of the misfortunes or mismanagements that may influence their development, they are inherent to the asymmetric character of global liquidity.

A reform in the international monetary system is needed to structurally correct the monetary asymmetries that generate sovereign debt crises. Yet so long as the conditions for this reform do not materialize, an international sovereign bankruptcy mechanism that allows countries to restructure their debts on a fair and timely manner should be conceived as indispensable to ensuring a more equitable global economic order.

It is hoped that the contributions to the sovereign insolvency literature made in this article—inspired by contemporary critiques of the centrality of liquidity in the political economy of finance—will provide new lenses to inform current debates on the need for international sovereign bankruptcy rules, thereby contributing toward a new momentum for legal reform in this field.

[162] See United Nations Commission on International Trade Law, *UNCITRAL Legislative Guide on Insolvency Law* (2004).

[163] See J Kaiser, 'Taking Stock of Proposals for More Ordered Workouts' in B Herman, JA Ocampo, and S Spiegel, *Overcoming Developing Country Debt Crises* (OUP 2010); K Rogoff and J Zettelmeyer, 'Bankruptcy Procedures for Sovereigns: A History of Ideas, 1976–2001', 49 (3) IMF Staff Papers 470–507 (2002).

[164] A Krueger, 'A New Approach to Sovereign Debt Restructuring' (IMF 2002).

[165] See A Gelpern and M Gulati, 'How CACs Became Boilerplate, or the Politics of Contract Change', IPD Task Force on Debt Restructuring and Sovereign Bankruptcy Working Paper Series (2004).

[166] *Towards the Establishment of a Multilateral Legal Framework for Sovereign Debt Restructuring Processes*, UNGA Res 68/304 (14 September 2014).

[167] *Modalities for the Implementation of Resolution 68/304, Entitled 'Towards the Establishment of a Multilateral Legal Framework for Sovereign Debt Restructuring Processes'*, UNGA Res 69/247 (29 December 2014).

[168] *Basic Principles on Sovereign Debt Restructuring Processes*, UNGA Res 69/319 (10 September 2015).