JUSTITIA NOVA
Indonesian Journal of Modern Law
e-ISSN: 3109-3469
Vol. 2, No. 1, June 2026
https://doi.org/10.5281/zenodo.20573887

State Responsibility and Currency Depreciation in Selected Developing Countries: A Comparative Constitutional Analysis

James Chin[1]*, Hisyam bin Hamid Albandiyi[2], Abdul Rahim[3]
[1] University of Tasmania, Hobart, Australia
[2] Lecturer at Doctoral Program of Islamic Law, Universitas Islam Negeri Sumatera Utara (UINSU), Medan, Indonesia
[3] Sekolah Tinggi Agama Islam Asy-Syafi'iyah Nabire, Nabire, Indonesia

*Corresponding Author Email: james.chin@utas.edu.au

Article History:
Submitted: 3 November 2025 | Revised: 30 April 2026 | Accepted: 25 June 2026 | Published: 30 June 2026

Citation (APA Style):
Chin, J., Albandiyi, H. B. H., & Rahim, A. (2026). State responsibility and currency depreciation in selected developing countries: A comparative constitutional analysis. *Justitia Nova: Indonesian Journal of Modern Law, 2*(1), 18–35.

Abstract
Currency depreciation in developing countries is commonly treated as a macroeconomic phenomenon; however, this study reconceptualizes it as a constitutional issue of economic governance involving state responsibility, institutional accountability, and socio-economic rights protection. This research examines how constitutional and legal systems regulate monetary stability obligations amid persistent currency depreciation. The study focuses on selected developing countries, namely Lebanon, Argentina, Iran, Indonesia, Laos, and Paraguay, which reflect diverse institutional arrangements and varying degrees of monetary instability shaped by fiscal structures, governance capacity, and external economic pressures. A normative juridical method is applied through statutory interpretation, doctrinal analysis, and comparative legal approaches to examine the relationship between constitutional law and monetary governance. The findings indicate that currency depreciation is not merely a technical economic issue but also reflects structural weaknesses in constitutional governance, particularly in fiscal–monetary coordination, institutional accountability, and enforcement of public welfare obligations. The study develops the Constitutional Monetary Responsibility Framework (CMRF), integrating monetary stability, state responsibility, constitutional accountability, and socio-economic rights protection into a unified model. This framework positions currency depreciation as a constitutional stress indicator affecting institutional legitimacy and economic rights realization. The study contributes to constitutional economic governance literature by offering a comparative legal perspective on monetary instability in developing countries and argues that effective responses require both macroeconomic adjustments and strengthened constitutional oversight. The research is limited by reliance on secondary legal sources and recommends future empirical socio-legal studies to validate the framework.

Keywords:
Constitutional economic governance; Currency depreciation; State responsibility; Monetary stability; Socio-economic rights; Developing countries.

JUSTITIA NOVA
Indonesian Journal of Modern Law
e-ISSN: 3109-3469
Vol. 2, No. 1, June 2026
https://doi.org/10.5281/zenodo.20573887

1. Introduction

Currency depreciation has emerged as a persistent and structurally significant challenge in developing countries within the contemporary global economic order. While traditionally analyzed through macroeconomic indicators such as inflation rates, trade balances, fiscal deficits, and capital flows, sustained exchange-rate instability increasingly reveals deeper structural issues that extend beyond technical economic management. In many developing states, including Indonesia, Lebanon, Iran, Laos, Paraguay, Tunisia, and several African economies, prolonged currency depreciation has produced severe distributive consequences affecting purchasing power, public expenditure capacity, social welfare systems, and overall economic security. These developments indicate that monetary instability cannot be reduced to a purely economic variable but must also be examined as a question of constitutional governance, particularly regarding the state's responsibility to safeguard public welfare and socio-economic rights (Cavalheiro et al., 2025; Korhonen-Kurki et al., 2025).

The structural nature of currency depreciation in developing countries is closely linked to institutional and fiscal constraints within the global financial system. Apeti et al. (2024) highlight the persistent problem of "original sin," where developing economies are unable to borrow internationally in their domestic currency, resulting in heavy reliance on foreign-currency-denominated debt. This condition exposes states to exchange-rate volatility and amplifies fiscal fragility during external shocks. Similarly, Potrafke (2025) and López-Villavicencio and Zoumenou (2025) demonstrate that fiscal rules and macroeconomic stability are strongly dependent on institutional enforcement capacity and governance credibility. These findings suggest that monetary instability is not merely a technical issue for central banks but reflects broader deficiencies in legal-institutional coordination and governance structures, raising important questions about state responsibility and constitutional accountability in economic management. Empirical experiences from developing countries further reinforce the governance dimension of currency depreciation. Lebanon's prolonged financial crisis illustrates how severe monetary collapse can erode institutional legitimacy and trigger informal monetary substitution, including increased reliance on dollarization and cryptocurrency adoption (Aoun et al., 2026). In Africa, Strong and Gakpa (2025) show that historical exposure to currency crises continues to shape central bank policy behavior and exchange-rate management strategies. Meanwhile, Tunisia, Zambia, and other developing economies demonstrate how fiscal fragility, weak institutional coordination, and external dependency intensify exchange-rate instability and constrain effective governance responses (Kalai et al., 2026; Nondo et al., 2025). These cases collectively demonstrate that currency depreciation not only reflects macroeconomic imbalance but also exposes structural weaknesses in governance capacity and the state's ability to fulfill its constitutional obligations.

From a constitutional perspective, monetary stability is increasingly understood as an implicit dimension of state responsibility. Although most constitutions do not explicitly regulate exchange-rate stability, modern constitutional theory recognizes that the state has an obligation to ensure public welfare, social justice, and socio-economic rights protection. Georgieva (2025) argues that developing states operate within an asymmetrical international economic order that constrains monetary sovereignty and complicates domestic constitutional responsibilities. In the Indonesian context, Susanto et al. (2025) further emphasize the emergence of monetary constitutionalism, which frames monetary governance as part of constitutional structure rather than purely technocratic policy. Accordingly, prolonged currency depreciation raises fundamental legal questions regarding the extent to which governments and central banks may be held constitutionally responsible for safeguarding citizens from systemic economic harm. Despite increasing scholarly attention to economic governance, existing literature remains fragmented. Studies on currency depreciation predominantly focus on macroeconomic determinants, fiscal rules, exchange-rate dynamics, and central bank behavior (Apeti et al., 2024; Duterme, 2025; Strong & Gakpa, 2025). Meanwhile, governance literature examines institutional legitimacy, sovereignty, and accountability without systematically integrating these concepts into constitutional analysis of monetary instability (Brown, 2025; Georgieva, 2025). As a result, there is limited conceptual integration between macroeconomic instability and constitutional law, particularly regarding the legal responsibility of the state in protecting socio-economic rights during currency depreciation. This gap is especially relevant for developing countries, where exchange-rate instability has direct and immediate consequences for poverty levels, welfare protection, and economic justice.

To address this gap, this study examines currency depreciation through the framework of constitutional economic governance and state responsibility in selected developing countries. The main objective of this study is to analyze currency depreciation as a constitutional governance issue and to evaluate the extent of state responsibility in ensuring monetary stability and socio-economic rights protection. Accordingly, this study addresses four research questions: (1) To what extent can monetary stability be interpreted as a constitutional obligation of the state? (2) How do governments and central banks bear legal responsibility during periods of currency depreciation? (3) How do selected developing countries respond to exchange-rate instability within constitutional and legal governance frameworks? and (4) What normative model can best explain the relationship between monetary stability, state responsibility, and socio-economic rights protection?

The novelty of this study lies in the development of the Constitutional Monetary Responsibility Framework (CMRF), which integrates monetary stability, state responsibility, constitutional accountability, and socio-economic rights protection into a unified analytical structure. Unlike previous studies that treat currency depreciation primarily as a macroeconomic or policy issue, this article conceptualizes it as a constitutional stress phenomenon requiring legal accountability and institutional responsibility. Through a comparative legal analysis of selected developing countries, the study contributes to emerging scholarship on constitutional economic governance by offering a structured normative framework for understanding how legal systems shape monetary resilience and state responsibility in conditions of economic instability (Lofthouse & Boettke, 2025; Korhonen-Kurki et al., 2025).

2. Literature Review

Literature on constitutional economic governance increasingly converges on the view that economic management is not merely a technocratic domain but an integral component of constitutional responsibility. Modern constitutional systems embed obligations of public welfare, social justice, and socio-economic rights protection, thereby extending the scope of state responsibility into fiscal and monetary domains. Within this framework, currency depreciation in developing countries must be understood not only as a macroeconomic phenomenon but also as a reflection of constitutional governance performance. Studies on governance and development indicate that economic outcomes are structurally linked to institutional quality, legal enforcement capacity, and governance architecture, suggesting that monetary instability is often the manifestation of deeper constitutional and institutional weaknesses (Cavalheiro et al., 2025; Korhonen-Kurki et al., 2025). Accordingly, monetary stability increasingly acquires normative relevance as part of the state's constitutional obligation to ensure economic security and public welfare.

Empirical literature further demonstrates that currency depreciation in developing countries is strongly associated with structural fiscal and external vulnerabilities. A key explanation is the "original sin" problem, in which developing economies rely heavily on foreign-currency-denominated debt, thereby increasing exposure to exchange-rate volatility and limiting monetary sovereignty (Apeti et al., 2024). This structural constraint weakens fiscal resilience and amplifies macroeconomic instability during external shocks. Complementing this view, Potrafke (2025) and López-Villavicencio and Zoumenou (2025) show that fiscal rules and macroeconomic stability depend not only on policy design but also on the credibility of legal institutions and enforcement mechanisms. Without institutional credibility, fiscal and monetary coordination becomes fragmented, reinforcing cycles of depreciation and inflation. These findings suggest that monetary instability is deeply embedded in legal-institutional structures rather than being purely cyclical or market-driven. From a governance perspective, literature increasingly emphasizes that institutional legitimacy plays a central role in shaping economic outcomes during monetary crises. Brown (2025) conceptualizes institutional failure as a "denial machine," where states maintain procedural legitimacy while failing to deliver substantive welfare outcomes. In the context of currency depreciation, this disconnect becomes evident when governments formally claim macroeconomic stability while citizens experience declining purchasing power, inflationary pressure, and reduced access to basic services. Similarly, Lofthouse and Boettke (2025) argue that governance legitimacy requires relational accountability, meaning that institutions must operate with citizens rather than over them. This perspective is particularly relevant for monetary governance, where central bank decisions and fiscal policies directly affect distributive justice and socio-economic rights. Consequently, state responsibility in monetary instability must be evaluated not only through legal compliance but also through its substantive welfare outcomes.

Recent scholarship on monetary constitutionalism further strengthens the argument that monetary governance is embedded within constitutional structures. Susanto et al. (2025) demonstrate that monetary constitutionalism conceptualizes central banking and monetary policy as constitutionally embedded functions shaped by legal norms, institutional design, and public accountability mechanisms. Georgieva (2025) similarly argues that developing states face structural constraints on monetary sovereignty due to asymmetrical international economic relations, which limit their capacity to independently manage exchange-rate stability. In addition, Buchan and Üngör (2026) highlight that digital financial transformation, including central bank digital currencies and crypto-assets, further complicates traditional notions of monetary sovereignty. Empirical cases reinforce these dynamics: Lebanon's financial collapse has led to widespread dollarization and increased cryptocurrency adoption, undermining state monetary authority (Aoun et al., 2026), while Latin American economies face both opportunities and risks associated with digital monetary systems (Bespalova et al., 2025). These developments indicate that monetary governance is increasingly shaped by transnational financial structures and technological disruption, thereby intensifying constitutional questions regarding state authority and responsibility.

Finally, literature on governance resilience and institutional capacity underscores that socio-economic rights protection is directly affected by monetary instability. Transformative governance theory highlights the importance of adaptive institutional systems capable of responding to economic shocks and structural uncertainty (Korhonen-Kurki et al., 2025; Gustafsson et al., 2025). However, in many developing countries, governance effectiveness is constrained by corruption, weak enforcement capacity, and fragmented regulatory systems. Studies by Igbinedion and Osobase (2025) and Mkhize (2025) show that corruption and institutional fragmentation significantly undermine state capacity and reduce public trust in governance institutions. Nondo et al. (2025) further demonstrate that governance quality is a critical determinant of economic resilience, particularly in resource-dependent economies. These structural weaknesses directly affect socio-economic rights protection, as currency depreciation reduces real income, increases inequality, and limits access to essential public goods. Therefore, monetary instability must be understood as both an economic and constitutional issue that reflects the state's capacity to fulfill its fundamental obligations.

Despite extensive literature on fiscal policy, monetary governance, institutional legitimacy, and economic sovereignty, there remains a significant analytical gap in integrating these domains within a constitutional legal framework. Existing studies tend to treat currency depreciation either as a macroeconomic problem or as a governance issue, without systematically examining its constitutional implications for state responsibility and socio-economic rights protection. This fragmentation limits the development of a unified analytical approach capable of explaining monetary instability as a constitutional governance phenomenon. To address this gap, this study develops the Constitutional Monetary Responsibility Framework (CMRF), which integrates monetary stability, state responsibility, constitutional accountability, and socio-economic rights protection into a single normative structure. This framework provides the theoretical foundation for analyzing how developing countries respond to currency depreciation not merely as economic adjustment but as constitutional governance performance, thereby contributing to emerging scholarship on constitutional economic governance and monetary constitutionalism (Mariana & Raz, 2025; Widlak & Peeters, 2025).

3. Methodology

This study employs a normative juridical research design combined with a comparative legal approach to analyze currency depreciation as a constitutional economic governance issue in developing countries. The normative juridical method is used to interpret constitutional provisions, statutory frameworks, and legal doctrines governing monetary stability, fiscal responsibility, and socio-economic rights protection. In this perspective, economic governance is not treated as a purely technical policy domain but as part of the state's constitutional obligations to ensure public welfare and institutional legitimacy (Georgieva, 2025; Susanto et al., 2025). Accordingly, the study focuses on how legal norms structure state responsibility in maintaining monetary stability and mitigating the social consequences of exchange-rate volatility.

The comparative legal approach is applied to selected developing countries, namely Indonesia, Lebanon, Iran, Laos, Argentina, and Paraguay. These jurisdictions are chosen purposively due to their documented experiences of currency depreciation, fiscal fragility, and varying degrees of institutional capacity (Aoun et al., 2026; Kalai et al., 2026). The comparative design follows a most-different systems logic, allowing the identification of convergent patterns in constitutional responses to monetary instability across heterogeneous legal and economic systems. The analysis pays particular attention to institutional variables such as fiscal discipline, central bank independence, enforcement of fiscal rules, and governance coordination between monetary and fiscal authorities, which are widely recognized as determinants of macroeconomic stability (Potrafke, 2025; López-Villavicencio & Zoumenou, 2025). Data are derived from secondary legal and doctrinal sources, including constitutional texts, central bank legislation, fiscal responsibility laws, policy documents from international financial institutions, and peer-reviewed academic literature published between 2023 and 2026. The analytical framework integrates scholarship on structural fiscal vulnerability and foreign currency dependency in developing economies (Apeti et al., 2024), monetary sovereignty and digital financial transformation (Buchan & Üngör, 2026), and governance legitimacy under conditions of institutional stress (Brown, 2025). Additional insights from adaptive governance literature are used to assess institutional resilience in responding to systemic economic shocks (Korhonen-Kurki et al., 2025; Gustafsson et al., 2025). These materials are analyzed through doctrinal legal interpretation and thematic comparative analysis.

The interpretation process is guided by the Constitutional Monetary Responsibility Framework (CMRF), which structures analysis into four interconnected dimensions: monetary stability, state responsibility, constitutional accountability, and socio-economic rights protection. Doctrinal interpretation is used to assess how constitutional principles such as public welfare, economic justice, and institutional accountability are reflected in monetary governance frameworks. Thematic comparison is then employed to identify cross-country patterns in legal and institutional responses to currency depreciation, particularly regarding enforcement capacity, policy coordination, and regulatory autonomy. Through this combined methodology, the study positions currency depreciation not merely as an economic phenomenon but as a constitutional governance issue involving legal responsibility and institutional performance.

4. Results & Discussion

4.1 Currency Depreciation as a Constitutional Governance Issue

Currency depreciation in developing countries should be understood not merely as a macroeconomic fluctuation, but as an expression of constitutional governance stress that reflects the capacity of the state to fulfill its legal and institutional obligations. In conventional economic literature, exchange-rate instability is primarily attributed to fiscal imbalance, external shocks, and capital flow volatility (Potrafke, 2025; López-Villavicencio & Zoumenou, 2025). However, from a constitutional perspective, persistent depreciation signals deeper structural deficiencies in state responsibility, particularly in ensuring economic stability as part of public welfare obligations. This shift in interpretation aligns with emerging scholarship on

JUSTITIA NOVA
Indonesian Journal of Modern Law
e-ISSN: 3109-3469
Vol. 2, No. 1, June 2026
https://doi.org/10.5281/zenodo.20573887

constitutional economic governance, which emphasizes that economic outcomes are inseparable from legal and institutional design (Georgieva, 2025; Susanto et al., 2025). Within this framework, monetary instability becomes legally relevant because it directly affects the state's ability to guarantee socio-economic rights. Currency depreciation reduces real income, weakens purchasing power, and undermines access to essential goods and services, thereby creating indirect but substantial constitutional consequences. Brown (2025) argues that institutional legitimacy deteriorates when states maintain formal compliance with legal procedures while failing to deliver substantive welfare outcomes. In the context of monetary governance, this suggests that legal legitimacy is not only procedural but also outcome-dependent, particularly when economic instability produces systemic social harm. Thus, currency depreciation may be interpreted as a manifestation of governance failure that engages constitutional responsibility.

The comparative evidence from developing countries further reinforces this argument. In cases such as Lebanon, prolonged currency collapse has led to the erosion of trust in formal monetary institutions and the emergence of alternative financial practices, including cryptocurrency-based transactions (Aoun et al., 2026). Similarly, experiences in Argentina and several African economies demonstrate that fiscal fragility and weak institutional coordination significantly amplify exchange-rate volatility and limit policy effectiveness (Strong & Gakpa, 2025; Kalai et al., 2026). These patterns indicate that monetary instability is not purely a technical issue but is closely linked to the constitutional capacity of states to coordinate fiscal and monetary authority in a coherent governance structure. From a legal-institutional perspective, such coordination failure reflects weaknesses in constitutional accountability mechanisms. Widlak and Peeters (2025) highlight that modern governance increasingly operates through infrastructure-level bureaucracies, where decision-making is embedded in administrative systems that may reduce transparency and democratic oversight. In monetary governance, this can lead to technocratic insulation of central banking decisions, thereby weakening public accountability for policies that directly influence currency stability. At the same time, Lofthouse and Boettke (2025) emphasize that legitimate governance must operate "with citizens," suggesting that exclusionary or opaque monetary decision-making undermines constitutional legitimacy in economic governance systems.

In synthesis, currency depreciation should be conceptualized as a constitutional governance issue that reflects the interaction between monetary policy, institutional coordination, and legal accountability. Within the proposed Constitutional Monetary Responsibility Framework (CMRF), exchange-rate instability functions as an indicator of systemic stress across four dimensions: monetary stability, state responsibility, constitutional accountability, and socio-economic rights protection. This interpretation reframes currency depreciation as a constitutional signal of governance failure rather than a purely economic disturbance, thereby justifying stronger integration between legal oversight mechanisms and macroeconomic policy governance in developing countries.

4.2 State Responsibility for Monetary Stability within Constitutional Frameworks

The concept of state responsibility for monetary stability remains largely implicit in the constitutional architecture of many developing countries, where constitutions rarely articulate explicit obligations regarding exchange-rate stability or inflation control. Nevertheless, this study advances the argument that such responsibility can be normatively derived from foundational constitutional principles, particularly welfare state doctrines, social justice commitments, and socio-economic rights provisions. Within this interpretive framework, monetary stability should be understood not merely as a macroeconomic objective but as a constitutional obligation linked to the state's duty to safeguard minimum standards of economic security and prevent systemic harm to citizens' livelihoods. This perspective is consistent with contemporary constitutional governance literature, which emphasizes the interdependence between legal norms, institutional design, and socio-economic outcomes in assessing state legitimacy (Korhonen-Kurki et al., 2025; Lofthouse & Boettke, 2025).

At the institutional level, responsibility for monetary stability is typically divided between fiscal authorities and central banks, reflecting a functional separation intended to enhance macroeconomic discipline. However, empirical and comparative evidence suggests that this separation often produces coordination failures in developing economies, particularly during periods of currency depreciation. Mariana and Raz (2025) show that central bank independence is insufficient to ensure financial stability when fiscal policy remains expansionary or politically driven. Likewise, Duterme (2025) argues that inflation-targeting frameworks often operate as institutional compromises rather than enforceable constitutional guarantees of price stability. These findings indicate that monetary stability is not solely dependent on institutional autonomy but requires coherent constitutional coordination between fiscal and monetary authorities. Structural constraints further complicate the realization of state responsibility in monetary governance. Apeti et al. (2024) describe the persistent problem of "original sin," whereby developing countries' reliance on foreign currency debt exposes them to exchange-rate vulnerability and limits monetary policy autonomy. This structural dependence weakens the constitutional capacity of the state to control monetary outcomes independently. In addition, Potrafke (2025) and López-Villavicencio and Zoumenou (2025) demonstrate that fiscal rules and macroeconomic discipline mechanisms are only effective when supported by credible enforcement structures and institutional commitment. Where such conditions are absent, fiscal-monetary fragmentation emerges, thereby undermining constitutional obligations related to economic stability and public welfare protection.

Comparative evidence from selected developing countries further illustrates how institutional fragmentation translates into constitutional governance failure. In Lebanon, prolonged currency collapse has significantly eroded trust in formal monetary institutions and triggered widespread substitution toward informal financial systems, including digital and cryptocurrency-based instruments (Aoun et al., 2026). In Argentina, chronic inflation reflects sustained fiscal dominance over monetary policy, weakening the institutional credibility of central banking frameworks. These cases demonstrate that monetary instability is not merely cyclical but structurally embedded in governance arrangements that fail to coordinate fiscal and monetary responsibilities effectively. As a result, currency depreciation becomes a constitutional symptom of weakened state capacity to fulfill protective obligations toward socio-economic rights.

JUSTITIA NOVA
Indonesian Journal of Modern Law
e-ISSN: 3109-3469
Vol. 2, No. 1, June 2026
https://doi.org/10.5281/zenodo.20573887

From a normative constitutional standpoint, state responsibility for monetary stability must therefore be conceptualized as a dual-layered obligation. The first layer is institutional responsibility, referring to the coordinated operational duties of fiscal authorities and central banks in ensuring macroeconomic stability. The second layer is constitutional-normative responsibility, which reflects the state's broader obligation to protect socio-economic rights, maintain distributive justice, and safeguard economic security. This dual structure aligns with emerging approaches to monetary constitutionalism, which emphasize the integration of legal accountability and macroeconomic governance within constitutional frameworks (Susanto et al., 2025; Georgieva, 2025). Accordingly, this study situates monetary stability within the proposed Constitutional Monetary Responsibility Framework (CMRF), which conceptualizes state responsibility as a legally grounded and institutionally coordinated obligation in addressing currency depreciation in developing economies.

4.3 Comparative Monetary Instability in Selected Developing Countries

The comparative analysis shows that monetary instability in developing countries is not a uniform macroeconomic phenomenon, but a structurally differentiated outcome shaped by institutional capacity, fiscal discipline, external dependency, and constitutional-economic governance architecture. Contemporary literature increasingly argues that economic instability reflects governance quality and institutional design rather than purely technical policy failure (Cavalheiro et al., 2025; Korhonen-Kurki et al., 2025). In this sense, currency depreciation reflects asymmetries in how states operationalize monetary sovereignty within domestic and global legal-economic systems. In Lebanon, monetary instability represents a severe breakdown of formal monetary governance. Financial collapse has triggered widespread dollarization and reliance on cryptocurrency-based transactions. Aoun et al. (2026) show that behavioral adaptation during financial crisis accelerates substitution away from state-issued currency, weakening monetary sovereignty. While such informal mechanisms may stabilize transactions temporarily, they erode regulatory authority and constitutional control over monetary systems. This condition reflects broader concerns that institutional failure generates parallel monetary systems outside state governance (Brown, 2025; Widlak & Peeters, 2025).

Argentina demonstrates a structurally different pattern characterized by chronic inflation and repeated currency depreciation driven by persistent fiscal imbalances. Fiscal dominance over monetary policy weakens central bank credibility and undermines institutional separation between fiscal and monetary authorities. Empirical studies confirm that weak enforcement of fiscal rules significantly increases macroeconomic instability (Potrafke, 2025; López-Villavicencio & Zoumenou, 2025). In addition, reliance on foreign currency debt under the "original sin" condition amplifies exposure to external shocks (Apeti et al., 2024). Thus, Argentina reflects constitutional governance failure rooted in fiscal–monetary misalignment. Iran presents a distinct trajectory where monetary instability is primarily shaped by external geopolitical constraints and sanctions. Unlike Lebanon and Argentina, depreciation here is not mainly driven by domestic governance failure but by restricted access to international financial systems. Georgieva (2025) emphasizes that monetary sovereignty in developing states is increasingly conditioned by asymmetrical global economic governance. Iran illustrates how currency instability emerges from the interaction between domestic constitutional responsibility and external legal-economic coercion.

JUSTITIA NOVA
Indonesian Journal of Modern Law
e-ISSN: 3109-3469
Vol. 2, No. 1, June 2026
https://doi.org/10.5281/zenodo.20573887

Indonesia represents a hybrid case of relative institutional strength combined with structural exposure to global volatility. Although monetary governance institutions are relatively developed, exchange rate pressures persist due to capital flow volatility, commodity dependence, and import exposure. Mariana and Raz (2025) highlight that central bank financial stability orientation plays a key role in mitigating risk, yet effectiveness remains limited when external shocks dominate. Similarly, Strong and Gakpa (2025) show that exchange rate pass-through effects are strongly shaped by structural conditions. Indonesia thus reflects partial monetary resilience under global integration. Laos and Paraguay represent cases of low institutional capacity and limited economic diversification. Monetary instability in these countries is driven by narrow production bases, weak fiscal space, and limited enforcement of macroeconomic governance. Governance literature shows that weak institutional capacity reduces policy effectiveness and increases vulnerability to shocks (Mkhize, 2025; Nondo et al., 2025). In these cases, currency depreciation is structural rather than cyclical.

Overall, the comparative evidence confirms that monetary instability is embedded in governance structures and constitutional-economic arrangements rather than being purely technical. Differences across countries reflect variations in institutional coordination, fiscal discipline, external dependency, and enforcement capacity. These findings support the argument that currency depreciation should be conceptualized as a constitutional governance problem requiring integrated legal and institutional responses (Korhonen-Kurki et al., 2025; Lofthouse & Boettke, 2025).

Table 1. Comparative Monetary Instability in Selected Developing Countries

Country	Main Drivers of Currency Depreciation	Institutional Condition	Legal–Constitutional Issue	Key Outcome
Lebanon	Financial collapse, banking crisis, dollarization, crypto adoption	Severe institutional breakdown	Erosion of monetary sovereignty and regulatory authority	Informal dollarization, parallel monetary systems
Argentina	Fiscal deficits, monetary financing, inflation persistence	Fiscal dominance over central bank	Weak enforcement of fiscal–monetary separation	Chronic inflation, currency instability
Iran	Economic sanctions, geopolitical restrictions	External constraint on financial system	Asymmetric access to international monetary governance	Exchange rate volatility, liquidity shortages
Indonesia	Capital flow volatility, import dependence, commodity cycles	Moderately strong institutions with external exposure	Partial monetary sovereignty under global integration	Managed depreciation, moderate volatility
Laos	Narrow economic base, weak diversification	Low institutional capacity	Weak macroeconomic governance enforcement	Persistent vulnerability to shocks
Paraguay	Export dependence, fiscal constraints	Limited governance capacity	Weak regulatory enforcement in macroeconomic policy	High sensitivity to external shocks

Source: Author's elaboration based on synthesized literature from Aoun et al. (2026), Apeti et al. (2024), Mariana and Raz (2025), Potrafke (2025), and related studies.

JUSTITIA NOVA
Indonesian Journal of Modern Law
e-ISSN: 3109-3469
Vol. 2, No. 1, June 2026
https://doi.org/10.5281/zenodo.20573887

4.4 Constitutional Accountability and Economic Rights Protection

This study further argues that currency depreciation should be interpreted not merely as a macroeconomic disturbance but as a trigger for constitutional accountability obligations within the state's economic governance framework. In developing countries, sharp and sustained currency devaluation produces direct distributive consequences that affect the enjoyment of socio-economic rights, including adequate living standards, employment security, and access to essential goods. From this perspective, monetary instability becomes constitutionally relevant because it directly conditions the state's capacity to fulfill its fundamental welfare obligations. Recent governance literature increasingly recognizes that economic instability is inseparable from questions of institutional legitimacy and state responsibility, particularly in contexts where governance failures translate into social vulnerability (Cavalheiro et al., 2025; Korhonen-Kurki et al., 2025).

From a constitutional perspective, socio-economic rights are increasingly interpreted as substantive guarantees rather than aspirational policy directives. Even where constitutions do not explicitly regulate monetary stability, obligations can be derived from broader constitutional principles such as social justice, human dignity, and public welfare. In this sense, severe currency depreciation that significantly erodes purchasing power may constitute an indirect violation of constitutional rights, especially when it results from preventable policy inconsistencies or institutional failures. Georgieva (2025) emphasizes that developing states' sovereignty must be understood within evolving international economic orders, where domestic constitutional obligations intersect with external economic constraints, further complicating state responsibility in economic governance. Brown (2025) provides a critical analytical lens by demonstrating that institutional legitimacy often deteriorates when governments maintain formal procedural compliance while failing to deliver substantive welfare outcomes. This condition, described as "performative legitimacy," is particularly relevant in contexts of monetary instability, where states may continue to operate legally valid institutions while failing to protect citizens from inflationary harm. In such circumstances, constitutional accountability shifts from purely procedural legality toward outcome-based legitimacy, where the state is evaluated based on its effectiveness in safeguarding socio-economic rights. This aligns with broader governance theories that emphasize the integration of law, institutions, and distributive justice in assessing state performance (Lofthouse & Boettke, 2025; Widlak & Peeters, 2025).

Furthermore, Widlak and Peeters (2025) highlight the emergence of infrastructure-level bureaucracies in modern governance systems, where decision-making processes are increasingly embedded within digital and administrative infrastructures. While such systems may enhance efficiency and data-driven governance, they simultaneously raise constitutional concerns regarding transparency, procedural justice, and the accessibility of economic decision-making. In the context of monetary governance, this shift is particularly significant because central banking and fiscal coordination increasingly operate through technocratic and algorithmic mechanisms that may reduce public oversight and democratic accountability. As a result, monetary policy decisions that directly affect currency stability may become less visible and less contestable within constitutional frameworks.

JUSTITIA NOVA
Indonesian Journal of Modern Law
e-ISSN: 3109-3469
Vol. 2, No. 1, June 2026
https://doi.org/10.5281/zenodo.20573887

Empirically, developing countries often exhibit a widening gap between formal constitutional guarantees and actual economic protection during periods of currency depreciation. Igbinedion and Osobase (2025) demonstrate that institutional weakness, elite capture, and political interference significantly undermine governance accountability in resource-constrained environments, particularly in the Global South. Similarly, Mkhize (2025) shows that anti-corruption and governance reforms frequently fail due to weak enforcement capacity and institutional fragmentation, resulting in persistent gaps between legal frameworks and practical implementation. These dynamics directly weaken the state's ability to uphold constitutional obligations related to economic stability and socio-economic rights protection, particularly during financial crises.

Building on these insights, this study conceptualizes constitutional accountability in monetary governance as operating through three interrelated dimensions. First, institutional accountability, which refers to the operational responsibility of fiscal authorities and central banks in maintaining macroeconomic and monetary stability. Second, legal accountability, which refers to the extent to which monetary governance obligations are enforceable through constitutional, statutory, or regulatory mechanisms. Third, social accountability, which refers to the broader obligation of the state to protect citizens from economic harm arising from policy failures, institutional inefficiencies, or systemic financial instability. These dimensions reflect a multi-layered understanding of accountability that integrates both legal formalism and socio-economic outcomes. Collectively, these three dimensions constitute the normative foundation of the proposed Constitutional Monetary Responsibility Framework (CMRF). Within this framework, monetary stability is reconceptualized as a constitutional governance obligation rather than a purely technocratic policy objective. Currency depreciation, therefore, is not only an economic indicator but also a signal of potential constitutional accountability failure, particularly when it produces sustained erosion of socio-economic rights. This interpretation is consistent with transformative governance theories that emphasize the role of law in shaping systemic economic and institutional change (Korhonen-Kurki et al., 2025).

Consequently, strengthening constitutional accountability in monetary governance requires reforms that extend beyond conventional macroeconomic stabilization policies. It necessitates enhanced transparency in monetary decision-making, stronger parliamentary and judicial oversight of economic governance, and the development of rights-based mechanisms capable of addressing socio-economic harm resulting from macroeconomic instability. Ultimately, constitutional accountability ensures that monetary governance remains aligned with the foundational purpose of the state, namely the protection of public welfare, economic justice, and human dignity in conditions of economic uncertainty.

4.5 Towards a Constitutional Monetary Responsibility Framework (CMRF)

The findings of this study culminate in the development of a conceptual model termed the Constitutional Monetary Responsibility Framework (CMRF). This framework is proposed as an integrative analytical structure that links monetary stability, state responsibility, constitutional accountability, and socio-economic rights protection into a unified model of constitutional-economic governance. The central premise of the CMRF is that currency depreciation in developing countries should be understood as a multi-layered governance

JUSTITIA NOVA
Indonesian Journal of Modern Law
e-ISSN: 3109-3469
Vol. 2, No. 1, June 2026
https://doi.org/10.5281/zenodo.20573887

failure, involving not only macroeconomic mismanagement but also constitutional and institutional deficiencies in the exercise of state authority. This perspective is consistent with contemporary governance scholarship emphasizing the interconnectedness of law, institutions, and economic outcomes in development processes (Cavalheiro et al., 2025; Korhonen-Kurki et al., 2025). The CMRF departs from traditional monetary theory by repositioning monetary stability within constitutional law and public governance theory. While conventional approaches treat exchange rate volatility as a technical macroeconomic issue, this framework conceptualizes it as a manifestation of the state's constitutional performance capacity. Monetary stability is therefore interpreted as an indicator of whether the state fulfills its constitutional obligation to ensure public welfare and economic justice. This approach aligns with emerging discussions on monetary constitutionalism, which highlight the legal foundations of monetary governance and the institutional constraints shaping sovereign monetary authority (Susanto et al., 2025; Georgieva, 2025). It also resonates with broader arguments that sovereignty in contemporary economic systems is increasingly conditional upon institutional and governance capacity.

The CMRF is structured into five interrelated layers that form a causal and normative chain of constitutional-economic governance. These layers are dynamically interconnected, meaning that failure at one level generates systemic stress across the entire governance structure. This reflects governance theories that emphasize system-wide interdependence between institutional design and economic outcomes (Lofthouse & Boettke, 2025; Widlak & Peeters, 2025). The model is summarized in Table 2 below.

Table 2. Constitutional Monetary Responsibility Framework (CMRF)

Layer	Conceptual Function	Legal–Constitutional Basis	Governance Outcome
1. Currency Stability	Macroeconomic and monetary equilibrium	Central bank mandate and monetary law	Price stability and exchange rate control
2. State Responsibility	Fiscal–monetary coordination duty	Welfare state doctrine and public finance law	Policy coherence and macroeconomic governance
3. Constitutional Accountability	Legal responsibility of institutions	Rule of law and constitutional supremacy	Institutional oversight and enforceability
4. Socio-Economic Rights Protection	Protection of citizens' economic welfare	Human dignity, social justice, welfare rights	Safeguarding purchasing power and livelihoods
5. Public Trust & Economic Resilience	System legitimacy and feedback stability	Democratic legitimacy and governance theory	Institutional trust and long-term stability

Source: Author's own elaboration based on synthesized literature (Apeti et al., 2024; Brown, 2025; Mariana and Raz, 2025; Potrafke, 2025; Widlak and Peeters, 2025; Susanto et al., 2025).

The first layer, currency stability, represents the immediate macroeconomic condition of the economy. Within the CMRF, however, this layer is not treated as a purely technical variable but as the entry point of constitutional evaluation. Persistent depreciation signals deeper structural weaknesses in fiscal governance, institutional coordination, and external vulnerability. Empirical literature shows that monetary instability in developing countries is often rooted in structural constraints such as fiscal dominance and foreign currency dependency (Apeti et al., 2024; Potrafke, 2025). The second layer, state responsibility, emphasizes the dual role of government and central banks in ensuring macroeconomic stability. Mariana and Raz

(2025) demonstrate that central bank independence alone does not guarantee financial stability in the absence of coherent fiscal policy coordination. Similarly, López-Villavicencio and Zoumenou (2025) highlight that fiscal rules are effective only when supported by strong institutional commitment and enforcement capacity. Therefore, state responsibility within the CMRF is conceptualized as a coordinated constitutional obligation rather than fragmented institutional mandates.

The third layer, constitutional accountability, introduces the legal dimension of enforceability and oversight. This layer ensures that monetary and fiscal authorities operate under constitutional principles such as legality, transparency, and institutional responsibility. Widlak and Peeters (2025) argue that modern governance increasingly relies on infrastructure-level bureaucracies, which require stronger accountability mechanisms to maintain procedural justice and institutional legitimacy. This is particularly relevant in monetary governance, where technocratic decision-making may reduce public scrutiny and weaken democratic oversight. The fourth layer, socio-economic rights protection, represents the normative core of the framework. Currency depreciation directly affects citizens' socio-economic rights by reducing purchasing power, increasing inequality, and limiting access to essential goods and services. Brown (2025) emphasizes that institutional legitimacy collapses when governments fail to deliver substantive welfare outcomes despite maintaining procedural compliance. Likewise, Mkhize (2025) and Igbinedion and Osobase (2025) demonstrate that weak enforcement structures and governance failures in developing countries often result in persistent gaps between legal rights and actual socio-economic protection.

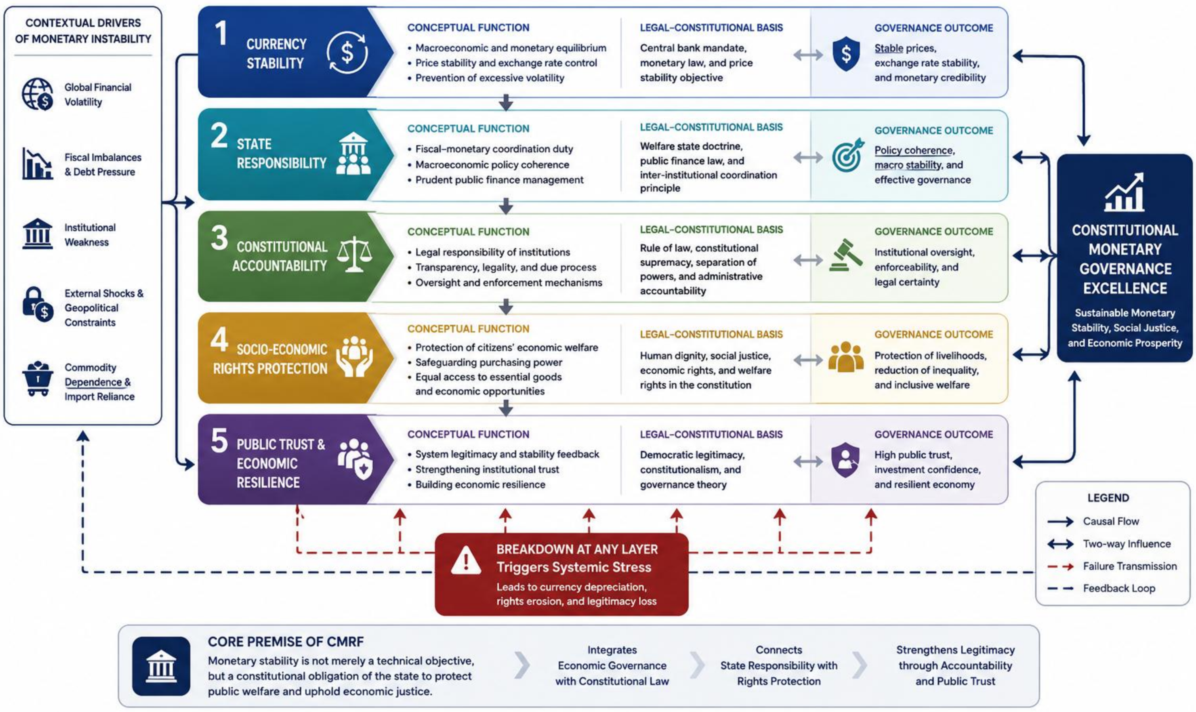
The fifth layer, public trust and economic resilience, functions as the systemic feedback mechanism of the framework. When monetary instability and rights erosion persist, institutional trust declines, weakening compliance and further destabilizing economic systems. Conversely, effective constitutional monetary governance strengthens legitimacy and enhances long-term resilience. This feedback dynamic reflects broader governance theories that emphasize adaptive governance and system resilience under conditions of economic uncertainty (Gustafsson et al., 2025; Korhonen-Kurki et al., 2025). In synthesis, the CMRF provides a normative and analytical bridge between constitutional law and monetary economics. It reframes currency depreciation as a constitutional governance stress indicator rather than merely a macroeconomic fluctuation. This contributes to legal and economic scholarship by integrating monetary governance into constitutional accountability theory, particularly in developing countries where institutional fragility is more pronounced. The framework also resonates with global debates on governance transformation, where economic stability is increasingly linked to institutional legitimacy and legal capacity (Cavalheiro et al., 2025; Lofthouse & Boettke, 2025).

Moreover, the framework offers practical implications for governance reform. Policy responses to currency depreciation should not be limited to monetary tightening or fiscal adjustment, but must also include strengthening constitutional oversight mechanisms, improving fiscal–monetary coordination, and reinforcing rights-based economic governance. It also aligns with anti-corruption and institutional reform literature emphasizing that governance failures are often rooted in weak enforcement and accountability structures (Mkhize, 2025; Igbinedion & Osobase, 2025). In doing so, the CMRF advances a holistic understanding of economic

JUSTITIA NOVA
Indonesian Journal of Modern Law
e-ISSN: 3109-3469
Vol. 2, No. 1, June 2026
https://doi.org/10.5281/zenodo.20573887

governance that integrates macroeconomic stability with constitutional legitimacy, institutional accountability, and social justice.

Figure 1. Constitutional Monetary Responsibility Framework (CMRF)



Source: Author's own elaboration based on synthesized literature (Apeti et al., 2024; Brown, 2025; Mariana & Raz, 2025; Potrafke, 2025; Widlak & Peeters, 2025; Susanto et al., 2025; and related studies).

5. Conclusion

This study concludes that currency depreciation in developing countries should be understood as a constitutional economic governance issue rather than merely a macroeconomic fluctuation. It directly answers the research questions by demonstrating that monetary stability can be interpreted as an implicit constitutional obligation of the state derived from principles of social justice, public welfare, and socio-economic rights protection. Although most constitutions do not explicitly regulate exchange rate stability, the findings show that persistent depreciation reflects failures in institutional coordination and fiscal–monetary governance. Accordingly, state responsibility in monetary governance operates through both institutional mechanisms—such as coordination between government and central banks—and normative constitutional obligations related to welfare protection and economic security. This confirms that monetary instability constitutes a form of constitutional stress affecting the state's capacity to fulfill its fundamental obligations.

The comparative analysis further shows that developing countries experience currency depreciation through diverse structural pathways, including fiscal dominance, external shocks, weak institutional capacity, and geopolitical pressures. However, a consistent pattern emerges: jurisdictions with stronger legal-institutional coordination and clearer separation of fiscal and monetary authority demonstrate greater monetary resilience, while fragmented governance structures tend to intensify instability and weaken public trust. This finding addresses the second and third research questions by illustrating how governance design and constitutional arrangements shape monetary outcomes across selected developing countries. In this regard, currency depreciation is not only an economic phenomenon but also a manifestation of constitutional and institutional dysfunction.

The original contribution of this study lies in the development of the Constitutional Monetary Responsibility Framework (CMRF), which integrates monetary stability, state responsibility, constitutional accountability, and socio-economic rights protection into a unified analytical model. This framework advances constitutional economic governance scholarship by positioning monetary stability as a legally relevant governance objective rather than a purely technocratic concern. Nevertheless, the study is limited by its reliance on secondary comparative literature and the absence of primary empirical data, as well as its focus on selected developing countries that may not fully represent global variation. Future research should employ empirical socio-legal methods and case-based constitutional analysis to further validate and refine the CMRF, particularly through judicial and institutional perspectives on monetary harm and economic rights protection.

Acknowledgments

The authors thank the University of Tasmania, Universitas Islam Negeri Sumatera Utara (UINSU), and STAI Asy-Syafi'iyah Nabire for academic support. Appreciation is extended to colleagues for constructive discussions. No external funding was received. The authors are solely responsible for any remaining errors.

References

Aoun, D., Youssef, C., & Jabbour Al Maalouf, N. (2026). Behavioral determinants of cryptocurrency adoption during financial collapse: Evidence from Lebanon. *International Review of Economics & Finance, 107*, 105165. https://doi.org/10.1016/j.iref.2026.105165

Apeti, A. E., Bambe, B. W. W., Combes, J.-L., & Edoh, E. D. (2024). Original sin: Fiscal rules and government debt in foreign currency in developing countries. *Journal of Macroeconomics, 80*, 103600. https://doi.org/10.1016/j.jmacro.2024.103600

Bespalova, O., Appendino, M., Bhattacharya, R., Clevy Aguilar, J. F., Geng, N., Komatsuzaki, T., Lesniak, J., Lian, W., Marcelino, S., Villafuerte, M., & Yakhshilikov, Y. (2025). Crypto assets and CBDCs in Latin America and the Caribbean: Opportunities and risks. *Latin American Journal of Central Banking, 6(2)*, 100157. https://doi.org/10.1016/j.latcb.2024.100157

Brown, S. (2025). The denial machine: How institutions perform legitimacy while failing the people. *Transforming Government: People, Process and Policy, 19(4)*, 839–855. https://doi.org/10.1108/TG-07-2025-0218

Buchan, J., & Üngör, M. (2026). Monetary Sovereignty in the Digital Age: The Role of Central Bank Digital Currencies. *International Journal of Political Economy, 55(1)*, 88–108. https://doi.org/10.1080/08911916.2026.2624900

JUSTITIA NOVA
Indonesian Journal of Modern Law
e-ISSN: 3109-3469
Vol. 2, No. 1, June 2026
https://doi.org/10.5281/zenodo.20573887

Cavalheiro, E. A., Oliveira, I. R., Leandro, D., & Kontz, L. B. (2025). Governance, development, and environment: Pathways to a sustainable future. *Sustainable Futures, 10*, 100813. https://doi.org/10.1016/j.sftr.2025.100813

Chimoy, G., Garibay, R., & Quineche, R. (2026). The price of war: Recalculating inflation in Peru during the Pacific War era. *Explorations in Economic History*, 101769. https://doi.org/10.1016/j.eeh.2026.101769

Duterme, T. (2025). How central banks cope with price instabilities: Ambiguous inflation targets as organizational compromise. *Scandinavian Journal of Management, 41(2)*, 101406. https://doi.org/10.1016/j.scaman.2025.101406

Georgieva, V. P. (2025). The reaffirmation of developing states' sovereignty under international law in the new (new) international economic order. *Journal of International Trade Law and Policy, 24(3)*, 267–289. https://doi.org/10.1108/JITLP-02-2025-0011

Gulácsi, G., & Kerényi, Á. (2025). The catching up of the Hungarian economy in the European Union and Hungary's falling behind among the post socialist member states. *Journal of Government and Economics, 18*, 100148. https://doi.org/10.1016/j.jge.2025.100148

Gustafsson, M., Matveieva, O., Wihlborg, E., Borodin, Y., Mamatova, T., & Kvitka, S. (2025). Adaptive governance amidst the war: Overcoming challenges and strengthening collaborative digital service provision in Ukraine. *Government Information Quarterly, 42(3)*, 102056. https://doi.org/10.1016/j.giq.2025.102056

Igbinedion, S. A., & Osobase, A. (2025). Grand corruption in the global south: Legal, political and economic analysis of assets recovery in Nigeria. *Journal of Economic Criminology, 9*, 100164. https://doi.org/10.1016/j.jeconc.2025.100164

Jon, W., & Min, K. (2025). The race to punish Terra-Luna of the United States and South Korea: Lessons toward avoiding another digital asset catastrophe. *Computer Law & Security Review, 58*, 106177. https://doi.org/10.1016/j.clsr.2025.106177

Kalai, M., Becha, H., Drira, M., & Helali, K. (2026). Budget Deficit Effects on Tunisian Economic Growth: Linear and Nonlinear Regressions. *Economic Analysis and Policy*. https://doi.org/10.1016/j.eap.2026.01.035

Korhonen-Kurki, K., D'Amato, D., Belinskij, A., Lazarevic, D., Leskinen, P., Nylén, E.-J., Pappila, M., Penttilä, O., Pitzén, S., Pykäläinen, N., Turunen, T., & Vikström, S. (2025). Transformative governance: Exploring theory of change and the role of the law. *Earth System Governance, 23*, 100230. https://doi.org/10.1016/j.esg.2024.100230

Kwasi, S., Cilliers, J., Yeboua, K., & von Rosing, M. (2025). Chapter 35—A developing country's perspective on race to sustainability: Sustainability for countries with weak economic performance—Case study: Egypt's challenge and opportunities to 2050. In M. von Rosing (Ed.), *The Sustainability Handbook, Volume 1* (pp. 511–569). Elsevier. https://doi.org/10.1016/B978-0-323-90110-9.00063-5

Lofthouse, J. K., & Boettke, P. J. (2025). Governance with, not government over citizens. *European Economic Review, 179*, 105147. https://doi.org/10.1016/j.euroecorev.2025.105147

López-Villavicencio, A., & Zoumenou, J. (2025). Do commitment and enforcement of fiscal rules enhance fiscal stability? Evidence from European Union countries. *Journal of Macroeconomics, 84*, 103664. https://doi.org/10.1016/j.jmacro.2025.103664

Mariana, C. D., & Raz, A. F. (2025). Central banks' financial stability orientation and bank risk-taking. *Journal of Financial Stability, 78*, 101409. https://doi.org/10.1016/j.jfs.2025.101409

Mkhize, N. (2025). Plans without action? Politics and institutional challenges of anti-corruption reforms in the BRICS countries. *Journal of Economic Criminology, 10*, 100197. https://doi.org/10.1016/j.jeconc.2025.100197

Nondo, C., Saungweme, T., & Odhiambo, N. M. (2025). Does governance matter in mediating the resource curse? Evidence from Zambia. *Resources Policy, 106*, 105603. https://doi.org/10.1016/j.resourpol.2025.105603

Potrafke, N. (2025). The economic consequences of fiscal rules. *Journal of International Money and Finance, 153*, 103286. https://doi.org/10.1016/j.jimonfin.2025.103286

Strong, C., & Gakpa, L.-L. (2025). Early-Life currency crises and exchange rate pass-through: Understanding the impact of central bankers' formative years in Africa. *Journal of International Money and Finance, 157*, 103393. https://doi.org/10.1016/j.jimonfin.2025.103393

Susanto, M., Angkawidjaja, M., & Harijanti, S. D. (2025). Teoretisasi Konstitusionalisme Moneter di Indonesia dalam Bingkai Pluralisme Konstitusi: Theorizing Monetary Constitutionalism in Indonesia through Constitutional Pluralism. *Jurnal Konstitusi, 22(2)*, 206–228. https://doi.org/10.31078/jk2221

Valenzuela, J. M. (2023). State ownership in liberal economic governance? De-risking private investment in the electricity sector in Mexico. *World Development Perspectives, 31*, 100527. https://doi.org/10.1016/j.wdp.2023.100527

Widlak, A. C., & Peeters, R. (2025). A theory of the infrastructure-level bureaucracy: Understanding the consequences of data-exchange for procedural justice, organizational decision-making, and data itself. *Government Information Quarterly, 42(2)*, 102021. https://doi.org/10.1016/j.giq.2025.102021