

Andrii O. Buz*

SYSTEMIC ENDOGENOUS AND EXOGENOUS HAZARDS TO MODERN GLOBAL MONETARY AND FINANCIAL STABILITY

This article explores the systemic endogenous and exogenous threats facing global monetary and financial stability amidst escalating geo-economic fragmentation. It critically examines the evolving dynamics in the dominance of traditional currencies, particularly the US dollar, in light of the emergent roles of the euro and the yuan, contextualised by global financial interdependencies and rapid advancements in digital technology. The study underscores the traditional criteria for an international currency – including economic stability, openness to trade and capital, and the depth and liquidity of financial markets – and supplements these with the contemporary necessity for institutional robustness. A thorough literature review reveals vulnerabilities within the global banking system exposed by recent stress tests, highlighting the fragility of banking liquidity. It also examines the impacts of geopolitical tensions and rapid technological transformations, such as the effect of social media on financial markets and the swift movement of capital. The discussion extends to the implications of geopolitical fragmentation on global liquidity and economic stability, emphasising the critical need for robust preventive measures and a regulatory framework adaptable to evolving financial threats.

The core findings of this research emphasise that effective regulatory reforms aimed at enhancing financial stability could alleviate the volatility of capital flows and diminish systemic risks, thereby reinforcing the status of certain currencies as international reserves. The paper posits that for a currency to qualify as an international reserve, it must possess assets that ensure value stability and exhibit minimal price impact during financial disruptions. Methodologically, this study employs a blend of theoretical and empirical approaches, merging quantitative and qualitative analyses to address its research objectives comprehensively. Given the current global financial uncertainties and shifts in the international currency arena, this paper is crucial for policymakers, financial analysts, and academic researchers engaged in the discourse of international finance.

Keywords: international currencies, global financial stability, geo-economic fragmentation, currency internationalisation, systemic financial risks, financial regulation.

Fig. 9. Lit. 30

DOI: 10.32752/1993-6788-2024-1-274-80-95

JEL Classification: E58, E61, F42, F55, G15.

https://orcid.org/0000-0003-0074-0693

Peer-reviewed, approved and placed: 11.04.2024.

Андрій О. Буз

СИСТЕМНІ ЕНДОГЕННІ ТА ЕКЗОГЕННІ ЗАГРОЗИ СУЧАСНІЙ ГЛОБАЛЬНІЙ ВАЛЮТНО-ФІНАНСОВІЙ СТАБІЛЬНОСТІ

Це дослідження аналізує системні внутрішні та зовнішні загрози глобальній монетарній та фінансовій стабільності у контексті гео економічної фрагментації. Стаття зосереджується на динаміці домінування традиційних валют, зокрема долара США, з огляду на зростання ролі євро та юаня, що відбувається на тлі глобальної фінансової (дез)інтеграції та стрімких технологічних змін. У роботі проведений всебічний огляд літератури, який виявляє вразливі місця у світовій банківській системі, акцентуючи на вразливості банківської ліквідності та впливі геополітичних напружень та технологічних новацій. Обговорюються наслідки гео економічної фрагментації для світової ліквідності та економічної стабільності, підкреслюючи необхідність міцних

* Kyiv National University named after Taras Shevchenko. Ukraine.

превентивних заходів та адаптивної регуляторної системи.

Основні результати дослідження підтверджують, що ефективні регуляторні реформи, спрямовані на підвищення фінансової стабільності, можуть пом'якшити волатильність потоків капіталів і зменшити системні ризики, тим самим підсилюючи статус певних валют як міжнародних резервів. Автор стверджує, що для досягнення статусу міжнародної резервної валюти необхідно мати активи, які забезпечують стабільність вартості та мінімальний вплив на ціни під час фінансових криз. Дослідження використовує теоретичні та емпіричні підходи, інтегруючи кількісні та якісні методи аналізу, що робить його важливим для політиків, фінансових аналітиків та науковців у галузі міжнародних фінансів.

Ключові слова: міжнародні валюти, світова фінансова стабільність, гео економічна фрагментація, валютна інтернаціоналізація, системні фінансові ризики, фінансове регулювання.

Problem statement. The potential shift from the dominant role of the US dollar as the principal international currency has sparked considerable speculation and debate, particularly following the introduction of the euro. Analysis presented in reports by the European Central Bank, notably in the document "The International Role of the Euro," indicates an increase in the international use of the euro until 2004, after which there was a period of stagnation [1]. In contemporary debates, the yuan has emerged as a new competitor that could diminish the global role of the dollar.

Historically, the defining factors for an international currency have been the economic stability of the country, its openness to trade and capital, as well as the depth and liquidity of its financial markets. Recently, this list has been supplemented by institutional strength, which influences the currency's ability to provide savings, liquidity, and fulfil international payments. Comments by P. Krugman and P. Goldberg on inertia highlight the high threshold for new currencies competing for the status quo [2, 3]. Analysis of the future role of international currencies should include a broader range of factors such as institutional and regulatory frameworks that promote financial stability. A currency aspiring to the status of an international reserve currency must possess assets that ensure stability of value and minimal impact on price during financial crises. The importance of financial stability and monetary prudence is determined by the risks associated with banking crises and their systemic consequences. Implementing reforms, and ensuring stability, and liquidity of sovereign assets are key in defining the status of an international reserve currency.

Literature review. In recent years, the global banking system has undergone significant stress tests, which have exposed vulnerabilities and led to a renewed examination of financial stability mechanisms. Key sources, including the Reserve Bank of Australia and the Basel Committee on Banking Supervision, emphasise the fragility of banking liquidity, exacerbated by geopolitical tensions and technological advancements. These sources note the rapid capital outflows observed during incidents such as the banking crisis in the USA [4, 5, 6]. The influence of social networks on financial markets has also been critically evaluated in studies like those by J. Cookson, demonstrating how platforms can accelerate the withdrawal of bank deposits through the rapid spread of information and misinformation, thereby increasing systemic risks [7].

The literature further discusses the implications of geopolitical fragmentation for financial systems, as detailed by the International Monetary Fund and Christine Lagarde [8, 9, 10]. They argue that increased geoeconomic tensions may lead to financial isolationism, adversely affecting global liquidity and economic stability. In discussions on regulation, such as those conducted by M. Grønberg and the Financial Stability Board, the need for robust preventive measures to enhance systemic stability and effectively manage financial crises is emphasised [11, 12]. This review underscores a critical consensus on the necessity of a dynamic regulatory framework capable of adapting to evolving financial threats and supporting global economic stability.

Purpose of the article. The purpose of this article is to critically assess the interplay between endogenous and exogenous threats to global monetary and financial stability, particularly under conditions of geoeconomic fragmentation; to understand how the race towards currency internationalisation, marked by shifts in the dominance of the US dollar, and the evolution of digital technologies impact global financial systems.

The methodology of this study is built on a bimodal combination of theoretical and empirical approaches, integrating both quantitative and qualitative methods. To address the research tasks, several analytical methods were employed, including analysis, synthesis, generalisation, induction, analogy, and a systematic approach.

Main research results. Heightened focus on financial stability is indirectly linked to increasing global awareness of the potential catastrophic international consequences of financing shocks in central nations. It is believed that regulatory reforms can impact these outcomes. By enhancing the resilience of global banks through financial regulation, it is possible to mitigate the volatility of capital flows that pass through these banks as intermediaries. Regarding financial stability and the status of reserve currencies, it is noted that international reserve assets are typically provided by sovereign entities. This primarily stems from a nation's financial capabilities and trust in the role of the central bank as the lender of last resort during liquidity crises. However, systemic financial events can exert pressure on the national budget. While providing financial support to the banking sector is not the optimal policy ex-ante, financial support is likely to be expanded if the anticipated risk and the projected costs of welfare due to systemic outcomes are deemed excessively high.

In today's world, financial stability faces new and undefined challenges that compel policymakers and financial system stakeholders to rethink traditional regulatory and risk management approaches. Primarily, the risks emerging in the next decade will differ from those experienced in the past, considering the impact of digital technologies, the volatility of interest rates, and the potential for rapid deposit growth. External risks such as geopolitical shifts, operational challenges, and climate changes also contribute to the growing complexity of the financial landscape. Revising the concept of resilience requires adapting regulatory frameworks and supervisory systems to a new environment of threats, necessitating greater flexibility and innovation capability. However, it is crucial to emphasise that the primary responsibility for ensuring resilience lies with the financial industry itself. While thoroughly developed regulatory regimes and supervision are important, they can be ineffective if risk management practices within the industry are underdeveloped. Ensuring the accuracy of the collective response to new challenges is a common

interest of all parties [13]. This requires not only strengthening regulatory and supervisory structures but also cultural changes within the financial sector, which include better understanding and management of internal and external risks. In this context, enhancing the financial system's ability to adapt and absorb losses, reducing dependency on state aid, and ensuring adequate budgetary space for reliable financial sector support become key directions for reform.

Firstly, the widespread extraction of bank deposits has historically been an inherent component of banking operations, derived from the nature of liquid deposits underpinning less fluid assets like loans. Following the Global Financial Crisis, considerable efforts were devoted to mitigating this susceptibility, yet recent developments signal the necessity for additional actions. Historically, fears regarding profitability and inadequate risk management have led to extensive withdrawals of deposits [14, 15]. Examples of banking disturbances in the US and Switzerland at the beginning of 2023, particularly at Silicon Valley Bank (SVB), exhibit unprecedented rates of deposit extraction (fig. 1). The situation at SVB, where the deposit base diminished by 30% within a few hours with subsequent expectations of a further 50% reduction, poses a significant threat to the bank's survival in the current framework. This level surpasses the reserve volumes mandated by Basel III and exceeds the extraction rates during the GFC.

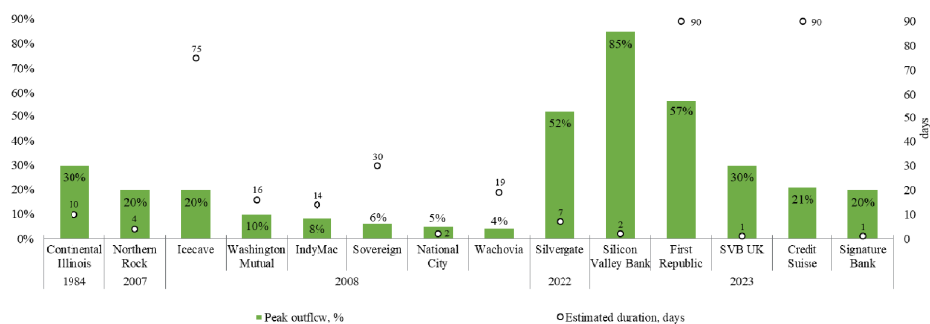


Fig. 1. A selection of the largest deposit withdrawals from 1984 to 2024, compiled by the author based on sources [16, 17, 18]

The unique dimension of this scenario can be elucidated by the interplay between novel technologies and specific balance sheet vulnerabilities, distinct from those during the GFC. The impact of collective behaviour, facilitated by social networks, poses a novel difficulty confronting financial regulatory authorities. Although technology undoubtedly facilitates easier access to deposit withdrawals through simple keystrokes, its role is perceived as an augmentative mechanism, not the fundamental cause. A critical factor that contributed to the severe mass extraction of deposits was the increase in the share of uninsured deposits in the US banking system, reaching its peak point in 1947 (fig. 2).

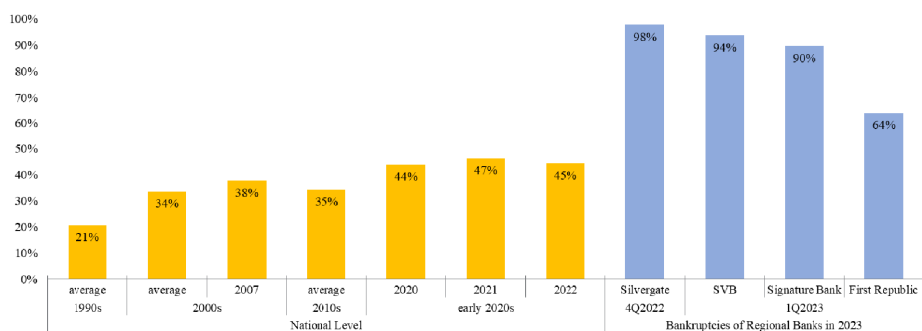


Fig. 2. Dynamics of the level of uninsured deposits in the USA during the 1990s to 2020s, compiled by the author based on data from sources [19, 20]

The aggregation of these uninsured deposits in the hands of a select few interconnected entities, facilitated by social networks and sector-specific ties, was a grave concern. For instance, the deposit pool at SVB was significantly reliant on entities within the technology and biotechnology sectors, bolstered by venture capital firms affected by the same macroeconomic disturbances, such as escalated interest rates impacting valuations [15]. In a parallel vein, Silvergate Bank encountered a concentration of nearly 90% of its client deposits in crypto-assets, all uninsured and exposed to identical risks – a 'crypto winter', propelled by heightened interest rates. The foremost ten deposit contributors at Silvergate comprised nearly half of its deposits. Anxiety among corporate deposit holders in insolvent banks extended beyond the safeguarding of their deposits to worries over their accessibility, as corporations required immediate funds for critical liabilities like payroll payments. With Credit Suisse, the Basel III liquidity risk markers failed to alert to impending troubles prior to the deposit withdrawals, leading policymakers to reconsider [15]. This highlights the evolving scenario in the digital epoch, where conventional markers fall short of accurately depicting emerging risks. A reimagined framework for regulatory oversight is warranted. Observations from the Australian banking milieu, where similar pressures were absent, emphasise the potential for augmenting regulatory mandates for liquidity and capital, and the consideration of international strategies to handle banking sector crises (fig. 3).

Secondly, the onset of rapid withdrawal of deposits can be regarded as a particular manifestation of a broader susceptibility, wherein systemic dangers emerge from entities that, under normal circumstances, lack systemic significance individually. This introduces a more intricate aspect of contagion risk. When considering "what has changed now," it appears that two amplification mechanisms have intensified: accelerated flows of funds and information, capable of enhancing the herd effect; and procyclicality in segments of the global asset management industry, where notable growth is observed. Primarily, the unprecedented pace at which funds can now exit institutions and markets is propelled by the rapid dissemination of (mis)information, particularly via social networks. While the reduction of frictions in monetary and

informational flows typically yields benefits during ordinary times, periods of heightened stress engender complexities. A recent review by the Financial Stability Board acknowledges the widespread impact of social networks combined with continual access to banking services and globally interconnected trading platforms, heightening the likelihood that a financial shock in one part of the system can evolve into a more extensive self-reinforcing crisis of trust [13].

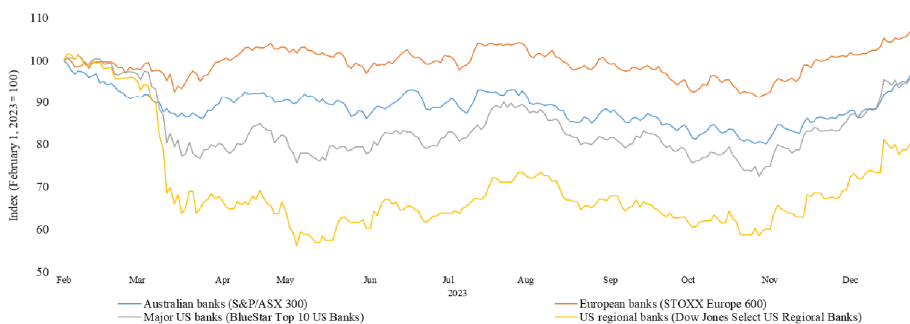


Fig. 3. Dynamics of a selection of banking indices (February-December 2023),
compiled by the author based on data from Refinitiv

The banking sector confronts concerns regarding swift outflows of funds, exacerbated by the adoption of technologies that trace back to the Continental Illinois crisis in 1984 [18]. Since then, the velocity of money circulation has markedly increased, with social networks emerging as a fresh catalyst for "herd" behaviour, particularly among closely interconnected depositors. This phenomenon was validated by regional banks in the US in March 2023, when activity on social networks induced substantial banking strain. The European experience with Credit Suisse, where a tweet about the bank's financial troubles garnered a significant number of retweets and precipitated substantial deposit losses, illustrates the immediate repercussions that social networks can wield in the financial domain [15]. Speculations about the potential collapse of Deutsche Bank likewise led to broad fluctuations in credit spreads exceeding crisis indicators of the GFC and the European debt crisis, notwithstanding the bank's recent financial metrics [8].

The situation in the financial sector is further complicated by the procyclicality in the global asset management industry. Investment funds, operating under less regulatory scrutiny, frequently experience the "herd effect," which in stressful conditions can trigger mass asset liquidations. This was notably evident during market dysfunctions in 2020 and 2021, necessitating interventions by central banks [21, 22]. The utilisation of leverage can further exacerbate these "liquidity spirals," as exemplified by the market downturn of gilts in the United Kingdom in September 2022, necessitating involvement by the Bank of England. Conversely, the structure of the Australian financial system provides a degree of insulation from global financial disruptions, yet international events pose certain impediments in funding markets (fig. 4). This underscores the necessity for enhanced global coordination and compliance with

financial regulations, aimed at mitigating potential risks and ensuring financial system stability [23].

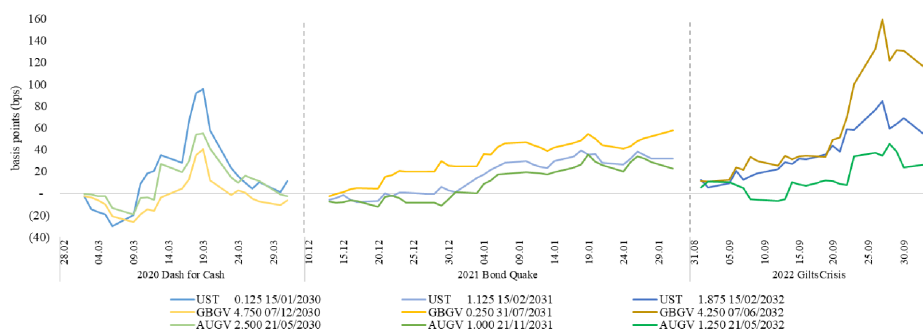


Fig. 4. Dynamics of the cumulative change in yield to maturity (YTM) for a selection of American, British, and Australian bonds during the financial turbulence of 2020-2022, calculated by the author based on data from Refinitiv (each bond represents a benchmark fixed-income security with a 10-year maturity under relevant historical conditions for the respective country. Information about the bonds is provided in the following order: issuer information – coupon rate – maturity date)

Broader implications, recently accentuated by smaller banks and investment funds, raise several issues. One consideration is whether the criteria for designating banks as systemically important should be reassessed. Another issue pertains to the extent to which regulators should impose stricter responsibilities on smaller banks, recognising the significance of proportionality in the regulatory framework and the potential risks of overly onerous regulation constraining competition and innovation [24]. The overarching concern involves bolstering preparation for resilience and recovery to better accommodate the heightened risk of contagion. For investment funds, an ongoing challenge is striking a balance between their pivotal role in safeguarding savings and minimising liquidity risks that can destabilise critical financial markets. These issues are presently subject to active international deliberation.

Thirdly, in the previous two decades, the fluctuation in long-term interest rates predominantly either diminished or stabilised at exceptionally low levels (fig. 5). Nevertheless, various indicators now point toward a likely transition to a regime marked by structurally enhanced volatility in interest rates in upcoming years. The era known as the "Great Moderation" is coming to an end; currently, the international economy is increasingly prone to stagflationary supply shocks due to the reconfiguration of globalisation, escalating geopolitical tensions, political-economic issues, and disruptions in energy due to climate change, raising the probability of a severe downturn rather than a gradual one [10]. This represents a departure from earlier decades, during which adjustments on the supply side generally promoted economic expansion and inflation, contributing to a reduction in financial market volatility.

Moreover, the term premium associated with bonds, which had been on a steady decline for nearly three decades, is showing signs of instability and increase (fig. 5).

This prior trend, which mirrored factors like a decrease in uncertainty regarding future inflation rates and real interest rates alongside a structural mismatch between the demand for and supply of bonds, is not expected to persist.

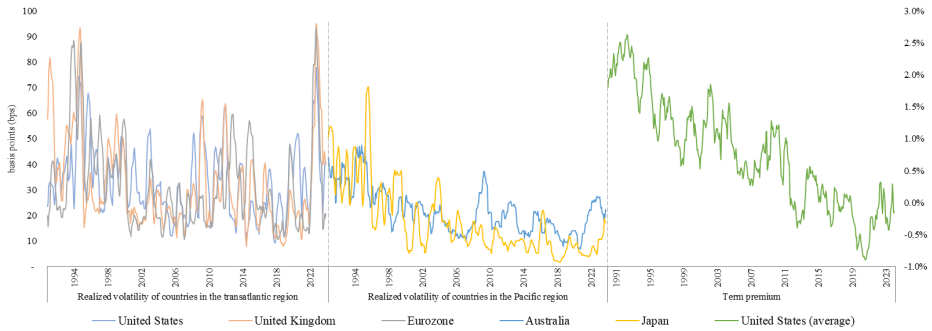


Fig. 5. Dynamics of the volatility of yields on long-term sovereign bonds of selected countries and the term premium on US bonds during the 1990s to 2020s, calculated by the author based on data from Refinitiv and source [25] (Realized volatility is calculated as the rolling standard deviation of monthly yields of long-term sovereign bonds with a 10-year maturity for a selection of countries over the last 12 months. 2. The term premium is demonstrated on a monthly basis and is defined as the arithmetic mean of daily data of the term premium on 10-year US Treasury zero-coupon bonds for the corresponding month)

During this time, it was feasible for governments to issue debt at minimal or even negative term premiums. Additionally, the dampening effect provided by buyers indifferent to price fluctuations in prominent bond markets has diminished over the past two decades, primarily influenced by the purchasing actions of currency reserve managers and the internal asset acquisition schemes of central banks [11]. Yet, this phase seems to be evolving. Lately, those managing reserves have shifted towards becoming net vendors of US Treasury bonds, and central banks plan to steadily decrease their inventory of domestic bonds over a prolonged duration. This transformation is taking place against a backdrop where brokers and dealers are increasingly reluctant and less capable of participating in bond transactions amid rising volatility.

The onset of structurally elevated fluctuations in interest rates presents significant difficulties facing the stability of the financial system. Notable issues arise from this shift: banks, regardless of size, must closely monitor and manage the risk associated with the duration of their assets. A lack of robust interest rate risk management was a crucial factor in the banking disturbances that occurred in the United States in March 2023 (fig. 6). While banks in Australia generally demonstrate a cautious approach to securities, major banks are compelled to reserve capital for managing interest rate risks, with the remaining risk often being hedged (fig. 7). Despite these precautions, this continues to be a focus of ongoing supervisory attention in various legal jurisdictions. Furthermore, the dynamics between interest rates and credit risk have evolved. Historically, when income growth consistently outstripped interest rates, lenders faced reduced credit risks [4]. However, in scenarios where interest rates

intermittently surpass income growth, it becomes increasingly difficult for borrowers with substantial debt levels to manage their financial obligations, thereby heightening credit risks.

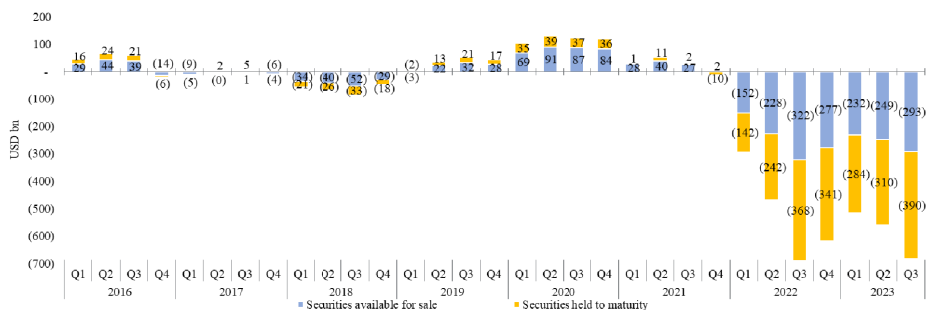


Fig. 6. Historical dynamics of unrealised gains (losses) on investment securities in the USA from 2016 to 2023, constructed by the author based on data from the FDIC

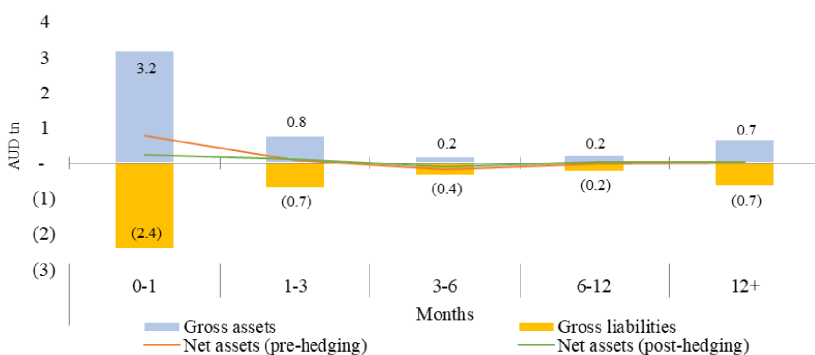


Fig. 7. Correspondence between the volumes of assets and liabilities of authorised deposit-taking institutions in Australia based on revaluation periods as of June 2023, sourced from [4]

Additionally, the functioning of the market has transformed. The period following the Global Financial Crisis, known for its exceptionally low volatility in interest rates, fostered the development of new investment business models and strategies [21]. These strategies often involved increasing bond positions in times of reduced volatility and anticipated an inverse relationship between bond yields and equity returns. However, the repercussions of operating in a climate of heightened inflation and interest rate volatility are yet to be fully understood, particularly in terms of how open-ended fixed-income funds handle liquidity pressures, the enforcement of stricter margin requirements than previously, and the readiness or capacity of brokers and dealers to offer liquidity.

Regarding external risks, it's crucial to highlight that the lack of direct confrontation among economically interconnected nations since 1945 has enabled two

generations to concentrate on alternative issues. However, recent developments suggest that this stability is no longer assured. Geo-economic fragmentation is anticipated to heighten the global economy's vulnerability to supply shocks, with the International Monetary Fund estimating potential losses in global output up to 7%, and in certain nations, these losses could spike to 12% [10]. Given the potential consequences for financial stability that surpass mere capital flows across borders and include international payment systems, principal financial institutions, as well as global financial and commodity markets, there is a growing body of international research focusing on areas where financial resilience must be bolstered. When evaluating risks associated with financial stability, it proves beneficial to explore two aspects: the gradual fragmentation and the immediate kinetic risk.

This ongoing fragmentation, already in motion, suggests the risk is now a reality. Trade and financial sanctions, including retaliatory measures, had been intensifying even prior to the military actions in Ukraine (fig. 8). The quest for just-in-time efficiency is now being traded for ensuring resilience in supply chains. Development is underway for alternative systems for payment messaging, and currency reserves are being reallocated to nations and assets deemed less prone to seizure [26]. The flow of direct foreign investment, portfolio investment, and bank loans has dwindled among nations with divergent foreign policy stances, labelling some as unattractive for investment—a notion that was uncommon until recently (fig. 9). The erosion of international cooperation fosters risks to the operation of the global financial security system [27].

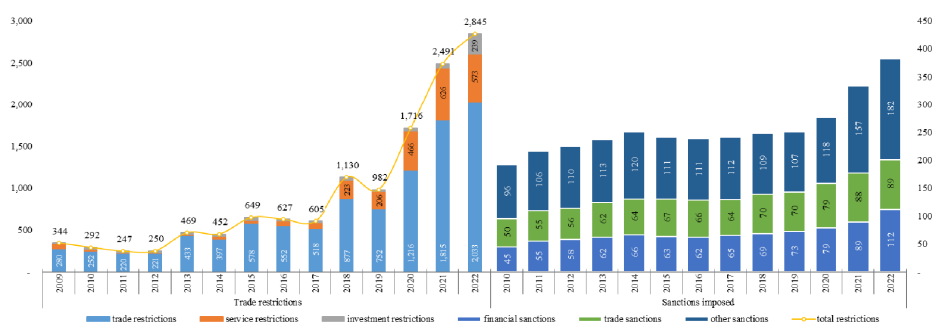


Fig. 8. Dynamics of the implementation of trade and financial sanctions globally from 2010 to 2022, compiled by the author based on source [27]

The notion of rapid escalation risk, depicting swift transitions into hostilities among pivotal global economic nations, poses an exceptionally grave scenario. This potential conflict heightens threats to worldwide financial equanimity, influenced by the extent, locale, and national involvements. Recent incidents have elucidated key stress conduits, underscoring scenarios where specific international transit paths could escalate in expense or become uninsurable. International monetary conditions could tighten dramatically, affecting primary funding markets, risk asset valuations, and international financing [27]. There's a possibility for international assets to be immobilised or seized, and financial infrastructures might suffer under sanctions and

retaliatory actions. Moreover, cyber offensives targeting essential entities could become more conspicuous, and interruptions in worldwide commodity markets are likely to be pronounced in zones with dense global production and pivotal trade routes. The continuance of any strife would amplify the feedback cycle between tangible and monetary conduits, including a decline in the asset quality of banks. It is paramount to emphasise the significance of bolstering financial and operational robustness across domestic and international dimensions. Internationally, a primary goal remains to avert the division of the global financial safety architecture into smaller liquidity segments based on geopolitical factions. The IMF points out a peril that considerable advantages tied to global risk division could be jeopardised just as international resource demands might markedly increase [9].

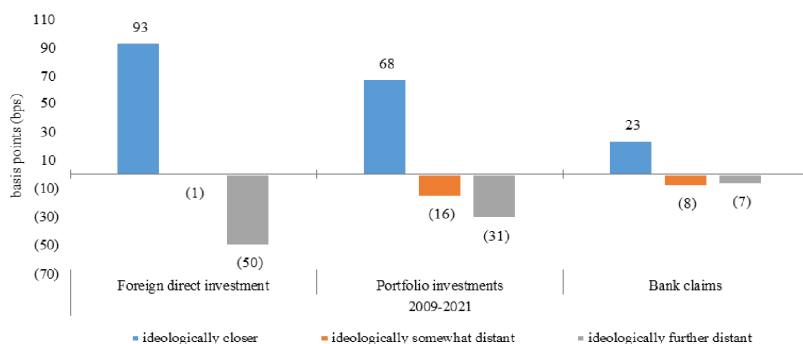


Fig. 9. Changes in the share of the global portfolio of financial flows by geopolitical blocks from 2009 to 2021, sourced from [10] (The division of countries into geopolitical blocks is based on the concept of “geopolitical proximity,” which is typically measured by voting protocols at the United Nations General Assembly)

Furthermore, the progressive digitisation of services has spurred innovations, initiating an era where managing operational peril has become a chief concern necessitating top-tier management and oversight. Considering that specific operational perils might provoke systemic effects, they are a central concern in global regulatory agendas. In this domain, three particular perils necessitate vigilance, with cyber peril emerging as the most pressing and grave [28]. The frequency and impact of cyber incursions are escalating, presenting challenges linked to reliance on external technologies, geopolitical strains, and resource shortages among smaller entities that could become significant vulnerabilities in the expansive system. Such incursions could cause direct financial detriments, such as thefts and extortion demands, as well as indirect losses tied to reputational harm.

Another operational peril involves providers of critical technological services, frequently operating beyond financial regulatory boundaries. While financial institutions and market infrastructures consider transitioning certain services to cloud-based solutions for significant reasons, the peril concentration in a scant number of service providers elicits concerns. Electrical disruptions could incapacitate many entities from performing essential functions. The oversight of peril concentration,

platform perils, and emergency responses has been thoroughly scrutinised with the advent of novel financial technologies like distributed ledgers. In certain regions, BigTech entities have commenced offering payment facilities (inclusive of digital wallets) without enduring the regulatory scrutiny generally imposed on other service providers [7].

The third operational peril pertains to artificial intelligence (AI), which presents substantial prospects for the financial system and broader economy, albeit accompanied by significant challenges. Monetary stability perils associated with AI involve the potential exacerbation of disruptions within the financial system. Contagion and herd behaviour perils are distinguished as potential avenues through which parties may depend on analogous models and data aggregators trained using comparable datasets, thereby prompting similar behaviours even in crisis contexts [29]. Given the intricacies of foundational models often crafted outside the regulatory scope, systemic vulnerabilities could develop in manners that remain obscure to entities or oversight authorities.

Thirdly, climate change constitutes a substantial, long-lasting hazard to monetary equilibrium. Physical hazards associated with deteriorating climatic patterns and elevated mean temperatures could negatively influence asset valuations and revenues in diverse sectors and locales. Concurrently, hazards during the transitional phase, such as sudden legislative shifts and alterations in consumer preferences, especially within sectors with high carbon footprints, could lead to asset depreciation [6]. These modifications may cause significant financial repercussions for lenders, augmented obligations for insurers, and possible markdowns for investors. On a global scale, entities with substantial carbon outputs are exposed to the most direct hazards, influencing investment portfolios, followed by insurance entities and financial institutions. Preliminary analytical examinations indicate that although financial institutions might endure losses across a range of scenarios, these deficits generally do not reach levels that provoke substantial distress [30]. Nonetheless, there exists a hazard that actual deficits may surpass projections and manifest more rapidly than anticipated. Employing sophisticated modelling approaches and acquiring more granular data is crucial for refining the prediction of future deficits and enhancing comprehension of their potential impacts on the financial framework.

Efforts to reform financial stability that has been initiated demonstrate advancement in fortifying the global monetary framework. Notably, amendments to the regulations governing banking capital and liquidity are designed to minimise the occurrence of difficulties among systemically crucial financial entities. These initiatives are augmented by measures aimed at reducing the cyclical nature of financial mechanisms and enhancing oversight, as well as refining the protocols for resolving and managing issues related to these crucial financial entities. The existence of bilateral pacts between nations facilitates more effective management of post-crisis scenarios, though a worldwide agreement on the oversight of transnational banks remains elusive. Reforms are also directed towards bolstering the overall robustness of the structure, which includes enhancing central counteragents and other financial market frameworks, in addition to establishing agreements on currency swaps among central banks. These strategies are intended to secure access to funding liquidity in foreign currencies during periods when market valuations of such liquidity are elevated.

However, despite these advancements, the global monetary structure still exhibits vulnerabilities within specific currency areas and broadly. The connection between sovereign financial institutions and governmental bodies remains intact, and the application of reforms varies across nations. The variance in financial capacity to offer stable support to the financial sector in times of stress remains considerable. The uncertainty surrounding the future role of principal global currencies persists, and nations aiming for a reserve currency designation employ financial stability reforms as a strategy to protect their sovereign holdings. Therefore, the imperative for reforms in financial and monetary stability is vital to alleviate adverse effects and diminish the negative influence of global capital movements, as supported by scholarly inquiry and practical evidence.

International capital flows offer significant benefits to both issuing and receiving countries, yet they come with challenges due to their unforeseen volatility, which can lead to profound economic disruptions. Macroprudential measures and, in some cases, capital flow management, are considered potential strategies for shielding peripheral nations from the adverse impacts of volatile capital streams. However, certain vulnerabilities might be mitigated through reforms aimed at enhancing financial stability in core countries. Specifically, bolstering the financial resilience of global banks and their capacity to absorb losses can mitigate some of the side effects associated with the unexpected volatility of capital flows.

Empirical research corroborates that financial entities with higher capitalisation levels and more stable funding sources adjust their balances less in response to complications in financing conditions. This also applies to cross-border banking lending. Thus, financial stability reforms could soften the negative externalities caused by financing conditions in core countries, while simultaneously maintaining the efficiency of the international banking system in capital allocation and risk management. However, regulatory measures targeted at global banks may have a limited impact on cross-border capital flows that bypass the traditional banking system. This could even lead to a shift of a larger portion of capital into the unregulated sector. Therefore, it is crucial to include non-banking and non-insurance financial organisations in the list of potentially systemically important institutions to ensure a more comprehensive approach to global financial stability.

Given the above, it is also pertinent to add that the international monetary system encompasses rules, policies, and conditions that govern two major global public goods: international currency and external stability. An internationalised or global currency facilitates cross-border transactions, while external (international) financial stability ensures a stable global economic equilibrium, preventing destructive events such as currency fluctuations and economic downturns. Thus, ensuring international monetary and financial stability indeed falls within the realm of common concern for humanity, a theory, doctrine, and principle that are actively evolving and developing in contemporary international public law.

Conclusions. The regulatory and structural settings of financial equilibrium are critical in defining the global currency system, affecting the prominence of currencies internationally. Initiatives in this area not only secure the safety of reserve assets but also indirectly facilitate the stabilisation of global capital movements. Despite conventional influences on reserve currency roles, such as the liberalisation of China's

capital accounts and structural adjustments in the Eurozone, these actions are deemed inadequate. The future influence on the roles of currencies will primarily be determined by advancements in monetary stability reforms across major currency regions.

Two central themes consolidate the aforementioned concerns. The first theme identifies a novel category of hazards to monetary stability, unlike those previously encountered and expected to remain relevant for the foreseeable future. These novel hazards may interact, requiring thorough examination. Approaches to managing these hazards and anticipatory planning become crucial, with a focus on scenario-based analyses and resilience testing, moving away from methods solely based on historical data. The second theme emphasises the necessity to bolster the robustness of the financial architecture at multiple levels, acknowledging inherent compromises. Reinforcing this robustness, a directive post-global financial meltdown continues to provide substantial scope for enhancement across the broader financial landscape. While the exact terms and characteristics of these hazards may be ambiguous, the emphasis shifts to actively preparing for unexpected challenges.

1. European Central Bank. (2023). The international role of the euro. Frankfurt am Main, Hesse. <https://data.europa.eu/doi/10.2866/518597>

2. Krugman, P. (1984). The International Role of the Dollar: Theory and Prospect. National Bureau of Economic Research, 261–278. <http://www.nber.org/chapters/c6838>

3. Goldberg, L. S. (2013). The international role of the dollar: Does it matter if it changes? *Global Interdependence, Decoupling, and Recoupling*, 243–262. <https://doi.org/10.7551/mitpress/9780262019804.003.0011>

4. Reserve Bank of Australia. (2023). Financial stability review - October 2023. Reserve Bank of Australia. <https://www.rba.gov.au/publications/fsr/2023/oct/>

5. Jones, B. (2023). Emerging Threats to Financial Stability – New Challenges for the Next Decade. Reserve Bank of Australia. <https://www.rba.gov.au/speeches/2023/pdf/sp-ag-2023-10-31.pdf>

6. Kurian, S., Reid, G., & Sutton, M. (2023). Climate change and financial risk. Reserve Bank of Australia. <https://www.rba.gov.au/publications/bulletin/2023/jun/climate-change-and-financial-risk.html>

7. Basel Committee on Banking Supervision. (2023). Report on the 2023 banking turmoil. Bank for International Settlements. <https://www.bis.org/bcbs/publ/d555.pdf>

8. Cookson, J. A., Fox, C., Gil-Bazo, J., Imbet, J. F., & Schiller, C. (2023). Social media as a bank-run catalyst. Université Paris-Dauphine. Research Paper No. 4422754. <http://dx.doi.org/10.2139/ssrn.4422754>

9. Aiyar, S., Chen, J., Ebeke, C. H., Garcia-Saltos, R., Gudmundsson, T., Ilyina, A., Kangur, A., Kunaratskul, T., Rodriguez, S. L., & Mi. (2023). Geoeconomic fragmentation and the future of multilateralism. IMF Staff Discussion Notes, 2023/001. International Monetary Fund. <https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2023/01/11/Geo-Economic-Fragmentation-and-the-Future-of-Multilateralism-527266>

10. International Monetary Fund. (2023). Global financial stability report: April 2023. IMF. <https://www.imf.org/en/Publications/GFSR/Issues/2023/04/11/global-financial-stability-report-april-2023>

11. Lagarde, C. (2023). Central banks in a fragmenting world. European Central Bank. <https://www.ecb.europa.eu/press/key/date/2023/html/ecb.sp230417~9f8d34fbd6.en.html>

12. Gruenberg, M. J. (2023). Successfully managing systemic risk: Deposit insurance in a turbulent world. International Association of Deposit Insurers. <https://www.fdic.gov/news/speeches/2023/spsept2823.html>

13. Financial Stability Board. (2023). 2023 Bank failures: Preliminary lessons learnt for resolution. Board of Governors of the Federal Reserve System. <https://www.fsb.org/2023/10/2023-bank-failures-preliminary-lessons-learnt-for-resolution/>

14. Sohn, S. (2023). Regulatory responses to this year's bank failures. Regulation Asia. <https://www.regulationasia.com/regulatory-responses-to-this-years-bank-failures/>

15. Board of Governors of the Federal Reserve System. (2023). Review of the Federal Reserve's supervision and regulation of Silicon Valley Bank. <https://www.federalreserve.gov/publications/files/svb-review-20230428.pdf>
16. European Central Bank. (2023). Destabilisation of bank deposits across destinations: assessment and policy implications. ECB Working Paper Series. <https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2887~845e136b3b.en.pdf>
17. Federal Deposit Insurance Corporation. (2023). Quarterly banking profile: December 2023. <https://www.fdic.gov/analysis/quarterly-banking-profile/qbp/2023dec/>
18. Rose, J. (2023). Understanding the speed and size of bank runs in historical comparison. Federal Reserve Bank of St. Louis Economic Synopses, (12). <https://doi.org/10.20955/es.2023.12>
19. Rose, J. D. (2015). Old-fashioned deposit runs. Finance and Economics Discussion Series 2015-111. Washington: Board of Governors of the Federal Reserve System. <https://www.federalreserve.gov/econresdata/feds/2015/files/2015111pap.pdf>
20. Federal Deposit Insurance Corporation. (2023). FDIC's supervision of First Republic Bank. FDIC. <https://www.fdic.gov/news/press-releases/2023/pr23073a.pdf>
21. Lonsdale, J. (2023). Aftershock: Lessons from a real-life banking stress test. APRA. <https://www.apra.gov.au/news-and-publications/apra-chair-john-lonsdale-speech-to-citi-australia-and-new-zealand-investment>
22. Pinter, G. (2023). Anatomy of the 2022 gilt market crisis. Bank of England Staff Working Paper No. 1019. <https://www.bankofengland.co.uk/working-paper/2023/an-anatomy-of-the-2022-gilt-market-crisis>
23. Choudhary, R., Mathur, S., & Wallis, P. (2023). Leverage, liquidity and non-bank financial institutions: Key lessons from recent market events. RBA Bulletin. <https://www.rba.gov.au/publications/bulletin/2023/jun/leverage-liquidity-and-non-bank-financial-institutions.html>
24. Schrimpf, A., Shin, H. S., & Sushko, V. (2020). Leverage and margin spirals in fixed-income markets during the COVID-19 crisis. <http://dx.doi.org/10.2139/ssrn.3761873>
25. Federal Reserve Bank of St. Louis. (2023). Three-year treasury constant maturity - 10-year projection. FRED Economic Data. <https://fred.stlouisfed.org/series/THREEFYTP10>
26. Weiss, C. (2022). Geopolitics and the U.S. dollar's future as a reserve currency. International Finance Discussion Paper No. 1359. <http://dx.doi.org/10.17016/IFDP.2022.1359>
27. Kempf, E., Luo, M., Schdfer, L., & Tsoutsoura, M. (2022). Political ideology and international capital allocation. University of Chicago. Becker Friedman Institute for Economics Working Paper No. 2022-27. <http://dx.doi.org/10.2139/ssrn.4041080>
28. Irwin-Hunt, A. (2023). Protectionism: Trade restrictions reach an all-time high. fDi Intelligence. <https://www.fdiintelligence.com/content/News/protectionism-trade-restrictions-reach-an-alltime-high-82637>
29. McCarthy Hockey, T. (2023). From fires to firewalls: The evolution of operational risk. APRA. <https://www.minterellison.com/articles/key-takeaways-from-apra-corporate-plan-2023-24>
30. CFR Climate Working Group. (2023). Council of Financial Regulators: Climate Change Activity Stocktake 2023. Council of Financial Regulators. <https://www.cfr.gov.au/publications/policy-statements-and-other-reports/2023/council-of-financial-regulators-climate-change-activity-stocktake-2023/>

-
1. European Central Bank. (2023). The international role of the euro. Frankfurt am Main, Hesse. <https://data.europa.eu/doi/10.2866/518597>
 2. Krugman, P. (1984). The International Role of the Dollar: Theory and Prospect. National Bureau of Economic Research, 261–278. <http://www.nber.org/chapters/c6838>
 3. Goldberg, L. S. (2013). The international role of the dollar: Does it matter if it changes? Global Interdependence, Decoupling, and Recoupling, 243–262. <https://doi.org/10.7551/mit-press/9780262019804.003.0011>
 4. Reserve Bank of Australia. (2023). Financial stability review - October 2023. Reserve Bank of Australia. <https://www.rba.gov.au/publications/fsr/2023/oct/>
 5. Kurian, S., Reid, G., & Sutton, M. (2023). Climate change and financial risk. Reserve Bank of Australia. <https://www.rba.gov.au/publications/bulletin/2023/jun/climate-change-and-financial-risk.html>
 6. Basel Committee on Banking Supervision. (2023). Report on the 2023 banking turmoil. Bank for International Settlements. <https://www.bis.org/bcbs/publ/d555.pdf>
 7. Cookson, J. A., Fox, C., Gil-Bazo, J., Imbet, J. F., & Schiller, C. (2023). Social media as a bank-run catalyst. University Paris-Dauphine. Research Paper No. 4422754. <http://dx.doi.org/10.2139/ssrn.4422754>

8. Aiyar, S., Chen, J., Ebeke, C. H., Garcia-Saltos, R., Gudmundsson, T., Ilyina, A., Kangur, A., Kunaratskul, T., Rodriguez, S. L., & Mi. (2023). Geoeconomic fragmentation and the future of multilateralism. IMF Staff Discussion Notes, 2023/001. International Monetary Fund. <https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2023/01/11/Geo-Economic-Fragmentation-and-the-Future-of-Multilateralism-527266>
9. International Monetary Fund. (2023). Global financial stability report: April 2023. IMF. <https://www.imf.org/en/Publications/GFSR/Issues/2023/04/11/global-financial-stability-report-april-2023>
10. Lagarde, C. (2023). Central banks in a fragmenting world. European Central Bank. <https://www.ecb.europa.eu/press/key/date/2023/html/ecb.sp230417~9f8d34fbd6.en.html>
11. Gruenberg, M. J. (2023). Successfully managing systemic risk: Deposit insurance in a turbulent world. International Association of Deposit Insurers. <https://www.fdic.gov/news/speeches/2023/spsept2823.html>
12. Financial Stability Board. (2023). 2023 Bank failures: Preliminary lessons learnt for resolution. Board of Governors of the Federal Reserve System. <https://www.fsb.org/2023/10/2023-bank-failures-preliminary-lessons-learnt-for-resolution/>
13. Sohn, S. (2023). Regulatory responses to this year's bank failures. Regulation Asia. <https://www.regulationasia.com/regulatory-responses-to-this-years-bank-failures/>
14. Board of Governors of the Federal Reserve System. (2023). Review of the Federal Reserve's supervision and regulation of Silicon Valley Bank. <https://www.federalreserve.gov/publications/files/svb-review-20230428.pdf>
15. European Central Bank. (2023). Destabilisation of bank deposits across destinations: assessment and policy implications. ECB Working Paper Series. <https://www.ecb.europa.eu/pub/pdf/scpwp/ecb.wp2887~845e136b3b.en.pdf>
16. Federal Deposit Insurance Corporation. (2023). Quarterly banking profile: December 2023. <https://www.fdic.gov/analysis/quarterly-banking-profile/qbp/2023dec/>
17. Rose, J. (2023). Understanding the speed and size of bank runs in historical comparison. Federal Reserve Bank of St. Louis Economic Synopses, (12). <https://doi.org/10.20955/es.2023.12>
18. Rose, J. D. (2015). Old-fashioned deposit runs. Finance and Economics Discussion Series 2015-111. Washington: Board of Governors of the Federal Reserve System. <https://www.federalreserve.gov/econresdata/feds/2015/files/2015111pap.pdf>
19. Federal Deposit Insurance Corporation. (2023). FDIC's supervision of First Republic Bank. FDIC. <https://www.fdic.gov/news/press-releases/2023/pr23073a.pdf>
20. Federal Deposit Insurance Corporation. (2023). Options for deposit insurance reforms. FDIC. <https://www.fdic.gov/analysis/options-deposit-insurance-reforms/index.html>
21. Lonsdale, J. (2023). Aftershock: Lessons from a real-life banking stress test. APRA. <https://www.apra.gov.au/news-and-publications/apra-chair-john-lonsdale-speech-to-citi-australia-and-new-zealand-investment>
22. Pinter, G. (2023). Anatomy of the 2022 gilt market crisis. Bank of England Staff Working Paper No. 1019. <https://www.bankofengland.co.uk/working-paper/2023/an-anatomy-of-the-2022-gilt-market-crisis>
23. Choudhary, R., Mathur, S., & Wallis, P. (2023). Leverage, liquidity and non-bank financial institutions: Key lessons from recent market events. RBA Bulletin. <https://www.rba.gov.au/publications/bulletin/2023/jun/leverage-liquidity-and-non-bank-financial-institutions.html>
24. Schrimpf, A., Shin, H. S., & Sushko, V. (2020). Leverage and margin spirals in fixed-income markets during the COVID-19 crisis. <http://dx.doi.org/10.2139/ssrn.3761873>
25. Federal Reserve Bank of St. Louis. (2023). Three-year treasury constant maturity - 10-year projection. FRED Economic Data. <https://fred.stlouisfed.org/series/THREEFYTP10>
26. Weiss, C. (2022). Geopolitics and the U.S. dollar's future as a reserve currency. International Finance Discussion Paper No. 1359. <http://dx.doi.org/10.17016/IFDP.2022.1359>
27. Kempf, E., Luo, M., Schdfer, L., & Tsoutsoura, M. (2022). Political ideology and international capital allocation. University of Chicago. Becker Friedman Institute for Economics Working Paper No. 2022-27. <http://dx.doi.org/10.2139/ssrn.4041080>
28. Irwin-Hunt, A. (2023). Protectionism: Trade restrictions reach an all-time high. fDi Intelligence. <https://www.fdiintelligence.com/content/News/protectionism-trade-restrictions-reach-an-alltime-high-82637>
29. McCarthy Hockey, T. (2023). From fires to firewalls: The evolution of operational risk. APRA. <https://www.minterellison.com/articles/key-takeaways-from-apra-corporate-plan-2023-24>
30. CFR Climate Working Group. (2023). Council of Financial Regulators: Climate Change Activity Stocktake 2023. Council of Financial Regulators. <https://www.cfr.gov.au/publications/policy-statements-and-other-reports/2023/council-of-financial-regulators-climate-change-activity-stocktake-2023/>