

Fragmentation and Digitalization: Outlines of a Looming Bretton Woods 2.0

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ARTICLE INFO

Keywords:

Bretton Woods 2.0
Digitalisation of
Finance
Multipolarity
Systemic
Fragmentation
Bitcoin
XRP
Central Bank Digital
Currencies
(CBDCs)

ABSTRACT

The international monetary system faces the dual challenge of accelerating digitalization and deepening geopolitical multipolarity. These forces, while irreversible, also risk driving the world toward financial fragmentation if unmanaged. Historical precedent, from the gold standard to the original Bretton Woods and the rise of SWIFT, shows that market-born instruments often emerge to fill gaps in global settlement and reserve functions. Today, Bitcoin and XRP—though not state-designed—represent such instruments, arising organically from market adoption and technological evolution. This paper does not aim to prescribe a fixed blueprint for the future. Rather, its purpose is to outline the contours of an impending transition, drawing lessons from past monetary regimes while examining how digital assets and CBDCs may shape the architecture of a multipolar financial order. By highlighting both risks and opportunities, the paper seeks to promote informed discussion and encourage policymakers to prepare for the realities of a digital, multipolar monetary landscape before crises impose disorderly adjustments.

JEL classification:

F31, F33, E5, G28

Received: 09.01.2026

<https://doi.org/10.46361/2449-2604.13.1.2026.17-30>

Revised: 14.02.2026

Accepted: 07.04.2026

ფრაგმენტაცია და დიგიტალიზაცია: ბრეტონ-ვუდსის 2.0-ის კონტურები

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ინფორმაცია

სტატიის შესახებ

საკვანძო სიტყვები:

ბრეტონ-ვუდსი 2.0
ფინანსების
დიგიტალიზაცია
მულტიპოლარობა
სისტემური
ფრაგმენტაცია
ბიტკოინი
XRP

აბსტრაქტი

საერთაშორისო სავალუტო სისტემა ორმაგი გამოწვევის წინაშე დგას - დიგიტალიზაციის დაჩქარება და გეოპოლიტიკური მულტიპოლარობის გაღრმავება. ეს ძალები, მათი შეუქცევადობის მიუხედავად, მართვის გარეშე, საფრთხეს უქმნიან და აჩქარებენ მსოფლიოს ფინანსური ფრაგმენტაციისკენ მიყვანას. ისტორიული პრეცედენტი, ოქროს სტანდარტიდან დაწყებული ბრეტონ-ვუდსის თავდაპირველ სისტემამდე და SWIFT-ის აღზევებამდე გვიჩვენებს, რომ ბაზარზე შექმნილი ინსტრუმენტები ხშირად ჩნდება გლობალური ანგარიშსწორებისა და სარეზერვო ფუნქციების ხარვეზების

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ენტრალური ბანკის
ციფრული ვალუტები
(CBDC)

შესავსებად. თანამედროვე პირობებში, არა სახელმწიფოს მიერ შექმნილი ბიტკოინი და XRP სწორედ ისეთ ინსტრუმენტებს წარმოადგენენ, რომლებიც ორგანულად წარმოიშობა ბაზარზე ამოქმედებისა და ტექნოლოგიური ევოლუციის შედეგად. წარმოდგენილი ნაშრომი არ ისახავს მიზნად მომავლისთვის ფიქსირებული გეგმის დადგენას. ავტორთა მიზანია გარდამავალი პერიოდის კონტურების გამოკვეთა, წარსული მონეტარული რეჟიმებიდან გაკვეთილების გამოტანით და ამავდროულად იმის შესწავლით, თუ როგორ შეიძლება ციფრულმა აქტივებმა და CBDC-ებმა ჩამოაყალიბონ მრავალპოლარული ფინანსური წესრიგის არქიტექტურა. როგორც რისკების, ასევე შესაძლებლობების ხაზგასმით, ნაშრომი ცდილობს ხელი შეუწყოს ინფორმირებულ დისკუსიას და წახალისოს პოლიტიკის შემქმნელები, მოემზადონ ციფრული, მრავალპოლარული მონეტარული ლანდშაფტის რეალობისთვის, სანამ კრიზისი არასტაბილურ კორექტირებას გამოიწვევს.

JEL კლასიფიკაცია:

F31, F33, E5, G28

მიღებულია:

09.01.2026

რეცენზირებულია:

14.02.2026

დამტკიცებულია:

07.04.2026

<https://doi.org/10.46361/2449-2604.13.1.2026.17-30>

Introduction

For decades, the dominance of the United States dollar has appeared unassailable. It has survived oil shocks, sovereign debt crises, and the global financial turmoil of 2008. Each crisis seemed only to reinforce its role as the default anchor of global trade and finance. Yet history shows that reserve currency systems endure only until their structural contradictions become unsustainable. The British pound, after a century of global primacy, lost its status in the aftermath of two world wars and mounting fiscal imbalances. Today, the U.S. dollar faces a similar test.

Two structural forces are reshaping the international monetary system. The first is the digitalization of money. Central Bank Digital Currencies (CBDCs), cryptocurrencies, and distributed settlement systems are no longer speculative experiments but concrete realities. Central banks across advanced, emerging, and small economies are piloting digital sovereign money, while private cryptocurrencies such as Bitcoin have demonstrated resilience and adoption over more than a decade. Underlying technologies—blockchain, programmability, and transparent settlement—are redefining expectations of efficiency, trust, and accessibility in payments.

The second force is geopolitical multipolarity. The unipolar moment of U.S. dominance is giving way to a more distributed global order. Rising powers are constructing alternative financial infrastructures, from bilateral trade conducted in local currencies to experiments with regional clearing systems. Sanctions, once seen as a precise geopolitical instrument, increasingly accelerate diversification away from the dollar. For many states, building alternatives to SWIFT and dollar-based settlement has shifted from strategic preference to strategic necessity.

These dynamics pose a central question: Can a single national currency remain the cornerstone of global finance in a world that is both digital and multipolar? Historical precedent suggests caution. The original Bretton Woods system of 1944, anchored in U.S. economic preeminence and gold convertibility, collapsed within three decades once the underlying conditions diverged from institutional design. Its unraveling illustrates the dangers of relying on a single sovereign currency as the global foundation.

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This paper contends that the international monetary system is once again approaching such a turning point. Unlike the mid-20th century, however, today's transition is shaped by technologies and market-born instruments that emerge independently of state design. Just as gold once anchored settlement and SWIFT became the default messaging network through market-led adoption, digital assets such as Bitcoin and XRP have emerged organically as candidates for reserve and settlement roles. Their significance lies not in subjective preference, but in the fact that they have been adopted, tested, and scaled through market mechanisms.

The purpose of this study is not to prescribe a definitive blueprint for "Bretton Woods 2.0," but to promote discussion of the looming risks of fragmentation and the inevitability of digitalization. By extracting lessons from past monetary transitions and examining the contemporary roles of CBDCs, Bitcoin, and XRP, the paper seeks to outline the contours of a multipolar future. The central argument is that while digitalization cannot be avoided and multipolarity cannot be reversed, proactive institutional preparation may prevent the next systemic shift from being disorderly and crisis-driven.

Review of Literature

The transformation now underway in the monetary sphere is less a discretionary policy option than a technological inevitability. Just as the telegraph in the 19th century revolutionised the transmission of financial information, and the late-20th-century wave of electronic payments reshaped everyday commerce, the advent of digital currencies—whether sovereign or decentralised—is poised to redefine the very concept of money. The historical lesson is clear: when new technologies deliver superior speed, reliability, and scalability, monetary systems adapt, sometimes reluctantly, but always decisively (Bordo & Levin, 2017; Rogoff, 2016).

In less than a decade, central bank digital currencies (CBDCs) have moved from the periphery of monetary debates to the centre of strategic planning in most major economies. The latest survey by the Bank for International Settlements finds that 93 percent of central banks are now engaged in CBDC research or development, with over half anticipating issuance in the medium term (Kosse & Mattei, 2023; Lannquist & Tan, 2023). This acceleration reflects not mere technological enthusiasm, but a defensive policy calculus: without a sovereign digital currency, governments risk ceding control over payment systems to foreign CBDCs, private stablecoins, or decentralised cryptocurrencies with global reach (Auer et al., 2021).

Historical analogies abound. Just as the gold standard was partly sustained by the network effects of a dominant settlement asset, so too might a widely adopted CBDC establish itself as the default unit of account and medium of exchange in international trade. The question for policymakers is not whether digital sovereign money will exist, but whose design will set the global standard.

Technological adoption in monetary history tends to follow a predictable arc: initial experimentation, selective pilot usage, then a tipping point where network effects drive widespread adoption. In China's e-CNY pilot, for example, state-backed incentives have already produced millions of wallet registrations, growing merchant acceptance, and measurable transaction volumes, despite competition from entrenched private payment platforms (PBoC, 2022). Comparable dynamics are visible in the Bahamas' Sand Dollar and Nigeria's eNaira, where early adoption patterns highlight the role of state policy in shaping uptake (Kosse & Mattei, 2023).

These developments signal a fundamental point: digitalisation is not merely an overlay to the existing monetary system—it is gradually becoming the system. Blockchain-based settlement layers, programmable payment contracts, and tokenised assets are not temporary novelties; they represent the next infrastructural phase of finance, much as central clearing houses did in the 20th century (Arner et al., 2020).

The transition is not without risks. Poorly designed CBDCs could disintermediate commercial banks, reduce credit availability, and create new vectors for cyber and operational risk (IMF, 2024; Bindseil, 2020). The challenge is that financial innovation almost invariably outpaces regulatory adaptation. Episodes from the free banking era to the globalisation of derivative markets in the 1990s illustrate that new instruments, once adopted, are exceedingly difficult to reverse—even in the face of instability (Bordo, 2021).

Accordingly, the central policy choice is stark: either shape the digital monetary order through deliberate, globally coordinated design, or allow it to evolve through fragmented national initiatives and market-driven

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adoption. The latter risks creating the same kind of systemic vulnerabilities that the Bretton Woods framework originally sought to eliminate. As history repeatedly shows, once the transition begins in earnest, the cost of inaction only compounds.

Research Methodology

This paper employs a comparative-historical and exploratory analytical approach to investigate the outlines of a potential “Bretton Woods 2.0.” The methodology integrates three complementary dimensions:

1. Historical-Comparative Analysis

- The study draws lessons from the design, operation, and collapse of the Bretton Woods system (1944–1971), as well as from subsequent phases of dollar dominance.
- Historical analogies are used to identify structural risks associated with reliance on a single sovereign currency and to contextualize the emergence of market-driven instruments.

2. Market-Emergent Instruments as Case Studies

- Bitcoin and XRP are analyzed not as prescriptive solutions but as illustrative case studies of market-born instruments that, like gold and SWIFT in earlier eras, have achieved adoption beyond state mandate.
- Their technical properties (scarcity, decentralization, settlement speed, interoperability) are examined in relation to systemic needs: store of value, unit of account, and medium of exchange.

3. Scenario-Based Assessment

- Rather than forecasting precise outcomes, the paper outlines plausible scenarios of systemic evolution under conditions of accelerated digitalization and geopolitical multipolarity.
- Scenarios highlight the risks of uncoordinated fragmentation versus the possibilities of orderly transition under proactive institutional design.

The methodology is deliberately exploratory. The aim is not to deliver a normative policy prescription but to frame the discussion, clarify potential pathways, and identify critical risks. By combining historical analysis with the study of contemporary market phenomena, the paper contributes to long-run preparedness in the face of inevitable structural change.

Multipolarity and the Threat to USD Dominance

For much of the post–Second World War era, the United States dollar has served as the backbone of the international monetary system—a position cemented by the Bretton Woods arrangements and sustained by the depth of U.S. financial markets, the credibility of its institutions, and the absence of viable alternatives (Eichengreen, 2011). Yet history warns that reserve currency dominance is not immutable. The late 19th century witnessed the British pound cede ground to the U.S. dollar as economic and geopolitical realities shifted (Chitu et al., 2014). Today, a similar dynamic is beginning to take shape under the combined pressures of geopolitical multipolarity and technological disruption.

The unipolar moment that followed the Cold War is fading. The rise of China, the economic integration of the BRICS bloc, and the assertiveness of middle powers have created a more distributed geopolitical landscape. Increasingly, trade and investment flows are conducted in regional currencies, bilateral swap agreements bypass the dollar, and sovereign wealth funds diversify their reserves away from USD assets (Subacchi, 2020; Ocampo, 2017).

Sanctions policy has accelerated this process. The freezing of Russian foreign exchange reserves in 2022 signaled to many states that reliance on dollar-clearing systems is a strategic vulnerability. The “weaponisation” of finance—while effective in the short term—has catalyzed long-term hedging behaviour among both allies and rivals, reinforcing incentives to build alternative payment rails and reserve structures.

In the past, transitions between reserve currencies unfolded over decades, constrained by the slow build-out of alternative financial infrastructure. Digitalisation compresses this timeline. Blockchain-based settlement systems, regional CBDC interoperability projects, and the rise of decentralised finance (DeFi) platforms enable

states to bypass dollar-denominated intermediaries far more rapidly than was possible in previous eras (Auer et al., 2021; Carney, 2019).

China's cross-border interbank payment system (CIPS) and its integration with the e-CNY are early indicators of how digital payment infrastructure can underpin strategic monetary influence. Similar initiatives—whether the mBridge CBDC project involving Hong Kong, Thailand, and the UAE, or the proposed BRICS bridge currency—represent the beginnings of a parallel settlement architecture. If scaled, these systems could gradually erode the USD's centrality in cross-border transactions.

Economic history is replete with examples of dominant reserve currencies losing ground, often gradually, but occasionally with surprising speed when geopolitical shocks and financial innovation coincide (Eichengreen et al., 2019). The pound sterling's decline in the interwar years was hastened by both fiscal overreach and the emergence of the U.S. as a creditor superpower. In the present case, sustained fiscal deficits, political polarisation, and the prospect of a technologically enabled multipolar order present a similar set of vulnerabilities for the dollar.

The lesson is twofold. First, network effects and incumbency advantages do not guarantee permanence. Second, when new settlement technologies align with shifting geopolitical alliances, the architecture of global finance can change more quickly than expected. Without institutional adaptation, the USD-centric system could face the kind of structural break that marked the end of Bretton Woods in 1971.

The convergence of multipolarity and digitalisation not only challenges the USD's supremacy but also exposes a governance gap in the current monetary order. If the international community fails to establish a credible, neutral, and transparent framework for cross-border settlement, the emerging system may fragment into competing, politically aligned payment blocs. A Bretton Woods 2.0 must therefore be designed with the explicit aim of accommodating multiple major currencies, integrating digital assets, and avoiding the destabilising overreliance on any single national currency.

The Need for Bretton Woods 2.0

The existing international monetary system is, in essence, a late-20th century architecture struggling to accommodate 21st-century realities. Built on the implicit assumption of a single dominant reserve currency—the U.S. dollar—it has proven resilient but not immutable. The forces described in the preceding sections—technological digitalisation and geopolitical multipolarity—are converging to expose structural vulnerabilities in this framework. The risk is not simply that the dollar's dominance will erode, but that the erosion will occur in a piecemeal, uncoordinated fashion, producing a fragmented and potentially unstable global payment landscape.

Post-1971, the dollar's centrality was sustained not by formal treaty arrangements but by a combination of deep financial markets, political stability, and the absence of credible competitors (Eichengreen, 2011). The IMF, World Bank, and SWIFT payment network—while indispensable in their time—were designed for a world of centralised banking infrastructure, relatively slow capital mobility, and limited technological alternatives. (Auer et al., 2021) observe, the rise of CBDCs and tokenised payment networks fundamentally alters the settlement layer of global finance, rendering many of these institutions' operating assumptions obsolete.

In such a setting, the absence of a coordinated governance framework for digital cross-border payments risks amplifying monetary fragmentation. Without an updated set of rules—akin in ambition, though not in identical design, to Bretton Woods—the world could see the emergence of competing regional payment blocs, each anchored to different reserve assets and technologies (Prasad, 2021).

The original Bretton Woods system emerged from crisis, not consensus. The monetary chaos of the interwar years—marked by competitive devaluations, capital controls, and trade protectionism—created the political will to design a cooperative order (Steil, 2013). That order combined fixed but adjustable exchange rates with a gold-dollar anchor, institutionalised through the IMF and World Bank.

Its eventual collapse in 1971 was precipitated by a divergence between the system's rules and economic reality. U.S. fiscal expansion, the Vietnam War, and a widening current account deficit made the dollar's gold parity untenable (Bordo, 1993). The lesson is stark: when the institutional design of the monetary system is

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misaligned with underlying economic forces, credibility unravels—often suddenly. Today’s equivalent misalignment lies in the gap between a USD-centric architecture and the realities of a digital, multipolar world.

The world is already experimenting with partial replacements for the current system—bilateral swap lines, regional clearing arrangements, and CBDC interoperability pilots such as mBridge. While these developments may improve efficiency in their immediate contexts, they are insufficient as a global anchor. A coherent monetary order must perform at least three functions: provide a stable unit of account, a trusted store of value, and an efficient medium for cross-border exchange (Obstfeld, 2022). Without coordination, these functions will be met unevenly across jurisdictions, heightening systemic risk.

Bretton Woods 2.0 must therefore be conceived not as a nostalgic return to fixed parities, but as a pragmatic framework capable of:

- Integrating digital currencies—sovereign and decentralised—into global settlement systems.
- Accommodating multiple major reserve assets in a way that preserves liquidity and reduces political leverage.
- Embedding transparency and trust into cross-border payment flows through verifiable, tamper-resistant infrastructure.

In this design, the anchor need not be a single national currency; it could instead be a neutral digital asset with scarcity-based credibility—functionally analogous to gold under Bretton Woods, but technologically adapted to the digital age.

Lessons from Bretton Woods for the Digital Age

Institutional Framework of Bretton Woods (1944–1971). Under Bretton Woods, countries agreed to fixed (but adjustable) exchange rates anchored to the U.S. dollar, which itself was pegged to gold at \$35 per ounce (Munster, 2025). The International Monetary Fund (IMF) and World Bank were created to enforce this system: each country maintained its currency within $\pm 1\%$ of a dollar parity and could only devalue by larger amounts with IMF approval. In effect, the U.S. dollar became the de facto global reserve asset (“as good as gold”), since other governments would buy or sell dollars to defend their pegs (Munster, 2025). This structure provided monetary stability and liquidity, combining a gold standard’s discipline with the flexibility of national policies, at least as long as trust in U.S. convertibility held (Bordo, 2017).

Causes of Collapse. The Bretton Woods regime ultimately failed when structural imbalances and loss of confidence overwhelmed it. By the late 1960s, the U.S. was running large balance-of-payments deficits to supply the world with dollars. Economists, notably Triffin, warned that this “exorbitant privilege” was unsustainable: as U.S. dollar liabilities abroad piled up, the stock of dollars exceeded U.S. gold reserves, eroding faith that all dollars could still be redeemed in gold (Bordo, 2017). Rising U.S. spending on the Vietnam War and domestic programs fueled monetary inflation and drained gold reserves (Bordo, 2017). Foreign central banks increasingly doubted that Washington would honor the \$35 per ounce gold promise. The final trigger came on 15 August 1971 when President Nixon unilaterally “closed the gold window.” The Nixon Shock terminated dollar–gold convertibility and placed the dollar fully on a fiat footing (Munster, 2025). Without gold backing, the fixed-rate system could not be maintained, and the Bretton Woods order dissolved: countries holding dollar reserves suddenly found them to be mere U.S. government credit, not gold-backed money (Munster, 2025).

Parallels with Today. Today’s debates over digital currencies echo these historical lessons. First, Bretton Woods underscores the appeal of a neutral global anchor. Just as Keynes proposed a supranational “bancor,” modern commentators propose a non-sovereign reserve asset (e.g., an expanded IMF SDR or a blockchain-backed digital SDR) to avoid dependence on any one country’s money (Sheng & Geng, 2018; World Economic Forum, 2018). The rise of cryptocurrencies has even been hailed as an opportunity for “market forces to spearhead a shift toward a truly neutral reserve asset” (World Economic Forum, 2018). For instance, some envision a regulated e-SDR (a digital unit backed by a basket of major currencies) or blockchain-based stablecoins as politically neutral stores of value that could stabilize global trade (World Economic Forum, 2018; Munster, 2025).

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Second, the Bretton Woods saga warns of the dangers if a dominant reserve currency (digital or otherwise) is overissued. In a highly digitalized world, unbacked or excess issuance of a global currency could quickly destabilize trade and erode trust – a modern Triffin dilemma. For example, stablecoins (digital tokens pegged to fiat) must maintain strict 1:1 backing. History shows how fast confidence can vanish: in 2022, the unbacked TerraUSD stablecoin collapsed, sparking a cascade of failures in crypto markets (McKenna, 2025). Similarly, if a single government flooded the world with unbacked digital dollars or allowed algorithmic coins to proliferate without real reserves, it could trigger rapid inflation and currency crises—only now the shocks would propagate at Internet speed. Maintaining trust in the new digital financial system will likely require robust backing and rules (for example, mandatory reserves or multilateral governance)—a lesson straight out of Bretton Woods.

Foundations for Bretton Woods 2.0

The accelerating digitalization of finance and the transition toward a multipolar geopolitical landscape present both opportunities and risks. Without coordination, the world risks entering a phase of monetary fragmentation, where regional blocs construct separate infrastructures, undermining liquidity and trust. Any credible outline of a future system must therefore acknowledge two realities: digitalization cannot be reversed, and multipolarity cannot be ignored. The task is not to prescribe a definitive design but to identify the market-born instruments already shaping this landscape and to consider their potential roles within a broader institutional framework.

As the global economy contemplates a Bretton Woods 2.0, two cryptoassets have emerged as significant market-born contenders for the new monetary architecture. Institutional adoption of digital assets has expanded rapidly: a 2024 EY survey found that 94% of major investors believe in the long-term value of blockchain-backed currencies (EY, 2024), while in Q4 2024 professional fund managers invested \$27.4 billion into U.S. Bitcoin ETFs, a 114% increase from the previous quarter (CoinShares, 2024). One analyst observed that “Bitcoin’s role in institutional portfolios will no longer be speculative – it will become structural” (CoinShares, 2024). This trend echoes the historical turning point of 15 August 1971, when President Nixon ended official dollar-to-gold convertibility—the “Nixon Shock” that terminated the Bretton Woods gold-exchange standard and moved the system toward floating exchange rates (Ghizoni, 2013). In today’s context, Bitcoin offers a cryptographic analogue to gold’s scarcity, while XRP provides a real-time bridge for cross-border payments. Together, they illustrate how market instruments can supply functions of neutrality and settlement in ways that CBDCs, stablecoins, or gold cannot.

Bitcoin as a Digital Gold Anchor. Bitcoin’s capped supply of 21 million coins and its decentralized issuance model provide a scarcity-based foundation akin to “digital gold.” Unlike fiat currencies managed by central banks, its algorithm enforces strict supply limits, protecting it from political manipulation or debasement. Some sovereign actors have begun quietly considering Bitcoin for reserves. As Chainalysis notes, “traditional reserve assets like gold and the U.S. dollar are becoming more politically entangled and subject to external influence,” which has led countries facing economic uncertainty to view Bitcoin as “a promising, if experimental, alternative” (Chainalysis, 2024).

Private markets mirror this trend. In 2024, major asset managers—including Millennium and DE Shaw—along with hedge funds and pension funds expanded their Bitcoin allocations. The first U.S. spot Bitcoin ETFs collectively surpassed \$100 billion in assets under management, with professional investors holding 26.3% of those funds (up from 21.1% in Q3), equivalent to roughly 1.5% of total Bitcoin supply (CoinShares, 2024). Sovereign wealth funds have also entered this space, with Abu Dhabi disclosing a \$439 million Bitcoin position in late 2024 (CoinShares, 2024). Increasingly, global capital regards Bitcoin not as a speculative instrument but as a durable store of value.

VanEck’s research team has described Bitcoin as moving from a speculative asset toward a structural store-of-value in institutional portfolios, projecting cycle targets that have supported substantial inflows (VanEck, 2024). Meanwhile, estimates of the market capitalization of above-ground gold stocks place them at around 15–17% of global GDP in 2024, consistent with World Gold Council data (World Gold Council, 2024). Yet gold

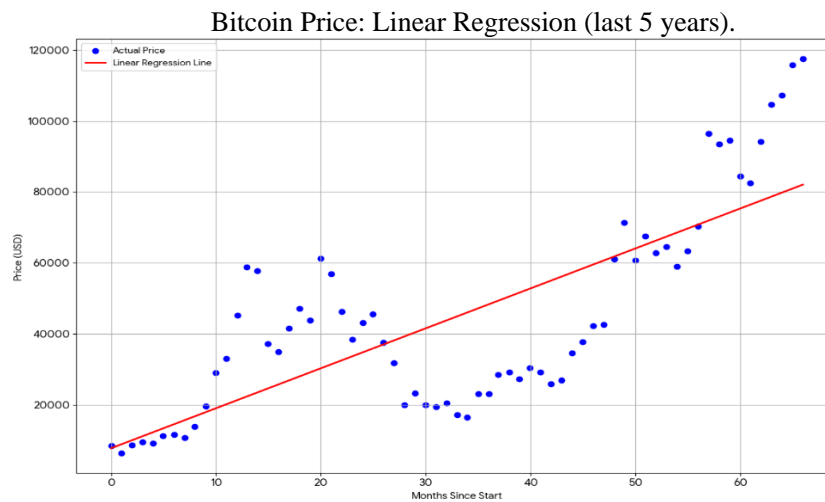
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remains only one-sixth of world output, whereas Bitcoin’s fixed supply could, in principle, absorb far larger global demand.

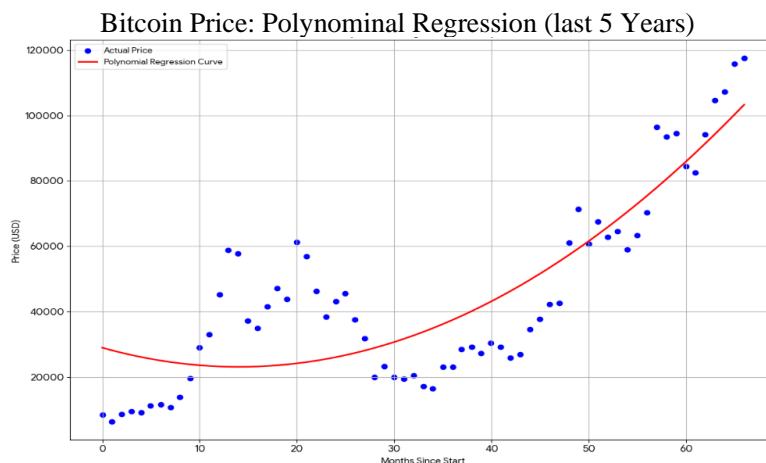
Empirical analysis reinforces this trajectory. An examination of Bitcoin’s monthly price data from 2020 to 2025 shows a steady upward trend. Linear regression indicates an average monthly increase of approximately \$1,126, capturing more than half of the observed variance (R-squared = 0.5764). A quadratic model highlights accelerating growth, with an R-squared of 0.6963, suggesting that Bitcoin’s rise has not only been consistent but increasingly pronounced. Viewed as a reserve asset, this trajectory underscores Bitcoin’s emergence as a durable store of value. Its performance over the past five years reflects consistent accumulation and appreciation, indicating that, as adoption broadens and the network matures, Bitcoin is positioned to sustain long-term upward momentum (See fig.1; fig.2).

Figure 1



Source: Author’s compile and <https://www.investing.com/crypto/bitcoin/historical-data>

Figure 2



Source: Author’s compile and <https://www.investing.com/crypto/bitcoin/historical-data>

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This lesson has not gone unnoticed. Policymakers in Asia and the Middle East are actively seeking to reduce dependence on the U.S. dollar, recognizing that neutrality is the antidote to financial coercion (Reuters, 2022). Bitcoin’s neutrality—no single nation can inflate or sanction it—makes it uniquely positioned to serve as a counterweight in a multipolar order.

XRP as a Cross-Border Liquidity Bridge. While Bitcoin addresses the problem of a neutral store of value, international trade requires rapid, low-cost, and scalable settlement. The XRP Ledger was explicitly developed for this purpose, with its native token (XRP) enabling finality in approximately 3–5 seconds at negligible cost. In practice, XRP serves as an on-demand bridge: a bank wishing to transfer funds from currency A to B can convert A into XRP in real time, then immediately convert XRP into B—eliminating the need to pre-fund nostro accounts (See Table 1).

Table 1. Comparative features of SWIFT and Ripple Net

	RippleNet	SWIFTgpi
Products	xRapid, xCurrent, xVia	Improvement over SWIFT, legacy platform
Instant payment	Yes	Yes
Instant calculation	Yes	No
Sources of liquidity	Yes	No
Calculation time	A few seconds	from 5 minutes to 24 hours
Currency exchange rate	Determined by banks	Determined by banks
Data flow	Bidirectional	Non-directional
Core technology	Blockchain	FAST
Architecture	Decentralized	Centralized
The settlement process	Consensus	Party Cleaning and Settlement

Source: [Shome](#), 2019

The emergence of Bitcoin as a neutral reserve anchor would fundamentally alter the foundations of international liquidity. If reserves are held in a censorship-resistant, fixed-supply digital asset, then the infrastructures built around fiat-based correspondent banking—most notably SWIFT—become increasingly misaligned with systemic needs. SWIFT functions as a secure messaging network, not a settlement layer; it relies on pre-funded accounts (nostro/vostro balances) and multilayer correspondent relationships that introduce both time delays and counterparty risks. This design worked in the context of a dollar-centric system with abundant U.S. liquidity, but it is less suited to a reserve structure anchored in a scarce, digitally native asset like Bitcoin.

In contrast, XRP operates as a real-time settlement bridge, converting value between currencies within seconds without reliance on pre-funded accounts. Its decentralized ledger enables finality of transactions directly on-chain, rather than through sequential messaging across intermediaries. In a world where Bitcoin functions as the global reserve, institutions would require equally digital-native infrastructures to mobilize liquidity and bridge between sovereign CBDCs or tokenized fiat. XRP fulfills this role by allowing market participants to transfer value rapidly and cost-effectively, reducing reliance on legacy rails.

Three structural features illustrate why XRP could erode SWIFT’s dominance under such conditions:

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1. Settlement versus messaging: While SWIFT only communicates transfer instructions, XRP executes final settlement directly on a distributed ledger, eliminating the distinction between message and transfer.
2. Liquidity on demand: XRP's model of converting from currency A → XRP → currency B in real time obviates the need for banks to maintain dormant liquidity buffers abroad. This is particularly valuable if reserves are increasingly concentrated in Bitcoin, since liquidity would need to be unlocked dynamically rather than tied up in multiple fiat corridors.
3. Neutrality in a multipolar system: Just as Bitcoin provides a politically neutral reserve asset, XRP offers a politically neutral settlement rail. Unlike SWIFT, which is subject to national oversight and therefore vulnerable to politicization or sanctions, XRP transactions propagate on a decentralized infrastructure that no single government controls.

In sum, if Bitcoin were to become a reserve asset in the international system, the logic of settlement would shift from fiat-based correspondent banking to digital-native bridges. Under those conditions, XRP is positioned to erode SWIFT's dominance—not through ideological preference, but because its design aligns more closely with the requirements of a Bitcoin-anchored and multipolar monetary order

This model has already been piloted by major institutions. Bank of America, Santander, and other financial players have integrated Ripple's On-Demand Liquidity service using XRP, reporting transaction cost reductions of up to 60% compared with traditional channels. Since 2023, over \$50 billion has been transferred through XRP corridors, particularly in remittance-heavy markets. XRP transactions propagate through a decentralized ledger, reducing reliance on intermediaries and eliminating counterparty risk (Firouzi, 2025). As Reuters (2022) observes, such neutrality is especially valuable in a multipolar context where state-issued currencies may be vulnerable to politicization.

CBDCs, Stablecoins, and Gold: Why They Fall Short. Despite their promise, alternative instruments face structural limits. CBDCs remain national in scope, with no jurisdiction yet launching a fully interoperable cross-border design. Achieving such global acceptance would require unprecedented levels of intergovernmental cooperation (BIS, 2023a). Stablecoins also fall short: most are pegged 1:1 to existing fiat currencies, thereby reinforcing rather than diversifying the dominance of the U.S. dollar (IMF, 2023). Moreover, the BIS has repeatedly cautioned that while stablecoins can support tokenization, they generally fail key monetary tests—such as singleness, elasticity, and integrity—and pose systemic risks unless tightly regulated (Bank for International Settlements, 2025). Gold, though still valued, suffers from scarcity in circulation, illiquidity, and geographic concentration in central bank reserves. Keynes himself noted that gold lacks the neutrality required of a global anchor (Federal Reserve History, n.d.).

Market Instruments as Systemic Outlines. Taken together, Bitcoin and XRP demonstrate how market-born instruments can evolve to fill functional gaps in global finance. Just as gold once operated as a neutral anchor and SWIFT became the default for international messaging, these digital assets have emerged through adoption, testing, and scaling by private and institutional actors. Their importance lies not in normative preference but in the fact that they represent empirical evidence of market adaptation to systemic needs.

In this sense, Bitcoin offers a scarcity-based anchor outside the control of any single state, while XRP provides an efficient rail for cross-border settlement. CBDCs and stablecoins remain tied to issuer politics, and gold cannot meet modern requirements for scale and divisibility. Institutional adoption suggests that Bitcoin and XRP could, if integrated into a neutral governance framework, form components of a blockchain-based Bretton Woods II (Reuters, 2022).

Unlike gold, Bitcoin is digitally native and highly divisible (1 BTC = 10^8 Satoshi, or approximately 2.1×10^{15} base units in total). This divisibility, combined with layer-2 scaling and tokenization, removes the operational shortage that made gold unsuitable for micro-payments and high-frequency commerce. While this resolves transactional constraints, macroeconomic management of aggregate liquidity remains an institutional challenge.

Outlines of a Hybrid Model. These developments suggest the outlines—but not the blueprint—of a potential hybrid framework. In such a model, domestic CBDCs would continue to serve national monetary functions, while market-born instruments such as Bitcoin and XRP could complement them in the international sphere: Bitcoin as a politically neutral reserve analogue to gold, and XRP as a practical bridge for liquidity and settlement. These roles emerge not from normative advocacy but from observable adoption dynamics.

The argument here is not that Bitcoin and XRP are definitive solutions, nor that they should replace sovereign authority. Rather, their emergence underscores how markets anticipate systemic needs during periods of transition. Just as Bretton Woods aligned the realities of gold and the U.S. dollar with postwar economic demands, the present moment may require recognition of instruments already in use. Whether this leads to a coordinated Bretton Woods 2.0 or to fragmented blocs will depend on whether policymakers engage with these realities rather than resist them.

Policy Recommendations

One possible approach to modernizing the global monetary architecture could involve a two-tier currency system. In this model, each country continues to issue its own central bank digital currency (CBDC) for domestic use, while international transactions would utilize digital assets such as Bitcoin and XRP. This framework seeks to strike a balance between national monetary sovereignty and global interoperability. Domestic CBDCs would function similarly to today's cash or bank deposits, supporting day-to-day payments and enabling each country to maintain its own monetary policy, including interest rate decisions.

The Bank for International Settlements (BIS) has emphasized that multilateral CBDC arrangements should “focus squarely on designing national CBDCs with access frameworks and interoperability options” rather than creating a single new global currency (BIS, 2021). Building on this view, our proposal envisions full convertibility of each CBDC into internationally recognized instruments—Bitcoin or XRP—either at the national border or through authorized exchanges.

For cross-border use cases, banks and governments could utilize Bitcoin and XRP. For example, an enterprise in Country A wishing to pay a supplier in Country B might convert its domestic CBDC into XRP via a licensed exchange, transfer the funds through the XRP ledger, and have the recipient bank in Country B convert the XRP back into their local CBDC. In this way, XRP could serve as a global settlement instrument—comparable in function to how SWIFT messaging relies heavily on USD today. Similarly, central banks might consider holding portions of their reserves in Bitcoin, viewing it as a neutral “digital gold.”

BIS analysts have explored this line of thinking, identifying a model in which unbacked crypto (such as Bitcoin or Lightning Network) plays a role in the tokenized settlement infrastructure: “BIS analysts identify a third model of tokenized settlement where unbacked crypto (e.g., Bitcoin/Lightning, as in the Strike example) provides the settlement layer” (BIS, 2021). Building on this, one could envision a scenario where Bitcoin's network forms part of a global liquidity pool, enabling central banks to pledge Bitcoin collateral for bilateral credit arrangements or perhaps to pool funds into a shared reserve to support currency swaps.

This dual-layer approach appears to align with BIS's conceptual models of CBDC interoperability. The BIS outlines three models—from compatible systems, to interlinked networks, to a shared platform (BIS, 2021). A realistic starting point might be Model 2, where each country retains control of its own CBDC infrastructure while establishing interoperability through shared settlement rails, such as XRP or Bitcoin. Over time, this might evolve toward Model 3: a more integrated platform where various CBDCs and crypto assets co-exist. However, even in such a future scenario, the importance of robust governance would remain: “the multinational governing council would set the rules for access, and each central bank would control how its CBDC is used on the shared platform” (BIS, 2021).

To summarize this line of thought: domestic economic activity would continue using CBDCs, thus preserving national control, while cross-border flows would “hop” onto the crypto layer. Bitcoin, with its fixed supply and decentralized architecture, might serve as a neutral store of value—earning its nickname “digital gold”—while XRP could provide efficient, low-cost settlement. BIS researchers acknowledge XRP as a relevant

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example: “BIS researchers explicitly cite Ripple’s XRP as an example of a private settlement asset and marketplace model” (BIS, 2021). This suggests that under appropriate regulatory oversight and limited to cross-border roles, such innovations could potentially enhance system efficiency without eroding sovereign authority. RippleNet’s On-Demand Liquidity model, for instance, could be adapted for central bank use, assuming it complies with standards set by international bodies like the IMF and BIS (BIS, 2021).

Conclusion

This study has demonstrated that while the existing international monetary order continues to function, its durability increasingly rests on fragile foundations. Empirical evidence indicates that although the United States dollar maintains its status as the primary reserve and settlement currency, the combined forces of digitalization and multipolarity are widening structural fissures. These dynamics are unlikely to recede; on the contrary, they are expected to intensify, gradually eroding the viability of a unipolar monetary framework. The persistence of the current system should therefore be understood not as evidence of stability, but as an interlude preceding transformation.

A central implication of this analysis is that future monetary arrangements will be shaped not only by state-led initiatives such as central bank digital currencies (CBDCs), but also by instruments that have emerged organically through market processes. Historical precedent—from the adoption of gold as a settlement anchor to the institutionalization of SWIFT—illustrates that systemic instruments often originate outside formal policy design before being incorporated into global structures. In this respect, Bitcoin and XRP exemplify how market-born technologies may complement or even substitute sovereign monetary tools. Bitcoin functions as a scarcity-based, politically neutral asset with growing acceptance as a potential reserve analogue, while XRP demonstrates technical capacity to facilitate low-cost, real-time cross-border liquidity. Their relevance lies not in normative preference but in their empirical adoption and functional alignment with the requirements of a digital and multipolar economy.

The broader lesson is that international monetary governance must engage with, rather than dismiss, these developments. If left unmanaged, the convergence of digitalization and multipolarity risks producing fragmentation, competing financial blocs, and heightened systemic volatility. By contrast, deliberate institutional design—akin in ambition, if not in form, to Bretton Woods—could transform these same dynamics into the foundation for a more resilient and inclusive order. A Bretton Woods 2.0 would thus need to integrate sovereign CBDCs with market-born digital assets, embed neutrality and transparency into global payment infrastructures, and provide credible multilateral mechanisms for supervision and crisis management.

In conclusion, the cracks in the present monetary order are not merely signs of weakness but signals of transition. The challenge for policymakers, scholars, and institutions is to interpret these signals as an opportunity to proactively shape a digital, multipolar, and rules-based architecture. Whether this transition unfolds through coordination or fragmentation will determine the degree of stability and legitimacy in the next phase of the international monetary system.

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