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# Re-evaluating Monetary Policy in a Post-Pandemic World – Inflation, Digital Currencies, and the Shifting Role of Central Banks

Antonieta Lima

## ABSTRACT

The relevance of the COVID-19 pandemic lies in the fact that it proved to be a basic disruptor of economic systems worldwide, thereby requiring unusually large quantities of monetary easing. This paper sets about examining the transition from a period described as “the great moderation” to a state characterized by a high level of inflation, the role of the Central Bank Digital Currencies (CBDC) as a mechanism for promoting economic stability, and the extension of central banking mandates to include considerations related to climate change and equity. This paper proposes a new framework for managing the economy in a digitalized and sustainable world.

**Keywords:** CBDC, Central bank mandates, Inflation, Monetary policy, Post-pandemic economics, Quantitative easing.

## Introduction

The global economy is in the midst of a “regime shift” in monetary policy. For decades, central banks have been in the midst of the “great moderation,” a paradigm characterized by low inflation and stagnating economic growth.<sup>1</sup> However, the recent global economic downturn due to the COVID-19 pandemic has reinvigorated inflationary pressures that have not been seen in 40 years.<sup>2</sup> While the literature has explored the overall shift in monetary policy, this paper seeks to answer an even more nuanced and timely research question: How do central banks incorporate digital currency systems and climate risk management without compromising price stability and risking fiscal dominance? This paper seeks to move beyond the literature and provide a concrete solution with the development of an Integrated Policy Framework (IPF). The IPF is conceptualized as a multi-objective optimization problem where the central bank must balance three primary pillars<sup>2,3</sup>:

- The Monetary Pillar: Using the interest rate paths ( $i_t$ ) and Quantitative Tightening (QT) to stabilize inflation ( $\pi$ ) around the 2% target, with real-time estimates of  $r^*$ .
- The Digital/Stability Pillar: Using remuneration tiering and holding caps of CBDCs to improve the efficiency of the transmission mechanism, while keeping bank disintermediation risks under strict control.
- The Sustainability Pillar: Using climate stress tests and “Green QE” in the context of market neutrality to address transition risks, without falling prey to the siren of “mission creep.”

By clearly articulating these objective functions and their particular policy constraints, this paper proposes a schematic for the “new nexus” of central banking in

the 2020s. The post-pandemic era has not only challenged the efficacy of traditional inflation-targeting frameworks but also accelerated the digitalization of finance. The rapid rise of private cryptocurrencies and stablecoins has forced a re-evaluation of the “sovereignty of money,” leading to the rapid development of central bank digital currencies (CBDCs).<sup>3</sup> Furthermore, there is an increasing consensus that central banks can no longer remain “neutral” observers to systemic threats like climate change and rising wealth inequality.<sup>4</sup> This paper provides a comprehensive evaluation of these shifts, arguing for a redesigned monetary framework that balances price stability with the demands of a digitalized and sustainable economy.

The rest of this paper will be structured as follows. Section “The Economic Framework: Externalities and the Social Cost of Carbon” will discuss the drivers behind the surge in post-pandemic inflation. Section “Methods and Approach” will compare the macro-financial indicators of the Great Moderation period with those of the current period of high volatility. Section “The Digital Frontier: CBDCs and the Future of Money” will discuss the digital frontier, including CBDCs and “weaponization of finance.” Section “Barriers to Action: The Political Economy of Climate Change” will discuss the political economy of climate change and mandate expansion. Section “The Fiscal-Monetary Nexus: A New Era of Coordination” will describe the fiscal-monetary link, including the “debt trap,” before offering policy recommendations in the concluding sections.

## The Economic Framework: Externalities and the Social Cost of Carbon

The biggest concern of the post-pandemic world has been the sudden change away from the long-standing 2% inflation target levels, which have been the norm for global markets for several decades. Between 2021 and 2024, headline global inflation rose to multi-decade highs, sparking a drastic shift away from quantitative easing to monetary normalization.<sup>5</sup>

## The Convergence of Shocks: Demand-Pull and Cost-Push

The sudden increase in inflation was not a result of a policy mistake but a coordinated convergence of a set of unprecedented macroeconomic shocks:

- Too much monetary expansion: during the period from 2020 to 2022, the balance sheet of the Federal Reserve grew from approximately 4.2 trillion to almost 9 trillion.<sup>6</sup> With the “infinite QE” policy, the nation gained liquidity but experienced a growth in the M2 money supply, which rose above the creation of goods and services.<sup>7</sup>

- Fiscal-monetary policy synergies: unlike the recovery after 2008, due to the pandemic, there were huge direct transfers to households.<sup>8</sup> When combined with loose monetary policies, it led to a huge surge in aggregate demand, which came at a time when supply constraints were tightening.<sup>9</sup>
- Structural supply chain failures: The “just in time” production systems were found to be vulnerable during lockdowns caused by the pandemic.<sup>10</sup> This resulted in a shortage of key components, such as semiconductors and building materials, causing vertical price rises that extended into other sectors.<sup>11</sup>

Standard monetary theory often references the Taylor rule as a guide for interest rate adjustments, expressed as:

$$r = p + 0.5y + 0.5(p - 2) + 2$$

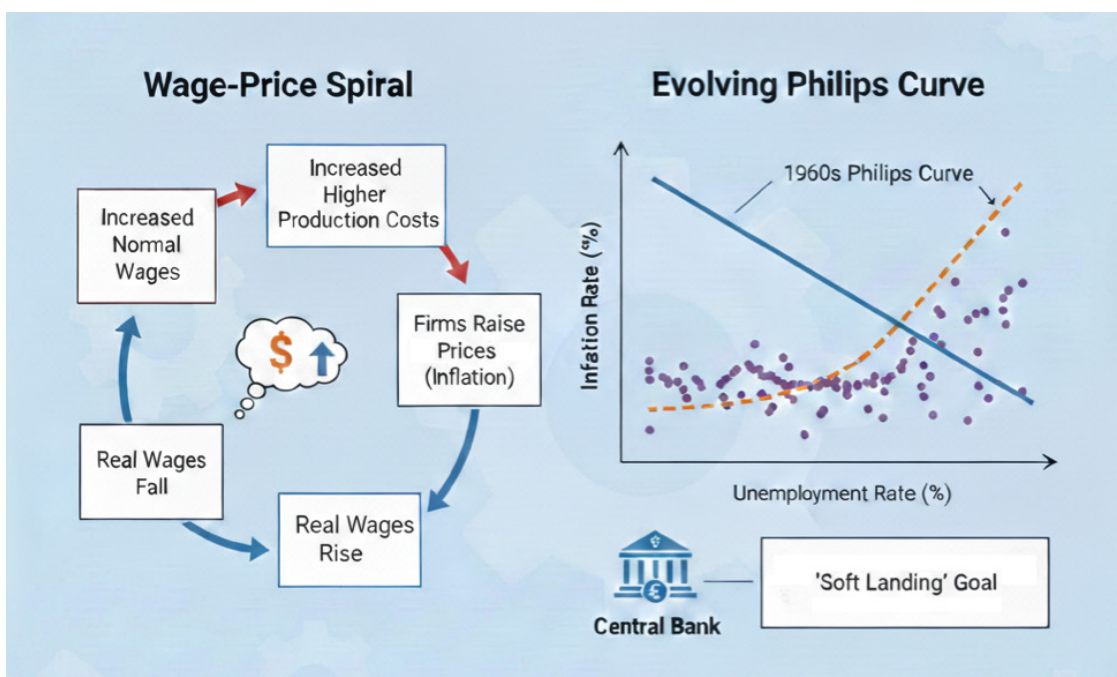
In this model,  $r$  is the proposed nominal interest rate,  $p$  is the inflation rate, and  $y$  is the output gap. During the period from 2021 to 2023, the difference between the suggestion made by the Taylor rule and actual rates attained a historically high value.<sup>12</sup> Central banks deliberately chose to operate “behind the curve” to ensure a strong recovery in the labor market. This has been argued to have led to the inflationary expectation becoming “unanchored”<sup>13</sup> among many economists. However, a crucial task is yet to be accomplished regarding the definition of the natural interest rate ( $r^*$ )—the level where interest rates do not stimulate or slow down economic activity. This is a topic of debate regarding a potential increase in  $r^*$  influenced by<sup>14</sup> increased public

debt, high transitional costs for a green transition,<sup>15</sup> or a transition from “offshoring” to “friend-shoring,” which could potentially ensure supply-chain integrity.<sup>16</sup>

**Wage–Price Spirals and the Phillips Curve**

Meanwhile, with the real wages affected by inflation, the labor forces in various industries demanded increased nominal wages, thus raising concerns about a “wage–price spiral.”<sup>17</sup> During this time, there was a significant change in Phillips curves, whereby the relationship between unemployment and inflation became less linear compared to the earlier decades.<sup>18</sup> Central banks have had to adapt to new frameworks to capture the non-linearities in the labor market dynamics while trying to manage a “soft landing,”<sup>19</sup> as represented in Figure 1.

The wage–price spiral is said to form a self-reinforcing feedback cycle in which an uncompetitive labor market allows workers to successfully make claims for higher nominal wages, leading in turn to increased costs of production for firms and, consequently, inflationary perceptions become de-anchored as workers make new wage claims, fueling endless wage–price spirals in turn.<sup>17</sup> The structural change is represented in this way through Phillips Curves, transformed in their shape and form over time from a traditional “flat profile” during the great moderation period to an excessively steep profile in this post-pandemic period in particular,<sup>18,19</sup> in such a way that any slight cut in unemployment is now accompanied by excessively aggressive inflation reactions, pushing central banks toward drastic interest-rate increases in order to pursue instead a “soft-landing strategy” toward achieving 2%



**Fig 1 | Dynamics of the wage–price spiral and the evolving Phillips curve**

Source: The figure illustrates the mutually reinforcing interaction between wage growth, production costs, and inflation expectations, along with the transition from a flatter Phillips curve during the Great Moderation to a steeper curve in the post-pandemic period. Conceptual representation by the author.

inflation without having any inflationary spark accelerate unemployment rates toward recession peaks.

### Methods and Approach

This paper employs a **qualitative and quantitative synthesis** of post-pandemic macroeconomic data and central banking literature. The methodology is designed to evaluate the shift from the “Great Moderation” to the current “regime shift” by integrating theoretical models with empirical observations.

### Literature Selection and Analytical Criteria

The literature was selected based on its relevance to the evolution of central bank mandates and the digitalization of finance.

- **Core Frameworks:** Theoretical foundations are drawn from established monetary principles, including the **Taylor Rule** for interest rate guidance and the **Phillips Curve** for labor market dynamics.<sup>19</sup>
- **Thematic Scope:** The selection covers four primary pillars: inflationary drivers (demand-pull vs. cost-push), the architecture of Central Bank Digital Currencies (CBDCs), climate-related financial risks, and the fiscal-monetary nexus.
- **Source Diversity:** Peer-reviewed journals (e.g., *Journal of Monetary Economics*), working papers from international institutions (BIS, IMF, NBER), and official central bank communications (Federal Reserve, ECB) were synthesized to provide a global perspective.

### Quantitative Analysis and Data Sources

The empirical analysis focuses on the “Pandemic Pivot” period, primarily spanning **2020–2024**, with the 2010–2019 decade serving as a baseline for the “Great Moderation.”

### Data Acquisition and Indicators (Table 1)

- **Global Headline Inflation:** Sourced from IMF and World Bank data to track the rise from ~2.5% pre-pandemic to the ~8.8% peak.
- **Fed Balance Sheet:** Data derived from Federal Reserve Board of Governors’ releases, tracking the expansion from approximately **\$4.2 trillion** to **\$9.0 trillion**.
- **Public Debt:** Compiled from IMF Global Debt Databases, expressed as a percentage of global GDP.

### Computational Methods: Taylor Rule Gaps

To analyze the “behind the curve” phenomenon, the paper evaluates the gap between suggested and actual nominal interest rates using the Taylor Rule formula:

$$r = p + 0.5y + 0.5(p - 2) + 2$$

- **Variables:**  $r$  represents the suggested nominal interest rate,  $p$  is the current inflation rate, and  $y$  is the output gap.
- **Application:** This computation was used to demonstrate the historically high divergence between 2021 and 2023, where central banks prioritized labor market recovery over the rule’s suggested rate hikes.

### Reproducibility and Validity

The findings are reproducible through the use of publicly available datasets from the Federal Reserve Economic Data (FRED) and the BIS Statistics Warehouse. Qualitative assessments regarding CBDC architectures and climate risks are based on comparative analysis of the “two-tier” distribution models and the NGFS (Network for Greening the Financial System) climate stress test frameworks.

### The Digital Frontier: CBDCs and the Future of Money

With the continued reduction in the use of physical money across the world, central banks are venturing into digital to ensure that people have access to secure national money within the changing financial environment.<sup>20</sup> This has been driven by the “encroachment” of digital money by the private sector, which has been seen to potentially affect the transmission of monetary policy.<sup>21</sup> Central Bank Digital Currencies (CBDCs) are digital money that has been designed to see the convenience of digital money and security of a direct claim to money of a country’s money (Table 2).<sup>22</sup>

### Motivations for Digital Sovereignty

The pressure to issue a CBDC is fueled by three major strategic purposes. First, in developing countries, digital currencies are viewed as a solution to financial inclusivity, considering that they form a cost-effective and secure mode of exchange.<sup>23,24</sup> Second, in developed countries, digital currencies are used as a shield for their unit of accounts from developing global “stable coins” and decentralized finance platforms that have the ability to threaten their power over money matters.<sup>25,26</sup> Third, in the wholesale sector, their coupling with DLT is set to give an entirely new life to international cash transfers by virtue of their ability to support “atomic settlement,” cutting down the days needed in transits facilitated by traditional systems by as much as seconds.<sup>27,28</sup>

The presence of a CBDC changes the standard monetary transmission mechanism. To examine the trade-off between improved transmission and financial stability, we set up a stylized macro-financial model in which the central bank sets the CBDC interest rate  $i^{CBDC}$ .

**Table 1 | Key macroeconomic indicators: Pre-pandemic versus 2024/2025**

Indicator	Unit	Pre-pandemic (2019)	2024/25	Source
Global headline inflation	% y/y	3.5	4.3	IMFWEO
Public debt	% GDP	83.3	93.2	IMF
Federal funds rate	%	1.75	3.75–4.00	Federal Reserve
Global growth	% y/y	2.8	3.2	World Bank
USD reserve share <sup>1</sup>	%	60.7	56.9	COFER

<sup>1</sup>Excludes unallocated reserves; reflects a shift toward non-traditional reserve currencies. Sources: International Monetary Fund (IMF), Bank for International Settlements (BIS), World Bank Global Economic Prospects.

Source: Estimates for 2025 are based on IMF and World Bank consensus projections. Reserve shares exclude unallocated reserves.

**Table 2: Comparison of digital currency architectures**

Feature	Retail CBDC	Wholesale CBDC	Private Stablecoins
Primary users	General public	Financial institutions	Crypto/DeFi users
Issuer	Central bank	Central bank	Private entities
Legal tender status	Yes	Yes	No
Main objective	Financial inclusion and payments efficiency	Interbank settlement efficiency	Digital-native payments
Settlement speed	Near-instant	Atomic (seconds)	Variable (on-chain)

Source: Adapted from BIS and IMF CBDC design frameworks.

$D$  denotes commercial bank deposits and  $C$  denotes CBDC balances. The household utility function includes the liquidity services provided by both:

$$U = \int_0^{\infty} e^{-\rho t} [u(x_t) + v(D_t, C_t)] dt$$

Where  $v(D, C)$  represents the elasticity of substitution between private and public money. If  $i^{CBDC} \geq i^{Deposit}$ , then there is a “corner solution” where all deposits are siphoned off, that is,  $D \rightarrow 0$ , which collapses the bank lending channel. To avoid this, the IPF adds the constraint:

$$i^{CBDC} = \begin{cases} i^* - \delta & \text{if } C \leq \bar{C} \\ -\infty & \text{if } C > \bar{C} \end{cases}$$

where  $\delta$  is a safety spread and  $\bar{C}$  is a quantitative holding cap (e.g., €3,000). This ensures  $v(D, C)$  remains imperfectly substitutable, preserving the credit multiplier.

**Risks to Financial Intermediation and Stability**

Any systemic risk with regard to the disintermediation of banks will be a natural consequence of such a shift toward a digital currency system. If households perceive a CBDC as more convenient or safer than bank deposits, it is quite conceivable that there could be a run from one type of deposit to the other.<sup>29</sup> This would mean a siphoning off of liquidity from the private banking system, thereby increasing the cost of funding for loans, which would impact the credit multiplier for economic growth.<sup>30,31</sup> To translate this framework into practical guidance, model simulations indicate a strict “two-tier” distribution model. In this framework, the central bank only delivers the wholesale ledger and settlement layer, while the retail interface, KYC, and customer service are handled by commercial banks

and regulated payment providers. Moreover, to avoid “digital bank runs,” the policy must adopt remuneration caps or tiering. This requires a zero or low interest rate on retail balances up to a certain threshold (e.g., €3,000), with penalty rates or hard caps on balances above that threshold to ensure that the CBDC is a medium of exchange and not a store of value that competes with commercial bank deposits.<sup>32–35</sup> Such digitalization of money also has implications related to the “weaponization of finance,” or the geopolitical leverage of payment systems and reserve access. Following the freezing of Russian central bank reserves in 2022, “confiscation risks” have accelerated interest in CBDCs and other settlement assets. Yet, primary data seems to reveal a more complex reality than that of “de-dollarization” and related geopolitical implications. According to COFER data from the IMF (2025), the share of the US dollar in global allocated funds has been experiencing a gradual decline, or “stealth de-dollarization,” from 70% in 2000 to 57%–58% in 2025. However, this has not been replaced by any other currency, such as the Renminbi, which holds less than 3%. Rather, diversification has moved into “non-traditional” currencies (such as the Australian and Canadian dollars, and the South Korean won) and gold, with the World Gold Council noting that central bank purchases have broken records, exceeding 1000 tons per year in 2024. BIS analysis supports the argument that the dollar’s “exorbitant privilege” is maintained by its deep liquidity and the lack of credible alternatives that can offer the same “safe asset” role, indicating that the transition toward a multipolar monetary system is slow and hampered by strong network effects (Table 3).<sup>36,37</sup>

**Barriers to Action: The Political Economy of Climate Change**

The post-pandemic period has reinforced this paradigm shift in understanding the extent of central banking, as central banks increasingly drift from their

**Table 3 | Outcomes from early CBDC adopters**

Pilot Name	Economy	Status (2025)	Key Policy Outcome
e-CNY	China	Expansion	Payment competition and limited bank disintermediation due to zero remuneration
Sand Dollar	Bahamas	Live	Improved inclusion across dispersed islands; limited transaction velocity
eNaira	Nigeria	Live/Redesign	Low adoption linked to fintech competition and complex KYC
DCash	ECCU	Post-outage	Operational resilience concerns highlighted by the system outage

Sources: Sources include BIS CBDC Tracker and IMF country reports (2023–2025).

traditional concerns with price stability toward new concerns related to systemic risks facing society at large.<sup>36</sup> The “function creep” described above is based on an increasing understanding of the interconnectedness of macroeconomic stability, environmental sustainability, and social cohesion.<sup>37</sup>

**The Time Horizon Mismatch**

The central banks have increasingly come to understand that climate change should not only be considered from a political externality perspective but also as one of the largest threats to their stability.<sup>38</sup> To be specific, actionable advice in this area demands the establishment of a “clear line of demarcation” between supervisory assessment and active allocation in order to prevent “mission creep.” Moreover, the standards set in the area of climate stress testing should be codified as mandatory disclosure requirements, specifically in relation to the resilience of bank capital in the face of “Green Swans.” Conversely, active balance sheet policies such as Green QE should be circumscribed by principles of “market neutrality” unless an explicit market failure is identified. Finally, in order to preserve the institutional mandate in the area of climate change, central banks should prioritize climate stress testing as a risk management tool, reserving the area of carbon pricing and industrial subsidies to the fiscal authorities (Table 4).<sup>39–45</sup>

**The Collective Action Problem**

It is widely acknowledged that there is an academic consensus on the serious implications of the use of unorthodox monetary policies on an ongoing basis.<sup>46</sup> Quantitative easing, per se, has always led to the expansion of asset values (equities and property) to activate the “wealth effect,” but with ownership of assets being mostly concentrated in the top household decile, it is increasingly contributing to worsening wealth disparities.<sup>47,48</sup> By contrast, the inflation tax due to post-pandemic price accelerations is mostly hitting poor households, for whom larger components

of their salaries are spent on inelastic commodities such as energy and food.<sup>49</sup> It is under this stress that Central Banks are forced to assume an increasingly “inclusive” stance toward interest-rate cycle impacts on various socio-economic groups with regard to ensuring their institutional autonomy under public support over time.<sup>50</sup> In order to reach the desired depth and intensity, we would supplement the requested chapters with an analysis of chapter 5 on the “Fiscal-Monetary Nexus (FMN) and how governments and central banks interact today,” and chapter 6 on the Geopolitics of Finance.

**The Fiscal-Monetary Nexus: A New Era of Coordination**

One of the most significant changes in the post-pandemic world has been a confluence of Independent Monetary Policies and Government Fiscal Policies. During “the great moderation” period of globalization, it was generally agreed that Central Banks should be made completely independent in order to avoid “inflationary policy” biases of politicians.<sup>51</sup> Yet in relation to the scale of the pandemic, a degree of coordination which had been felt during wartime went through (Table 5).

**From Independence to Interdependence**

Thus, as governments began to execute major relief efforts, central banks began to encourage this expenditure by maintaining low borrowing costs in order to finance it on their side. This ends up causing the situation of fiscal dominance, where the need to finance the major debt in the economy of the country may tend to affect the ability of the central bank to set interest rates.<sup>52,53</sup> This ends up affecting the major mandate of the central bank as the primary goal, which is to maintain the country’s price level stability. However, the exit strategy from this “pandemic-induced” accommodative stance is limited by the sheer size of central banks’ balance sheets. As of early 2025, the aggregate balance sheet sizes of these “Big Four” central banks (Fed, ECB, BoJ, and BoE) are still relatively high.

**Table 4 | Climate risk transmission channels to the financial system**

Risk Category	Driver	Impact on the Financial System	Mitigation Tool
Physical risk	Extreme weather events	Asset damage; insurance losses	Climate stress tests
Transition risk	Regulatory and policy shifts	Stranded assets; valuation losses	Green bond purchases; portfolio tilting
Market risk	Uncertainty and repricing	Commodity and asset price volatility	Disclosure standards and transparency rules

Source: Based on NGFS and central bank supervisory frameworks.

**Table 5 | Evolution of the fiscal–monetary nexus across policy regimes**

Feature	Great Moderation (Pre-2020)	Crisis Era (2020–2022)	New Nexus (2024+)
Policy stance	Strict independence	Active coordination	Interdependence
Primary goal	Price stability	Liquidity and survival	Stability and debt sustainability
Main risk	Policy lag	Inflation spike	Fiscal dominance
Exit strategy	Rate hikes	Continued expansion	Quantitative tightening

Source: Author synthesis of post-pandemic monetary–fiscal dynamics.

Balance sheet statistics (USD Trillion Equivalent):

- 2019 Q4: ~15.2 Trillion
- 2022 Peak: ~31.1 Trillion
- 2025 Jan (Est): ~24.8 Trillion (reflecting active QT)

Moreover, the pace of quantitative tightening (QT) has to be balanced with  $r^*$ . Current HLW (2023/24) estimates indicate that while  $r^*$  has indeed moved higher from its 2019 trough, it remains structurally lower than nominal rates. Therefore, it is argued that central banks are maintaining a “restrictive” policy stance. For instance, with respect to the US, HLW estimates  $r^*$  at 0.9%–1.1% (in real terms) based on its COVID-19 adjusted estimate. Nominal rates of 4% imply a significant positive real rate gap, which may result in over-tightening if supply-side shocks persist.<sup>54</sup>

**The “Debt Trap” and the Exit Strategy**

It has been noted that the central banks cannot afford to enter a “debt trap,” given the unprecedented levels of public debt across the globe, which may result in a fiscal crisis in the case of strong monetary policy measures in the highly leveraged economies.<sup>54</sup> In order to prevent this phenomenon of fiscal dominance, new coordination protocols are necessary. These should involve the adoption of so-called “debt anchor rules” whereby support by the central bank during crises depends on the adoption by the government of a transparent medium-term consolidation plan. Moreover, the start of QT should be subject to rules based on the level of market depth rather than rigid calendars. This is because the progress of QT should be linked to the level of liquidity in the economy, such as the bid-ask spreads in the sovereign bond market, to prevent the triggering of a so-called “taper tantrum” and a systemic surge in borrowing costs that would force the central bank to give up its inflation-fighting mandate too quickly.<sup>55,56</sup> Crucially, these cycles of tightening are calibrated based on the estimation of  $r^*$ , that is, the long-run natural rate of interest consistent with full employment and stable inflation. Measurement of  $r^*$  has been achieved through semi-structural models, which filter out  $r^*$  from GDP growth rates and inflation. The Laubach–Williams (LW) model forms the base of these measurements, where  $r^*$  is specified as a function of trend potential GDP growth and other persistent factors through a state-space approach. The Holston–Lauba–Williams (HLW) model is an extension of this model, which incorporates the US, Canada, and Euro Area economies. Subsequently, this model has been modified since 2020 to reflect the volatility

of the period. Whereas the traditional HLW estimates implied a steady path of  $r^*$  to zero, the post-pandemic adjustments (HLW 2023) incorporate time-varying volatility and “COVID-adjusted” potential output series to separate one-off price shocks from sustained changes in the neutral interest rate. This requires policymakers to balance these structural estimates with market expectations derived from surveys to assess whether the “Great Moderation” of ultra-low interest rates has actually passed or merely been temporarily paused.<sup>57</sup>

**Geopolitics and the International Monetary System**

The post-pandemic world is further marked by the phenomenon of “fragmentation”—a shift from the hyper-globalization of the early 2000s to a more multipolar and regionalized world order.<sup>57</sup>

**Weaponization of Finance and De-Dollarization**

“The increasing application of the US dollar and the Swift system as “weapons of geopolitics” is accelerating the quest for an alternative.” Numerous states are currently researching “friend-shoring” or “final settlement in local currencies” in order to “decrease vulnerability to events in the world of international finance.”<sup>58</sup> The geopolitical changes represent an essential area in the evolution of international CBDC-bridges like “project mBridge.” This solution provides the means to “facilitate international transactions in digital form, independently of the underlying financial infrastructure supported in North America (Table 6).”<sup>59</sup>

**The Rise of the Multipolar Monetary Order**

What is being observed is the “early stages of a shift toward a ‘multipolar’ monetary system in which a greater role for several ‘major’ currencies: The euro, the renminbi, and even gold could become even more important than they were in a reported ‘dollar-centered’ system even as ‘The U.S. dollar continues to be the preeminent international currency’ but a decreasing part of ‘international reserves.’” The shift represents a challenge to central banks in a “flow of capital shaped more by views of national security than by interest rate differentials.”<sup>47</sup>

**Conclusion**

Post-pandemic crisis and entering the new economic steady state make it clear that rules of the previous “Great Moderation” era—times of low volatility and stable inflation—cannot be applied within the new world environment anymore. Although the basic toolkit of solutions by Bernanke<sup>1</sup> and even the measures

**Table 6 | Global reserve currency composition and multipolar trends**

Currency/Asset	2000 Share (%)	2024 Share (%)	Strategic Driver
US dollar	~71	~58	Sanctions risk; geopolitical leverage
Euro	~18	~20	Regional integration
Renminbi (RMB)	~0	~3	Trade settlement expansion
Other currencies and gold	~11	~19	Diversification and hedging

Source: Shares refer to allocated foreign exchange reserves. Data from IMF COFER and BIS statistics.

outlined by Powell<sup>2</sup> were based on the traditional approach of zero-bound interest rates and liquidity injections to preserve the markets that collapsed, it turned out that the appropriate blend of supply-side shock and monetary-fiscal cooperation<sup>9,13</sup> showed that inflation was not quite “transitory”. This shift in thought is further bolstered by the argument of Summers<sup>37,56</sup> that the scale of fiscal transfers combined with accommodative monetary policy posed an imminent risk of overheating. Conversely, Goodhart<sup>17</sup> postulates that we are facing a demographic reversal – the shrinking global labor supply is structurally pushing inflation upwards, independent of any actions taken by central banks.

To achieve this, evolution in turbulence calls for an “Integrated Policy Framework” where “price stability” becomes the “North Star” but not alone, as it has been in the past. With the end of the era of “predictable low volatility” gradually approaching, in the new era of turbulence, Auer & Böhme have insisted that “the central bank of the future will have to be a highly sophisticated manager of digital infrastructure” for “maintaining monetary sovereignty via CBDCs.” On the other hand, in today’s changing turbulence of financial markets, Bolton has underscored that “the central bank of the future will also have to be a very vigilant supervisor of climate-related financial risks” to avoid “Green Swan” events that tend to “undermine the financial core.” Nevertheless, an opposing voice mandated by Waller<sup>45</sup> suggests that this involvement in climate issues may end up politicizing this institution and thus compromising its independence and mandate to fight inflation.

Finally, based on numerous perspectives, it can be concluded that the modern central bank needs to play a strategic role in ensuring fiscal stability in a world of higher debt levels. This is achieved while avoiding the “trap of fiscal dominance” that is determined by debt servicing. As posited by Sargent & Wallace<sup>52</sup> within the framework of the present scenario, the implications for the coordination game between the fiscal authority and the central bank have become necessary rather than nice. A future-proof development and evolution of the central bank as a multi-dimensional actor between and within technology, the environment, and sovereign debt are consequently the only feasible way to ensure that there is a sustainable and fair global economy in and under the digital age.

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