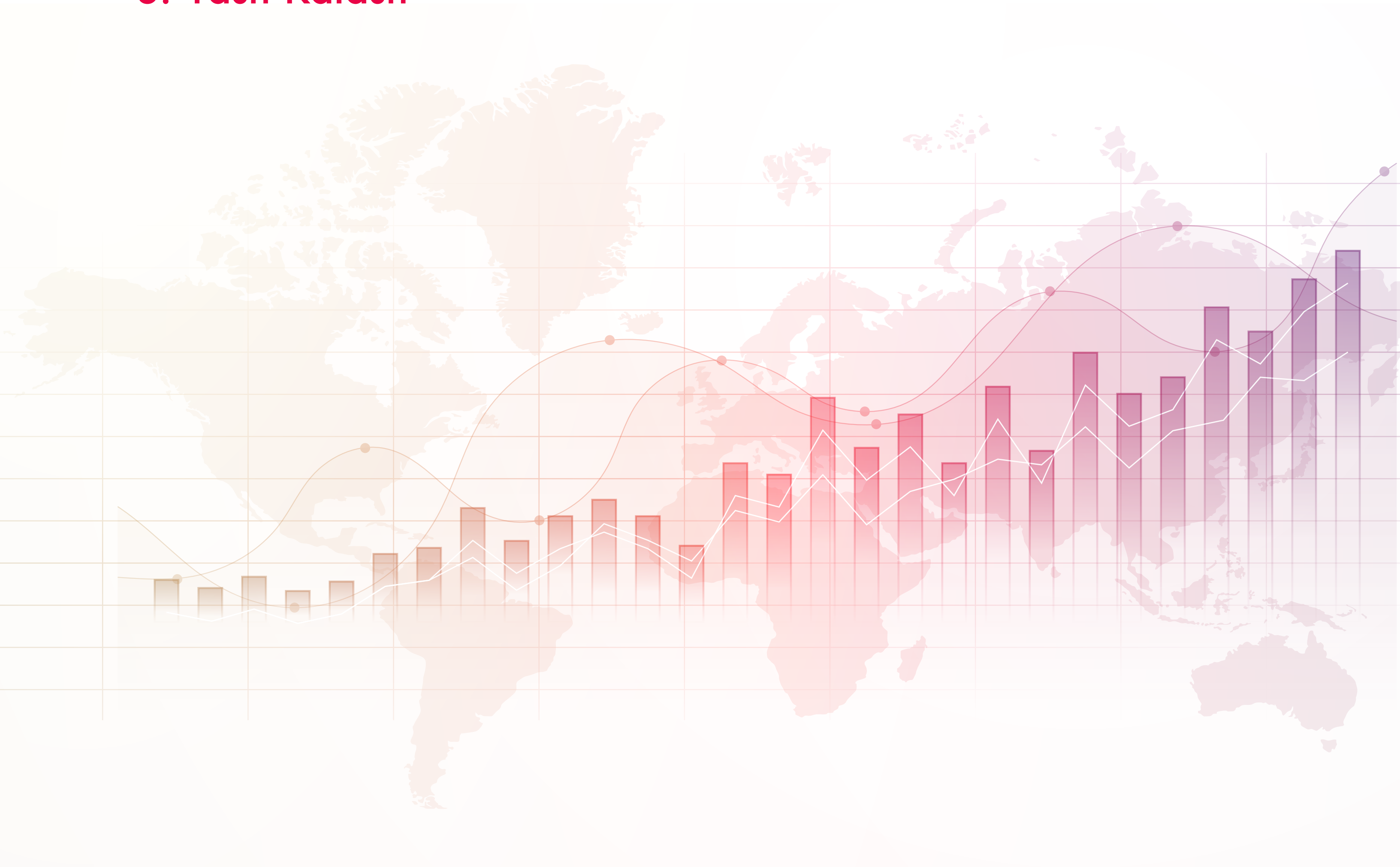
Centre for International
Governance Innovation

CIGI Paper No. 324 — June 2025

Exploring Potential Impacts of Global Shifts on Financial Systems and Assets

S. Yash Kalash



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About the Author

S. Yash Kalash is research director of digital economy at CIGI. He is an expert in strategy, public policy, digital technology and financial services. He has experience in emerging markets across India, MENA (Middle East and North Africa) and the Asia-Pacific and a distinguished track record advising governments and the private sector on emerging technologies. His expertise spans various industries, including fintech, artificial intelligence and digital assets, and their impact on geopolitics. His career includes key roles at Roland Berger, the Government of India, Adani Group and KPMG, where he spearheaded strategic digital projects, advised clients on their digital assets and AI strategy, and informed policy and regulatory developments. With an M.Sc. in management from Imperial College London and a B.Sc. in international relations and politics from the University of Bath, Yash combines deep strategic insight with strong training, making him a versatile and impactful leader in the field of digital economy.

Executive Summary

This paper explores the evolving relationship between geopolitical transformations and technological innovation, and their combined impact on the future of global financial assets and systems. Through a scenario-based methodology, it examines three plausible geopolitical configurations — a multipolar order, a fragmented global economy and a renewed cooperative global governance framework — and assesses their implications for currency stability, investment patterns and market volatility.

The analysis then integrates technological developments — particularly in artificial intelligence (AI), blockchain and decentralized finance (DeFi) — into each geopolitical scenario to evaluate how these technologies may amplify, stabilize, or disrupt global financial systems. The paper argues that while emerging technologies offer potential for financial inclusion and efficiency, they also risk exacerbating fragmentation if regulatory divergence and infrastructure disparities persist.

Drawing on current trends and foresight tools, the paper concludes by proposing strategic policy responses focused on regulatory flexibility, global coordination, infrastructure investment and cybersecurity. These measures aim to help states, financial institutions and multilateral bodies navigate the increasing intersection of geopolitical uncertainty and rapid technological change.

Introduction

The intricate dance between geopolitical dynamics and financial systems has never been more pronounced than in today's hyperconnected world. As nations vie for economic dominance and geopolitical influence, the global financial landscape is experiencing seismic shifts. In a globalized world, geopolitical dynamics — from trade wars and sanctions to regime changes and regional conflicts — are all playing a role in shaping economic conditions and financial markets across the world. Currency fluctuations, stock market volatility and shifting investment flows are just some of the tangible manifestations of this interconnectedness. As scholars Carlos Góes and Eddy Bekkers (2022) put it, "Taken together and mutually reinforcing each other, these forces can cause the global economy to experience higher inflation, lower growth and significant welfare losses in times of geopolitical tension."

At the same time, the role of technology in shaping financial systems cannot be understated. Emerging technologies such as AI, blockchain, DeFi and digital currencies are transforming how capital moves across borders, how investments are structured and how financial institutions operate. These technological innovations interact with geopolitical shifts, often reinforcing or complicating existing global financial trends.

Exploring "what-if" scenarios is thus crucial for understanding how these intersecting dynamics might evolve in the future. These scenarios allow for the anticipation of potential risks and opportunities, guiding policy makers, financial institutions and investors in preparing for diverse geopolitical outcomes. In an increasingly volatile and unpredictable global order, such foresight is indispensable for mitigating risk and seizing opportunities.

The objective of this paper is to analyze various potential global geopolitical scenarios and their implications for financial assets. It will also assess how technological developments may redefine financial systems under different geopolitical conditions. Specifically, this study will examine how shifts in global power — such as the rise of a multipolar world, and the potential fragmentation or unification of global governance — could affect global markets, currency systems and investment strategies. In addition, the paper will explore how technological innovations may both exacerbate and mitigate these geopolitical forces.

By examining these intersecting forces, this paper aims to provide a comprehensive understanding of the future of global finance, highlighting the need for proactive strategies to manage uncertainty in both geopolitical and technological realms.

Geopolitical Scenarios and Their Impact on Financial Assets

The global financial system is deeply intertwined with geopolitical dynamics. As power shifts between nations and regions, financial markets react to changing trade policies, military alliances and regulatory frameworks. In a world where the balance of power is constantly evolving, understanding how different geopolitical scenarios may unfold is essential for anticipating their impact on financial assets. This section explores a series of potential global orders, each defined by distinct geopolitical configurations, and examines how these scenarios could shape currency markets, investment strategies and the overall financial landscape.

Scenario 1: Global Power Play — A Multipolar World Emerges

The collapse of the Soviet Union in 1991 marked a seismic shift in the global geopolitical landscape. The end of the Cold War, the decades-long ideological and military standoff between the United States and the Soviet Union, ushered in a new era of international relations. With the Soviet Union's demise, the bipolar global order, characterized by the rivalry between these two superpowers, gave way to a unipolar system. The United States, emerging as the sole global hegemon, wielded significant economic, military, diplomatic and technological power. Political scientist Samuel Huntington (1999) described the new status of the United States as "the lonely superpower able to impose its will on other countries," due to its significant economic, military, diplomatic and technological might. And as scholar Francis Fukuyama (1989) famously argued, the new era marked the "end of history," a triumph of liberal democracy and capitalism.

The American-dominated world order that emerged following the Cold War has faced increasing challenges in recent years. The rise of regional powers, such as China, India, Russia and Brazil, has significantly altered the global balance of power. These nations have demonstrated the capacity to challenge US influence, both regionally and globally, and possess substantial economic, military, diplomatic and technological capabilities. As these emerging powers gain prominence, there is an increasing discourse around the possibility of a multipolar order. However, this remains contested, as some analysts argue the United States continues to retain disproportionate geopolitical and financial leverage. The future may thus reflect an asymmetrical order, wherein multipolarity coexists with US dominance in key domains.

A multipolar world represents a global order in which power is more evenly distributed across several major players, including the United States, China and the European Union, and rising regional powers such as Russia and India. In this scenario, no single superpower dominates the global stage. Instead, rivalries among these key actors drive shifts in trade patterns, military alliances and economic policies. New alliances such as the Quadrilateral Security Dialogue and AUKUS (Australia-UK-US security alliance) may be broadened to include like-minded states to counterbalance rising powers, while existing alliances such as the North Atlantic Treaty Organization could expand to consolidate influence.

In this environment, rivalry among the leading powers will increase, influencing global trade and security policies. Strategic competition will manifest in the form of economic sanctions, trade wars and differing regulatory frameworks, which may result in regional spheres of influence. The diffusion of power will also lead to shifts in global governance structures, as international institutions such as the World Trade Organization (WTO) and the International Monetary Fund (IMF) adjust to accommodate the interests of multiple powers and new institutions such as the New Development Bank and the Asian Infrastructure Investment Bank. Military alliances will also evolve, as regional powers strengthen their influence and play a more significant role in security and economic partnerships.

The financial implications of a multipolar world would be profound. Increased competition among reserve currencies, particularly the US dollar, the euro and the Chinese yuan, would lead to greater volatility in currency markets. As nations diversify their reserves and reduce dependence on any one currency, alternative digital currencies could also emerge as credible competitors to traditional fiat currencies and assets, further complicating global financial markets. In terms of investment, this scenario would likely trigger a shift toward safer assets, such as gold and, potentially, its digital cousin bitcoin, as uncertainty surrounding geopolitical developments increases. Investors may seek more stable options as regional powers assert themselves, making global markets more fragmented and unpredictable. Emerging and developing markets that do not possess the clout of the core BRICS nations[1] but are of significant importance, such as Nigeria, Türkiye, Mexico and Indonesia, could face additional challenges, with capital flowing away from politically unstable regions toward more secure developed markets.

Regional stock exchanges would also become increasingly influential as trade blocs — such as the European Union, the Association of Southeast Asian Nations and potential new alliances in Africa — could expand their influence in global trade. These blocs would create new financial hubs and trading patterns, reshaping the flow of capital and investment across borders. This decentralization of financial power would lead to a more complex global market, characterized by regional financial centres vying for dominance and cooperation within trading blocs becoming increasingly critical.

Scenario 2: The Great Unravelling — Fragmentation of the Global Economic Order

Another plausible scenario is that the global economic order becomes increasingly fragmented as populism and nationalism rise, with countries prioritizing sovereignty and domestic agendas over international cooperation. This shift may lead to the weakening or collapse of key Bretton Woods institutions, such as the WTO, the World Bank Group (WBG) and the IMF, which have traditionally played central roles in maintaining global economic stability and facilitating cooperation. The result would be a world marked by trade protectionism, deepened economic regionalism and a lack of coordinated global governance, creating significant political and economic instability.

US President Donald Trump's second administration, which has been characterized by economic unilateralism, withdrawal from multilateral institutions and tariff-based diplomacy, has significantly heightened the probability of this fragmented global scenario. In particular, deregulation of emerging technologies such as AI and cryptocurrencies under such a regime may amplify divergence between national technology frameworks and undermine global regulatory convergence.

The breakdown of international institutions under this fragmented global order would signal a retreat from multilateralism. Countries may become more inward-looking, focusing on protecting their domestic industries through tariffs, trade barriers and restrictive economic policies. Global trade flows may reduce, as nations opt for regional alliances or unilateral strategies, further exacerbating geopolitical tensions. Political instability would further increase as nationalist governments assert their independence from global norms and agreements, leading to unpredictable shifts in economic and foreign policies.

The rise of populism and nationalism would create a highly volatile financial environment, with significant implications for global financial markets. One of the key effects would be the rise in political risk premiums. As political and economic instability grows, investors may seek to demand higher returns to compensate for the increased risks of operating in unpredictable markets. This, in turn, would drive up borrowing costs for governments and businesses, particularly in regions experiencing heightened political tensions or economic mismanagement. For example, in recent years countries such as Argentina and Türkiye have had significantly higher bond yields compared to more stable economies such as the United States or Germany. These increased yields serve as a tool to compensate investors for potential risks such as government instability, inflation or default (Song 2024).

Currency devaluations and capital flight are also likely outcomes in this fragmented world. As economic policies become more protectionist and unpredictable, confidence in national currencies declines, particularly in politically unstable regions. Investors may seek safer assets in more stable economies, leading to currency devaluations and the flight of capital from vulnerable markets. Such changes could further destabilize economies that

1 The intergovernmental organization was named after the first five member states' initials in English: Brazil, Russia, India, China and South Africa. BRICS+ includes the newest members: Egypt, Ethiopia, Indonesia, Iran and the United Arab Emirates.

are already struggling with political instability or isolation from the global economy.

With fewer opportunities for international cooperation, capital flows would slow, leading to reduced liquidity in global market and cross-border investments due to heightened protectionism and political uncertainty. As countries retreat into regional economic systems the process of deglobalization would be accelerated, contributing to slower economic growth and less integration between financial markets.

The overall result would be higher volatility in global markets. With increased uncertainty around trade policies, economic stability and international relations, financial markets would experience frequent fluctuations. Investors would face heightened uncertainty, leading to more frequent episodes of market instability as global financial systems become more fragmented and less resilient to shocks.

However, it is important to note that fragmentation may not always result in instability. It is plausible that the world could evolve into two or more relatively stable blocs with independent governance structures and internal cohesion — each maintaining its own financial and regulatory ecosystem. In such a bifurcated order, financial actors might adjust through bloc-specific investment strategies and risk frameworks, echoing a "good fences make good neighbours" paradigm.

Scenario 3: A Unified Global Order — Global Governance and Cooperation

A less likely but analytically relevant scenario is one of global cooperation among major states, brought about by a need to coalesce to solve issues affecting all of humanity. In this case, states would seek to strengthen global governance and prioritize international cooperation to foster a more stable and predictable world order. Institutions such as the United Nations and Bretton Woods organizations such as the WBG and the WTO would gain renewed significance as key players in maintaining global financial stability and addressing shared challenges (for example, trade, climate change and economic inequality). However, while this scenario envisions increased stability and greater international alignment, it is likely that the current system will undergo only incremental reforms, primarily driven by the countries that benefit most from the existing global order, such as the United States and other advanced economies.

The established powers, particularly the United States and its allies, will continue to shape the reform agenda to preserve their dominant positions within the global financial and political system. While there may be an expansion of representation for emerging markets within institutions such as the IMF and the World Bank, these changes will likely be cosmetic, ensuring that the core structure of the Bretton Woods institutions remains intact.

As a result, while the international system may achieve stability in the sense of continuity, it will not sufficiently address the demands of emerging powers and markets. Critical challenges — such as the need for significant investments in global infrastructure, climate finance and a just transition to sustainable energy — may only be partially addressed, with the interests of emerging economies still marginalized within the broader framework. This could create friction as emerging markets, which have grown in economic and geopolitical importance, continue to push for a more equitable share of influence in global governance.

In financial markets, the continued dominance of the US dollar would persist. Although there might be more inclusion of emerging market currencies in global reserves, the US dollar would remain the primary reserve currency, reinforcing existing imbalances in the global financial system. This dominance could limit the scope of global financial reforms, as the United States and other established powers would resist significant changes that threaten their economic and geopolitical influence.

The scope of Bretton Woods institutions may expand to accommodate the growing complexity of global finance and provide more representation to emerging markets. However, their capacity to maintain financial order and prevent future crises may remain constrained by the unwillingness of established powers to concede substantial control. As a result, the global financial system may face continued issues, such as inadequate responses to the infrastructure deficits in developing regions, insufficient funding for climate adaptation and the persistence of exclusionary practices that marginalize the interests of smaller or emerging economies.

Given present geopolitical tensions and the retrenchment of multilateralism, this scenario must be treated as more aspirational than probable in the near term. While this scenario offers a degree of financial stability through global coordination and incremental reforms, it is unlikely to generate the systemic changes required to fully address the needs of a rapidly evolving global landscape. The limited nature of reforms and the prioritization of the interests of dominant powers mean that emerging markets will continue to struggle with issues such as insufficient representation, limited access to global financial resources and continued dependence on the established economic order. Given these limitations, this scenario seems less likely to materialize in its idealized form.

These geopolitical scenarios are not isolated from technological dynamics. Rather, each prospective global order would shape and be shaped by distinct technological trajectories. For instance, the emergence of rival geopolitical blocs would likely lead to bifurcated digital ecosystems, while a more unified global governance model might support harmonized technology regulation. The following section builds on this logic by exploring how these global scenarios interact with emerging technological paradigms.

Technological Landscape: Assumptions and Financial System Implications

The rapid evolution of technology is profoundly transforming the global financial landscape, with several key trends poised to reshape the way financial markets and institutions operate. Innovations such as AI, blockchain, quantum computing and 5G+ (enhanced fifth-generation) network technology are revolutionizing financial transactions, data processing and risk management. AI is increasingly used for algorithmic trading, risk assessment and automation of financial services, while blockchain technology underpins the rise of DeFi, enabling peer-to-peer financial transactions without the need for traditional intermediaries. The development of quantum computing promises to enhance computational power, potentially revolutionizing data security and financial analytics. Additionally, 5G and 6G (fifth- and sixth-generation) network technologies will increase the speed and efficiency of financial transactions, further integrating digital platforms with real-time financial operations.

These advancements are complemented by the growing prominence of fintech (financial technology) and DeFi, which are democratizing access to financial services, disrupting traditional banking models and facilitating more efficient cross-border transactions. However, the adoption and impact of these technologies depend on various geopolitical, economic and regulatory factors, which could either accelerate global financial integration or contribute to market fragmentation. This section will explore the potential implications of these technological trends on the global financial system, considering how they may shape the future of finance under different global scenarios.

Scenario 1: The Age of Disruption — Rapid Technological Innovation and Global Adoption

The world experiences an accelerated pace of technological advancement, with widespread global adoption across both developed and emerging markets. Underpinning this transformation is the establishment of a global regulatory framework that promotes and supports technology-driven innovation. This regulatory coherence encourages the seamless integration of emerging technologies such as AI, blockchain and DeFi into the global financial system.

With the widespread adoption of AI, financial decision making, risk management and asset allocation are increasingly automated. AI's ability to process vast data sets at unprecedented speeds enables more accurate and efficient investment strategies, improving market predictions and reducing operational risks for financial institutions. AI-driven platforms enhance the efficiency of credit risk assessment, investment portfolio management and fraud detection, leading to a more optimized and secure financial ecosystem.

The emergence of blockchain-based financial markets further transforms the global financial landscape. Blockchain's decentralized ledger technology reduces reliance on traditional financial intermediaries such as banks, enabling faster and more transparent transactions. This results in the proliferation of digital assets, including cryptocurrencies, which become a key component of global financial portfolios. DeFi platforms facilitate peer-to-peer lending, trading and other financial services without the need for conventional banks, reshaping the fundamental structure of financial markets.

New financial products and platforms, driven by AI and blockchain, lead to increased efficiency and liquidity in financial markets. These innovations enable real-time trading, improve access to financial services in underserved regions and reduce transaction costs. Cross-border financial transactions become more streamlined, enhancing global capital flows and fostering greater financial inclusion. As blockchain and DeFi platforms gain prominence, traditional financial institutions such as banks, clearing houses and payment processors could face significant disruption. Conventional banks, which have long acted as intermediaries for payments, loans and investments, may see their role diminish as more users shift to decentralized systems that offer lower fees, greater efficiency and increased transparency (Consultative Group of Directors of Financial Stability 2023).

The decline of conventional banking models would have a ripple effect on the broader financial ecosystem. For instance, banks' reduced role in facilitating transactions could lead to a decline in traditional financial assets such as savings accounts, money market instruments and even government bonds, as users migrate toward more dynamic digital assets and decentralized platforms. This shift would also create competitive pressure on banks to adapt by incorporating digital assets and blockchain technology into their services.

In response to these changes, banks would need to either innovate by adopting fintech solutions or risk becoming obsolete. Many may choose to integrate AI and blockchain technologies into their operations, offering hybrid models that combine traditional banking services with decentralized financial products. This could lead to the rise of "cognitive banks" or fintech-enabled financial institutions that leverage cognitive computing, AI, machine learning and natural language processing to enhance their banking services and operations and, theoretically at least, provide customers more personalized, efficient and intelligent financial services (Harry, Thomas and Hatim 2023). Cognitive banks could further leverage the blockchain for secure and efficient transactions at an unprecedented scale.

However, for banks that fail to adapt, the rise of digital assets and decentralized platforms could result in significant losses in market share, particularly among younger and tech-savvy consumers who are more willing to engage with non-traditional financial systems. Traditional financial assets such as stocks, bonds and even currencies could also lose ground to new asset classes such as cryptocurrencies, stablecoins and tokenized assets, which offer higher returns, greater liquidity and enhanced security.

While the rapid adoption of these technologies promises numerous benefits, it also presents regulatory and operational challenges. Ensuring the security, privacy and stability of AI-driven and blockchain-based systems will require robust global regulatory frameworks. Governments and regulatory bodies will need to collaborate to establish uniform standards that protect users and ensure the integrity of financial systems, while still encouraging innovation.

Additionally, the rise of digital currencies and decentralized financial platforms could pose risks to national monetary policies and central banks' ability to manage inflation and economic stability. For instance, if digital currencies gain widespread acceptance, they could reduce the demand for traditional fiat currencies, potentially undermining central banks' control over money supply and interest rates (Azar et al. 2022). Regulators will need to strike a balance between fostering technological growth and preserving the stability of the financial system.

Scenario 2: The Great Digital Divide — Unequal Technological Progress and Fragmentation

This scenario assumes that technological fragmentation driven by unequal resource distribution, geopolitical divergence and strategic decoupling across different regions will create a fragmented global financial landscape. While some countries rapidly integrate advanced technologies such as AI, blockchain and DeFi, others will remain dependent on traditional financial systems. This divergence is driven by varying levels of technological capacity, economic priorities and regulatory frameworks across the globe.

A key assumption underpinning this scenario is the global fragmentation of technology standards, compute capabilities, energy resources and regulatory frameworks. Geopolitical rivalries — particularly between major powers such as the United States, China, India and the European Union — lead to the development of distinct technological ecosystems, each governed by differing rules and regulations. While some regions embrace decentralized, technology-driven financial systems, others maintain a cautious approach, favouring traditional, centrally regulated financial structures. The lack of coordination and global standards would create barriers to the integration of new technologies. Access to advanced computation hardware and constant cheap energy would limit certain nations from developing the foundational capabilities to develop market-fit applications that leverage these emerging technologies, resulting in a fragmented global financial system.

This divergence in technological capabilities would create silos within the global financial system. Investors, companies and consumers operating in technologically advanced regions will enjoy faster transaction speeds, lower costs and greater transparency, while those in less technologically advanced areas will face higher transaction costs, slower processes and less access to innovative financial products. This disparity will exacerbate existing global economic inequalities, making it more difficult for emerging markets to compete on the global stage.

As a result of this technological fragmentation, the global financial system would become divided into distinct blocs, each with its own standards and regulatory environments. For example, countries within the European Union might adopt a highly regulated financial framework that emphasizes data protection and consumer rights, while regions such as Southeast Asia or parts of Latin America could embrace more decentralized, innovation-driven financial systems. Meanwhile, the United States and China might develop parallel competing technological standards for digital currencies, blockchain infrastructure and financial regulation.

These divergent financial systems would create significant challenges for cross-border transactions and investments. The lack of harmonized standards would further complicate international trade, as companies would need to navigate different regulations, transaction protocols and currency mechanisms. Additionally, cross-border investments may become riskier and more complex as financial systems operate on incompatible technological platforms. For instance, investors accustomed to the transparency and security of blockchain-based systems may hesitate to invest in markets that still rely on traditional banking infrastructures with less transparency and higher fraud risks. This fragmentation would reduce global liquidity and hamper the free flow of capital across borders, stunting global economic growth.

In a fragmented technological landscape, cybersecurity risks and financial fraud are likely to increase. As different regions adopt varying levels of technological innovation, their ability to protect financial systems from cyberthreats will vary significantly. Advanced financial markets that utilize blockchain may be more resilient to fraud due to the inherent security features of distributed ledger technology, such as encryption and decentralized verification. However, less technologically advanced regions will remain vulnerable to cyberattacks, as their outdated infrastructures lack the necessary protections to guard against increasingly sophisticated cybercriminals.

The lack of global regulatory coordination would further exacerbate this problem. With divergent cybersecurity standards, it would become easier for bad actors to exploit weaker systems in less regulated regions, using them as entry points into global financial networks. This could lead to the rise of international financial fraud, money laundering and cybercrime, undermining trust in the global financial system as a whole. Regions with weaker regulatory frameworks may be disproportionately affected, as they may struggle to implement robust cybersecurity measures, leaving their financial institutions and consumers vulnerable to attacks.

Emerging markets would be particularly vulnerable in this scenario. Many developing nations lack the resources to invest in cutting-edge financial technologies or regulatory reforms needed to adopt DeFi systems. As a result, they may remain dependent on traditional banking systems, limiting their ability to participate in the global digital economy. These nations may face barriers to attracting foreign investment as technologically advanced regions dominate capital flows due to their efficiency, security and innovation, and will be unable to reap the benefits of financial innovation, increased productivity and financial inclusion, thereby leading to greater economic divergence between rich and poor nations.

Scenario 3: The Great Technological Freeze

In contrast to the previous scenario, this scenario assumes technological stagnation due not to resource gaps, but rather to conservative regulatory stances, public skepticism and energy constraints. In this scenario, the global pace of technological advancement slows significantly due to a combination of regulatory hurdles, political and societal resistance to innovation due to widening economic gaps, and energy consumption. Rather than embracing rapid changes in AI, blockchain, DeFi and other emerging technologies, conservative regulatory environments take hold in many key regions. Governments prioritize stability, risk aversion and the protection of established industries, which results in a financial landscape dominated by traditional systems and instruments. This stagnation has profound implications for both developed and emerging economies, as well as for the overall efficiency and inclusiveness of global finance.

A fundamental assumption in this scenario is that governments and regulators, particularly in developed economies, adopt conservative approaches to fintech and digital innovation. Fearing the potential risks associated with decentralized systems, cybersecurity threats and disruptive business models, policy makers implement stringent regulatory frameworks that restrict the adoption of new financial technologies. This reluctance to innovate is also driven by concerns over financial stability, the protection of legacy financial institutions, climate change and net zero goals and societal skepticism toward disruptive technological changes. As a result, the progress of technological advancements in the financial sector is stifled, and traditional financial systems continue to dominate.

Emerging markets, recognizing the opportunity to leapfrog past developed economies, could leverage these emerging technologies to transform their financial systems and economies. Many of these countries, particularly those in the BRICS+ bloc, are already investing in digital public infrastructure and partnering with the private sector to scale digital financial services. For example, India's Unified Payments Interface (UPI) and Brazil's Pix have become models of public sector-led digital infrastructure that drive financial inclusion and modernization. UPI and Pix enable real-time, low-cost transactions at a scale, bringing millions of previously underserved consumers into the formal financial system. These systems represent a shift in how financial services are delivered, bypassing traditional banking models and introducing digital solutions that enhance efficiency, accessibility and inclusivity. Four out of the world's five top real-time payments markets are emerging markets: India, China, Thailand, Brazil and South Korea, making 92.9 billion real-time payments in 2021, and forecasted to grow to 356.9 billion by 2026 with a compound annual growth rate of 30.9 percent, outpacing advanced economies such as the United States, Canada and the United Kingdom (ACI Worldwide 2022).

These innovations are not isolated efforts but are part of a broader national development vision that seeks to create public sector-driven digital infrastructure that can be augmented by the private sector capability to scale up the adoption of emerging technologies, thus creating efficient financial ecosystems that could compete with, or even surpass, the stagnating financial systems of developed countries. This push toward alternative financial systems is motivated by two core objectives:

→ **Advancing internal development:** For emerging markets, technology is seen as the great equalizer — a means to leapfrog into developed country status and tackle persistent issues such as poverty and inequality. By investing in digital infrastructure and embracing technologies such as blockchain and AI, emerging markets can enhance their economic efficiency, promote financial inclusion and build more resilient economies that are less dependent on external institutions. The use of digital assets and innovative payment systems such as offline central bank digital currencies, to provide internet-free digital payment capabilities to those who reside in remote areas where internet penetration remains low, could be of significant value. Furthermore, these innovations would potentially support efforts to improve transparency, reduce corruption and accelerate economic growth in underserved regions.

→ **Deleveraging and de-dollarization:** Many emerging markets seek to reduce their dependence on financial institutions dominated by advanced economies and on the US dollar, which currently prevails in global trade and finance. The use of alternative payment systems and digital currencies could provide emerging markets with greater financial sovereignty, shielding them from sanctions, currency fluctuations and other geopolitical pressures that disproportionately impact economies reliant on the dollar. In particular, BRICS Pay, a novel payment system, is designed to create an ecosystem in which member countries can trade with one another without depending on traditional financial systems such as Swift (Electronic Payments International 2024). The development of alternative payment systems, such as BRICS Pay, and initiatives to create cross-border digital currencies or payment frameworks that bypass Western-dominated systems such as SWIFT, are critical steps in this direction. Moreover, emerging markets are exploring the possibility of creating alternative reserve currencies to reduce their reliance on the US dollar and the broader Western financial system. The drive to "de-dollarize" is central to the motivation of emerging markets as they seek to reduce their vulnerability to fluctuations in US monetary policy and geopolitical tensions (Dolgin and Turner 2024). For instance, discussions within the BRICS bloc have included the possibility of creating a new reserve currency backed by the bloc's combined reserves and natural resources, which could further weaken the dominance of the US dollar in global trade and finance.

Policy Recommendations and Strategic Responses

The great economist and philosopher Adam Smith famously said, "Virtue is more to be feared than vice, because its excesses are not subject to the regulation of conscience" (Fulmer 2022).

Smith's quote suggests that while virtuous actions such as innovation and progress are generally seen as positive, they can become harmful when taken to extremes, especially without adequate checks and balances. Similarly, stifling innovation in the name of safeguarding potential systemic threats of technological innovation can curtail the progress of human society.

Flexible Regulatory Frameworks

The rapid emergence of financial technologies presents both opportunities and challenges for policy makers. To effectively navigate this evolving environment, governments and regulators must adopt a strategic approach that balances the need to foster innovation with the imperative to ensure financial stability. Overly restrictive regulations can stifle innovation and delay the adoption of beneficial financial technologies, while insufficient regulation can lead to systemic risks and market vulnerabilities. Therefore, a balance must be struck through the following approaches.

To begin with, governments must design regulations that offer clear guidelines for financial institutions and fintech companies without being overly prescriptive. Doing so entails creating adaptable regulatory frameworks that can evolve alongside technological advancements. For instance, policy makers should focus on principles-based regulation that allows companies to innovate while ensuring compliance with core financial stability, consumer protection and anti-money-laundering principles.

Furthermore, implementing regulatory sandboxes to test new technologies safely must be given impetus. Regulatory sandboxes allow fintech start-ups and established financial institutions to test new technologies and business models in a controlled environment. These sandboxes provide a space where innovations can be piloted under regulatory supervision, enabling regulators to understand potential risks and benefits before scaling the technology. Governments could encourage the use of regulatory sandboxes to explore innovative financial products, such as blockchain-based payment systems, digital currencies and AI-driven financial advisory services, while ensuring adequate consumer protection and risk management mechanisms.

Given the global nature of financial markets, international collaboration is critical in managing the intersection of technological innovation and geopolitical tensions. Fragmented regulatory approaches could lead to inefficiencies, increase systemic risk and hinder cross-border transactions. As such, governments must engage in multilateral efforts to harmonize technology standards and financial regulations. The rapid rise of digital currencies, DeFi systems and AI-driven financial technologies requires greater regulatory alignment across countries. Governments should actively participate in international fora such as the Financial Stability Board, the Bank for International Settlements and the IMF to develop harmonized standards for financial technologies. These efforts should focus on establishing common frameworks for cybersecurity, data privacy and regulatory oversight to ensure that the benefits of new technologies can be realized without introducing systemic risks.

Global Coordination on Standards

International cooperation is also essential in addressing global challenges such as cybersecurity threats, money laundering and financial fraud, which are increasingly prevalent in the digital financial ecosystem. Governments should collaborate through global platforms such as BRICS+, the Group of Twenty, the Group of Seven and the United Nations to develop coordinated responses to these challenges, ensuring that technological advancements in finance do not exacerbate existing risks. For instance, cross-border frameworks for regulating digital currencies and DeFi can help prevent regulatory arbitrage and reduce the risks of financial instability caused by divergent national regulations.

Strategic Investment in Infrastructure and Education

A critical component of fostering innovation in fintech is ensuring that the workforce possesses the necessary skills to engage with and develop these technologies. Governments should invest in science, technology, engineering and mathematics education to cultivate a new generation of workers who are proficient in AI, blockchain, cybersecurity and other emerging technologies. Educational programs should be developed in collaboration with industry experts and academic institutions to ensure that students are equipped with the technical and practical skills required for a rapidly changing financial ecosystem.

Upgrading technological infrastructure to support advanced financial systems is fundamental to the effective adoption of advanced financial technologies, which requires modern and robust technological infrastructure. Governments must invest in upgrading digital infrastructure, such as high-speed internet, cloud-computing capabilities and data centres, to support the real-time processing and security demands of AI, blockchain and digital currencies. This investment is especially critical in regions where technological infrastructure remains underdeveloped, as a lack of digital connectivity could hinder financial inclusion and limit access to innovative financial services.

Public-Private Partnerships for Cybersecurity and Secure Innovation Development

As financial systems become increasingly digital, the risk of cyberattacks and data breaches grows exponentially. Cybersecurity should be a top priority for governments as they integrate new financial technologies. Governments must allocate sufficient resources to protect critical financial infrastructure from cyberattacks, particularly in areas such as payment systems, banking networks and financial markets. The strategies governments should adopt include developing national cybersecurity strategies that focus on securing both public and private financial systems, as well as ensuring that financial institutions comply with stringent cybersecurity regulations. Regular stress testing of financial systems against cyberthreats should also be mandated to assess vulnerabilities and strengthen resilience.

Governments should collaborate with private sector cybersecurity experts to stay ahead of emerging threats. This collaboration can involve public-private partnerships to develop cutting-edge security protocols, share intelligence on cyberthreats and establish rapid response mechanisms in the event of a cyberattack. Financial institutions should be encouraged to adopt best practices in cybersecurity, such as end-to-end encryption, multi-factor authentication and advanced threat detection systems. Moreover, cross-border cooperation in cybersecurity is essential to protect against threats that can easily transcend national boundaries.

Conclusion

In an era of unprecedented geopolitical shifts and rapid technological innovation, many challenges and opportunities lie ahead for the global financial system, as the IMF has well expressed: “Geopolitical tensions threaten financial stability through a financial channel. Imposition of financial restrictions, increased uncertainty and cross-border credit and investment outflows triggered by an escalation of tensions could increase banks’ debt rollover risks and funding costs” (Catalán et al. 2023). The intricate interplay between geopolitical forces and emerging technologies will shape the future of financial assets, investments and markets in profound ways. The potential scenarios explored — ranging from a multipolar world of heightened competition to a fragmented global economic order, or even a unified cooperative global system — offer distinct challenges and opportunities for the global financial landscape.

The transition from a unipolar world dominated by a single superpower to a multipolar or even fragmented system presents heightened risks for financial markets, characterized by greater volatility, currency fluctuations and regional disparities in growth and investment. The prospect of a multipolar world raises the likelihood of rivalry and economic protectionism, with nations seeking to assert their influence through divergent trade policies and sanctions. The rise of regional powers, competing reserve currencies and decentralized financial ecosystems will further complicate capital flows, pushing investors to re-evaluate risk management strategies and to, potentially, retreat to safer, more traditional assets.

At the same time, the rapid evolution of technologies such as AI, blockchain, DeFi and digital currencies is reshaping the financial system in ways that defy traditional models. While technological innovations offer the promise of increased efficiency, transparency and inclusivity, they also pose new risks — particularly in a world where global governance remains fragmented. Divergent regulatory approaches, geopolitical tensions and uneven access to technology will create a digital divide, potentially exacerbating inequalities between developed and emerging markets.

As financial systems evolve, the global order’s direction will critically determine the shape of financial markets. The challenge for policy makers, financial institutions and investors is to anticipate these shifts and develop strategies that foster innovation while safeguarding financial stability. International cooperation, regulatory foresight and strategic investment in infrastructure and education will be paramount to navigating this uncertain future.

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