



Geopolitical **Risk Index**

Geopolitics of De-Dollarization

IMPLICATIONS OF A SHIFTING MONETARY ORDER FOR
GLOBAL FIRMS

CONSULTING GROUP 1

Gianluca Battaini - 3146929

Giovanni Emanuel Calvagna - 3159588

Simona Festa - 3324937

Leonard Grube - 3299938

Lucrezia Merico - 3162659

Antoine Thomas Picart - 3402949

Lukas Prommersberger - 3387702

Stefano Spataro - 3137087

Bocconi

Table of Contents

1. Introduction.....	2
2. The Dollar Didn't Win – It Was chosen: The Architecture of USD Dominance	3
a. Bancor vs Bullion: Two Visions of Post-War Monetary Order.....	3
b. From Gold to Oil: How the Petrodollar Locked in American Monetary Hegemony.....	4
c. The Architecture of Dollar Dominance	4
d. The Impossible Burden: How the Triffin Dilemma Made Dollar Dominance Structurally Unstable	5
3. The Dollar as a Weapon: Why States Are Betting on an Alternative	6
a. Sanctions, Ukraine and the Weaponization of the Dollar System.....	6
b. Who Wants Out and Who Has the Power to Leave?.....	7
c. The SDR That Never Was: Why the IMF's Answer Had Failed to Convince	9
d. BRICS and the Coalition of the Discontented: Collective Exit or Political Theater?....	10
4. De-Dollarization and Its Three Distinct Scenarios	11
a. Scenario 1: New Global Reserve System	11
b. Scenario 2: Fragmented Currency Blocs.....	11
c. Scenario 3: Accelerated Financial Decoupling.....	12
5. Impact of Global Reserve Currency on Businesses	13
a. Concentration of Currency Exposure in a Dollar-Centric System.....	13
b. Transmission of U.S. Monetary Policy: The Global Financial Cycle	14
c. Dependence and Capital Structure Asymmetries.....	14
d. Strategic Implications.....	15
6. Business Implications of Alternative Monetary Systems	16
a. Scenario-Based Risk Overview	16
b. Risk Exposure Matrix.....	19
c. Petroyuan and Russian-Indian Oil Trade Settlement: Risk Overview and Positioning in the Risk Exposure Matrix	21
7. Conclusion	24
8. Bibliography.....	26

1. Introduction

The international monetary system has, for a long time, revolved around the U.S. dollar. This dominance is not simply the outcome of market forces. It is the result of a mix of historical events, political choices and institutional arrangements that accumulated over time. As a consequence, the U.S. Dollar ended up being embedded almost everywhere: in trade, in finance and in payment systems. At that point, the distinction between economic power and political influence becomes less clear and this setup started to show tensions.

More countries, central banks and market players are questioning their dependence on the U.S. Dollar. This is what is usually referred to as de-dollarization. It is important to clarify that this process has not yet produced a real alternative to the dollar as a global reserve currency.

Today, something is clearly shifting and geopolitical tensions, the increasing use of sanctions, together with a more fragmented global environment, are playing a pivotal role. Nevertheless, these pressures do not affect all actors in the same way since in some cases they are a direct response to existing constraints; while in others, they reflect a more cautious attempt to limit exposures. Another category of proactive actors is taking a more strategic approach, gradually trying to build greater autonomy.

These dynamics are already visible at the firm level. Companies are increasingly exposed to changes in currency regimes, to shifts in payment infrastructures and to regulatory environments that are becoming less predictable. In other words, what looks like a macro shift quickly turns into an operational problem.

For this reason, the paper adopts a scenario-based approach that distinguishes between alternative trajectories of de-dollarization depending on their speed and intensity (as further developed in Chapter 6). These scenarios do not simply entail financial risks, they also generate operational and strategic challenges, all taking place in a context where uncertainty plays a central role and where predictability is inherently limited.

Building on this, the analysis shifts from a purely state-centric perspective to a more firm-oriented one and a key limitation must be pointed out: detailed firm-level information on currency strategies and geopolitical risk management is rarely disclosed. As a result, this paper relies on an industry-level perspective, treating it as a proxy for firm behavior. While not perfect, this approach makes it possible to observe concrete patterns in trade flows and settlement practices, which in turn provide meaningful insights into how firms are likely to react.

The empirical analysis focuses on two case studies in the energy sector: the emerging Petro Yuan framework between Saudi Arabia and China, and the Russian-Indian oil trade arrangements following the sanctions introduced in 2022. This sector is particularly relevant. Historically, it has been at the core of the petrodollar system and today it still remains strategically central in an increasingly multipolar world. At the same time, energy markets are among the first to reflect shifts in settlement currencies. The possibility that different currency hubs may coexist in energy trade therefore offers a useful lens to understand how

a transition away from a dollar-centric system might unfold, not through a single replacement, but through increasing fragmentation.

The remainder of the paper is structured as follows. Chapter 2 outlines the historical and institutional foundations of U.S. dollar dominance. Chapter 3 examines the growing incentives for states to reduce their reliance on the dollar. Chapter 4 introduces three potential de-dollarization scenarios. Chapter 5 analyzes the implications of the current dollar-centric system for firms, while Chapter 6 develops a risk exposure matrix and applies it to the selected case studies. Chapter 7 concludes.

2. The Dollar Didn't Win – It Was chosen: The Architecture of USD Dominance

a. Bancor vs Bullion: Two Visions of Post-War Monetary Order

As the Second World War drew to a close, the Allied Powers convened at Bretton Woods in July 1944 to design a new international monetary order. The conference was defined by a fundamental disagreement between its two principal architects: Harry Dexter White of the US Treasury, who proposed anchoring the new system to gold and the dollar, and John Maynard Keynes for the British delegation, who envisioned something altogether more radical (Bordo & Eichengreen, 1993).

Keynes was one of the first who envisioned a such a solution by introducing the concept of the “Bancor” at the Bretton Woods Conference in 1944. The Bancor would have been a new international currency usable to settle international imbalances and managed by a global central bank, the International Clearing Union (ICU). Countries would have received overdraft facilities of Bancor proportionate to their share of world trade. In addition, countries would then be disincentivized to deviate from the balance of payments, as there was a symmetrical penalty system for deficits and surpluses. This would drastically decrease the motivation to weaponize trade – a behavior also known as “geoeconomics”. National currencies would then maintain a fixed exchange rate against the Bancor, which in turn would be fixed to gold (de Bordo & Eichengreen, 1993).

In the end, the United States largely dictated the terms of the agreement while the reasons for this were straightforwardly political: Britain needed American money but America did not need the bancor. White’s counterproposal, namely a Stabilization Fund funded with a finite pool of national currencies and gold, with the dollar convertible to gold at \$35 per ounce, prevailed almost entirely on American terms. This is also partly due to the bancor suffering from genuine technical weaknesses. Keynes’s proposal of international collaboration entailed high complexity of execution and its perceived encroachment on national sovereignty. Another flaw was the risk of Bancor inflation following issuance at will of the ICU (Tout, 2023; Wagdi et al., 2023).

The outcome encoded a structural asymmetry into the post-war monetary order from the outset. Rather than a neutral clearing system with no privileged issuer, Bretton Woods placed

the dollar and thus, by extension, the American monetary policy at the center of global finance. Keynes warned against a system in which one nation's domestic currency became the world's reserve asset which became the very defining feature of the order that emerged (Bordo & Eichengreen, 1993; Farhi & Maggiori, 2016).

b. From Gold to Oil: How the Petrodollar Locked in American Monetary Hegemony

By the late 1960s, the US faced mounting pressures driven by Vietnam War expenditures which had expanded the supply of dollars well beyond what American gold reserves could credibly back. When President Nixon unilaterally suspended the gold convertibility in 1971, the formal architecture of Bretton Woods dissolved (Farhi & Maggiori, 2016; Bordo & Eichengreen, 1993). The question was what would replace it.

The answer came from geopolitics rather than monetary design. The energy crisis in connection with the Arab oil embargo in 1973 created the opening for a new arrangement. In 1974, Washington and Saudi Arabia established the Joint commission on Economic Cooperation, under which the latter would price oil in USD and recycle surpluses into US Treasury securities. In return, the US provided military protection and security guarantees to the Gulf. The petrodollar thus became the de facto replacement for the gold standard, providing a structural reason for the rest of the world to hold dollars (U.S. GAO, 1979).

The systemic consequences were self-reinforcing. Because every oil-importing economy needed USD to purchase the essential input of industrial production, permanent structural demand for the currency was guaranteed. Exporters recycled surpluses back into US financial markets, deepening their liquidity and lowering American borrowing costs. This so called "exorbitant privilege", as a systematic external demand for US assets made it possible to maintain lower interest rates and greater resilience to pressures on the balance of payments relative to other states. The dollar was no longer backed by gold but by oil dependency and American military credibility in the Gulf (IMF, n.d.).

c. The Architecture of Dollar Dominance

To understand how reserve currency status translates into geopolitical power, it is useful to trace the role of the USD across the currency value chain. At its foundation, international trade and borrowing is largely invoiced and settled in USD, meaning that even direct transactions between two non-American counterparties often require the conversion in and out of USD. This exposes the users to volatility their domestic monetary policy cannot control but only react to, resulting in central banks accumulating foreign exchange reserves which are essentially stockpiles of foreign currencies used to stabilize their own or service foreign debt. The USD has historically dominated these reserves, anchored in the Bretton Woods system and reinforced by the petrodollar arrangement, which locked in increasingly globalized trade flows and entrenched itself as the incumbent reserve asset (Quintana, 2025). The resulting structural demand for USD creates a self-reinforcing cycle (Goldman Sachs, 2025).

Underpinning both aforementioned layers is the payment infrastructure that enables communication between the counterparties and facilitates cross-border transactions, most notably the SWIFT messaging system, through which the vast majority of international bank transfers are routed and which serves as the primary channel for dollar-denominated transactions globally (SWIFT, 2025; Quintana, 2025).

d. The Impossible Burden: How the Triffin Dilemma Made Dollar Dominance Structurally Unstable

To sketch out scenarios about alternative global reserve systems, it is key to understand the structural contradiction inherent in any national currency serving as such role, which is named Triffin Dilemma after its originator, Robert Triffin. Triffin maps out that if a national currency serves as a global reserve, the issuer faces an irresolvable tension: on the one hand, the issuing country must run trade deficits to effectively supply the world with liquidity, while on the other hand, persistently maintaining such a deficit erodes confidence in the value of that very currency. In essence, the issuing country is permanently caught between maximizing short-term domestic objectives and credibility demands of the international monetary system it underwrites (Smaghi, 2011; Triffin, 1961; Farhi & Maggiori, 2016).

This structural imbalance will always exist as long as the US, or any other national currency for that matter, provides the global reserve currency, as they will always be tempted to pursue domestic objectives at the cost of international credibility (Farhi & Maggiori, 2016).

This imbalance attracted its most prominent contemporary critic in 2009, when Zhou Xiaochuan, then governor of the People's Bank of China, published a widely cited essay in the wake of the Global Financial Crisis. Zhou argued that the USD lacked anchoring to a stable benchmark and that, while its supply could adjust to global demand, the decisions governing that supply remained tied to economic conditions and sovereign interests of a single country – the United States (Zhou, 2009). The Global Financial Crisis had made the cost of that dependency vivid: American decisions, taken for domestic reasons, had produced systemic consequences that the rest of the world absorbed without recourse.

Triffin also outlined a possible escape from this dilemma through the introduction of a trusted, supranational, institutionally issued currency that floats against national currencies and could be used as a means of payment in international transactions (Smaghi, 2011). This is precisely the vision Keynes had advanced with the *bancor* and that the IMF attempted to operationalize, as outlined in the following section.

3. The Dollar as a Weapon: Why States Are Betting on an Alternative

a. Sanctions, Ukraine and the Weaponization of the Dollar System

The dollar's hegemony provides the US with unparalleled access to transactional information, cheaper borrowing and leverage over the global payments system that simultaneously allows it to enforce its norms beyond its territory (Gerding & Hartley, 2024). This dominance has historically rested on international confidence in not only the economic strength of the US but also institutional credibility of its monetary policy. This is not purely a matter of the economic size but reflects the interplay between deep and liquid capital markets and the perceived independence of the Federal Reserve, embedded in the more general stability of American governance (Goldman Sachs, 2025). Both are now under pressure from two directions: domestic developments are eroding institutional credibility and external geopolitical shifts that challenge the US hegemony and have prompted measures that risk undermining the very system the US depends on (Gerding & Hartley, 2024; Dunkley et al., 2026; Goldman Sachs, 2025).

On the domestic side, the US has accumulated a debt-to-GDP ratio that has reached record levels (IMF, 2025), raising questions about long-term soundness of dollar-denominated assets held as reserves by foreign central banks (Goldman Sachs, 2025). When confidence in US repayment capacity for these assets falters (due to over-indebtedness), so too does confidence in the USD as a store of value. Adding to this, US monetary policy has long faced criticism for being asymmetrically calibrated to domestic conditions while exporting volatility to the rest of the world. When the Fed tightens, emerging economies typically bear the cost through stronger dollar headwinds and more expensive dollar-denominated debt regardless of their own circumstances. This tension has been significantly amplified under the current Trump administration, whose repeated attacks on the independence of the Fed have unsettled global markets and contributed to a notable depreciation of the USD (Smith et al., 2026). Externally, the relative decline of the US hegemony has opened space for alternative powers, most notably China and the broader BRICS grouping, to assert themselves (J.P. Morgan, 2024; Glover, 2024; Quintana, 2025).

These structural shifts reached an inflection point with the increasing weaponization of the USD as a political instrument, most sharply illustrated by the imposed sanctions following Russia's attack on Ukraine (Wagdi et al., 2023; Cohen, 2024). The US operates two forms of sanctions: primary ones, prohibiting US entities to engage in business with the sanctioned party, and secondary ones which extend this prohibition to foreign states and companies conducting business with that party (Quintana, 2025). It is the latter that carry global systemic significance, as the USD is the primary instrument through which the US is able to impose and enforce these sanctions globally. While financial sanctions have been a US foreign policy tool since the Cold War [i.e. against Cuba from 1962 (U.S. Department of State, 2017)], their

deployment reached a new scale following Russia’s invasion of Ukraine: the US and its Western allies froze \$300bn of Russian sovereign assets deposited in foreign banks and excluded Russian banks from the SWIFT system, severing their access to the critical infrastructure of international payments (Banque de France, 2022; Cohen, 2024).

While the effectiveness of these measures in achieving their political objectives remains debatable, they unambiguously demonstrated the willingness of the US to deploy its financial hegemony as a geopolitical weapon. This has elevated independence from the USD to an existential priority for geopolitical rivals such as China, while simultaneously prompting preemptive diversification among a broader set of emerging economies that now possess both the means and the motivation to reduce their exposure (Quintana, 2025; Cohen, 2024).

b. Who Wants Out and Who Has the Power to Leave?

De-dollarization refers to the process by which governments, central banks and participants in financial markets seek to reduce their dependence on the USD as the world’s primary reserve currency (J.P. Morgan, 2024; Glover, 2024).

There are three actor categories driving de-dollarization (see Exhibit 1): those responding to sanctions already imposed, those hedging against future coercion and those pursuing broader geoeconomic competition.

Exhibit 1: Macro-Level Risk Matrix for De-Dollarization Scenarios

	Reactive	Proactive
Low Urgency		<i>Strategic Decoupling</i> e.g. China
High Urgency	<i>Economic Survival</i> e.g. Russia	Opportunistic Diversification e.g. ASEAN economies

i. Russia

Russia represents the most acute case of sanctions-driven de-dollarization and is fundamental to its economic survival. Russia’s efforts to de-dollarize its economy began in 2014 following US sanctions imposed after the annexation of Crimea. As part of its ‘Going-Alone’ strategy, Russia has built sophisticated financial infrastructure. This includes the implementation of the NSPK, a national card network known as the MIR card, which is now accepted by the majority of domestic merchants and in the areas most affected by US sanctions. Finally, Moscow has also established the SPFS, an alternative financial messaging system to SWIFT that connects both domestic and foreign banks. In 2019, SPFS traffic accounted for 15% of domestic transfers, and Russia has expanded it internationally, linking

it to banks in Iran, the Eurasian Economic Union and Turkey, while exploring further connections in the Middle East and Europe (Liu & Papa, 2022; Cohen, 2024).

These measures have been accompanied by a strategic shift in trade and reserves: between 2014 and 2021, the dollar's share of Russian exports to China fell from nearly 99% to 55%, whilst the euro and other currencies gained ground. Russia's holdings of US Treasury bonds fell from over \$150 billion in 2018 to almost zero in 2021. These measures aim to protect Russia's financial autonomy, enable cross-border transactions in local currencies such as the rouble, and reduce vulnerability to US sanctions whilst maintaining partial connectivity with the global financial system (Liu & Papa, 2022; Cohen, 2024).

ii. China

China's motivations are less about immediate sanctions exposure and more about long-term geoeconomic competition that motivates the strategic decoupling from the USD. Beijing has pursued a dual strategy of building parallel infrastructure while simultaneously working within existing institutions.

On the infrastructure side, the Cross-Border Interbank Payment System (CIPS), founded in 2015, offers an alternative clearing channel. Further, yuan-denominated oil futures, multiple bilateral agreements to settle transactions in local currencies, and the internationalization of UnionPay, a Chinese card network designed to facilitate cross-border renminbi transactions in over 180 countries collectively reduce transactional dependence on dollar liquidity (Liu & Papa, 2022; Cohen, 2024). Beyond that, China demands receivers of financial support in connection with the Belt & Road Initiative to repay such loans in renminbi (Wagdi et al., 2023). Within institutions, China secured renminbi inclusion in the IMF's Special Drawing Rights basket which constitutes a symbolic step towards reserve asset legitimacy (IMF, 2023; Goldman Sachs, 2025). None of these individually displaced the dollar but together they result in a patient architecture for reducing dependency.

iii. Other Emerging Economies

Beyond Russia and China, a broader set of emerging economies is pursuing more modest but structurally significant hedging. ASEAN economies, such as Indonesia and Cambodia conducting over 94% of trade in dollars, have historically been among the most dollar-dependent but are starting to opportunistically diversify their currency dependency. They have begun developing regional alternatives such as the Local Currency Settlement Framework between Thailand, Indonesia and Malaysia, or cross-border digital payment systems such as NETS-DuitNow QR. These initiatives represent efforts for technological workarounds over confrontational currency politics. Consequently, dollar reserves in the region have fallen by nearly 13% since 2023 (Agarwal, 2023).

iv. US Response to De-Dollarization Efforts

The United States has not remained passive. Its response rests on two pillars. The first is structural maintenance: the Federal Reserve's swap line network reinforces the dollar's safe-haven role in crises. Further, the Treasury's management of bond market depth anchors global reserve allocation which is illustrated by the dollar still accounting for more than 56%

of global reserves (Blustein, 2026). The second is coercion: secondary sanctions, tariff threats against countries bypassing the dollar. In addition, the renewal of strategic energy partnerships, such as the new bilateral agreement with Saudi Arabia in 2025, are designed to defend the petrodollar architecture that has underpinned the dollar dominance since 1974 (Al-Kassab, 2026). The paradox, however, is that this aggressive enforcement of dollar centrality and the threat of sanctions is the very reason that accelerates independence efforts (Nugrahaeni, 2025).

While national de-dollarization efforts are accelerating, they remain structurally constrained. Displacing the dollar requires coordinated multilateral action that no single country can achieve alone (Wigglesworth, 2026; Cohen, 2024). Two frameworks have emerged as the most credible vehicles for such a coordinated action: IMF's Special Drawing Rights and the BRICS grouping.

c. The SDR That Never Was: Why the IMF's Answer Had Failed to Convince

The creation of the Special Drawing Rights (SDR) by the IMF in the late 1960s was the first institutional attempt to resolve the Triffin Dilemma and supplement the reserves of its member countries. Under this system, a reserve asset was created whose value is independent of any single nation, tied instead to a basket of the five most globally significant currencies: the USD, EUR, CNY, JPY, and GBP. The IMF allocates SDRs to member states based on their economic size at moments of acute global liquidity need as determined by the IMF Board, for instance in 2009 and 2021 (IMF, 2023; Paduano, 2022; Goldman Sachs, 2025).

However, the SDR is not a currency in its own right but rather a reserve instrument that enables a country to find a counterparty willing to exchange freely usable currencies for SDRs (IMF, 2023). For instance, Germany could exchange its SDRs for USD with the US counterparty receiving the equivalent SDR amount as credit. Countries pay interest on SDRs used below their allocations and earn interest on holdings above it, at a rate set weekly by the IMF based on a weighted average of short-term rates across the five major currencies (IMF, 2023; Nye, 2020; Paduano, 2022).

Hence, as the SDRs cannot be used directly as a means of payment in international transactions, it falls short of what a functioning global reserve currency would require (IMF, 2023; Nye, 2020). In addition, it depends on the availability of counterparties willing to distribute their currency reserves in exchange for SDRs, which might prove difficult at times of global economic uncertainty. Reinforcing that, the SDR has a targeting problem since allocations can only go to all member states simultaneously and within these only to pre-defined institutions, and not to certain categories with special needs (Nye, 2020). Lastly, the USD remains central within the SDR framework since it holds effective veto power that leads to required US approval for significant reforms which is precisely what will not be forthcoming (Nye, 2020; Paduano, 2022). It is this institutional dead end that pushed de-dollarization efforts outside the existing framework entirely toward the coalition-based approach embodied by the BRICS.

d. BRICS and the Coalition of the Discontented: Collective Exit or Political Theater?

BRICS was formed in 2009 as an informal grouping of major emerging economies, namely Brazil, Russia, India, China and South Africa, and subsequently expanded to BRICS+ to include additional emerging market partners. The bloc was founded on a shared desire to rebalance global order its members viewed as structurally biased toward Western, and most particularly US, interests. Its member states also pursue individual national de-dollarization strategies as outlined above, which collectively reinforce the bloc's broader agenda. At its core, the BRICS coalition represents the most serious coordinated attempt to reduce dollar dependence, explicitly building on the lessons of earlier initiatives. (Liu & Papa, 2022; Cohen, 2024)

In essence, the BRICS "Unit" closely resembles the Bancor in that it is supranational, anchored to a commodity, and intended to be usable for international transactions, while addressing several of the institutional constraints that have limited the SDR's effectiveness. The Unit is envisaged as a settlement instrument for large-scale cross-border trade between member countries, reducing dependence on the USD, to which member currencies must often first be converted to conduct such transactions, and by extension reducing exposure to Western monetary policy cycles and sanctions risk (Ogden, 2025).

The Unit would be backed by a weighted mix of BRICS member currencies constituting 60% of the reserve basket and 40% by physical gold, yielding a partial commodity anchor. Critically, this collateral must be deposited into national nodes before the issuance of any units, differentiating it drastically from the counterparty dependency that weakens the SDR. A New Development Bank is proposed to be the issuing and watchdog institution by digitally issuing Units via a blockchain infrastructure to ensure transparency and traceability (Ogden, 2025; Jordanov, 2024).

Yet the Unit faces headwinds that are as much political as technical. At the operational level, implementation requires synchronization of highly divergent financial systems and the formal while simultaneously weathering potential economic sanctions likely imposed by the US in response to such initiative (Gift, 2024; Jordanov, 2024; Goldman Sachs, 2025). More fundamentally, the initiative demands a degree of political convergence that the bloc has not yet achieved, alongside the establishment of equitable governance mechanisms for issuance and dispute resolution. In addition, member states exhibit not only political but also economic divergence which risks the destabilization of currency portion of the collateral basket if member inflation rates and domestic monetary policies diverge significantly. For instance, China's export-based manufacturing economy occupies a fundamentally different role in the global economy than the commodity-driven exports of Russia or Brazil (Gift, 2024). Finally, the Unit lacks deep and liquid capital markets which are at the basis of a sustainable global reserve currency (Eichengreen, 2011). Taken together, these structural complexities might jeopardize the initiative and may ultimately render it insufficient to withstand geopolitical pressure from the incumbent reserve currency issuer. Taken together, these

constraints suggest that the BRICS Unit is better understood as a serious long-term challenge to dollar hegemony than an imminent replacement (Cohen, 2024).

4. De-Dollarization and Its Three Distinct Scenarios

To better structure how the macro-level will be impacted by various potential future outcomes of De-Dollarization, it is important to classify them based on **intensity of the outcome** and **speed of occurrence** (see Exhibit 2).

Through this classification, Scenario #1 emerges as the most dangerous, with rapid evolution into a disruptive establishment of a *“New Global Reserve System”*. On the other hand, Scenario #2 is the mirror opposite, slowly reaching *“Fragmented Currency Blocs”* as with low intensity impact on the world. Lastly, there is Scenario #3 of *“Accelerated Financial Decoupling”*, with a similar result to the second scenario, but occurring at a faster pace.

Exhibit 2: Macro-Level Risk Matrix for De-Dollarization Scenarios

	Low Speed	High Speed
Low Intensity	Scenario 2: <i>“Fragmented Currency Blocs”</i>	Scenario 3: <i>“Accelerated Financial Decoupling”</i>
High Intensity		Scenario 1: <i>“New Global Reserve System”</i>

a. Scenario 1: New Global Reserve System

The radical proposal examined in the preceding chapter – IMF SDRs and the proposed BRICS monetary ecosystem – face a common constraint: no single currency or basket of such currently combines the liquidity, institutional depth and global acceptance required to credibly substitute the USD at scale. A full displacement of the dollar in the near term therefore remains unlikely (Glover, 2024; Wigglesworth, 2026; Blustein, 2026; Goldman Sachs, 2025). The more instructive question is what the intermediate landscape looks like.

b. Scenario 2: Fragmented Currency Blocs

The scenarios will be defined by combining the group’s point of view with IMF definitions. In short, Scenarios 2 and 3 concern similar ends, but with different means and timings. The Fragmented Currency Blocs is the slower version, characterized by a gradual and uneven

drift towards bloc-based currency usages over a longer time period, with continued yet reduced cross-bloc interoperability (Cohen, J., 2024; Aiyar et al., 2023).

Within this scenario, the world slowly evolves toward overlapping yet increasingly distinct currency zones. This is due to invoicing and payments inertia being difficult to challenge, potentially taking more years up to decades to achieve this scenario. According to the IMF, Fragmented Currency Blocs could be characterized by a layered structure with three currencies; a still dominant U.S. dollar-based liquidity core, with a regionally concentrated euro zone of influence, and a selectively expanding RMB bloc (Aiyar et al., 2023).

In this case, the transition is slow as the fragmentation driven by geopolitical tensions and sanctions, being constrained primarily by the strong inertia in currency use. For instance, the ECB states that potential fragmentation in the international monetary system since Russia's invasion has so far been mainly restricted to announcements and specific cases rather, than pointing to broader trends, with gold accumulation being an exception (den Besten, Di Casola and Habib, 2023).

Operationally, this scenario would be characterized by increased reserve diversification, selective payment system pluralism, and trade invoicing mostly unchanged globally (Cohen, J., 2024). First of all, there would be a continued drift from USD into nontraditional currencies and gold. In addition, a vaster use of regional and alternative settlement channels like CIPS, with continued SWIFT relevance. Finally, trade invoicing would experience only localized shifts in certain economies, rather than a stronger global change (ECB, 2025).

c. Scenario 3: Accelerated Financial Decoupling

Accelerated Financial Decoupling is the faster version driven by shocks, and can occur in months to a few years. This involves the rapid and discontinuous separation of financial networks and currency uses, which can be caused by escalations related to policy, sanctions, or conflict (Cohen, J., 2024).

This scenario differs from the Fragmented Currency Blocs through the rapid and discontinuous breaks in financial connectivity, yet still reaching a similar ends state. According to the IMF, this scenario is likely to materialize when fragmentation becomes highly synchronized across multiple domains including trade controls, financial sanctions, technology restrictions, and more (Aiyar et al., 2023).

This scenario is also likely to materialize as there are currently multiple catalysts in place which would indicate the de-dollarization transition could be faster than expected. First of all, ECB documents showed how freezing reserves and SWIFT exclusions after Russia-Ukraine war triggered debates concerning the safety of holding and sanctioning currencies and rails (den Besten et al., 2023). In fact, this and similar future events could directly incentivize the speedy rerouting of payments and reserve positioning (Bianchi & Sosa-Padilla, 2023). Above this, the accessibility of RMB settlement infrastructure such as CIPS reduce friction to change (CIPS, no date). In particular, research from BIS shows that geopolitical tensions such as wars in fact reduce cross-border bank lending (Pradhan et al., 2025).

Operationally, this scenario would be similar to the end goal of Fragmented Currency Blocs, yet more abrupt. Due to geopolitical events, there could be rapid shutdown of cross-border payments, speedy reconfiguration of cash management to onshore systems, a much larger gold reserve allocation, and severe short run volatility spikes in hedging costs and FX markets (Cohen, J., 2024).

With all the above in mind, it is now possible to mention certain signposts to monitor to better understand the business impact of these scenarios. Firstly, the introduction and intensity of sanctions increase the likelihood of a faster transition, to which businesses must adapt. Second aspect is the growth of alternative payment systems such as CIPS, which directly indicate the scenarios are materializing. Finally, pivots in reserve portfolios and reductions in cross-border lending must be tracked by companies.

5. Impact of Global Reserve Currency on Businesses

While the previous scenarios outline potential future configurations of the international monetary system, firms today continue to operate within a predominantly dollar-centric environment, whose structural implications must be understood at the micro level. The use of a global reserve currency does not constitute a neutral source of stability for firms. On the contrary, it entails an asymmetric distribution of risks and opportunities across global firms, exposing them differently to financial conditions (Rey, 2015). Such asymmetries translate into firm-level outcomes, influencing currency exposure and shaping strategic decisions.

a. Concentration of Currency Exposure in a Dollar-Centric System

In a dollar-dominance scenario, U.S. firms benefit from a form of natural hedging, as they operate primarily in their domestic currency, thereby reducing direct exposure to exchange rate fluctuations. In contrast, non-U.S. firms are structurally exposed to the dollar even when operating in third markets, due to its widespread use as a unit of account in international trade transactions (BIS, 2023).

The predominance of the dollar in international invoicing limits firms' ability to pass exchange rate variations onto final prices, thereby strengthening the impact of dollar fluctuations on operating margins. This phenomenon makes global firms more sensitive to dollar-related shocks, amplifying the transmission of exchange rate movements at the microeconomic level.

A relevant example is Nestlé since the company reported that foreign exchange movements had a negative impact of 3.7% on reported sales, highlighting how revenues generated in multiple currencies can lose value when converted, thereby affecting overall performance (Nestlé, 2025).

Exchange rate risk is thus systematically centralized, generating stability benefits for some actors while simultaneously increasing exposure and vulnerability for others, particularly for firms not integrated into the U.S. financial system (BIS, 2023).

b. Transmission of U.S. Monetary Policy: The Global Financial Cycle

In this setting, U.S. monetary policy ends up influencing financial conditions well beyond domestic borders, with effects on firms operating outside the US. When the Federal Reserve adjusts interest rates, the impact tends to spread internationally through financial markets and capital movements. This directly affects firms' cost of financing and access to liquidity (Rey, 2015).

The mechanism is particularly evident during tightening cycles. An increase in US interest rates strengthens the dollar and reduces liquidity. This creates pressure on companies with exposure to dollar-denominated debt. In such contexts, non-US companies face higher debt servicing costs and greater refinancing challenges. For example, Turkish Airlines has been exposed to rising debt servicing costs in 2023. This was driven by its significant dollar-denominated liabilities, which become more "expensive" to repay during periods of U.S. monetary tightening and dollar appreciation (Turkish Airlines, 2023).

This effect is particularly pronounced in emerging markets, where reliance on the dollar is more widespread (Rey, 2015). Lower liquidity can amplify exchange rate volatility, further increasing the financial pressure on firms exposed to dollar-denominated debt. Moreover, this implies that US monetary shocks quickly translate into changes in global financial conditions, limiting the autonomy of economic actors. U.S. monetary policy effectively acts as a constraint on firms' financial decisions worldwide.

Overall, the international transmission of U.S. monetary policy strengthens the link between U.S. macroeconomic conditions and the financial performance of global companies, exacerbating asymmetries between actors more integrated into the dollar-based financial system and those more passively exposed to it (Rey, 2015).

c. Dependence and Capital Structure Asymmetries

Non-U.S. firms often must borrow in U.S. dollars. This is because their domestic capital markets are less developed and less liquid leading to a currency mismatch: they earn revenues in local currency but repay debt in dollars.

U.S. firms operate within a more internally consistent financial system. Their revenues, liabilities and funding are all in the same currency. This reduces their exposure to exchange rate risk. This difference creates a structural constraint for non-U.S. firms, limiting their ability to choose how to finance themselves and makes them more dependent on external financial conditions (McCauley et al., 2015).

This phenomenon brings relevant capital structure asymmetries between US and Non-US firms. In fact, access to dollar funding is a key determinant of financial flexibility, reinforcing disparities across firms operating in different monetary environments.

d. Strategic Implications

The widespread use of the dollar does not only facilitate transactions but also shapes the way firms organize their activities (BIS, 2023). The dollar can be interpreted as an implicit infrastructure that coordinates operational practices, contractual models and pricing mechanisms among economically heterogeneous actors.

This standardization generates significant benefits in terms of efficiency and predictability, reducing coordination costs and facilitating integration into global value chains (Farrell et al., 2019). It also produces lock-in effects, as firms tend to structure their operations, accounting systems and relationships around the dollar. In this way the transition to alternative currencies is becoming progressively more costly over time (BIS, 2023).

i. Sanctions and Extraterritorial Regulatory Exposure

The use of the U.S. dollar as a settlement currency also entails a direct exposure of firms to an extraterritorial regulatory framework. This exposure is inherently shaped by the pivotal role of clearing systems and financial intermediaries within the dollar-based infrastructure, which function as key conduits for the transmission of U.S. regulations (IMF, 2024).

In this framework, economic sanctions are considered enforcement tools applicable even to non-U.S. entities. This creates a risk of exclusion from international payment systems and restricted access to essential financial services. The impact on operational continuity can be devastating (Farrell et al., 2019). A real-life example is Huawei, which faced severe restrictions due to U.S. sanctions and export controls that limited its access to critical technologies and global supply chains, leading to a 50% decline in its consumer business revenues and a 29% drop in total revenues in 2021 (Lee-Makiyama & Baker, 2024). This configuration leads to higher compliance costs and complexity in managing regulatory and geopolitical risks, with firms required to monitor counterparties.

ii. Supply Chain Structuring and Partner Selection

Decisions about how to organize supply chains and which partners to work with are now influenced increasingly by geopolitical considerations. Firms that are more exposed to the dollar-based system tend to prefer counterparties and locations that are seen as stable and closely connected to the global financial system (Farrell et al., 2019).

Concerns over potential restrictions in accessing the dollar, arising from sanctions or geopolitical tensions, push firms to avoid partners operating in higher-risk environments, even when this entails higher costs or reduced operational efficiency. This attitude leads to new global value chains' shapes, no longer driven by cost minimization and productivity but mainly by considerations related to financial security. For example, Apple has diversified its supply chain away from China in response to broader geopolitical tensions and strategic

risks, reflecting how global firms increasingly incorporate geopolitical and financial considerations into operational decisions, influenced by the need to ensure reliable and uninterrupted access to the global financial system (Harvard Kennedy School, 2025).

6. Business Implications of Alternative Monetary Systems

a. Scenario-Based Risk Overview

As chapter 4 has shown, the ramifications of the described de-dollarization scenarios differ in terms of speed, intensity and eventual consequences. One thing they have in common, however, is their importance for firms, especially those operating on a multinational level. The implications for the private sector can be structured along four dimensions: financial, operational, strategic, and institutional risks. While all four dimensions are present across scenarios, their relative importance differs between gradual fragmentation (Scenario 2: Fragmented Currency Blocs) and more disruptive outcomes (Scenario 3: Accelerated Financial Decoupling). In addition, the complete replacement of the current dollar dominance (Scenario 1: New Global Reserve System) would generate a distinct set of risks centered on systemic transition, credibility, and coordination challenges rather than fragmentation.

i. Financial Risks

In a Fragmented Currency Blocs scenario, a first-order effect is the loss of vehicle currency efficiency. The dollar's dominance in foreign exchange markets has allowed firms to minimize transaction costs by routing trades through deep, liquid markets (Gourinchas et al., 2019). As trade and financial flows shift toward regional currencies, firms increasingly face transactions in thinner currency pairs, where liquidity is limited and spreads are wider, which raises the cost of converting revenues and inputs across jurisdictions (Rinaldo & Santucci de Magistris, 2022).

Closely linked is the gradual breakdown of invoicing uniformity. While global trade has traditionally been invoiced in dollars, stabilizing prices and concentrating exchange rate risk (Gourinchas et al., 2019), the increasing use of regional currencies leads to a more fragmented pricing environment with less developed hedging markets, thus raising hedging costs and earnings volatility (Zhang et al., 2023; Kim, 2024).

A further shift concerns the geography of financing. The expansion of local-currency lending and regional financial systems reduces exposure to dollar cycles but introduces risks tied to shallower markets, local financial instability, and regulatory divergence (Liu & Papa, 2022). This creates a trade-off between reduced currency mismatch and increased exposure to local volatility.

In an Accelerated Financial Decoupling scenario, financial risks become non-linear. Decoupling heightens settlement and liquidity risks, as alternative systems often lack the safeguards of infrastructures such as the Continuous Linked Settlement (CLS) and the global financial safety net (Aiyar et al., 2023; Ballis, 2025). Against that backdrop, firms may lose

indirect access to dollar liquidity backstops, such as Federal Reserve swap lines, and face acute liquidity shortages during crises (Aiyar et al., 2023; Kim, 2024). In parallel, asset values and balance sheets become more vulnerable to sudden re-pricing, with limited ability to hedge or diversify.

Under a New Global Reserve System, the main financial risk for firms is extra volatility during the transition. When reserve holdings and invoicing shift away from the dollar, exchange rates, funding costs, and risk premia can become more unstable, especially where markets for the new reserve asset are still shallow (Iancu et al., 2020). Limited liquidity and derivatives in the new reserve currency make hedging less reliable and increase refinancing and basis risk (Dugbartey, 2025). Because global trade and commodities are still largely priced in a few dominant currencies, any move to a new anchor is likely to bring periods of pricing and FX instability that complicate cash-flow forecasting and treasury management (Burke, 2024).

ii. Operational Risks

In a Fragmented Currency Blocs scenario, operational complexity increases gradually. Treasury functions, which have historically been centralized around dollar liquidity management, must become more decentralized, particularly in markets with institutional voids and higher funding frictions. Consequently, firms may opt to increase domestic buffers, such as higher foreign exchange reserves or reduced reliance on external debt, through a form of “self-insurance” that often comes at the cost of reduced output (Aiyar et al., 2023; Xu & Xiong, 2022). Such structural changes complicate internal netting and cross-border financial coordination by eroding the liquidity pooling benefits currently provided by a single vehicle currency like the U.S. dollar (Aiyar et al., 2023; Ranaldo & Santucci de Magistris, 2022).

In an Accelerated Financial Decoupling scenario, operational risks become structural as the global payments ecosystem fragments into parallel, politically aligned infrastructures (Ballis, 2025). Financial infrastructures may become incompatible as alternative systems, such as the Chinese Cross-border Interbank Payment System (CIPS), the Russian System for Transfer of Financial Messages (SPFS), and regional networks like BRICS Pay, expand (Aiyar et al., 2023; Liu & Papa, 2022). This proliferation of competing messaging standards creates a shadow international financial system that often operates in less transparent, opaque jurisdictions outside traditional regulatory perimeters (Verdier, 2025).

More importantly, firms might be required to choose between competing financial ecosystems, leading to operational bifurcation. Maintaining access to one system, particularly the dollar-based infrastructure, can constrain access to another due to the weaponization of financial interdependence, where central nodes are used to choke off economic flows for sanctioned entities (Ballis, 2025; Verdier, 2025). Firms facing these risks may be forced to structurally separate business units to preserve market access and shield assets from potential confiscation or blocking sanctions (Verdier, 2025; Witt, 2019).

Under a New Global Reserve System, operational risks arise from running old and new monetary systems in parallel. Firms would need to upgrade treasury, settlement, and reporting tools to handle a new reserve asset while still managing dollar-based flows. This

dual setup increases complexity in internal netting and liquidity management, especially for supply chains that span jurisdictions moving at different speeds.

iii. Strategic Risks

In a Fragmented Currency Blocs scenario, strategic risks emerge from the erosion of global economic integration as the system shifts toward financial regionalization (Aiyar et al., 2023; Verdier, 2025). The transition toward regional currencies reduces standardization, thereby increasing the complexity for firms that must now navigate a “globalization patchwork” of varying bilateral and regional agreements (Witt, 2019; Verdier, 2025). Firms face a critical trade-off: reducing exposure to the risk of dollar-based weaponized interdependence versus accepting the inefficiencies and volatility of regional markets where shocks are often more correlated (Aiyar et al., 2023; McDowell, 2020; Verdier, 2025). Over time, this can lead to reduced market access, regional restructuring, and a gradual shift away from globally integrated business models.

In an Accelerated Financial Decoupling scenario, strategic risks become constraint-driven as the international order moves from a logic of absolute gains to one of relative gains, where one party’s economic advantage is viewed as another’s loss (Witt, 2019; Verdier, 2025). Firms face a limited ability to operate globally due to the proliferation of security-based constraints, such as outbound investment restrictions and the requirement to choose between parallel, non-interoperable financial infrastructures like SWIFT and the Chinese CIPS (Ballis, 2025; Verdier, 2025). This decoupling fundamentally alters global business models by introducing significant separation costs, including a potential shortage of dollar funding and reduced competitiveness for firms operating outside the dollar-based ecosystem (Liu & Papa, 2022; Witt, 2019).

Under a New Global Reserve System, firms would operate for some time without clarity about the future monetary anchor. This uncertainty over which currency or basket will prevail can delay investment, shorten contract maturities, and push firms toward more flexible but less efficient business models (Dugbartey, 2025).

iv. Institutional Risks

In a Fragmented Currency Blocs scenario, institutional risks increase gradually as geopolitical considerations begin to shape financial systems. Regulatory divergence and differing institutional frameworks across regions increase compliance costs and legal uncertainty.

In an Accelerated Financial Decoupling scenario, institutional risks become systemic. Financial infrastructure can be used as a policy instrument, as demonstrated by the restriction of Russian banks’ access to SWIFT in 2022 (Xu & Xiong, 2022; Aiyar et al., 2023). The perception of the dollar system as “weaponized” incentivizes the development of alternative infrastructures (McDowell, 2020; Ballis, 2025).

As a result, firms may face conflicting sanctions and compliance regimes across jurisdictions, where maintaining access to one system creates legal risks in another (Verdier, 2025). Governments under pressure may impose capital controls, mandate currency conversions,

or redenominate liabilities, leading to significant losses for firms with currency mismatches (Xu & Xiong, 2022; McDowell, 2020).

While international economic law provides some protection, enforcement becomes more uncertain and politically contingent. In practice, firms must assume that legal safeguards may not fully offset losses in periods of severe geopolitical stress (Verdier, 2025).

Under a New Global Reserves System, institutional risks concern how well the new system is governed and how it behaves in crises. Building a credible alternative to the dollar requires clear rules on issuance, convertibility, legal jurisdiction, and dispute resolution, which are unlikely to be fully in place at the start (Burke, 2024). During this formative phase, firms face more legal uncertainty in cross-border contracts and less clarity about access to emergency liquidity, thus increasing exposure to systemic shocks and payment disruptions.

b. Risk Exposure Matrix

The preceding analysis has shown that the implications of de-dollarization for firms are multifaceted, spanning financial, operational, strategic, and institutional dimensions. While this categorization is analytically useful, it does not fully capture how risks are experienced and managed at the firm level. In practice, corporate exposure is less determined by abstract risk types than by two more immediate questions: where the firm is exposed and who is driving the underlying disruption.

To bridge this gap, the next section introduces a risk exposure matrix that organizes de-dollarization risks along two axes and has been inspired by Colli's (2025) geopolitical risk matrix. The first axis distinguishes between domestic exposure, i.e. risks affecting firms within their primary currency and regulatory environment, and foreign exposure, where firms operate across jurisdictions. The second axis differentiates between US-driven dynamics, reflecting the continued centrality and politicization of the dollar system, and non-US-driven dynamics, capturing the gradual or deliberate shift toward alternative monetary and financial arrangements.

This framework results in four distinct risk quadrants (see Exhibit 3), each representing a different transmission mechanism through which de-dollarization affects firms.

Exhibit 3: Risk Exposure Matrix

	US-driven dynamics	Non-US-driven dynamics
Domestic exposure	Quadrant 1: <i>"Friendly Fire"</i>	Quadrant 3: <i>"The Trojan Yuan"</i>
Foreign exposure	Quadrant 2: <i>"The Long Arm"</i>	Quadrant 4: <i>"The Frontier"</i>

Each quadrant captures a specific combination of geographic exposure and source of disruption, translating macro-level monetary shifts into concrete firm-level risk profiles.

Quadrant 1 (“Friendly Fire”) describes risks that originate from US policy but primarily affect firms operating within the dollar-centered system. These include monetary tightening cycles, regulatory expansion, and the increasing use of financial infrastructure as a policy tool. Even firms headquartered in allied jurisdictions may face rising compliance costs, funding constraints, and indirect exposure to geopolitical tensions.

Quadrant 2 (“The Long Arm”) captures the extraterritorial reach of US policy into foreign operations. Firms with assets, subsidiaries, or counterparties in sanctioned or politically sensitive jurisdictions face the risk of asset freezes, forced divestments, and restricted access to dollar-based financial infrastructure. Here, exposure is driven less by local de-dollarization than by the global enforcement capacity of the United States.

Quadrant 3 (“The Trojan Yuan”) reflects externally driven changes that affect firms within their home markets. As trading partners increasingly adopt alternative currencies, firms may encounter shifting invoicing practices, rising foreign-exchange complexity, and gradual erosion of the dollar’s role as the default transaction currency. These dynamics unfold without direct coercion but nonetheless alter the operating environment.

Quadrant 4 (“The Frontier”) represents the most direct and high-intensity exposure to de-dollarization. Firms operating in jurisdictions actively promoting alternatives to the dollar must adapt to local-currency mandates, parallel payment infrastructures, and capital controls. In this quadrant, de-dollarization is not a gradual trend but an immediate operational constraint shaped by host-state policy.

Importantly, these quadrants are not mutually exclusive. Multinational firms, in particular, are often exposed to multiple quadrants simultaneously, depending on their geographic footprint, supply chain configuration, and funding structure. The matrix should therefore not be interpreted as a static classification, but as a tool for identifying overlapping risk channels and potential points of vulnerability.

The framework also complements the scenario-based analysis developed earlier in this report. In a Fragmented Currency Blocs scenario, risks tend to emerge gradually across Quadrants 1 and 3, as financial regionalization and currency diversification reshape transaction patterns. In an Accelerated Financial Decoupling scenario, Quadrants 2 and 4 become dominant, reflecting the intensification of sanctions, infrastructure bifurcation, and geopolitical alignment pressures. Under a New Global Reserve System, all four quadrants remain relevant, but risks are primarily associated with transition dynamics, including volatility, coordination challenges, and institutional uncertainty.

By reframing de-dollarization risks through this matrix, firms can move beyond abstract categorizations and develop a more actionable understanding of their exposure. The following section applies this logic to two distinct examples and explains how the framework can help to identify risks in more depth and help to craft strategic responses.

c. Petroyuan and Russian-Indian Oil Trade Settlement: Risk Overview and Positioning in the Risk Exposure Matrix

The emergence of alternative settlement currencies in international trade does not primarily reflect a voluntary strategic choice by firms, but rather a structural adjustment to changing commercial relationships. Currency choice is often embedded within the terms imposed by dominant trade partners, contractual standards, and market conventions.

When firms are heavily exposed to a dominant buyer, such as China in energy and industrial supply chains, they may face growing pressure to accept settlement in the buyer's preferred currency (Gopinath, 2020).

i. Petroyuan

This framework has led to the emergence of discussions between Saudi Arabia and China on the possibility of conducting oil trade in Chinese yuan, often referred to in this context as the "Petroyuan". While still limited in scope, this development represents both a potential challenge to the Petrodollar System and a possible structural shift for the Saudi oil industry, with implications that could, over time, extend to other sectors and markets. Within the Risk Matrix, this case can be positioned in Quadrant 4: *"The Frontier"*, given the potentially significant yet still uncertain consequences associated with it, which will be explored in the following sections.

The structure of the oil market is characterized by a high concentration of supply among a limited number of producers, with Saudi Arabia being the largest producer and the leading exporter within the OPEC. Meanwhile, oil demand today is mostly concentrated in Asia with China emerging as the largest importer. Within this framework, the growing interdependence between Middle East and China shows the importance of bilateral trade flows in shaping oil market dynamics (OPEC, 2024).

The choice of using the renminbi in oil trade between China and Saudi Arabia comes from a mix of economic changes and strategic choices. China began pushing this around 2016, as a broader effort to strengthen relations. In 2018, it also introduced oil futures in yuan in Shanghai with the goal of building a pricing reference in its own currency. In reality, this shift does not depend on one specific agreement. It's more about how transactions could work in practice. Oil could be priced in yuan and payments handled through Chinese financial channels. At that point, exporters would have to decide what to do with the renminbi they receive. They could keep it, convert it or use it inside the Chinese economy. So, exports to China could be invoiced and paid in yuan and the revenues managed in different ways depending on the situation (S&P Global, 2024).

Despite these developments, the renminbi remains only marginally used in oil trade. A key limitation lies in its still limited role as an international currency. For major oil exporters, accepting payments in renminbi can generate practical constraints, particularly in the presence of unbalanced trade relationships with China. In many cases, including Saudi Arabia, exports to China significantly exceed imports. As a result, receiving payments in

renminbi leads to the accumulation of excess currency holdings that cannot be easily redeployed. This forces exporters either to reinvest these balances in Chinese assets or to convert them into other currencies, both of which entail additional transaction costs and exposure to exchange rate risk (S&P Global, 2024).

This becomes even more relevant in Gulf economies. Their currencies are usually tied to the U.S. dollar, so changes between the dollar and the renminbi directly affect how much those revenues are worth at home. When the dollar gets stronger, being paid in yuan can actually reduce the value of what exporters earn in domestic terms, which makes this option less attractive. More generally, there are still some structural limits within China's financial system that slow down the international use of the renminbi: the capital account is not fully open, financial markets are not as deep and there are fewer tools available to manage risk. All of this makes it harder for firms and governments to handle large inflows of renminbi. This creates uncertainty around the long-term viability of the currency as a settlement mechanism for strategic commodities (S&P Global, 2024).

ii. Russian-Indian Oil Trade Settlement

Another driver of changes in settlement currency may stem from external dynamics, rather than from the economic environment in which a firm operates. This is the case of the situation following the introduction of sanctions against Russian companies in 2022. Within the Risk Exposure Matrix, this case can be positioned in Quadrant 1, "Friendly Fire", given the significant impact on Russian oil companies in managing financial, operational and strategic-commercial risks.

After Western sanctions were introduced in 2022, Russia's oil sector had to adjust quite quickly to a very different trading environment. The restrictions on using the U.S. dollar, along with the exclusion of some major Russian banks from the international financial system, made the usual payment channels much harder to use. As a result, exporters started redirecting a large share of oil exports toward other markets, while also having to rethink how transactions were actually structured from a financial point of view.

The sanctions imposed on the Russian Federation from 2022 onwards created a useful setting to understand, at the firm level, how currency diversification faces concrete limitations. A clear example is the case of energy trade with India. After the sanctions were introduced, settling Russian oil transactions in U.S. dollars was no longer an option in many cases. Firms had to adjust quickly, using different payment solutions just to keep trade flows active. In particular, Russia's biggest oil producers (State-controlled Rosneft and private-owned Lukoil) faced major financial risks as they produce half of Russian oil exports, especially to China and India.

On the other side, Indian refiners, like Indian Oil Corporation, Reliance Industries and Nayara Energy, kept buying large amounts of Russian crude, which ended up playing a significant role in India's energy supply (Bloomberg, 2023). In practice, these deals were no longer settled in dollars but in other currencies, mainly the UAE dirham and the Chinese renminbi (Reuters, 2023b).

After several months, on-going negotiations on defining an agreement were ultimately suspended due to Moscow's concerns about the possibility of accumulating an annual surplus of rupees exceeding 40 billion dollars if such a mechanism were implemented, which was considered undesirable, with a preference instead for payments in Chinese yuan or other currencies. From the perspective of Indian importers of low-cost oil and coal from Russia, this represents a significant setback, as they had been expecting a permanent rupee-based payment mechanism to help reduce currency conversion costs (Reuters, 2023a). Compared to dollar transactions, these arrangements usually require going through more intermediaries and dealing with markets that are less liquid. In practice, this makes transactions harder to execute and increases operational risk (BIS, 2023). In fact, relying on alternative currencies and payment systems brought several practical issues, such as: slower settlements, a greater need for intermediaries and the difficulty of converting certain currencies. Taken together, these factors have made trade less efficient and put additional pressure on margins, showing quite clearly the downsides of operating outside the dollar-based system (FT, 2023).

A key issue that has emerged in this context is the accumulation of currencies that are not easily convertible or cannot be used freely. For instance, Russian exporters receiving payments in Indian rupees have found it difficult to reuse these funds outside the Indian market, which has led to what is often described as "trapped liquidity" (Bloomberg, 2023; Reuters, 2023b). This situation creates a structural mismatch between revenues and costs. Firms are paid in local currencies, but a large share of their costs, imports, debt repayments, capital spending, still has to be covered in widely accepted currencies. This creates a gap that exposes them to exchange rate fluctuations and additional conversion costs. These risks are not always easy to hedge, given the limited availability of financial instruments and the relatively underdeveloped derivative markets for alternative currencies (McCauley et al., 2015). In practice, firms must manage cash flows across multiple currencies, coordinate conversions across different markets and rely more heavily on intermediaries to access liquidity. In dollar-based systems, firms can rely on deep and liquid markets to hedge risks and manage their positions more easily. This is much less the case with alternative currency arrangements, where financial flexibility tends to be more limited (BIS, 2023).

The financial frictions associated with non-dollar settlement mechanisms also have direct commercial consequences. To offset higher operational and financial risks, Russian crude has often been sold at a discount compared to international benchmarks. This is not only due to geopolitical factors, but also to the inefficiencies embedded in alternative settlement systems. For firms involved in these transactions, pricing is no longer driven solely by supply and demand. So pricing is not driven only by supply and demand anymore. It also reflects the extra costs firms face when dealing with exchange rate risk, limited liquidity and more complicated transaction setups. This means that currency diversification has a direct effect on margins and competitiveness, as firms are pushed to include an additional risk component in their prices (FT, 2023).

7. Conclusion

The context outlined above points to a paradigm shift in the operational environment of firms, which are increasingly perceived as geopolitical actors operating within global markets.

The case studies analyzed highlight two distinct ways in which this dynamic materializes. In the case of the Petroyan, the agreement between Saudi Arabia and China reflects a deliberate strategic and commercial choice by both parties to strengthen bilateral relations, while also, though not exclusively, aligning with their broader geopolitical positioning.

In contrast, the failed agreement between Russia and India illustrates a different mechanism, where de-dollarization is not a voluntary choice but rather the result of external constraints. In this case, sanctions imposed following the outbreak of the 2022 conflict forced Russian oil producers such as Lukoil and Rosneft to adapt their settlement practices. These firms, operating in one of the most strategically and economically vital sectors for Russia, were directly affected by the country's reclassification as a hostile actor by several Western economies.

At the firm level, these developments give rise to strategic considerations that are often sudden and disruptive, leaving limited scope for anticipation. This is consistent with the macro-level risk matrix for de-dollarization scenarios, where the evolution of outcomes depends on both the speed and intensity of underlying shocks.

As discussed in Chapter 6, top managers, who increasingly resemble a "Chief Geopolitical Officer" (KPMG, 2018), must therefore make financial, operational, and strategic decisions aimed at mitigating these risks.

From a financial perspective, firms should prepare for scenarios in which treasury operations are no longer centralized in USD. Instead, they may need to adopt a multi-currency operating model, managing liquidity across key currencies in order to avoid excessive reliance on a single financial system and reduce the risk of payment disruptions.

However, these adjustments introduce significant operational challenges. Firms must deal with heightened foreign exchange volatility, increased sanctions exposure, and convertibility constraints. In particular, they must account for scenarios of limited or restricted currency conversion, while also exploring natural hedging strategies, such as aligning revenues and costs in the same currency or reinvesting proceeds within the country of origin (e.g., reinvesting RMB in China). While such strategies may reduce exposure to exchange rate fluctuations, they carry important strategic implications. These risks are further compounded by the possibility of "trapped liquidity," as clearly illustrated in the case of Russian-Indian oil trade settlements.

From a strategic standpoint, firms must reassess the sustainability of their supply chains. This involves revisiting partner selection by avoiding counterparties exposed to sanctions or unstable financial systems and prioritizing those operating within compatible currency environments. Commercial strategies may also need to be adapted, for instance in response to differentiated pricing dynamics driven by external constraints, as seen in the Russia-India

case, or through the potential exit from markets characterized by structurally weak or illiquid currencies (market prioritization).

In conclusion, given the volatility and uncertainty of the scenarios described, firms should prioritize the development of internal geopolitical risk capabilities. This is no longer a “nice to have,” but a core competence on par with financial or operational expertise. These capabilities are not limited to forecasting a single future scenario but rather involve evaluating multiple strategic responses across different potential trajectories of de-dollarization. By integrating geopolitical expertise into their organizational capabilities, firms can enhance risk management, strategic planning, and treasury functions, while systematically monitoring sanctions regimes, payment infrastructures, monetary policies, and trade relations. The risks discussed are not limited to higher transaction or hedging costs but also include the need to develop differentiated strategies for scenarios such as fragmented currency blocs and financial decoupling. Firms that are able to build these capabilities early will gain a first-mover advantage and position themselves more effectively for an increasingly uncertain global financial environment. Ultimately, the key challenge for firms is not adapting to a new dominant currency but learning to operate within a fragmented and politically constrained monetary system.

8. Bibliography

Agarwal, R. K. (2023). Emerging Economics, Emergent Currencies: A Look into Dedollarization in Southeast Asia. *Modern Economy* 14(10), 1432-1438. <https://doi.org/10.4236/me.2023.1410074>

Aiyar, S., Ilyina A., Chen J., Kangur A., Treviño J., Ebeke C., et al. (2023). Geo-Economic Fragmentation and the Future of Multilateralism. IMF Staff Discussion Note. <https://doi.org/10.5089/9798400229046.006>

Al-Kassab, J. (2026). Preventing De-dollarization Is Trump's Aim Both in Venezuela and the World at Large – Analysis. *Eurasia Review*. <https://www.eurasiareview.com/12012026-preventing-de-dollarization-is-trumps-aim-both-in-venezuela-and-the-world-at-large-analysis/>

Ballis, A. (2025). Geopolitical Tensions and Financial Networks: Strategic Shifts toward Alternatives. 2505.21480. arXiv.org. <https://doi.org/10.48550/arXiv.2505.21480>

Bank for International Settlements. (2023). Annual Economic Report 2023. <https://www.bis.org/publ/arpdf/ar2023e.pdf>

Banque de France. (2022, March 22). Sanctions against Russia: The role of SWIFT. <https://www.banque-france.fr/en/publications-and-statistics/publications/sanctions-against-russia-role-swift>

Bianchi, J., & Sosa-Padilla, C. (2023). International Sanctions and Dollar Dominance. NBER Working Paper Series. <https://doi.org/10.3386/w31024>

Bloomberg. (2023). Russia Says It Has Billions of Indian Rupees That It Can't Use. <https://www.bloomberg.com/news/articles/2023-05-05/russia-says-it-has-billions-of-indian-rupees-that-it-can-t-use>

Blustein, P. (2026, January 29). Don't bet on dollar dethronement. *Financial Times*. <https://www.ft.com/content/a3262db1-73b7-4be6-9d02-d67dee0e9830>

Bordo, M. D. & Eichengreen, B. (1993). *A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform*. University of Chicago Press.

Burke, J. J. A. 2024. De-dollarization. *Academicus International Scientific Journal*, 30(1), 98-111.

Cohen, J. (2024, June 20). Don't Bet Against the Dollar. *Foreign Policy*. <https://foreignpolicy.com/2024/06/10/brics-currency-dollar-yuan-united-states-economy/>

Colli, A. 2025. *Understanding Geopolitical Risk. Perspectives for Corporate Decision Makers*. Bocconi University.

Cross-Border Interbank Payment System (CIPS). CIPS Homepage. <https://www.cips.com.cn/en/index/index.html>

den Besten, T., Di Casola, P., & Habib, M. M. (2023). Geopolitical Fragmentation Risks and International Currencies. European Central Bank. https://www.ecb.europa.eu/press/other-publications/ire/article/html/ecb.ireart202306_01~11d437be4d.en.html

Dugbartey, A. N. (2025). Systemic financial risks in an era of geopolitical tensions, climate change, and technological disruptions. *International Journal of Science and Research Archive*, 14(2), 1428-1448.

Dunkley, E., Smith, I., Rees, R., & Jones, C. (2026, February 16). Fund managers take most bearish stance on dollar for a decade. *Financial Times*. <https://www.ft.com/content/18a8c7e6-c3d5-4f57-ad0f-58463ede2bd2?syn-25a6b1a6=1>

Eichengreen, B. (2011). *Exorbitant privilege: The rise and fall of the dollar and the future of the International Monetary System*. Oxford University Press.

European Central Bank (ECB). 2025. The International Role of the Euro. <https://doi.org/10.2866/7881574>

Farhi, E., & Maggiori, M. (2016). A Model of the International Monetary System. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2774545>

Farrell, H., & Newman, A. (2019). Weaponized interdependence: How global economic networks shape state coercion. *International Security*, 44(1), 42-79.

Financial Times. (2023). US Sanctions Threaten Major Blow to Russian Oil Groups Rosneft and Lukoil. <https://www.ft.com/content/17c52df8-f119-4d25-8869-df98c9386a9b>

Gerding, F., & Hartley, J. S. (2024). De-dollarization? Not so fast. *Economics Letters*, 111665. <https://doi.org/10.1016/j.econlet.2024.111665>

Gift, M. M. (2024, October 28). The BRICS currency conundrum: Weighing the pros and cons of a unified monetary system. APRI. <https://afripoli.org/the-brics-currency-conundrum-weighing-the-pros-and-cons-of-a-unified-monetary-system>

Glover, G. (2024, December 2). Trump has threatened tariffs against countries moving away from the dollar. Here's what to know about the efforts to dethrone the greenback. *Business Insider Africa*. <https://africa.businessinsider.com/markets/trump-has-threatened-tariffs-against-countries-moving-away-from-the-dollar-heres-what/zymt21b>

Goldman Sachs. (2025). US Dollar's Shifting Landscape: From Dominance to Diversification. Goldman Sachs Asset Management. <https://am.gs.com/en-us/advisors/insights/article/2025/dollars-shifting-landscape-from-dominance-to-diversification>

Gopinath, Boz, E., Casas, C., Díez, F. J., Gourinchas, P.-O., & Plagborg-Møller, M. (2020). Dominant currency paradigm. *American Economic Review*, 110(3), 677-719. <https://doi.org/10.1257/aer.20171201>

Gourinchas, P.-O., Rey, H., & Sauzet, M. (2019). The international monetary and financial system. *Annual Review of Economics*, 11, 859-893.

Harvard Kennedy School. (2025). Apple's Supply Chain: Economic and Geopolitical Implications. <https://www.hks.harvard.edu/centers/wiener/publications/apples-supply-chain-economic-and-geopolitical-implications>

Iancu, A., Anderson, G., Ando, S., Boswell, E., Gamba, A., Hakobyan, S., Lusinyan, L., Meads, N., & Wu, Y. (2020). Reserve currencies in an evolving international monetary system. *Open Economies Review*, 33(5), 879-915.

International Monetary Fund (IMF, n.d.). Recycling Petrodollars. IMF. https://www.imf.org/external/np/exr/center/mm/eng/rs_sub_3.htm

International Monetary Fund (IMF). 2024. Currency Composition of Official Foreign Exchange Reserves (COFER). <https://data.imf.org/?sk=E6A5F467-C14B-4AA8-9F6D-5A09EC4E62A4>

International Monetary Fund. (2023). What is the SDR? IMF. <https://www.imf.org/en/About/Factsheets/Sheets/2023/special-drawing-rights-sdr>

International Monetary Fund. (2025). World Economic Outlook: General government gross debt. IMF. https://www.imf.org/external/datamapper/GGXWDG_NGDP@WEO/OEMDC/ADVEC/WEOW_ORLD/USA/DEU

Jordanov, A.. (2024, December 20). Gold-backed digital currency could be a game-changer for Brics. OMFIF. <https://www.omfif.org/2024/12/gold-backed-digital-currency-could-be-a-game-changer-for-brics/>

J.P. Morgan. (2024, October 8). De-dollarization: The End of Dollar dominance? | J.P. Morgan. <https://www.jpmorgan.com/insights/global-research/currencies/de-dollarization>

Kim, S. (2024). Digital Money, Cross-Border Payments, International Reserves, and the Global Financial Safety Net. IMF Notes.

KPMG (2018), The CEO as Chief Geopolitical Officer. <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2018/03/the-ceo-as-chief-geopolitical-officer.pdf>

Lee-Makiyama, H., & Baker, R. (2024). How Huawei weathered the storm: Resilience, market conditions or failed sanctions? (ECIPE Policy Brief). European Centre for International Political Economy. <https://ecipe.org/publications/how-huawei-weathered-the-storm-resilience-market-conditions-or-failed-sanctions/>

Liu, Z. Z., & M. Papa. (2022). Can BRICS De-dollarize the Global Financial System? Cambridge University Press. <https://doi.org/10.1017/9781009029544>

McCauley, R., McGuire P., & Sushko, V. (2015). Global Dollar Credit: Links to US Monetary Policy and Leverage. BIS Quarterly Review. https://www.bis.org/publ/qtrpdf/r_qt1509e.htm

McDowell, D. (2020). Financial Sanctions and Political Risk in the International Currency System. *Review of International Political Economy* 27 (3): 635–661.

- Nestlé. (2025). Full-Year Results 2024. <https://www.nestle.com/media/pressreleases/allpressreleases/full-year-results-2024>
- Nugrahaeni, R. (2025). BRICS and the Shift Away from Dollar Dependence. Chicago Policy Review. <https://chicagopolicyreview.org/2025/10/08/brics-and-the-shift-away-from-dollar-dependence/>
- Nye, A. (2020). The G20's impasse on Special Drawing Rights (SDRs). Yale School of Management. [https://som.yale.edu/sites/default/files/2022-01/International Institutions The%20G20s%20impasse%20on%20Special%20Drawing%20Rights.pdf](https://som.yale.edu/sites/default/files/2022-01/International%20Institutions%20The%20G20s%20impasse%20on%20Special%20Drawing%20Rights.pdf)
- Ogden, C. (2025, December 17). What is the BRICS “UNIT” – and could it really challenge the US dollar? The Conversation. <https://doi.org/10.64628/aa.tm9nxpg66>
- Organization of the Petroleum Exporting Countries. (2024). Annual Statistical Bulletin 2024. OPEC. <https://www.opec.org/assets/assetdb/asb-2024.pdf>
- Osama Wagdi, Elnahrawy A., & Fathi, A. (2023). Petrodollar and De-dollarization: A Survey from OAPEC Countries. E3S Web of Conferences, 449, 02008. <https://doi.org/10.1051/e3sconf/202344902008>
- Paduano, S. (2022). SDRs and The Global Financial Architecture: History, Economics, Mechanics – and a Return to the Original System. LSE Global Economic Governance Commission. <https://www.lse.ac.uk/ideas/Assets/Documents/project-docs/GEGC-Working-Paper-Nov-22.pdf>
- Pradhan, S.-K., et al. (2025). Geopolitics Meets Monetary Policy: Decoding Their Impact on Cross-Border Bank Lending. Bank for International Settlements. <https://www.bis.org/publ/work1247.htm>
- Quintana, F. J. (2025). Dollar dominance, de-dollarization, and international law. Journal of International Economic Law. <https://doi.org/10.1093/jiel/jgaf032>
- Ranaldo, A., & P. Santucci de Magistris. (2022). Liquidity in the Global Currency Market. Journal of Financial Economics 146 (2): 495–518.
- Reuters. (2023a). Exclusive: India Refiners Start Yuan Payments for Russian Oil Imports. <https://www.reuters.com/business/energy/india-refiners-start-yuan-payments-russian-oil-imports-sources-2023-07-03/>
- Reuters. (2023b). India, Russia Suspend Negotiations to Settle Trade in Rupees, Sources Say. <https://www.reuters.com/markets/currencies/india-russia-suspend-negotiations-settle-trade-rupees-sources-2023-05-04/>
- Rey, H. (2015). Dilemma Not Trilemma: The Global Financial Cycle and Monetary Policy Independence. <https://www.nber.org/papers/w21162>

Smaghi, L. B. (2011, October 3). The Triffin dilemma revisited. Triffin International Foundation.

Smith, I., Sandlund, W., & Rees, R. (2026, January 12). Gold hits record high and dollar weakens on Fed independence worries. Financial Times. <https://www.ft.com/content/09aa1ffc-3776-4c72-8342-47d4d1bd5186?syn-25a6b1a6=1>

S&P Global. (2024). Saudi-China Ties and Renminbi-Based Oil Trade. <https://www.spglobal.com/en/research-insights/special-reports/saudi-china-ties-and-renminbi-based-oil-trade>

SWIFT. (2025). What is Swift? <https://www.swift.com/about-us/who-we-are/what-swift>

Tout, E. (2023, March 10). Plans for a fictitious world: Keynes's global bank and currency. Economic History. <https://blogs.lse.ac.uk/economichistory/2023/03/10/keynes-global-bank-and-currency/>

Triffin, R. (1961). Gold and the dollar crisis: The future of convertibility. Yale University Press.

Turkish Airlines. (2023). Annual Report. https://investor.turkishairlines.com/documents/ThyInvestorRelations/download/financial/annual-report/Turkish_Airlines_Annual_Report_2023.pdf

U.S. Department of State. (2017). Cuba Sanctions - United States Department of State. United States Department of State. <https://www.state.gov/cuba-sanctions/>

U.S. Government Accountability Office (GAO). 1979. The U.S. and the OPEC Oil Problem. <https://www.gao.gov/assets/id-79-7.pdf>

Verdier, P.-H. (2025). International Finance and the Return of Geopolitics. American Journal of International Law. 119(2), 229-278.

Wigglesworth, R. (2026, February 17). Have we hit peak dollar bearishness? Financial Times. <https://www.ft.com/content/89b950ae-c991-4730-b615-969f91547afc>

Williams, A. (2025, August 7). Donald Trump's new tariff regime deepens global trade war. Financial Times. <https://www.ft.com/content/9f642686-d9bf-4d16-a2f6-2d2ab8fb43d2?syn-25a6b1a6=1>

Witt, M. A. (2019). De-globalization: Theories, Predictions, and Opportunities for International Business Research. Journal of International Business Studies 50(7), 1053-1077.

Xu, Q., & A. Xiong. (2022). The Impact of Financial Sanctions on the International Monetary System. China Economic Journal 15 (3): 277-297.

Zhang, L., Perez-Saiz, H., & Iyer, R. (2023). Currency Usage for Cross-Border Payments. IMF Working Paper.

Zhou, X. (2009). Reform the international monetary system. People's Bank of China. <http://www.bis.org/review/r090402c.pdf>