

The Challenges and Coping Strategies for mBridge Construction (along the Belt and Road) and RMB Internationalization amid Geopolitical Risks

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Abstract: In the current complex and ever-changing international landscape, geopolitical risks have a profound impact on the global economy and finance. In the context of the Belt and Road Initiative, the construction of the mBridge has presented new opportunities for the internationalization of the RMB, while also facing numerous challenges. This paper takes geopolitical risks as the starting point to explore the theoretical basis for constructing mBridge along the Belt and Road and the internationalization of the RMB. It analyzes the impact mechanism of geopolitical risks on these two aspects, identifies the core challenges faced, and proposes a systematic response strategy. The study aims to provide theoretical reference and practical guidance for promoting the construction of the mBridge along the Belt and Road and the internationalization of the RMB in a complex geopolitical environment.

1. Introduction

With the profound transformation of the global geopolitical landscape, geopolitical risks—including political conflicts and trade frictions—have intensified in frequency and severity, exerting growing interference on international economic and financial activities. As a pivotal platform for global cooperation, economic and financial collaboration among countries along the Belt and Road Initiative confronts heightened uncertainties. The emerging cross-border payment infrastructure, mBridge, demonstrates significant potential to enhance payment efficiency and reduce transaction costs. It thereby offers novel pathways for economic and trade activities within the Belt and Road region while concurrently aligning closely with the internationalization trajectory of the Renminbi (RMB). A thorough investigation into the developmental trends of both phenomena under geopolitical risks holds considerable significance for enriching international financial theory and guiding China's participation in global financial cooperation.

Existing scholarly research has examined the technical applications of mBridge, explored pathways for RMB internationalization, and investigated the impacts of geopolitical risks. However, integrating these three dimensions into a systematic analytical framework remains an underexplored area of significant academic and practical value. Specifically, there is a paucity of research addressing the interplay between the Belt and Road mBridge initiative, RMB internationalization, and corresponding response strategies amidst geopolitical risks. This study employs a multifaceted methodological approach to analyze empirical data across multiple dimensions, aiming to formulate targeted and systematic response strategies that address the identified gaps in the extant literature ^[1].

2. Theoretical Basis

2.1 Theoretical Relationship between Geopolitical Risk and International Financial Structure

Geopolitical risk refers to the uncertainty arising from interstate political relations, territorial disputes, and ideological differences that adversely impacts international political, economic, and security landscapes. Its core connotation encompasses power struggles, conflicts of interest, and various forms of political instability and conflict. Theoretically, the mechanism through which

geopolitical risk reshapes the international financial architecture manifests primarily in the following dimensions ^[2]. First, geopolitical risk reorients international capital flows. geopolitical conflicts emerge within a specific region or nation, investors typically reallocate capital toward safer jurisdictions to mitigate exposure, thereby instigating global capital reconfiguration. This consequently perturbs financial markets across affected countries and regions. For instance, recurrent geopolitical tensions in the Middle East frequently precipitate capital flight toward comparatively stable financial markets such as those in Europe and the United States. Secondly, geopolitical risk influences the status and utilization of international currencies. During geopolitical confrontations, states may impose financial sanctions on adversarial nations, restricting the use of targeted currencies and thus altering the international monetary landscape. Beyond reducing reliance on specific currencies, nations may pursue diversified currency alternatives, further impacting the international financial structure. Additionally, geopolitical risks may catalyze adjustments in patterns of international financial cooperation. Confronted with shared geopolitical threats, some states may enhance financial collaboration and establish regional financial safety mechanisms to counter systemic risks. Conversely, geopolitical divergences may prompt other nations to curtail financial cooperation, fostering divergent trajectories within the international financial cooperation framework.

2.2 Theoretical Logic of mBridge along “The Belt and Road” and RMB Internationalization

mBridge is a cross-border payment infrastructure that facilitates the interconnection of digital currency systems across various countries and regions. It employs advanced technologies such as distributed ledgers and encryption algorithms to ensure the security and integrity of financial transactions. Its technical characteristics include decentralization, anonymity, traceability, and more. The operating model is principally designed to facilitate seamless exchange and cross-border transfers between different digital currencies by establishing unified technical standards and protocols. In terms of settlement efficiency, unlike SWIFT's reliance on layered correspondent banking networks—often taking 2-5 business days with high intermediary fees—the mBridge enables near the real-time settlement. By leveraging DLT's shared ledger, transaction validation occurs simultaneously across all network nodes, eliminating the need for sequential reconciliation. This cuts settlement times from days to minutes, drastically reducing liquidity costs tied to pre-funded nostro/vostro accounts. For data sovereignty, the mBridge's design prioritizes jurisdictional control over transaction data. Unlike SWIFT, which centralizes data processing in Western jurisdictions, its distributed structure allows participating regions to retain oversight of their citizens' and firms' transaction metadata through localized node management. It mitigates the risks of extraterritorial data access by foreign authorities. In the context of cross-border payments within the "Belt and Road" region, mBridge has been demonstrated to circumvent the conventional constraints imposed by traditional cross-border payment systems. This advancement has been shown to enhance payment efficiency, curtail transaction costs, and fortify payment security and transparency^[3].

The internationalization of the RMB signifies its capacity to traverse national boundaries, thereby serving as a medium for exchange, circulation, payment, and storage on an international scale. This development culminates in the RMB's emergence as a widely accepted international currency. The stage characteristics of the internationalization of the RMB are manifested in the gradual advancement from peripheralization to regionalization and then to globalization. The RMB has achieved a certain degree of peripheralization and is widely used in trade and investment with neighboring countries. However, considerable room for improvement remains in terms of regionalization and globalization.

In the field of digital currencies, a key cross-border regulatory framework developed by the International Monetary Fund (IMF) focuses on central bank digital currencies (CBDCs) and global stablecoins (GSCs). The IMF argues that while CBDCs do not fundamentally alter the economic drivers behind a currency's international use, they can quantitatively strengthen incentives for currency substitution and internationalization. Examples include enhancing financial inclusion, facilitating the more equitable distribution of government funds to households and businesses during crises such as pandemics, and reducing cross-border transaction costs, particularly for small-value

payments. For GSCs, they may expand access to services across global social networks and e-commerce platforms. However, this regulatory framework faces challenges and counterarguments. From the perspective of international political economy, the existing dollar-centric global monetary system suppresses the development of emerging digital currency initiatives. The mBridge project, for instance—a multilateral central bank digital currency bridge aims to simplify cross-border payments by establishing direct digital connections between central banks, thereby reducing reliance on dollar-dominated correspondent banking systems—has aroused vigilance from Western countries like the U.S. Some U.S. circles contend that mBridge's growth could erode the dollar's dominance in international trade, allowing nations like China to bypass U.S.-led financial systems and diminish the efficacy of U.S. sanctions. Such concerns may prompt restrictive measures against mBridge, highlighting the practical hurdles posed by resistance from dominant players in the current global monetary order.

The Russia-Ukraine war significantly affected the use of the yuan in Central Asia. Geopolitical uncertainties increased the region's demand for a stable currency. For instance, the CIPS (Cross-Border Interbank Payment System) nodes in Central Asia experienced a significant increase in business volume. In 2023, the daily average processing volume was 12 billion yuan, which soared to 85 billion yuan in 2024. This growth facilitated trade settlement in yuan between China and Central Asian countries.

There is a close synergistic relationship between mBridge and RMB internationalization in cross-border financial scenarios. On the one hand, the construction of mBridge provides a new channel and carrier for RMB internationalization. The implementation of mBridge facilitates the execution of RMB transactions, thereby enhancing the convenience of cross-border payments and settlements within countries along the Belt and Road initiative. This development is expected to augment the frequency and scope of RMB utilization in the region, thereby fostering the regionalization and internationalization of the RMB. Conversely, the progression of RMB internationalization has the potential to broaden the scope of its application and provide a significant stimulus for the development of mBridge. As the RMB's status in international economic exchanges continues to improve, more countries and regions will be willing to accept the RMB as a settlement currency in mBridge, thereby promoting the development and application of mBridge.

Within the framework of the trilemma paradox, it is challenging to achieve both free capital flows, exchange rate stability, and monetary policy independence. mBridge's mechanism of action is reflected in the following aspects: first, it enhances the efficiency of capital flows. Realizing real-time clearing of cross-border payments through digital currency and reducing intermediation links not only promotes the free use of the RMB in trade and investment but also mitigates the impact of traditional capital flows on the exchange rate. Second, it enhances the flexibility of exchange rate management. Based on programmability, capital flows can be accurately monitored and directionally regulated, allowing for the independent operation of monetary policy while maintaining the basic stability of the exchange rate. Third, it strengthens monetary sovereignty. Compared with relying on external systems such as SWIFT, mBridge relies on the central bank's digital currency technology, making it easier for China to balance the goals of capital liberalization and financial stability when promoting the cross-border use of RMB.

3. The Impact of Geopolitical Risks on mBridge and RMB Internationalization

3.1 Impact of Geopolitical Risks on mBridge Construction

From the perspective of project implementation, the absence of political trust constitutes a substantial impediment to the collaboration necessary for the construction of mBridge and the advancement of infrastructure development. In the context of the Belt and Road initiative, certain countries have experienced challenges in fostering mutual trust, largely attributable to ongoing territorial disputes and strained political relations. In the context of projects such as mBridge, which necessitate the sharing of data and collaboration among countries, there is often a degree of caution among participating nations due to concerns regarding security and national interests. This caution

can sometimes result in a refusal to engage in cooperative endeavors. Concurrently, geopolitical risks will also have ramifications for the construction of the mBridge infrastructure. Some countries may impose various obstacles to infrastructure construction, such as restricting foreign companies from participating in construction and raising the approval threshold, because they are concerned that the construction of the mBridge will compromise their own financial security and national sovereignty, resulting in slow progress in infrastructure development ^[4].

From the perspective of technical collaboration, the technical standard game and restrictions on cross-border data flow have severely restricted the compatibility of the mBridge system. A close examination of the research, development, and application of digital currency technology reveals significant variations among different countries. These variations are accompanied by the establishment of distinct technical standards and specifications. In the context of mBridge construction, nations frequently assert the adoption of their technical standards to safeguard their technological superiority and industrial interests. This tendency engenders challenges in achieving uniformity in technical standards. Furthermore, restrictions on cross-border data flow have emerged as a salient issue. Geopolitical risks have prompted certain nations to implement stringent regulatory measures concerning cross-border data flows, driven by concerns that data leakage may potentially compromise national security and interests. Consequently, in the development of mBridge, cross-border data transmission frequently encounters various limitations, which can impact the system's overall performance and operational efficiency.

3.2 The Impact of Geopolitical Risks on RMB Internationalization

The impact of trade channels on the cross-border utilization of the RMB is subject to the influence of trade protectionism stemming from geopolitical conflicts. These conflicts have the potential to significantly constrain the RMB's cross-border application. In the context of geopolitical conflicts, certain nations may resort to trade protectionist measures, including the imposition of tariffs and the establishment of trade barriers, with the objective of restricting trade with other countries in order to safeguard their own industries and economic interests. Consequently, the scale of trade between countries along the "Belt and Road" will be affected, and the use of RMB as a trade settlement currency will also decrease. For instance, following a geopolitical conflict between countries, the nation in question imposes strict restrictions on imported goods, leading to a substantial decrease in the proportion of RMB settlement in bilateral trade. Concurrently, the adoption of trade protectionist measures will precipitate elevated levels of uncertainty within the global market. To mitigate risks, companies are increasingly inclined to use traditional international currencies, such as the US dollar and the euro, for settlement, thereby further reducing the use of the RMB ^[5]. The following is a schematic diagram of the geopolitical risk-mBridge-RMB internationalization transmission mechanism, as shown in Figure 1:

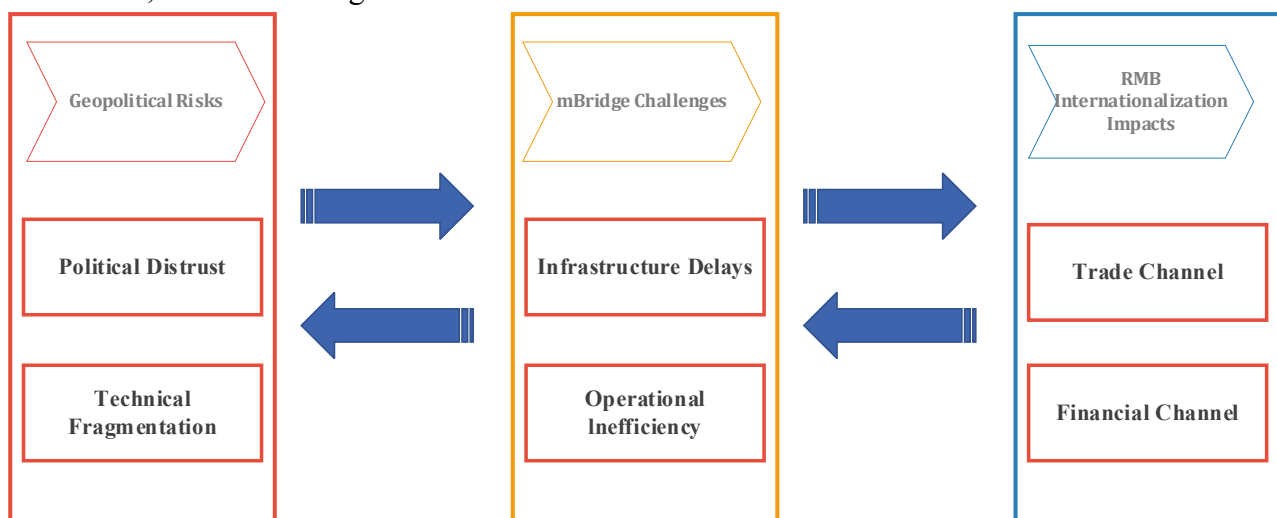


Fig. 1 The schematic diagram of the geopolitical risk-mBridge-RMB internationalization transmission mechanism

The fluctuation of international capital's confidence in RMB assets, as measured through financial channels, will have a direct impact on the enhancement of RMB's reserve currency status. Geopolitical risks have been shown to induce turbulence in the international financial market, thereby prompting a decline in investors' risk appetite and engendering a sense of caution regarding assets in emerging market countries. As a significant component of emerging market currency assets, RMB assets will be subject to the influence of international capital. In the context of escalating geopolitical risks, there is a possibility that international capital may sell off substantial quantities of RMB assets. This dynamic could lead to heightened volatility in the RMB exchange rate, thereby impacting the stability of the RMB. This dynamic has the potential to erode the confidence of other nations in the RMB when determining its role as a reserve currency, thereby impeding the advancement of the RMB's reserve currency status. For example, during the geopolitical crisis, international capital sold off assets in emerging market countries on a large scale, and RMB assets were also affected, resulting in a certain degree of depreciation of the RMB exchange rate, and some countries reduced the proportion of RMB in their foreign exchange reserves ^[6].

Additionally, some achievements have been made in the internationalization of RMB. China's financial institutions have strengthened RMB loan support for Kazakh projects, and domestic engineering contracting enterprises have participated in their project bidding, forming a closed loop of RMB internationalization. First, due to geopolitical developments, particularly the Russian-Ukrainian war, Russia's influence in Central Asia has declined, while the scale of investment by Russian enterprises in Kazakhstan has increased significantly. In the Silleno polyethylene project, KazMunayGas holds a 40% stake, while Russian Sibur and Sinopec each hold 30%. This partnership exemplifies successful cooperation. Second, the recent Central Asia Summit and the upcoming Shanghai Cooperation Organization (SCO) Summit in Tianjin, where Kazakhstan has signed and will soon sign several major projects, are obvious political signals. Furthermore, a notable distinction emerges among Belt and Road countries concerning the degree of RMB internationalization, a phenomenon influenced by geopolitical risks and the depth of financial cooperation. Pakistan exemplifies the high-risk, low-cooperation model, where political instability and external spillovers constrain RMB utilization to specific projects (e.g., the China-Pakistan Economic Corridor), with superficial financial ties lacking systematic mechanisms. The Republic of Indonesia offers an exemplary illustration of the low-risk, high-cooperation model, wherein stable politics and consistent policies have been instrumental in fostering deeper ties. Following the execution of local currency agreements, the bank has pursued several strategic initiatives. These include the expansion of RMB trade settlement, the inclusion of RMB in its reserves, and participation in mBridge tests. These actions signify a commitment to progressive cooperation. Such divergence stems from political risks that impact trust and policy continuity, amplified by economic complementarity and the maturity of financial infrastructure.

In light of the aforementioned factors, financial institutions, including CITIC Insurance and banking institutions, have further reinforced their commitment to providing project loans to Kazakhstan. In the current economic climate, the LPR of RMB loans is persistently declining. RMB loans possess a discernible price advantage, irrespective of foreign currency exchange gains and losses. In addition, domestic engineering contracting enterprises have established a presence in foreign markets to participate in bidding for projects in Kazakhstan. This development has contributed to the formation of a closed loop of RMB internationalization within the context of the Belt and Road initiative. The process entails the mobilization of upstream funds in RMB, the execution of construction contracts by Chinese enterprises in the middle reaches, and the sourcing of all downstream trade procurement from China.

4. Challenges

4.1 Practical Obstacles to mBridge Construction

The primary challenge confronting the development of mBridge pertains to the complexity inherent in system docking, which is predominantly influenced by the variances in digital currency

technical standards across different geographical regions. Given the considerable variations in research and development, conceptual frameworks, technical approaches, and application scenarios of digital currencies among nations, a range of technical standard systems have emerged. These technical standards are incompatible in terms of data format, encryption algorithm, transaction process, and so forth. For instance, certain nations have adopted an account-based digital currency system, while others have adopted a token-based system. A critical examination of the two systems reveals substantial disparities in their transaction processing methodologies, which present considerable technical obstacles to the implementation of mBridge. To achieve system docking, countries need to coordinate and unify technical standards; however, this involves the technological sovereignty and industrial interests of various countries, making coordination difficult.

Furthermore, to advance the offshore RMB account infrastructure, it is imperative to optimize the institutional design for Non-Resident Alien (NRA) accounts and Foreign Trade (FT) accounts, with a focus on RMB-denominated instruments. Current operational frictions, characterized by stringent foreign exchange controls and elevated account opening/maintenance costs, hinder their efficacy as conduits for cross-border RMB circulation.

Notably, NRA accounts face regulatory constraints on fund receipt and utilization, as cross-border remittances require compliance with foreign exchange rules and the submission of supporting documentation, which escalates operational and time costs for entities with frequent cross-border liquidity needs. Compared to resident accounts, NRA accounts demand more cumbersome documentation—including identity verification, income source attestation, and residency proofs—posing entry barriers for overseas enterprises. Additionally, the exchange settlement policy exhibits complexities: while RMB funds in NRA accounts can be converted and remitted after procedural compliance, remittances to the same entity overseas accounts are restricted from foreign exchange purchases. Despite policy flexibilities in free trade zones, regulatory stringency remains more stringent compared to domestic resident accounts. To mitigate these inefficiencies, a "regulatory sandbox" pilot is proposed, with a capped single-transaction limit (e.g., an initial ceiling of \$500,000). This calibrated approach would balance innovation and risk containment, enabling controlled experimentation with streamlined procedures while preventing systemic exposure, thereby fostering incremental liberalization of offshore RMB account functionalities.

The risks associated with the absence of uniformity in cross-border regulatory frameworks should not be disregarded. The construction and operation of mBridge are intricately linked to the financial markets and regulatory systems of multiple countries. It is essential to acknowledge that there are substantial discrepancies in the regulatory policies and regulations governing digital currencies across different countries. Certain nations have adopted a favorable stance toward digital currencies, accompanied by a relatively relaxed regulatory framework. Conversely, others have adopted a cautious approach toward digital currencies, implementing stringent regulatory measures and even prohibiting the trading and utilization of these currencies. The lack of uniformity in regulatory rules poses significant risks to mBridge in cross-border transactions. For example, when mBridge makes cross-border payments, it may be penalized for violating the regulatory provisions of certain countries, which could impact the project's normal operation. Moreover, unclear regulatory rules bring uncertainty to financial institutions participating in the project mBridge, reducing their enthusiasm for participation.

The absence of engagement, largely due to certain nations' reservations regarding the transfer of technological sovereignty, further hinders the development of mBridge. The construction of mBridge necessitates extensive cooperation among countries in the realm of technology, necessitating the sharing of technical information and data resources. Some countries have expressed concerns that their participation in the construction of mBridge could result in the disclosure of their technological secrets, potentially hindering their development initiatives in the digital currency field and even compromising the country's financial and information security. Therefore, these countries have a wait-and-see attitude towards the project mBridge and their participation is not high, resulting in limited coverage of mBridge and difficulty in fully playing its role in cross-border payments.

4.2 Constraints on RMB Internationalization

The structural issues faced by China, such as the limited openness of financial markets and the problems in the exchange rate formation mechanism, are key factors restricting the internationalization of the RMB. Despite the substantial progress made by China's financial market in recent years, a notable disparity persists in terms of market openness when compared to developed economies. The convertibility of capital items is limited, and foreign capital continues to encounter restrictions when entering China's financial market. It hinders international investors' ability to freely allocate RMB assets, which negatively impacts the liquidity and attractiveness of the RMB in the international financial market. Additionally, the RMB exchange rate formation mechanism is not without flaws, and exchange rate fluctuations are to a certain extent subject to government intervention. It leads to insufficient stability and predictability of the RMB exchange rate, increases the risks of enterprises and investors using RMB for cross-border transactions and investments, and is not conducive to the promotion of RMB internationalization ^[7].

From an external perspective, the inertia of the international monetary system and the exclusion of the RMB from currency selection due to geopolitical considerations have presented significant challenges to its internationalization. Currently, the US dollar and the euro, representing international currencies, hold a dominant position in the international monetary system, creating a strong path dependence and inertia. These currencies are widely used in international trade, financial transactions, and foreign exchange reserves. The geopolitical landscape has emerged as a significant factor influencing the selection of currencies in various nations. In the context of geopolitical interests, there is a clear preference for the utilization of currencies from allied nations, while the RMB is met with disdain. Furthermore, in the context of utilizing mBridge, it has been observed that the RMB's pricing functionality is deficient. The majority of cross-border transactions continue to be denominated in international currencies, such as the US dollar. The utilization of the RMB in mBridge is predominantly confined to financial transactions, thereby impeding the international expansion of the RMB.

5. Strategies for Dealing with Geopolitical Risks

5.1 Phased Approach to Managed Convertibility

A phased approach to managed convertibility, which prioritizes current account (trade-related) openness before gradually relaxing the capital account, underpins RMB internationalization. The core of RMB internationalization lies in its widespread global recognition as a pricing unit, trading medium, and store of value—aimed at reducing reliance on existing monetary systems (via mechanisms like mBridge and CIPS as alternatives to SWIFT) and boosting its global standing through expanded use in scenarios such as Belt and Road trade, overseas contracting, and syndicated loans.

China's practice exemplifies this sequenced approach: since 1996, full liberalization of RMB convertibility for goods and services trade has facilitated its use in cross-border settlements, with growing adoption in Belt and Road trade. Capital account liberalization proceeds cautiously, with controlled access through programs like QFII, striking a balance between openness and stability. This prudence is critical because excessive RMB exchange rate volatility would undermine its reserve currency potential, as overseas entities need confidence in converting RMB to other assets. Thus, managed convertibility supports RMB internationalization by fostering stability while expanding its global role.

5.2 Building a Multilateral Collaborative Cooperation Framework

Promoting the establishment of the mBridge multilateral coordination mechanism is a crucial measure to mitigate geopolitical risks. By signing a memorandum of cooperation, the rights and obligations of various countries in the construction of mBridge can be clarified, the behavior of all parties can be regulated, and the transparency and stability of cooperation can be enhanced. Furthermore, a joint regulatory committee will be established, composed of representatives from

financial regulatory agencies of countries along the Belt and Road, responsible for coordinating regulatory policies across various countries, resolving regulatory conflicts arising from the operation of mBridge, and mitigating the impact of political interference on the project's advancement. In the monetary field, expanding the scale of currency swaps with countries along the route can increase the liquidity of the RMB in the region and facilitate countries to use the RMB for trade and investment. By signing currency swap agreements with more countries along the route, the proportion of RMB in regional trade pricing and settlement can be increased, thereby enhancing the RMB's influence in the region.

The sovereignty concession gradient model alleviates geopolitical crises through three tiers of cooperation, each with a graded delegation of sovereignty. First, technical standard unification involves harmonizing foundational protocols, such as CBDC encryption and mBridge interfaces. It minimizes cross-border transaction frictions without compromising regulatory autonomy, thereby building operational trust, as seen in "Belt and Road" nations that adopt unified digital payment formats, which in turn ease trade-related tensions through smoother economic interactions. Second, bounded data sharing builds on technical consensus. Participants exchange non-sensitive metadata while retaining control over proprietary data, reducing information asymmetry. It enables joint risk assessments and defuses distrust-driven conflicts, as in regional financial stability pacts. Third, regulatory coordination entails aligning policies and creating joint dispute mechanisms. Partial delegation of regulatory powers enhances collective crisis response, curbing the weaponization of the financial system and mitigating systemic geopolitical spillovers. The gradient fosters incremental trust, striking a balance between preserving sovereignty and fostering depth of cooperation to de-escalate frictions through structured interdependence.

5.3 Strengthening Technical and Institutional Support

In terms of technical standards, focusing on the first level of the gradient model, it is essential to unify core technical protocols, including distributed ledgers, encryption algorithms, and smart contracts. Referring to the technical framework of the digital euro, ensure the technical security and stability of mBridge. Fully consider the technical differences and needs of countries along the "Belt and Road" initiative, and formulate compatible and adaptable regional technical standards to enhance the system's compatibility and interoperability, thereby laying a solid technical foundation for cross-border transactions.

In the aspect of regulatory mechanisms, introduce the "regulatory equivalence and mutual recognition" clause. Based on the third level of the gradient model, recognize the regulatory systems of participating countries that meet the minimum standards and reduce regulatory barriers. Establish a joint legal expert group composed of legal and financial professionals from participating countries. The group is responsible for interpreting and coordinating legal issues arising from cross-border transactions, formulating unified dispute resolution rules, and providing legal support for the smooth operation of mBridge, which is conducive to curbing the weaponization of financial systems and mitigating systemic geopolitical spillovers.

While we promote technical innovation and establish standards to enhance China's influence in regional digital currency cooperation, we must also focus on improving our domestic financial market system. It includes advancing market-oriented reforms for interest rates and exchange rates, expanding the opening of financial markets, and increasing the international appeal of RMB assets. These efforts will provide strong support for the development of mBridge and the internationalization of the RMB.

6. Conclusion

In the contemporary complex geopolitical environment, there is a close interactive relationship between the construction of the "Belt and Road" initiative and the internationalization of the RMB. Concurrently, numerous core challenges exist. Geopolitical risks exert a detrimental influence on both entities, doing so through a variety of mechanisms. These mechanisms not only impede the construction of the mBridge, but also impose limitations on the rate of RMB internationalization.

To meet these challenges, a systematic strategy is needed. It is necessary to establish a multilateral cooperation framework that can mitigate the interference of political games and foster a conducive environment for the construction of mBridge and the internationalization of the RMB. Strengthening technical and institutional support will enhance the competitiveness of mBridge and the attractiveness of RMB assets.

Subsequent research endeavors may encompass a more exhaustive examination of dynamic risk assessment models, the real-time monitoring of the impact of geopolitical risks on mBridge construction and RMB internationalization, and the provision of a foundation for the adjustment of response strategies. Additionally, in light of the geopolitical environment, economic development levels, and financial market conditions in different regions along the "Belt and Road", targeted development strategies can be formulated to effectively promote the implementation and development of mBridge construction and RMB internationalization in these regions.

References

- [1] Huang K, Zhang Z, Wang Y. Characteristics of RMB Internationalization and Stock Market Co-movement Between China and RCEP Countries: An Analysis Based on Kernel PCA and SV-TVP-SVAR Model[J]. Computational Economics, 2025, 65(6):3945-3969. DOI:10.1007/s10614-024-10691-5.
- [2] Cui Y, Liu L, Peng K, et al. International competitiveness and currency internationalization: an application to RMB internationalization[J]. Journal of the Asia Pacific Economy, 2024. DOI:10.1080/13547860.2022.2031521.
- [3] Wang P, Ho T, Liu X, et al. China's Trilemma: Exchange Rate Marketization, RMB Internationalization, and Exchange Rate Pricing Power[J]. Borsa Istanbul Review, 2023. DOI:10.1016/j.bir.2023.06.002.
- [4] Tansuchat R. The Conflicting Developments of RMB Internationalization: Contagion Effect and Dynamic Conditional Correlation[J]. Engineering Proceedings, 2021, 5. DOI:10.3390/engproc2021005054.
- [5] Zhang T. RMB internationalization promotes the transformation analysis of import and export enterprises[C]//Proceedings of SHS Web of Conferences. 2023, 163: 303016. DOI:10.1051/shsconf/202316303016.
- [6] Saijai W, Panya T, Maneejuk P. Contagion Effects Among Selected Asian Stock Markets During the COVID-19 Pandemic: A Dynamic Conditional Correlation Approach[J]. Studies in Systems, Decision and Control, 2024:361-374. DOI:10.1007/978-3-031-43601-7_24.
- [7] Yao Qichao, Li Ping. The Impact of the "Belt and Road" Strategy on China's Economic Development [J]. Economic Management (Abstract Edition), 2016(10): 00044.