

# Analysis of the Path and Countermeasures for the Central Bank's Digital Currency to Boost the Internationalization of the RMB

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## Abstract

**In order to meet the needs of China's economic development and international trade, and to prevent potential risks arising from the international monetary system dominated by the US dollar, China officially began the process of RMB internationalization in 2009. However, in the process of development, it faces obstacles caused by factors such as US dollar hegemony and limited financial openness in China. In recent years, China has further developed the internationalization of the RMB and achieved significant results. Among them, the issuance of the Central Bank's Statutory Digital Currency (DC/EP) in 2020 has brought a new upgrade to the RMB. As an emerging circulation method, the digital RMB has the advantages of efficiency, convenience, centralized management, and information recording, bringing a new development to the internationalization of the RMB. It can be foreseen that with the development of China's economy and technology, the digital RMB will play an important role in future development. This article aims to analyze the current development status of RMB internationalization, explore the opportunities and challenges brought by the issuance of legal digital currency by the central bank to the development of RMB internationalization, and propose corresponding countermeasures and suggestions.**

## Keywords

**Digital Currency; Internationalization of RMB; Cross Border Payment.**

## 1. Introduction

Under the new development pattern of domestic circulation as the main body and mutual promotion of domestic and international double circulation, the digital economy is an important link in the development of domestic and international double circulation. As a trading medium and value scale of the digital economy, various factors such as digital currency make the promotion and use of digital currency a trend, and the digital economy has become a new engine for the further development of China's economy. After joining the central bank's regulatory mechanism, fiat digital currency can significantly enhance economic inclusivity, monetary policy effectiveness, and payment system stability, accelerate the global flow of fiat digital currency, help reshape the international trade settlement and cross-border payment system, and promote the internationalization of domestic currency. In this context, China's central bank has developed the digital RMB based on the practical needs of social development,

aiming to fully leverage the stability of monetary policy, prevent financial risks, maintain monetary sovereignty, and promote the internationalization of the RMB. So far, China's central bank has made breakthrough progress in the research and operation of digital RMB. It can be foreseen that the implementation of the digital RMB in the future will play an important role in China's further improvement of the RMB settlement system, strengthening the functions of the RMB in international payments, investment and financing, reserves, and promoting the internationalization process of the RMB. Therefore, studying the path and countermeasure analysis of digital RMB for RMB internationalization has academic value and practical significance.

## 2. Literature Review

The research on RMB internationalization by domestic and foreign scholars can be roughly divided into three parts: the background and significance of RMB internationalization, the factors affecting the current development of RMB internationalization, and the implementation path of RMB internationalization. This article summarizes the research of relevant scholars based on the research purpose.

Regarding the background and significance of RMB internationalization, many scholars believe that after the global financial crisis, the drawbacks of relying solely on the US dollar as the international currency in the financial system have become prominent and no longer meet the requirements of the times. As the world's second largest economy, China plays an important role in regional cooperation. Prasad (2011) and Frankel (2012) conducted a detailed study on the impact of free flow of Chinese capital market and restrictions and obstacles in the financial market on the internationalization of the RMB, and found that these factors can have a blocking effect at specific times. Lee and Will believe that the future global economic landscape will mainly be represented by the United States, Europe, and Asia, while China's rapid development will significantly enhance Asia's influence in the financial sector.

In terms of the challenges faced by the internationalization of the RMB, Cao Lanying (2016) believes that the international trade structure and RMB payment and settlement are not coordinated, the international and regional influence of the RMB is relatively weak, and there are deficiencies in domestic financial institutions and systems. Wang Jie (2021) conducted empirical analysis on the factors that affect the development of RMB internationalization and found that factors such as economic strength, moderate exchange rate fluctuations, and financial market development have a positive impact on the development of RMB internationalization.

In terms of the development path of RMB internationalization, Lin Lefen and Wang Shaonan (2016) mainly believed that in the context of the "the Belt and Road", to improve the level of RMB internationalization, it is necessary to increase foreign investment, strengthen Eurasian trade, give play to the regulatory role of the government, and gradually and steadily open up capital projects. Tang Mengmeng (2023) analyzed the obstacles encountered in the internationalization of the RMB and the background of the Federal Reserve's interest rate hike, and concluded that China should deepen bilateral monetary and financial cooperation and improve the international status of the RMB to continuously promote the internationalization of the RMB and respond to the constantly changing world economic situation.

## 3. Current Development Status of RMB Internationalization

Since China implemented the pilot work of cross-border trade settlement in RMB in 2009, it has been actively and steadily promoting the internationalization of RMB. After more than a decade of development, the international valuation function of the RMB has been further improved, the international investment and financing function has been basically stable, the international

foreign exchange reserve function has been continuously enhanced, and the scale of RMB use has been continuously expanding. According to the 2022 RMB Internationalization Report, as of December 2021, the international payment share of the RMB has increased to 2.7%, surpassing the Japanese yen and becoming the world's fourth largest payment currency. With the continuous improvement of China's economic strength and international influence, the RMB is being accepted by more and more countries and regions, and the development path of RMB internationalization is good. Although China's RMB internationalization has achieved many achievements in its development, there are still problems such as insufficient international currency function, low share of foreign exchange reserves, limited level of financial market openness, and inconvenient investment and trade. At the same time, the internationalization of the RMB is facing challenges from multiple factors such as the hegemony of the US dollar and insufficient market users of the RMB.

### **3.1. Continuously Expanding the Scope of Cross border Use of RMB**

With the application of the RMB in the international balance of payments, it continues to expand from the current account to fields such as direct investment, cross-border financing, and securities investment. The scope of cross-border use is constantly expanding, and the participating entities are also constantly expanding. According to relevant data, in 2019, the total cross-border use of the RMB reached 19.67 trillion yuan, compared to only 400 billion yuan in 2009. The RMB has become the second largest cross-border currency in China, and has become the largest cross-border currency in Shanghai, Guangdong Hong Kong Macao Greater Bay Area, and other places. According to the composition data of the International Monetary Fund's foreign exchange reserves, as of the end of the fourth quarter of 2019, the proportion of RMB assets in the global official foreign exchange reserves reached 1.95%, ranking fifth in the world. More than 70 central banks and currency management authorities have included RMB assets in their foreign exchange reserves. According to data released by the Bank for International Settlements in April 2019, the transaction volume of RMB foreign exchange transactions ranks eighth in the world, with a daily average transaction volume of 284 billion US dollars, accounting for 4.3% of the global foreign exchange market.

### **3.2. The "the Belt and Road" Promotes the Increase of Overseas Use Rate of RMB**

The development of the "the Belt and Road" has not only strengthened the trade cooperation of the countries along the Belt and Road, promoted the common development and prosperity of the economies of the countries along the Belt and Road, but also promoted the development of RMB internationalization. According to the Report on RMB Internationalization in 2022, the total cross-border collection and payment of RMB between China and countries along the "the Belt and Road" in 2021 will reach 5.42 trillion yuan, up 19.6% year on year, accounting for 14.8% in the same period. By the end of 2021, China had signed bilateral local currency swap agreements with 22 countries along the "the Belt and Road", which further promoted the facilitation of overseas investment and trade in RMB. Since the implementation of the "the Belt and Road" initiative, China and the countries along the "the Belt and Road" have formed a beautiful pattern of financial, trade and people to people connectivity, creating good conditions for the internationalization of RMB. RMB has become the main reserve currency of many countries along the "the Belt and Road", greatly improving the overseas use rate of RMB.

### **3.3. Threat of US Dollar Hegemony**

The Bretton Woods system after World War II linked the US dollar to gold, and various currencies maintained basic exchange rates with the US dollar, establishing an international monetary system centered around the US dollar. As the world reserve currency, the US dollar has a significant impact on the monetary hegemony under the Bretton Woods system and the

post-war world economy. Currently, over 65% of the world's foreign exchange reserves come from the US dollar. The proportion of using US dollars for foreign exchange transactions reaches 90%, and in some foreign exchange markets, the proportion of trading in US dollars can even reach over 99%. Since 2022, affected by the Russia-Ukraine conflict, the United States has taken advantage of the hegemony of the US dollar to increase sanctions against Russia, freeze the overseas assets of the Russian Central Bank, and prohibit some large Russian banks from using the SWIFT international settlement system. As of September 2022, in order to alleviate high domestic inflation, the US Federal Reserve has raised interest rates five times by 300 basis points, promoting a significant appreciation of the US dollar, leading to a significant depreciation of the local currencies of many countries from the Middle East to Europe, and from Latin America to East Asia. The hegemony of the US dollar poses a threat to the stability of the RMB value and the overseas trading environment of the RMB, hindering the internationalization process of the RMB.

## **4. The Development Opportunities of Digital Currency for the Internationalization of RMB**

### **4.1. Create a Secure and Convenient Cross-border Payment and Settlement System**

The digital RMB based on blockchain technology can reduce financial market risks, create a safe and convenient cross-border payment and settlement system for international entities, and enhance the confidence of foreign investors in the RMB. Based on the characteristics of security, traceability, and non forgeability of digital RMB, the central bank can not only prevent the use of digital RMB for criminal activities such as money laundering, telecommunications fraud, and terrorist financing, but also provide information support in combating cross-border illegal crimes. At the same time, digital RMB based on blockchain technology has controllable anonymity, which can provide important technical support for cross-border payment settlement, protect users' personal privacy, avoid many privacy violations and big data hacks, and have faster settlement speed, more efficient settlement efficiency, and a safer payment environment than traditional cross-border payment settlement systems. The digital RMB issued by the People's Bank of China, guaranteed by national credit, has strong stability and reliability, which is conducive to enhancing the confidence of international entities in holding the RMB and promoting two-way facilitation of domestic and foreign investment.

### **4.2. Expanding New Space for RMB Internationalization**

The US dollar has strong network externalities in the existing international monetary system, not only achieving incremental marginal returns, but also cultivating the inertia of market entities to use the US dollar. These advantages of the US dollar make it difficult for other emerging currencies to play a substitute role. But currently, in terms of payment settlement and international reserves, China's global share is relatively low, and during the same period, China's total economic output, international trade and investment have already ranked among the top in the world. In the fields of financial technology and digital technology, China has obvious comparative advantages and good development momentum. If China actively seeks more reliable global partners to participate in the trading and issuance of digital RMB, it will increase the acceptance of digital RMB globally. By establishing a prudent and effective regulatory framework, enhancing the flexibility and adaptability of digital RMB in issuance and trading, increasing the use of digital currencies or digital RMB linked to the RMB, and gradually achieving free exchange between digital RMB and other legal tender currencies. Utilizing the good opportunities of emerging digital economy development in certain advantageous areas,

enabling the digital RMB to smoothly enter emerging economies and gain corresponding market share, thereby enhancing the international status of the RMB.

#### **4.3. Adding New Power to the Internationalization of the RMB**

From a micro perspective, digital RMB will provide a new program and blockchain solution, which will help unify the payment systems of various financial institutions, ensure that transaction entities achieve safer, more reliable, and efficient transactions, promote the development of digital accounting and auditing, and effectively prevent and combat financial fraud and tax evasion. Although blockchain automation transactions will reduce intermediate links such as market pricing and project financing during the use of digital RMB, the role of banks as principals in most transactions will be severely weakened. However, this will also stimulate financial institutions such as banks to provide more new services. Regarding user anonymity and privacy protection, digital RMB will adopt a limited anonymity method. By setting up different types of wallets, small amount wallets can achieve anonymity and be used to pay for daily small purchases. If a large transaction is to be conducted, it is necessary to upgrade the wallet through necessary identity recognition programs to meet the needs of anti money laundering, tax evasion, and counter-terrorism financing.

From a macro perspective, the digital RMB improves cross-border settlement efficiency, reduces cross-border payment costs, enhances its international appeal, and makes it a settlement currency for goods and service trade on a larger scale, and is included in foreign exchange reserves by more countries. Through digital trading, more comprehensive and accurate economic information can be obtained, which is conducive to strengthening the effectiveness of macroeconomic regulation policies. Increasing the innovation, research and application of digital technology, and providing tax incentives to relevant research and development enterprises and professional talents can promote coordinated cooperation among government departments, enterprises, and society, master independent intellectual property rights in key technological fields of digital currency, and establish a global competitive advantage in technology. At the same time, we will accelerate the construction of a digital financial system and establish new systems related to the issuance of digital RMB, digital financial markets, and trusted institutions for digital currencies. We must not only boldly innovate digital financial products, but also actively explore new paradigms for digital financial business supervision, and enhance our voice in the global digital financial system construction. Using digital currency as a new driving force to promote the internationalization of the RMB is also conducive to forming a stable structure of a multipolar international monetary system.

### **5. Suggestions**

#### **5.1. Applying Digital RMB to Regional Cooperation**

Seize the opportunity of rapid development of digital RMB research compared to other countries internationally, promote the issuance of digital RMB and form a first mover advantage. As an international currency, the main function of the RMB is to serve as a stable payment tool on a global scale. Therefore, the low-cost and efficient characteristics of digital RMB should be fully utilized to apply it to the international market through cross-border trade. To this end, we can use the "the Belt and Road" initiative, regional trade agreements, etc. to broaden the application scenarios of digital RMB, widely apply digital RMB to bilateral or multilateral cooperation, and promote the regionalization and even internationalization of RMB.

#### **5.2. Further Improve the Supporting Regulatory System**

Further improve the regulatory framework for digital RMB, strengthen the legal system construction for digital RMB, and ensure and promote its lawful and standardized use. Actively promote the revision of the Law of the People's Bank of China and relevant laws and regulations,

and fill the gaps in relevant laws, regulations, and regulatory provisions for digital RMB. Strengthen the protection of user personal information and the supervision of data security and financial security to ensure the smooth and safe operation of the system. Internationally, actively participate in the negotiation and formulation of standards and regulatory standards related to digital currencies, with a focus on strengthening effective joint and collaborative supervision of anti money laundering, anti fraud, and anti-terrorism financing in the field of digital currencies, and strive to enhance the voice of China's digital currencies internationally.

### **5.3. Exploring the Development of Digital RMB Cross Border Transactions**

The development of digital RMB has played a certain role in promoting the internationalization of RMB, and its characteristics such as traceability of large transactions and anonymity of small transactions can improve the convenience of cross-border payments. Compared to traditional cross-border payment models that have always faced issues such as time lag, high costs, and low efficiency, emerging technologies such as digital RMB can sustain 7% × Working 24 hours a day and completing transactions in a very short time, therefore, establishing a cross-border payment and settlement system based on digital RMB is an important aspect of expanding the circulation scale of RMB and enhancing the externality of RMB network. In the process of promoting digital RMB, the will of market entities should be followed, so that the legal digital RMB gradually becomes the official payment method for international economic and trade settlement, and a new international settlement system should be gradually formed.

### **5.4. Using Digital Technology to Improve China's Financial Market System and Mechanism**

The current development of China's financial market is not perfect enough, and overseas capital liquidity is insufficient, leading to obstacles in the internationalization of the RMB. Therefore, improving the credit structure and establishing a stable financial system are the top priorities for the internationalization of the RMB. To this end, digital technology can be fully applied to improve the credit system and guide capital flow to the real economy. At the same time, the traceability, monitoring, and regulatory characteristics of digital RMB can also be utilized to effectively prevent and resolve financial crises. The US dollar, euro, pound sterling and other currencies have become important international currencies, and the path of internationalization of the RMB will inevitably face political resistance from the United States and Western countries. The digital RMB has become a new way to break the hegemony of the US dollar. By using the digital RMB, we can further strengthen international cooperation with other countries, rebuild the global monetary system to a certain extent, enhance the influence of the RMB in the international currency, and enhance China's voice in the international arena.

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