

# Impact of Digital RMB on RMB Internationalization

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#### **ABSTRACT**

Digital currencies, led by the digital renminbi, as an important representative of sovereign digital currencies of major countries, have played an important role in many scenarios and have had a profound impact on the internationalization of the renminbi. Through its multiple advantages in international trade scenarios, the digital renminbi has shaped a more open, inclusive, and robust market, which in turn has positively influenced the internationalization of the renminbi and contributed to its internationalization.

**Keywords:** Digital RMB; RMB internationalization; International trade

#### 1. INTRODUCTION

Fiat digital currencies play an important role in the current "green digital finance" environment, with major economic powers looking into issuing digital currencies to promote their financial development. The digital RMB is an important part of China's efforts to enhance its international economic status. Most of the relevant literature has studied the impact of digital RMB on the internationalization of RMB from a macro perspective and proposed methods for the synergistic development of digital RMB and RMB internationalization, but most of the methods have shortcomings such as not being able to be practically implemented and taking a long time to take effect. This paper will focus on the positive impact of using digital RMB in trade scenarios for RMB internationalization to corroborate the view that digital RMB promotes RMB internationalization.

#### 2. SIGNIFICANCE OF DIGITAL RMB

In recent years China has become increasingly influential on the international stage, and its domestic economy has been growing year on year, showing a steady trend towards improvement. In order to strengthen China's position in the world economy and enhance its influence, the digital RMB plays an important role. The emergence of the digital renminbi is in line with the current "digital economy" and "green finance" concepts at home and abroad, and to a certain extent shows the pattern of a large country. At the same time, as China is the world's largest trading country in goods, manufacturing and the second-largest economy in the world, the digital RMB is an important representative of

the sovereign digital currency of a large country and plays an important role in many scenarios, especially in the trade market, which provides a more effective, practical and clear direction for the development of China's digital currency. In particular, during the 2022 Beijing Winter Olympics, the use of digital RMB in all scenarios within the Winter Olympics, the good experience of Olympic athletes with digital RMB, and the "zero-barrier" integration of digital currency and mobile payment formed during the period, have enhanced the global soft power of digital RMB and laid a good foundation for the internationalization of digital RMB. Looking at the recent international situation, the West has imposed sanctions on Russia and removed some Russian banks from the international settlement network Society for Worldwide Interbank Financial Telecommunication (SWIFT), subsequently reflecting the West's monopoly in the international settlement system and the hegemony of the US dollar. A few days ago, China was also under pressure from a number of sources, including trade wars, technology wars, and financial wars. Therefore, replacing the SWIFT payment system with the digital RMB is a way to make the global settlement system safer and fairer through Chinese digital means and to avoid bullying interference on the political front.

In summary, the digital RMB plays an important role in the domestic and international arena.

# 3. THE IMPORTANCE OF RMB INTERNATIONALIZATION

Since China's official accession to the Special Drawing Rights (SDR) basket of currencies in October

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2016, the RMB has become the fifth SDR basket currency after the US dollar, the euro, the British pound, and the Japanese yen, and has also demonstrated that the RMB is gradually meeting the requirements of a "freely usable" currency. This has greatly contributed to the speed of the RMB's internationalization and has laid a good foundation for the RMB's internationalization in the economic and financial sectors. The internationalization of the RMB symbolizes the RMB's qualification as an international reserve currency, which not only generates revenue from minting taxes, but also long-term carry income. In addition, China, as the issuing country, no longer needs to consider the risk of exchange rate fluctuations when using the RMB for transactions with other countries, which in turn reduces transaction costs and promotes the development of China's foreign trade. Secondly, because the RMB has become an international reserve currency, China's foreign exchange reserves can be reduced accordingly, as well as the wide circulation of the RMB in the trading market, which in turn affects the pricing of commodities, attracts foreign investment, and other aspects, further optimizing China's economic environment and creating an open and diversified trade market, making a great contribution to strengthening China's international trade strength and enhancing China's role in the global It has also enhanced China's voice and decision-making power in the global economy. In addition to this, the internationalization of the RMB has also had an important impact internally. With the internationalization of the RMB, the number of people traveling abroad and studying abroad will gradually increase, which will to a certain extent improve the standard of living of Chinese residents; at the same time, the stable and positive economic environment will also stimulate the enthusiasm of the nationals for innovation and entrepreneurship, which will promote the growth of the employment rate, making the economic vitality to be enhanced again and creating a harmonious and upwardlooking new economic society.

In summary, the impact of the internationalization of the RMB has also laid a good foundation for the improvement of China's international status.

# 4. HOW DIGITAL RMB PROMOTES RMB INTERNATIONALIZATION

#### 4.1. The ease of trading in digital RMB

According to statistics, the cross-border RMB settlement volume has reached a record RMB19.67 trillion (equivalent to approximately US\$2.83 trillion), while the frequency of using RMB in international trade settlement has gradually increased since China's accession to the SDR and as the world's second-largest economy, the world's number one industrial power and the number one country in trade in goods, establishing a broader settlement for RMB scenario. With this, digital

RMB can be widely used in trade payment and settlement scenarios by leveraging its transaction convenience features, such as not relying on third-party platforms, to supplement and replace traditional physical currencies, and time as of the end of 2021, the central bank data shows that there have been more than 8,085,100 digital RMB pilot scenarios, with a cumulative total of 261 million personal wallets opened and 87,565 million transactions The share of international payments in RMB increased to 2.70% in the statistics of payment amount ranking of major currencies in 2021. With the massive promotion and widespread use of a total of 403,000 digital RMB pilot scenarios, especially during the 2022 Winter Olympics, the acceptance of RMB at home and abroad is gradually increasing. On the other hand, even during the epidemic, China's annual import and export volume of goods in 2021 still reached over RMB 39 trillion, an increase of 21.4% year on year. It is clear to predict that the vast international trade scenario also lays a good foundation for the future increase in circulation of the digital RMB. By taking this opportunity to vigorously promote the digital RMB for trade at home and abroad, we will gradually expand the circulation of the digital RMB and increase the share of RMB in international payments, which will truly realize the "maintaining a reasonable abundance of liquidity" as proposed by the Central Economic Work Conference and make China more open and inclusive on the basis of the existing contributing capital market. thus the internationalization of the RMB. This will enable China to become more open and inclusive on the basis of its capital market, thus contributing the internationalization of the RMB.

The convenience of digital people's transactions is also reflected in its own frictionless, intermediary-free, and precise transactions in the transaction process to solve the complex cross-border payment system, eliminating all intermediate links in a short period of time and realizing point-to-point docking to further improve payment efficiency. As far as the current situation is concerned, the SWIFT clearing system adopted by the international payment clearing system cannot handle specific remittance funds business, and the payment clearing between international trade needs to be completed by at least four departments (such as the depositary bank, receiving bank, clearing bank and overseas banks, etc.). The global time difference is large and the SWIFT system operates non-continuously, which greatly extends the trade clearing cycle, and according to statistics it takes at least 3~5 fills to settle a cross-border transaction, and the payment efficiency will be lower compared to the central bank's use of blockchain technology to combine the digital RMB with the RMB cross-border payment system CIPS, which cannot meet the massive trade settlement demand brought about by global economic development. the CIPS system is established and The CIPS system establishes and realizes the cross-border payment capability of the digital RMB and the direct exchange rate inquiry mechanism between the digital RMB and other currencies, eliminating the high cost of multiple links required by the SWIFT system such as entry fees, annual fees, and labor costs, reducing trade costs by approximately 10% according to the World Bank for cross-border payment countries in 2019. direct participants in CIPS can handle cross-border payment operations directly to CIPS, greatly improving the efficiency of the CIPS system. The peer-to-peer connection greatly enhances the reliance on the use of RMB for international payments and achieves a breakthrough in the international settlement system in the current era of digital financial change in the world. This will not only break the current inertia in the use and storage of international currencies but also break the monopoly of the current SWIFT system, further realizing the value storage and international currency functions of the RMB, which will also provide a new solution to the political bullying brought about by the economic focus of world peace.

The convenience of digital RMB transactions is more practically reflected in everyday inclusive life. Not only does it break the international payment monopoly, but digital RMB also features support for offline payments, its mobile network service radius is much larger than the service radius of bank branches, and digital RMB can still achieve current banknote functions, which can meet the needs of non-network-covered areas and other specific places in use, from all information, transaction records of multiple aspects and multi-dimensional integration of big data resources and advantages, using the value of powerful data assets to enhance customer acquisition and risk management capabilities. At the same time, in the light of the current international outbreak of the new coronavirus, the convenience of digital RMB transactions will reduce the spread of the virus and improve security due to the zero-touch nature of digital RMB. The enhancement of digital financial inclusion drives national progress towards common prosperity, compensates for regional production disadvantages, addresses general environmental health and wellness, achieves high-level, high-quality positive development of China's economy, enhances international economic status, and leads the internationalization of the RMB.

# 4.2. Digital RMB has traceability

Because the digital RMB uses blockchain technology, the decentralized nature of synchronized distributed ledger technology and the centralized management model of the central bank, unlike the characteristics of private digital currency, has the characteristics of incomplete anonymity - controlled anonymity, the characteristics of "small amount of anonymity, a large amount of traceability". At the same time, through the traceable tracking of the whole transaction process of all user

information, it enables the central bank to obtain the real transaction records of the currency circulation and realize the real-time monitoring of the capital flow stock, which makes the financial supervision more accurate and reduces the monitoring and management costs. In other words, digital RMB has traceability, which can be used to combat money laundering, terrorist financing, and other illegal acts, and also let counterfeit currency have nowhere to escape, greatly reducing the risk between domestic and foreign trade, and enhancing the credibility of RMB in the world. The goal of monetary regulation. The use of digital renminbi for domestic and foreign trade transactions not only relieves the pressure on financial regulators in the context of the prevalence of private digital currencies, but also hedges the risks arising from harmful financial innovations, and subsequently secures the financial stability of more and more regions with which China has already entered into trade, thus laying a good foundation for countries' trust in China in trade, attracting more capital flows from various countries to our country, and playing a role in attracting more capital flows from various countries to our country. It plays an important role in attracting more capital flows from various countries to China and reaching broader trade cooperation. In addition to significantly enhancing the international competitiveness of the RMB, it also strengthens the RMB's position in the international arena and contributes to the internationalization of the RMB.

# 4.3. Early and low-cost issuance of digital RMB

In 2014, the People's Bank of China began exploring blockchain technology and digital currencies; in August 2019, it successfully launched a pilot campaign for digital currency mobile payments among the population. Since then, by the end of 2022, China has become the first economy in the world to issue a major legal digital currency, seizing the first opportunity in the new round of financial modernization and gaining a "first mover advantage" to enhance the international discourse of the RMB by rapidly expanding its use. In addition, the low cost of digital RMB, such as the elimination of third-party intermediary fees for reserves and the necessary printing, movement, and anti-counterfeiting technology costs in the banknote issuance process, will enable the early capture of a larger market share in settlement scenarios at a lower transaction price, as well as saving the 0.6% handling fee currently paid by UnionPay cards and the 0.38% handling fee for QR code scanning payments, expanding the It also saves the 0.6% fee that is currently paid by UnionPay cards and the 0.38% fee for QR code scanning payments, expanding the world's acceptance of digital RMB and achieving true "value for money". This not only breaks through the inherent hegemonic jurisdiction of the US dollar, but also greatly safeguards the independent financial sovereignty of China and other countries, and ultimately promotes internationalization of the RMB by virtue of the gradual

increase in the RMB's international discourse, which has a positive effect.

# 5. POSSIBLE CHALLENGES OF DIGITAL RMB IN ADVANCING RMB INTERNATIONALIZATION

## 5.1. Financial markets are not open enough

The cross-border movement of digital RMB is based on a high degree of market liberalization, requiring the capital projects involved to be more open and the financial markets more inclusive than is currently the case. The main reason for this is that the digital RMB remains decentralized at the terminal and has strong international attributes of its own, requiring that crossborder transactions be completed without the support of cross-border banks and only require a confirmation from both parties to the transaction. However, since China's reform and opening up, although there has been continuous reform in the economy to form an open situation, the free use of the digital RMB has not yet been fully realized, or at least further opening up has to be made, and the reform and upgrading of the management system brought about by the further opening up of the financial market should also be considered.

## 5.2. Restrictions on the use of RMB

The introduction of digital RMB will have a significant impact on the current business structure of commercial banks over a long period of time, forcing banks to make passive business restructuring, which will definitely affect the number of deposits and credit creation capacity of commercial banks. Because the main source of income for commercial banks' business in China relies on deposit and loan differences, with a small proportion of intermediate business, the implementation of digital RMB has caused a reduction in commercial banks' ability to absorb deposits, so digital RMB will likely suffer from the rejection of most commercial banks, resulting in the source being unable to advance. Most countries still possess a greater reliance on the use of the US dollar for valuation, settlement, investment and financing; and with the US dollar as the main currency for international foreign exchange reserves, phenomenon of countries relying on the US dollar for foreign debt to develop their own economies cannot be changed in a short period of time, and even some ASEAN countries are unable to use the RMB for settlement due to the long-term influence of the US dollar hegemony. In addition, China's accession to the SDR is limited and the use of the RMB in the international arena is still restricted and cannot be changed in the short term, which to a certain extent greatly reduces the market's acceptance of the digital RMB and has an impact on the extent to which the digital RMB promotes the internationalization of the RMB, slowing down the internationalization process.

### 5.3. Inadequacy of relevant laws

The new characteristics of the currency, such as technological innovation and flexibility of use, brought by the digital RMB, bring certain challenges to the related institutions and laws. As the introduction of digital RMB will enhance the difficulty of macro-control in a short period of time, such as increasing the complexity of monetary policy and fiscal policy regulation, it will cause the emergence of new transmission variables of monetary policy, followed by the reconsideration of the effect of monetary policy by the central bank. As there are no clear regulations on the legal status, issuance process, channels and norms of digital RMB in the current Regulations of the People's Republic of China on the Administration of RMB and the Banking Law of the People's Republic of China, if further promotion is to be carried out, we need not only the People's Bank of China Law to make explicit changes to the current right to issue different forms of RMB, but also breakthrough changes As the first country to develop a legal digital currency, there are no international laws and regulations that can be used as a reference, leading to the embarrassing situation that the old law cannot be explained and the new law cannot be relied upon in the future development of digital RMB, resulting in the development of a cowering stage and the possibility of losing the budding development during the period. The first advantage of the budding development will be lost.

#### 6. CONCLUSION

Combined with what is described in this paper, the focused use of digital RMB in trade scenarios has great scope and prospects for development, effectively advancing the RMB internationalization process. By virtue of its own characteristics, it has led to a significant development of the RMB in terms of increased circulation, discourse, market penetration, and acceptance in the international arena. Thus the digital RMB has made a forward-looking contribution to the enhancement of China's international economic status.

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