

Analysis on the Impact of Digital Currency Technology on the path of RMB Internationalization

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Abstract: With the advent of the digital era, the emergence of digital currency has promoted the change of the international monetary system. China follows the tide of The Times and issues digital currency through the People's Bank of China, which has received wide attention from all walks of life. By seizing the opportunity of digital currency, the RMB has accelerated its international pace and increased its international influence. This paper analyzes the nature and characteristics of digital currency, discusses the impact of digital currency on the internationalization of RMB, and puts forward relevant policy suggestions to provide new ideas for the internationalization of RMB.

Key words: Digital currency, RMB, internationalization

Introduction:

Digital currency belongs to the integration of cryptography and information technology. With the change of social environment, digital currency has been widely recognized by people. The emergence of various communication technologies and the application of third-party payment have promoted the transformation of the form of currency holding. The development of digital currency has strengthened the ties between countries in the world, which not only poses challenges to the sovereign currencies of various countries, but also provides new ideas for currency internationalization.

I.The nature and characteristics of digital currency

The advent of the digital age has significantly increased the scale of transactions, and the demand for lower transaction costs has increased. Among them, the issuance and supervision of paper currency consumes a lot of costs, which deviates from the development of digital economy. Starting from the nature and characteristics of digital currency, applying it to transactions can reduce the cost of transactions and help social and economic development.

1. Essence

The essence of money is to reduce transaction friction and strengthen the connection between different production relations, such as economic entities and living needs. Taking Marx's monetary theory as the starting point, money needs to follow the development of The Times and constantly change its form, so as to better adapt to the improvement of social productivity. Due to the expansion of the scale of commodity economy, commodity money is gradually transformed into worthless money in the financial market. In the process, the value of money has been transformed from the gold standard to the credit system, which has improved the service quality of money and promoted the development of the real economy.

Digital currency belongs to a kind of credit currency. In the actual social application, it cannot be separated from the help of the credit system to carry out the redistribution of time and space. Digital currency has driven the improvement of modern payment systems such as payment tools and systems, and ensured the smooth progress of transactions through new infrastructure, business and organizational processes.

2. Features

Paper currency is driven by papermaking, printing and other technologies, and plays a medium role in the transaction process. Digital currency is an encrypted string of data that includes comprehensive information such as issuance, amount and circulation requirements. Among them, the digital currency can carry out controllable anonymization of the owner's identity in the encrypted data string, and encrypt the attributes of the digital currency with the help of consensus algorithm and other technologies. Compared with paper currency, the advantages of digital currency are as follows.

First, it breaks the time-space constraint. The circulation of digital currency in the network can better connect production and trading entities and penetrate into the real economy. Second, break through the credit boundary. In the process of cross-district payment, the use of paper currency transactions usually requires a third-party institution to build a trust mechanism. Digital currency is traceable and cannot be tampered with, which can significantly reduce the cost of trust and better transfer value. Third, break through the application boundary. The emergence of new technologies has given digital currencies diversified application scenarios, such as smart contract technology. Fourth, eliminate the boundary between money flow and data flow. Digital currency is conducive to the integration of capital flow and data flow, the collection of monetary data, such as issuance and withdrawal, and the formation of big data assets that include the entire social activities.

II. The impact of digital RMB on the internationalization of RMB

1.Promoting financial market development

In the long run, the internationalization of RMB cannot be achieved without the support of a sound financial market system, among which the emergence of digital RMB has promoted the development of the financial market, including the following aspects.

First, improve financial infrastructure. The implementation of digital RMB cannot be separated from the support of blockchain,

distributed ledger and other technologies. It not only helps to improve transaction efficiency, reduce transaction costs, make the system more scalable, continuous and secure, but also helps to improve financial infrastructure, such as CIPS, strengthen the connection between different scenarios, and provide a good international use channel for RMB.

Second, we should improve the financial market. In the current era, digital RMB plays an important role in M0. Compared with traditional demand deposits, digital RMB has stronger liquidity and will crowd out demand deposits in the process of implementation. This phenomenon encourages banks to carry out financial innovation activities, design financial products from the perspective of users, constantly improve the financial market, promote the enhancement of China's financial attractiveness, enable foreign investors to participate in it, and enhance the international influence of RMB. In addition, as the digital RMB plays a detecting role, the government can better understand the financial trend through the digital RMB, promote the development of the real economy, promote the improvement of the efficiency of financial operation, and lay a foundation for the long-term development of the country.

2.Enhance market stability

The implementation of digital RMB in the financial market can significantly improve market stability, enable more users to invest in it, enhance the influence of RMB, increase the recognition of RMB by overseas investors, and accelerate the process of RMB internationalization.

First, the digital RMB has many features, such as security and traceability. Therefore, in the issuance of the digital RMB, the government needs to pay attention to the development of its characteristics, conduct in-depth understanding of fund information, supervise the flow of funds, and timely detect possible illegal activities, such as fraud.

Second, according to the implementation of the digital RMB, the central bank has formulated a reasonable monetary policy, and through the application of new tools, the currency has more abundant space for regulation and control. At the same time, the digital RMB forms an electronic currency area, which is less interfered by external policies, and helps to improve the independence of monetary policy. In terms of government finance, based on the characteristics of the digital RMB, expenditure items can be tracked, financial funds can be better supervised, and special funds can be truly used to improve fiscal effectiveness. When there are unstable factors in the financial market, the government can use the flexible application of digital currency to adjust fiscal and monetary policies and promote the improvement of financial stability.

Thirdly, Regulators can manage financial risks with the help of digital RMB, detect risks in a timely manner, and contain risks in their early stages. Based on the traceable characteristics of digital RMB, the regulatory authorities can continuously monitor the flow of funds, predict financial risks, and reduce the frequency of financial crises.

3. The RMB network externality will be enhanced

In the development of RMB internationalization, the poor network externality is a key issue. In order to improve this problem, the government can expand the circulation scale of RMB and allow more market players to participate in it. As market players are rational, in order to increase the frequency of use of RMB, the government can start from the reduction of transaction costs, and the government can use the issue of digital RMB to deal with the above problems, so as to promote the improvement of RMB network externality.

First of all, the promotion of digital RMB can avoid the loss of coins caused by the issuance and circulation, and save various costs. In addition, compared with paper RMB, many aspects of digital RMB have been replaced, such as printing and transportation, which helps to reduce various costs. With the increase in the number of digital RMB issued, the economic benefits are becoming more obvious, increasing the appeal of digital RMB to foreign investors.

Secondly, with the development of information technology, such as blockchain, distributed ledger and other technologies, it provides good technical support for the abundant circulation scale of digital RMB. Based on the traceable characteristics of digital RMB, it can more effectively crack down on illegal activities and provide institutional guarantee for economic development.

Finally, there are problems of high cost and low efficiency in cross-border payment, which have a negative impact on the richness of RMB network externalities. The application of digital RMB will help to solve the above problems. The use of digital RMB can not only speed up the clearing speed, but also save the clearing cost, and provide a relatively good channel for international clearing. In addition, digital RMB usually uses distributed ledger technology to reduce the cost of capital and time consumed in cross-border payments. Through the implementation of the digital RMB, the rights and interests of both sides of the trade are better protected, and the security of settlement is significantly improved. Through the above activities, the international influence of RMB can be significantly enhanced, the process of internationalization can be accelerated, and a new trading system can be gradually formed. For example, foreign investors holding the right to use the digital RMB can choose banks supporting the exchange business for exchange abroad, promote the improvement of transaction efficiency, increase the scope of application of digital RMB, make RMB have a broader circulation scale, and enhance the network externality of RMB.

4.To maintain the stability of the value of RMB

Digital RMB is safe, convenient and other features, the emergence of digital RMB has a big impact on banks, crowding out demand deposits and increasing banks' excess reserves, which to some extent leads to the decline of the money multiplier and the weakening of commercial banks' ability to expand money. In the national financial system, if the amount of money circulation and commodity transactions is relatively stable, if the amount of money in circulation is reduced, it is easy to cause a long-term decline in prices and affect the financial market. For this reason, the implementation of digital RMB will help to achieve the goal of relatively stable money supply and prices.

In addition, due to the loose coupling function of the digital RMB, the dependence of capital flow on banks is reduced, and the cross-



border liquidity of capital is improved. The emergence of the above situation can reduce transaction risks and ensure the stability of the value of RMB.

III. Policy suggestions

In the current era, the emergence of various legal digital currencies has ushered in challenges for digital remninbi. To this end, it is necessary to give full play to the advantages of digital RMB, as China's research in this area is early, it is easy to form a first-mover advantage. In the initial stage of the development of digital RMB, it will face greater difficulties, but after it gradually forms a certain scale, it will show non-linear development. The government needs to give full play to the advantages of digital RMB, expand its application scenarios, such as retail, project payment, etc., gradually implement the central bank's legal digital currency, and apply it to cross-border transactions, supply financing and other activities.

Traditional cross-border payments have some problems, such as time lag and high cost, and the application of digital currency can carry out continuous work and shorten the time consumed by cross-border payments. In the cross-border payment system, digital RMB has become the mainstream trend of development, which can enrich the circulation scale of RMB and improve its network externality. In the process of promoting the RMB, the government needs to follow the principle of voluntary participation of the subject, promote the gradual development of the digital RMB, improve its international status and speed up the formation of a new clearing system.

In addition, the government needs to encourage financial institutions and banks to innovate related products, and carry out exchanges and discussions on the centralization of issuance management and the decentralization of technical framework according to the legal digital RMB, so as to build a good form of assets, clarify the core position of digital RMB, and show strong liquidity. In order to design products that meet the needs of users, banks need to explore the innovation space of digital currency and significantly improve the attractiveness of products. The innovative activities of financial institutions and banks have promoted the sound development of the financial market, promoted the improvement of transaction efficiency, built a relatively stable financial market, and attracted more overseas investors to invest in the country's financial products.

Finally, the government needs to formulate a reasonable regulatory system with the help of which problems related to digital currencies can be solved. Therefore, in the implementation of the digital yuan, the government needs to not only analyze security and privacy, but also avoid the occurrence of regulatory arbitrage. Among them, the link that needs to be focused on is cross-border circulation, where there may be some illegal acts, and it is necessary to supervise them to avoid causing large losses. Through the establishment of a good supervision system, the probability of risk occurrence can be reduced to the greatest extent and the financial market can be more stable. The implementation of the above suggestions will not only promote the development of the financial market, but also help to enhance the international influence of RMB.

IV. Concluding Remarks

To sum up, the implementation of digital currency has had a positive impact on the internationalization of RMB, including the development of financial markets and the stability of the value of RMB. Therefore, in the implementation of digital RMB, it is necessary to enrich its network externalities and formulate a corresponding regulatory system to ensure the internationalization of RMB.

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