On the Development Status and Strategy of Digital Currency of the Central Bank of China

Guangxin Pan*, Tianfeng Guo, Junjie Xia
Anhui University of Finance & Economics, Bengbu 233030, China. E-mail: 1960147052@qq.com

Abstract: With the gradual rise of financial science and technology, the traditional currency tends to be eliminated due to various limitations. Digital currency technology based on block chain technology emerges as the times require. With the gradual deepening of the research on legal digital currency by the central bank, the implementation of legal digital currency will be the inevitable choice of China’s economic development, and also the inevitable requirement of complying with the trend of economic globalization and informatization. This paper studies the development status of digital currency at home and abroad and the importance of central bank issuing digital currency, and analyzes the main causes of the risk problems of circulation environment, laws and regulations, financial system and technical system faced by the Central Bank of China in promoting digital currency, including the implementation of laws and regulations, protection of users’ rights and interests, establishment of monitoring and analysis department, promotion of digital currency, etc. This paper puts forward specific measures and suggestions for the central bank to issue digital currency.

Keywords: Central Bank; Digital Currency; Development Status; Strategy

1. An overview of central bank digital currency theory

The digital currency directly issued by the national central bank or authorized by commercial institutions is called the central bank digital currency. It is an electronic currency issued by the National Central Bank as a cash substitute or supplement for specific groups or institutions.

The Chinese version of CBDC, also known as digital RMB, is issued by the People’s Bank of China. The corresponding operating agencies participate in the operation and exchange with the public. Based on the generalized account system, it supports the loose coupling function of bank accounts, plays the role of substitute for M0, and is equivalent to banknotes and coins. It is a controllable anonymous payment instrument with value characteristics and legal compensation.

2. Development status of digital currency of central bank

2.1 Development status of foreign central bank digital currency

At present, in order to develop inclusive finance and break through economic sanctions, central banks around the world are vigorously exploring and promoting the issuance and application of legal digital currency[1]. In 2015, the Central Bank of Ecuador issued its own digital currency to ease inflation; in 2018, the Swedish Central Bank also issued its own legal digital currency e-krona, which is mainly applicable to small transactions between consumers, enter
prises and government institutions; in September 2019, the Central Bank of Brazil said that it would start the digital currency payment system based on block chain technology research and development in 2020, so did the European Central Bank (ECB). The Central Bank of France is actively studying the digital currency of the central bank, the board said.

2.2 Development status of digital currency of the Central Bank of China

The People’s Bank of China started its research on digital currency early. Since 2014, the People’s Bank of China has been actively exploring legal digital currency. At present, some phased achievements have been achieved: In 2014, the central bank set up a team to study the issuance and circulation of digital currency; in 2017, the first digital currency research institute was established in Shenzhen. At the same time, pilot projects will be carried out in Suzhou, Xiong’an and other places in 2020.

3. The importance of central bank digital currency issuance

3.1 Reduce cash utilization and improve economic efficiency

The status of DCEP to be introduced in China is the same as cash in circulation, which is mandatory and unlimited. With the popularity of legal digital currency in the future, digital currency will gradually replace the use of cash in some suitable application scenarios by virtue of its unique convenience and off-line payment, so as to reduce the market circulation volume of traditional currency, reduce the actual issuance cost and sunk cost of currency, and reduce the possibility of friction in the process of currency circulation. The implementation of legal digital currency is in line with the basic law of the evolution process of China’s currency, which will inevitably improve the efficiency of economic operation, but also have a certain inhibitory effect on the inflation rate.

3.2 Increase the accuracy of monetary policy and enhance the stability of financial system

Since the normal circulation of money is the basic guarantee for the stability of the financial system, the establishment of a stable and efficient financial system should first ensure the normal circulation of money. In the future, the central bank will issue legal digital currency. On the one hand, it will adopt the “point-to-point” payment and settlement mode to reduce the intermediate links of currency transactions and transaction costs, and improve the liquidity of money transaction participants. On the other hand, with the help of big data technology, transparent bookkeeping and controllable anonymous transactions, the central bank’s digital currency can more accurately detect the risks in the current financial system and make timely response. All of these create convenient conditions for the normal circulation of money, which is conducive to the final construction of a stable and efficient financial system.

3.3 Promotion of financial supervision and control of illegal behaviors

The underlying technology of DCEP is mainly blockchain, and any technology that can improve the circulation efficiency may be used. The centralized operation mode and non-distributed account management form will enable each transaction to be supervised in a favorable way, which has a good inhibitory effect on illegal money laundering, illegal financing and illegal tax evasion. Financial regulators can make use of the unique technical characteristics of digital currency to accurately track and analyze the specific flow direction, effectively avoid and crack down on the theft and use of financial information by illegal institutions. At the same time, it can accurately and timely judge the effective demand of the market, accurately put in and withdraw money, and ensure the stability of legal digital currency in the market operation. From the perspective of financial market supervision, the implementation of the central bank’s legal digital currency is undoubtedly a great progress in the process of monetary development.

4. Risks of the central bank issuing digital currency

4.1 incompatible laws and regulations
According to the law of China, RMB must be printed and issued by the central bank, and it can be divided into two types: Paper money and coins. Although the legal digital currency is issued by the central bank, it does not belong to the real currency, so it does not need to be printed. Moreover, the legal digital currency is neither a paper currency nor a coin, and does not belong to the scope of the existing people’s currency.

4.2 Many difficulties in the construction of circulation environment

For the issuance and circulation of central bank digital currency, citizens need to use it on the mobile terminal. At the same time, enterprises or businesses also need to be equipped with equipment to support digital currency transactions. At present, China’s mobile phone penetration rate is high, which is not too big a problem. The key point is the construction of the terminal environment of the latter. If they hold a questioning attitude towards “marginal cost tends to zero and marginal benefit increases”, they are likely to refuse to equip relevant equipment and increase the construction difficulty of terminal environment.

4.3 Implementation of technical system

If the central bank digital currency is to represent the national credit as legal currency, it must have the characteristics of storage security, transaction security and circulation security. To meet these requirements, the central bank must improve the security of the digital currency server. In addition, the transaction processing capacity of the digital currency system also needs to be strengthened. Because if we encounter a large number of transactions, the system processing capacity is not good, it is likely to face the risk of system collapse, resulting in large economic losses. The central bank’s digital currency system also needs to have a strong expansibility to meet the needs of future digital currency internationalization.

5. Policy suggestions for the central bank to issue digital currency

5.1 Formulation of laws and regulations on digital currency

Digital currency is still in its infancy, and the relevant legal provisions of digital currency are not perfect. The legislature should refine the system, formulate laws and regulations on digital currency, speed up the introduction of relevant policies, gradually bring the digital currency issued by the central bank into the category of real currency, clarify the main position of digital currency in the law, increase the specific content of digital currency legal provisions, and set the number. We should establish and improve the legal system related to digital currency, standardize the relevant legal provisions of digital currency from the source, ensure the safe operation of digital currency, and promote the healthy development of digital currency below[2].

5.2 Precise measures to protect the rights and interests of digital currency users

In order to enhance the transparency of digital currency, strengthen the supervision of digital currency, and ensure the rights and interests of every digital currency user, the regulatory authorities should take precise measures, issue normative measures to improve the legal system related to the rights and interests of digital currency users, and interpret the relevant legal issues, so as to help users identify the authenticity of some institutional information resources, and to improve the digital currency users’ rights and interests risk prevention ability. In addition, in view of the focus of people’s attention, open dialogue is carried out, and relevant institutions are urged to actively cooperate to do a good job of investigation and supervision.

5.3 Set up monitoring and analysis department of digital currency and financial system

Digital currency has many new characteristics, which may have a certain impact on China’s financial system, and even bring negative impact. The central bank can set up a digital currency detection department to make full use of big data technology to monitor the demand and supply of money, the speed of money flow and the change of cash flow of the central bank’s digital currency in real time, and analyze and study the impact of digital currency on the financial
market. With the help of quantitative analysis of the potential impact of financial indicators on the financial market, this paper provides a quantitative analysis of the negative impact on the financial market.

6. Conclusion

China’s Central Bank is gradually optimizing and improving the function of digital currency, and the promotion of digital currency has achieved phased results. However, it is worth noting that the central bank still faces the risk problems of circulation environment, laws and regulations, financial system and technical system, which requires the central bank to take a more positive attitude and multiple measures and make overall planning to ensure the efficient and orderly continuous promotion by implementing laws and regulations, protecting the rights and interests of users, establishing monitoring and analysis departments, and promoting digital currency.

References

1. Zhang Y. Central bank’s digital currency exploration and its impact on monetary policy (in Chinese). Contemporary Economics 2020; (9): 53–55.
2. Gao H, Li G. Financial technology, digital currency and global financial system reconstruction (in Chinese). Academic Forum 2020; 43(2): 102–108.