

Research on Legal Challenges and Responses of the People's Bank of China issuing Legal Digital Currency

Wenli Niu ^{1,a} and Haiyan Chen ^{2,b,*}

¹East China University of Political Science and Law, China

²Dept. of Computer Science and technology, East China University of Political Science and Law, Shanghai 201620, China

^a1164668180@qq.com; ^btom_chy@163.com

*Corresponding author

Keywords: Legal digital currency; Legal challenges; Legal responses; Virtual currency

Abstract: This paper analysis the meaning of The People's Bank of China issuing Legal Digital Currency, the status and trend of the research on legal digital currency at home and abroad. It analyses the Legal challenges and responses of China issuing legal digital currency.

Introduction

Legal digital currency issued by the People's Bank of China, which is called Central Bank Digital Currency, CBDC, is supported by state credit. CBDC is equal to current RMB in legal status. But they are completely different morphologically. CBDC, in essence, is a coded character string of different information, such as the signature of the People's Bank of China and the holders. The payment transaction of CBDC is done by moving encryption characters while the payment transaction of RMB is done by moving banknotes or coins which are physical.

CBDC issued by China can reduce the cost of the issue and circulation of banknotes to a large extent, optimize traditional payment and solve modern currency problems, such as the poorly transmitted monetary policy, a difficult regulation during the conversion period, the currency taken off the reality to the virtual, and inadequate management of policy expectations. And as a result, the accuracy and validity of the monetary policy is improved. Meanwhile, CBDC has significant evidence meaning in combating traditional crimes such as money laundering, tax evasion, gamble and Prostitution and whoring because CBDC is traceable.

The Status and Trend of the Research on CBDC

Issuing CBDC faced different challenges of technique programs, financial mechanisms and legal protection. The People's Bank of China has established specific research team since 2014 in order to prove the feasibility of issuing CBDC. Nowadays, this team has been upgraded to Central Bank Digital Currency Research Institute. They have achieved a few researches on the general frame, the use environment, circulation models and relative supporting policies. They have issued tens of research papers [1][2][3] and achieved more than 70 research patents. China Banknote Credit Card Industry Development Co., Ltd, which is attached to Central Bank, has achieved 22 patents in CBDC information processing, ID management, transaction methods and etc. The institute of Printing Science and Technology, the People's Bank of China, has also applied 22 patents, including the design of digital currency system, the design of conversion and payment of digital currency, the design of chip cards of digital currency and other core technology. The results of the above three units are as of September 2018. With the pass of time, the results will be more in the future, which represents the development direction of CBDC at the level of the Chinese government. The central bank's Yifei and Zhang Zhengxin also discussed the legal digital currency in finance. The research team of the Beijing Aeronautics and Astronautics University professor Cai Weide presented a "panda -CBDC Central bank digital currency model". However, these studies mainly focus on the technical and financial point of view, and there is not much research on the laws and regulations of legal digital currency issuance, such as "Legal Issues of Issuing Digital Currency" by Liu Xiangmin,

deputy director of the Department of Treaty and Law of the People's Bank of China and "Research on the Distribution of Legal Principle and Rights and Obligation" wrote by Professor Liu Shaojun, China University of Political Science.

Foreign researches on CBDC are also mainly focused on technology realization and trading mechanism. The Bank of England has proposed a RScion prototype experimental system, the world's first national legal digital currency prototype, sponsored by the Bank of England and developed by University College London [4]; The Bank of Canada launches the Jasper Project [5]; MAS promotes the Ubin Project [6]. In addition, the Federal Reserve, the Bank of Korea and other countries have also proposed their own digital currency research projects. Their researches are limited to the use of blockchain technology for inter-bank payments, and the study of relevant laws and regulations are even fewer.

To sum up, it can be seen that experts research on the central bank digital currency in the technical program and financial mechanism intensively, while the study of legal protection urgently needs to keep up.

Legal Challenges of the Central Bank Issuing Legal Digital Currency

Challenges 1: Issues of legal basis for issuance.

Although the issuance of CBDC is of great significance, its issuance needs to be supported by its own basic monetary law as a legal currency in circulation throughout the country. Chinese basic currency law is the Law of the People's Bank of China, in which suggests that the legal nature and status of CBDC needs to be established, as well as issues such as issuance rights and management rights.

Challenges 2: The legal protection of circulation mechanism.

The issue of legal compensation:

CBDC has unlimited legal capacity of compensation, and the basic law needs to provide for this nature, and no unit or individual has the right to reject CBDC.

The legal protection of the financial system:

According to the guiding spirit of issuing legal digital currency by the People's Bank of China, the current issuance of legal digital currency is not to replace RMB, but to serve as a useful supplement to RMB. There is a need to prevent these situations including the risk-free arbitrage between the two currencies, all money end-users holding the CBDC, running commercial banks to form "chivalrous bank" factually, and all money end-users holding RMB, making CBDC "in vain". In addition to the design of the financial system, the Central Bank legally needs to provide guarantees for a well-designed financial system to prevent the artificial destruction of the financial system and the formation of the above 3 situations.

Legal protection of trading environment:

The trading environment, which includes trading networks and terminals, as well as audited servers, requires legal protection to prevent man-made damage and leads to transaction difficulties. Developers of hardware and software for trading, and operators of platforms need to be legally set their qualification for participation and their obligation to participate in processing after a critical event, the legal consequences they bear, and so on.

legal rights and obligations of each participant:

In the process of the circulation of CBDC, there are the central banks, commercial banks and individual users of enterprises, and there is a legal need to set out participants' rights and obligations, such as the obligation of the central bank to maintain the circulation mechanism of CBDC while enjoying the right of currency issuance. Commercial banks enjoy the right of the agent management of CBDC while assuming the obligation of maintaining end-users information and so on. Users enjoy the right of convenient payment of CBDC, and the obligation to protect their private key and so on.

Challenges 3: Legal punishment of CBDC crime.

In the context of the circulation of CBDC, some new forms of crime will certainly be formed, which can be generally divided into the following five categories: counterfeiting false digital currencies, illegally transferring and stealing digital currencies, maliciously cancelling and emptying digital currencies, attacking and damaging payment systems and illegally stealing users' information. The law needs to characterize these crimes and provides basis and criteria for conviction.

Legal Countermeasures of Central Bank Issuing Legal Digital Currency

In order to address those challenges, there are 3 possible path to legal construction.

Path 1: Only to amend the existing Laws and Regulations of the People's Bank of China, the Law on Commercial Banks, the Regulations on the Administration of RMB, the Law on Property Rights and the Measures for Payment and Settlement. The advantage of this method is that there is no need to add new laws and regulations, and the legislative point of view is more cautious. But the disadvantage is that the revision of the law and the content is numerous, and the cycle is relatively long.

Path 2: The National People's Congress specializes in the enactment of the Digital Currency Law, which has the advantage of a high level of legislation that can address the issuance and circulation of legal digital currency, while the disadvantage is that it cannot be perfectly integrated with existing RMB-related laws such as the People's Bank of China Law and the Law on the Commercial Banks. For example, this method will weaken the legal status of the People's Bank of China Law as the law on the basis of currency issuance and the question of differentiating between the RMB and the legal digital currency will emerge.

Path 3: To amend the relevant laws and regulations such as the People's Bank of China Law, the Law on Commercial Banks, the Law on Property Rights, the measures of Payment and Settlement and the Criminal Law of the People's Republic of China, and to draft the legal digital currency administration regulations by analogizing the RMB of the same legal status, The advantage of this method is that it will not have an impact on the existing legal framework, and the existing laws and regulations only need to be minor amended. The drafting of the legal digital currency management regulations, like the RMB management regulations, in the legal system to form a symmetrical beauty, is easy for the public to understand and accept.

Conclusion

According to the related guidance spirits of the People's Bank of China issuing digital currencies, the issuance of digital currency is not to replace the RMB, but to serve as a useful supplement to the RMB. This paper proposes to adopt "path 3", in the current legal framework aimed at the RMB, to incorporate the legal amendment proposals related to the legal digital currencies and draft a special management regulation of legal digital currencies.

Acknowledgements

The corresponding author of this paper is Wenli Niu and CHEN Hai-Yan. This paper is supported by Projects of the National Social Science Fund (No.06BFX051); Shanghai university training and selection of outstanding young teachers in special research fund (No.hzf05046)

References

- [1] Yao Qian, The Prototype Conception of Legal Digital Currency in China, Chinese Financial, 2016.
- [2] Yao Qian, Experimental Study on CBDC prototype system, Journal of Software, 2018.
- [3] Institute of the People's Bank of China Researching Digital Currency. The Method of the return

of digital currency and System: China, 2017.

- [4] Yao Qian, The Analysis of the system of the Central Bank Cryptographic Currency- RScoin, Finance, 2017.
- [5] Garratt, R. CAD-coin versus Fedcoin. R3 Report, 2016
- [6] Monetary Authority of Singapore. The future is here – Project Ubin: SGD on distributed ledger, 2017