

DIGITAL TRANSFORMATION OF RMB BUSINESS IN CHINA

Xiangpin Dou, *Postgraduate Student*

Supervisor: *S. Kuzmina, Doctor of Economics Sciences, Professor*

Saint Petersburg Electrotechnical University "LETI"

(Russia, Saint Petersburg)

DOI:10.24412/2500-1000-2024-1-4-160-163

Abstract. *With the continuous expansion of China's digital renminbi research and development pilots, the use scenarios of digital renminbi are more diverse, and it has a large number of users, and its influence at home and abroad is gradually increasing. Starting from the background of the digital renminbi, the article discusses the development direction of the digital renminbi in the context of the digital economy. First analyze the uniqueness of digital renminbi, then analyze the value of digital renminbi application according to China's economic situation, and finally give suggestions and significance for applying digital renminbi from different levels.*

Keywords: *e-CNY, digital economy, special attributes, driving factors, monetary system.*

Introduction

At present, a new round of technological revolution and industrial transformation has made the digital economy an irresistible trend. According to the Central Bank Digital Currency Survey released by the Bank for International Settlements in May this year, among the 81 central banks participating in the survey, 90% of the central banks are conducting research on digital currency-CBDC, and 62% of the central banks are conducting related experiments or concepts. verify. It is particularly worth noting that the Federal Reserve, the European Central Bank, and the Bank of Japan changed their previous conservative and prudent attitudes, started work on digital dollars, digital euros, and digital yen, and began to formulate common rules and operating platforms, reflecting the Economies are accelerating the trend of deploying digital currencies [1].

The digital renminbi serves as legal tender in digital form issued by the People's Bank of China. The digital renminbi was launched in 2019. After multiple pilot applications, it has been applied to multiple business scenarios and has won the support of the public. The digital renminbi is in line with the current digital and intelligent development trend of the economy and society. It has the characteristics of safety and convenience, and will have a broader development space in the future. At present, it is necessary to pay attention to the potential impact of the

development of digital renminbi, tap its commercial value, and strengthen the system and mechanism design to create an environment for its stable development and safe use [2].

Special Attributes of Digital RMB

Digital renminbi (e-CNY): The digital renminbi is a legal tender in digital form issued by the People's Bank of China. At present, it is mainly positioned in M0, that is, cash in circulation, which is consistent with the physical renminbi that also belongs to the M0 category. Since the launch of the digital renminbi pilot test at the end of 2019, the People's Bank of China has continued to explore the innovation of application models. As of the end of June 2021, the number of digital renminbi pilot scenarios has exceeded 1.32 million. Since January, civil servants and enterprises in some cities in China have used digital renminbi to pay wages, and launched digital renminbi housing loan business. The positioning has been expanded to M1 and M2 levels [3]. China is promoting the development of both "retail CBDC" and "wholesale CBDC".

A. Payment angle

1) *For settlement: e-CNY can realize end-to-end value transfer without bank accounts, so as to realize payment and settlement.*

2) *Security: The digital renminbi comprehensively uses technologies such as digital certificate system, digital signature,*

and secure encrypted storage to achieve features such as non-repeatable spending, non-illegal copying and counterfeiting, non-tamperable transactions, and non-repudiation.

3) *Programmability: The digital renminbi realizes programmability by loading smart contracts that do not affect currency functions, so that the digital renminbi can conduct automatic payment transactions according to the conditions and rules agreed by the transaction parties under the premise of ensuring safety and compliance.*

B. Account angle

Attributes of assets: There is a difference between e-CNY accounts and accounts opened by traditional commercial banks. People use e-CNY to open accounts directly with the "Master Account" opened by the People's Bank of China. In the past, the deposit handling business in commercial banks was just a certificate of deposit and arrears, which belonged to the category of liabilities. Only commercial banks and financial institutions had the "Master Account" of the central bank. And now e-CNY is an asset class [4].

Drivers of Digital RMB Development

Central banks of all countries issue CBDC with only one ultimate purpose: control. It is to absorb all the advantages of the blockchain economy that are conducive to the development of the digital economy except for the "decentralization" feature.

C. The penetration rate of mobile payment in China is high For the central bank

In China, people hardly use cash now, and commercial banks and financial institutions have become the main force in controlling and creating money, which is making the financial system vulnerable to systemic risks, leading to financial bubbles and financial collapses. And in this case, it is easy to have a very large commercial financial institution, which cannot bear the financial damage caused by its bankruptcy, such as Alipay.

D. The effect of monetary policy implementation is average For the central bank

It is precisely because banks and financial institutions are like a wall between the central bank and the people. As a result, the central bank's monetary policy must be transmitted through financial institutions as an intermediary. Economically, this transmission method is very inefficient [5].

Example: During 2020, the Federal Reserve used quantitative easing to stimulate the economy. The central bank prints money to buy treasury bonds held by commercial banks to transfer reserves to commercial banks, expecting banks to lend money to those who really need it. However, commercial banks still release liquidity to capital markets such as the stock market and real estate, which causes asset bubbles and inequality between the rich and the poor.

E. Information barriers and policy lag

Financial institutions have a large amount of real-time consumption data of users, and these big data are very valuable to the central bank. It makes real-time and accurate judgments on the economy, so as to implement more accurate and effective monetary policies.

For example: inflation, cpi data are lagging and not necessarily accurate. If the central bank can know everyone's consumption records in real time, it can immediately determine the impact of interest rate hikes on consumption and the real-time reaction of prices, and then make adjustments to monetary policy.

F. The development of cryptocurrencies such as Bitcoin Information barriers and policy lag

With the popularization of blockchain technology, it brings decentralized financial technology innovation. This puts the central bank under pressure to lose monetary control. The development of the stable currency Libra: it will squeeze or even replace other countries' legal currencies, threatening the dominance of other countries' central banks' monetary and exchange rate policies.

G. The power of the international settlement system is not balanced

It is difficult for China's cross-border payment system to be separated from the SWIFT network. Some international events in recent years have reflected the fact that SWIFT has an official position under special circumstances. China needs to rely on e-CNY to establish a new payment and settlement system to deal with the US financial trade war and Promote the internationalization of RMB.

The Value and Application of Digital RMB

Currently, e-CNY adopts a two-tier operation model, in which commercial banks are responsible for providing services such as digital RMB exchange and circulation to the public. Commercial banks share data with the central bank. The central bank can more comprehensively grasp the real data of different industries and enterprises, analyze the needs of the digital financial market, build a digital ecology, and ensure that different customers can be satisfied in multiple fields such as payment and settlement, consumption investment, and financing transactions [6]. Digital financial needs to provide customers with a better financial service experience.

A. For the central bank

The digital renminbi has a wide range of application space in inclusive finance and market supervision, and the reasonable use of smart contracts can make the digital renminbi a new monetary policy tool. In addition, the "value chain" established by the central bank's digital currency can realize point-to-point transactions, which is expected to reduce costs and increase efficiency to reshape the cross-border payment system, and establish a data "information network" through distributed ledgers to improve the efficiency of international settlement. A new multi-level digital renminbi payment and settlement system can be established around different levels of entities, and an enterprise-level market-oriented digital renminbi cross-border payment and settlement platform with core enterprises as super nodes can be built [7].

B. For financial institutions such as commercial banks

As a provider of a series of related services such as digital renminbi exchange and

circulation, it will become the entrance of traffic, which will help banks expand their customer acquisition channels. Therefore, banks need to build a solid digital RMB system, quickly expand cooperation scenarios and lay infrastructure, and launch practical payment applications. For example, focusing on key businesses such as social security, salary payment, and digital wallet applications, we will step up the construction of special scenarios such as smart transportation, smart campus, smart tourism, and smart medical care, and explore the commercial profit model of digital renminbi.

C. For enterprises

The combination of digital RMB and automated enterprise B2B payment platform will produce greater effectiveness. The digital renminbi is free of service fees, which is inclusive for small and medium-sized enterprises. In addition, the digital renminbi can realize real-time transfers between enterprises or individuals, facilitate capital turnover and receipt and payment between enterprises, facilitate the search of payment records, and shorten the performance cycle without changing the original enterprise payment process. chain and supply-side production efficiency [8].

In the future, it will be more convenient for small and medium-sized enterprises to borrow money. The central bank will directly transfer funds to small and medium-sized enterprises that meet the requirements and need financial support to ensure the healthy development of enterprises. At the same time, the many advantages brought by the digital renminbi will also promote the online payment process of enterprises, accelerate the digital upgrade of enterprise payment supporting infrastructure, and build a digital industry-finance ecosystem based on upstream and downstream enterprises.

Conclusion

With the rapid development of the global digital economy and the increasing demand for digital financial services, the global monetary and financial system has entered the digital age. As the legal currency in digital form issued by the People's Bank of China, digital renminbi is the digital financial

infrastructure supporting the development of the digital economy. It can provide a safe and open ecological environment for the healthy

operation of the digital economy. In the future, it must be applied in a wider range and on a larger scale.

References

1. Bai Jinfu. Central Bank Digital Currency. – CITIC Press, 2021.
2. Hu Yanming. From "early adopters" to "commonly used" digital RMB application scenario expansion // Economic Observer, 2023-05-01(009).
3. Liao Meng, Dong Hanxuan. Issuing digital RMB wages and digital currency promotion to a new level // Beijing Business Daily, 2023-04-24(007).
4. Yao Jin, Ma Chunyang. Solid progress in digital RMB pilot project // Economic Daily, 2023-04-08(001).
5. Wu Chuande, Li Meng. Research on the Operational Transformation of Enterprise Group Financial Companies from the Perspective of Digital RMB // Financial Theory and Teaching. – 2023. – №02. – P. 27-31.
6. Tang Jianzhen, Huang Shiming. Research on Digital RMB Supporting the Development of Cross-border Trade // Regional Finance Research. – 2022 – №11. – P. 78-85.
7. Zhang Xiaowen. The Significance and Strategic Choice of Digital RMB to RMB Internationalization // Economic Research Guide. – 2022. – №31. – P. 81-83.
8. Huang Yipeng. The Significance of Digital RMB Issuance and Analysis of Its Impact on Economy // Accounting of China Township Enterprises. – 2022. – №07. –P. 6-8.

ЦИФРОВАЯ ТРАНСФОРМАЦИЯ КИТАЙСКОГО БИЗНЕСА В ЮАНЯХ

Сянпин Доу, аспирант

Научный руководитель: С. Кузьмина, д-р экон. наук, профессор

Санкт-Петербургский электротехнический университет «ЛЭТИ»

(Россия, г. Санкт-Петербург)

Аннотация. С непрерывным расширением пилотных проектов по исследованию и разработке цифрового юаня в Китае сценарии использования цифрового юаня становятся все более разнообразными, у него большое число пользователей, и его влияние внутри страны и за рубежом постепенно возрастает. Отталкиваясь от предыстории цифрового юаня, в статье обсуждается направление развития цифрового юаня в контексте цифровой экономики. Сначала проанализируйте уникальность цифрового юаня, затем проанализируйте ценность применения цифрового юаня в соответствии с экономической ситуацией в Китае и, наконец, дайте предложения и значимость применения цифрового юаня на разных уровнях.

Ключевые слова: экономика, цифровая экономика, особые атрибуты, движущие факторы, денежно-кредитная система.