

# Research on the Challenges Brought by the Development of Digital Currency

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## Abstract

Throughout the development of China's economy and financial industry, monetary capital, as the micro-foundation and core of economy and financial industry, has always been accompanied by the positive and technological drive of economy and financial industry to produce formal changes and evolution. In recent years, the popularity and development of digital information technology, such as digital economy and the Internet, have greatly changed the form of China's traditional currency, spawned various new forms of digital currency, which will become the focus and new variable to be accelerated in the future reform of China's monetary system, in order to promote the application of science, technology and practice in China's digital currency, and is gradually moving towards a new period of development. The emergence of digital currency has made the utilization rate of cash decrease continuously. It is very smart and convenient. It is not difficult to imagine that in the future society, the credit system will continue to improve and people will rely more on electronic equipment. Therefore, the full popularity of digital currency is just around the corner, followed by regulatory issues in digital currency and a series of challenges. Therefore, the analysis of the challenges brought by digital currency is the main content of this paper.

## Keywords

Credit system; Regulatory issues; Challenge.

## 1. Introduction

In recent years, with the rapid and healthy development of the global market economy, the concept of digital currency has been gradually proposed by the state under the new conditions and order of market economy operation and development. The introduction and proposal of this new concept will have important significance and influence on the domestic and international market economy and social development, and has attracted wide attention of all economic entities in the world. On January 20, 2016, the People's Bank of China fully organized a working seminar on issues related to digital electronic money in emerging international markets. At the seminar, the general policies and working instructions on how the Chinese government should study and establish and accelerate the implementation of digital electronic money in emerging international markets were further clarified. On December 15, 2016, China's National People's Monetary Bank has also organized and completed a special test on how to establish and implement digital electronic money in emerging international market economy regions and China's key market segments as soon as possible, which also directly indicates that in recent years China has been in a high strategic leading position of healthy and orderly development due to its efforts to maintain and promote the improvement of the current global emerging market economic and social order. At the same time. With the continuous progress and rapid development of industrial modernization and information and electronic science and technology, and the introduction and continuous introduction of innovative technologies such as mobile internet payment, cloud computing, block chain, etc., China's digital traditional

currency, which the central bank needs to issue, is still facing many brand- new market opportunities and development challenges in the international market. digital currency itself is actually a kind of currency with fixed price lower than zero cost and ultra- high efficiency. Therefore, the digital virtual currency will be regarded by the society as the most creative new development direction of the payment business model of the product distribution system in digital currency and the payment business model of the product distribution system in digital currency in the future.

## 2. Challenges from Digital Currency

### 2.1. Challenges to the Global Economic Order

First of all, in terms of China's traditional banking business, the traditional banking business has been in a relatively stable state for a long period of time. However, with the continuous prosperity and development of China's market economy, a new market economic order has gradually formed and digital currency has gradually emerged. That is to say, all the relevant functions of the traditional commercial banks are beginning to be weakened, and the actual value- creating function of the traditional commercial banks is also limited to a certain extent. From the perspective of the current development trend, cash has gradually been transformed into a more digital virtual currency and gradually transferred into the capital chain of private accounts, which directly results in the continuous reduction of the traditional commercial banks' ability to absorb and use deposits, thus directly weakening the commercial banks' mortgage and credit service capabilities. In addition, with the continuous progress and development of mobile Internet and information technology, and the continuous dissemination and implementation of digital currency, the traditional bank cash management business has gradually lost its living space. In the past, some businesses that we only need to go to the counter of a bank to handle by ourselves can now be realized online, which is mainly manifested in online bookkeeping, transfer and settlement. Even the most common water, electricity and gas charges can be handled directly through digital currency on the mobile Internet. The corresponding payment transaction has been completed, from which we can clearly see that the ways and channels through which people can make payments are increasing day by day, and the functions of the traditional bank' s various payment services are gradually being replaced by more diversified payment means and methods. [1]

The history of monetary development shows that no currency is without defects. The abstract monetary form of the legal digital currency makes its foreseeable risks and drawbacks also cannot be underestimated. An important reason is that, compared with the ordinary special note symbol password technology, although they have no trouble of illegally using forged counterfeit money passwords to crack down on illegally disrupting the normal order of the international financial market, one of the core features of the encryption technology based on special e- mail symbol password is that the note password needs to be encrypted twice. The so-called " one foot higher than the magic" , since the password is the note password, It is inevitable that the bank note codes will be broken or cracked illegally again. Once these bank note codes are attacked illegally again, forgery, tampering, loss, duplication, illegal capital flow or illegal transfer are all likely to happen again. One of the two main features is that although it is no longer required to directly use newspapers to print digital currency, thus eliminating the cost of printing paper currency, and basically eliminating the large cost of directly using printed paper currency as a commodity of currency value for market sales and currency exchange in commodity transportation, inventory and security links, it is still unclear whether the high cost of paper currency or the high cost of network operation and maintenance are due to the fact that digital printing currency needs to be supported by a strong computer network operation, and network maintenance, network security and network upgrade also need to incur huge costs

and expenses. Third, compared with the current payment system in digital currency, the digital currency system is likely to expose users to more risks, especially those from the Internet, such as hacking and data confusion. As the traditional digital currency system is actually a completely closed system, and some security measures and means are adopted to prevent external threats, it can be said that this digital currency system is likely to become a completely open system, which will directly face external security threats.

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## **2.2. Challenges to Global Money Flows**

At present, different countries have different levels of economic development and different means of supervision, all of which have led to digital currency's inability to achieve barrier-free circulation in the world. Digital currency, such as the popular Bitcoin and Ether coins, cannot obtain a legal status in the world. Meanwhile, large-scale speculation and speculation also affect the value of these digital currency, making it difficult to achieve large-scale circulation. Digital electronic money is easy to directly promote the rapid flow of international capital due to the wide use of cross-border trade and transportation, which may cause some financial risks. Especially for developing countries, controlling the large flow of capital of overseas enterprises is a particularly important issue. The large flow of capital of some cross-border enterprises in the process of overseas investment and trade has always been considered to be a very complicated matter, because it has already begun to involve in a series of relevant international trade laws and regulations, including sovereignty over foreign currency trade and internationalization of foreign investment and trade patterns. On the one hand, due to the immaturity of developing countries in establishing policies and measures to strengthen international financial supervision, international investors from all walks of life are prone to massive capital inflows or rapid capital outflows in the short term, which brings huge socio-economic risks to the country's economy; On the other hand, people still tend to directly choose all digital sovereign currencies with stable domestic currencies as their main instruments for value storage. Investors in developing countries still want to directly convert all their personal assets into all digital sovereign currencies of developed countries and stable digital currency pegged to the currencies of other developed countries. They also need to temporarily abandon all their sovereign digital currency holdings. Over time, it is likely that this will eventually lead to a financial and credit burden crisis on the use of domestic currencies. [2]

## **2.3. Regulatory Challenges Posted by Digital Currency**

Moreover, as the risks brought by digital currency are not only numerous but also extremely complicated, the financial supervision system currently implemented in our country cannot effectively supervise the risks of digital currency. Even we can say that this kind of digital currency has brought greater difficulties and challenges to the financial supervision. For the regulatory authorities, the most important thing when monitoring illegal financial acts is the transparency of information. Although this kind of digital currency has strong traceability and can slow down and solve some illegal financial acts such as money laundering to a certain extent, this kind of digital currency's ineffectiveness and anonymous letter also brings some difficulties to its regulatory work. It is very difficult for the regulatory authorities to obtain its information for monitoring, which will lead to the acts of terrorist financing and money laundering being

unable to be controlled and the regulatory effect cannot be fully exerted. At the same time, the financial risk in digital currency may lead to regulatory risk, which in turn may lead to credit risk. A series of risks are prone to lead to negative feedback between digital currency and financial institutions, which will also seriously undermine the feasibility of regulation in digital currency. In view of the multiple attributes of digital currency itself, the regulatory authorities need to refine the regulatory rules, and digital currency has an international character. Therefore, the regulatory measures also need to be in line with the international standards, which leads to the uncertainty of the ownership of the formulation of regulatory standards and the difficulty in ensuring international regulatory coordination. [3]

### 3. Digital Currency Study Continues to Advance

#### 3.1. Guard against Risks

Under the current financial technology development environment, the correct implementation and effective implementation of digital electronic money may still face certain technological risks. As a kind of currency, digital currency should not only ensure the correct transmission and mechanism of monetary policies such as monetary policy and financial security and stability, but also maintain good consumers. Some scientific and technological schemes bear too much risk, which may harm consumers. Especially for the economies of big countries, they must try their best to avoid such substantial and irreparable losses, so they must be cautious. In the process of this promotion, full testing and partial inspection should be carried out before it is started. As for the risks of virtual assets and fluctuations in commodity prices that have begun to appear in the market at present, experts suggest that some science and technology have not focused on the application of virtual digital currency in the commercial and retail payment fields, but have instead moved to the trading fields of other virtual assets. The development direction of virtual asset transactions is more cautious. From the perspective of China, virtual asset transactions do not fully meet the needs of financial products and services for the real economy. Therefore, in the whole development process, we need not worry too much, start research and development steadily, conduct tests in an orderly manner, grasp the development direction, and fully emphasize that the financial industry should serve the real economy, improve efficiency, reduce costs, and prevent it from turning into excessively speculative commercial products. On the implementation of the pilot project in digital currency, Jin Penghui, a member of the National Committee of the Chinese People's Political Consultative Conference, executive vice-director of the Shanghai headquarters of the People's Bank of China and chief executive officer of the Shanghai branch, said that the pilot project in digital currency is still under in-depth exploration. [4]

#### 3.2. Dynamic Regulation

Supervision is an important aspect that needs to be particularly strengthened during the research process and in the future after the release of digital currency. Ma Huateng, a representative of the Standing Committee of the National People's Congress and the president and chief executive officer of Tencent, believes that there are many risks in digital currency's behavior, not because the technology is not mature. If everyone can use the block chain technology to randomly distribute and distribute a kind of digital currency anywhere, it will cause a lot of supervision problems. Li Huiyong, chief macro analyst of Shenwan Hongyuan Company, believes that full attention should be paid to maintaining the overall financial stability of the enterprise and preventing investment risks. Effective transmission and coordination mechanisms for policies such as monetary policy and financial stability should be ensured. At the same time, consumers should be protected to a certain extent. The future control and supervision are dynamic, depending on the maturity level of science and technology, as well as the inspection and evaluation. Full consideration should be given to the

fact that it can bring more efficiency to consumers, bring less cost and bring more security and privacy to the retail market. In addition, full and accurate consideration should be given to the overall situation of the development of the rule- of- law economy. It should not conflict directly with the current stability of the rule- of- law economy and the current social order of the rule- of- law market economy. Of course, because the scientific finance and the rapid development of information network technology will bring huge social changes to the original market financial industry and the social order structure of market economy in our country, we still need to consider these two issues more carefully and make an in- depth study and demonstration before we can effectively solve them. In addition, regarding the landing application standard of digital electronic money payment, Ge Huayong, a member of the National Committee of the Chinese People' s Political Consultative Conference, a vice- chairman of the China UnionPay Association and the chairman of the central bank, and Jin Penghui jointly held a joint meeting a few days ago to put forward several suggestions in the Proposal on Legislation of Electronic Payment. With the continuous deepening of China's practice and exploration of developing the concept of digital electronic money payment, further research and standardization of the development of electronic money payment are needed to create a sound development environment and lay a solid foundation for accelerating the wide landing application of digital electronic money in our country. We should fully learn from the new thinking and legislative practice of Europe and the United States and other regions in strengthening supervision in the field of payment industry, pay close attention to exploring, researching and formulating a set of electronic payment laws, and clarify the rights and obligations of the industrial subjects participating in different aspects and the division of supervision responsibilities from the relevant policies and laws, so as to effectively avoid the risks in payment behavior and safeguard the rights and interests of consumers. [5]

#### 4. Conclusion

To sum up, digital currency has gradually become the inevitable result of the changes in the current global market economic order and is a new chapter in the current global market economic changes. At the same time, it is of great significance to promote the internal economic and social development of our country. At present, China' s pace in promoting the issuance of digital currency has far exceeded that of some developed countries in the world. Digital currency is no longer just a newly arisen special large currency for contemporary China and for safeguarding and maintaining the whole global market economic order, but an important result of the digital currency system reform in the economies of all countries in the world.

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