# Innovative Development of Shared Economy in Digital Currency Era

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**Abstract:** Money was born to meet the needs of commercial transactions. With the development of social commerce, the form of money has been evolving. With the advent of the era of Internet, digitalization and virtualization, the form of money will change further. In view of the current widespread use of smartphones and rapid technological updates, as well as the characteristics of virtual currency and digital currency. Looking back on the performance of digital economy and exploring the development prospects of digital economy. By combining the risk theory and regulatory principles of digital currency, the credit risk assessment system from single-dimensional plane to multi-dimensional is proposed to realize the effective supervision of digital currency system. Sharing the generalized effect of credit personalization in the digital economy era. Studies have shown that shared economy is low time cost, low coin cost and high privacy cost compared to traditional economy. The use of digital currency may be easier and faster, and it will be easier for the administrative department to strictly supervise this part of the funds.

## 1. Introduction

As the classical economics of orthodox economics in the history of economic thought, it once tried to create a science without money. After classical economics, some economic theories and policy considerations did not take currency into account when studying the determinants of real economic variables, at least put monetary factors in a negligible position [1]. The key factor in the emergence of digital money is that money managers manipulate the value of money rather than the free market, which leads to the inflationary monetary system. Digital money introduces the mechanism of competition and neutralization into the monetary system without human interference. The digital money system issues money according to the free market demand [2]. Finance is an important core competitiveness of a country. Financial security is also an important part of national security. It is necessary to innovate and improve the financial market system, accelerate the transformation of financial development methods, promote a virtuous circle of economic and financial resources, and ensure its healthy development [3]. From the content of the speech to the current financial situation, it is not difficult to find that with the advancement of technology and the development of finance, Internet technology brings great changes and speed. And Internet finance has brought convenience and rapid changes to the public, which has become a hot topic today [4].

In 2014, money demand, new technology and the adoption of electronic money were studied by relevant scholars [5]. Since electronic finance technology in 2016, distance and responsibility in global finance have been proposed by relevant scholars [6]. Since then, the classification of digital community monetary platform has been studied by relevant scholars [7]. The emergence of shared economy is based on the fragmentation of ownership. In other words, ownership equals the sum of fragmented rights of use. Under the traditional commercial economic structure, in order to obtain the right to use, people must have ownership. Because at the cognitive level at that time, ownership was basically complete and indivisible (not excluding a few exceptions) [8]. In the long process of human economic history, the evolution of the digital currency era has gone through four processes. One is the material currency, such as livestock, cloth, shells and other equivalent production materials recognized by both sides. Secondly, metal currencies, such as bronze, iron, copper and so

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on, are more scarce gold and silver, which are mainly manifested in weighing and Minting coins. The third is banknotes, such as the Song Dynasty Jiaozi and Guanjiao, the Ming Dynasty Daming Banknotes, and the current various types of banknotes. The fourth is electronic money, where the electronic money is mainly based on electronic accounts, such as payment and account settlement through the Internet [9]. The initial actual metal content of the coin is equal to the nominal metal content. The actual value of the metal coin is gradually separated from the nominal value. The popularity of ordinary coinage marks the initial stage of entering the credit currency form. After the millennium AD, the world gradually transitioned to the use of banknotes. The emergence of official financial institutions such as the Central Bank made legal paper bills more common. The popularity of statutory paper money marks the advanced stage of entering the credit currency. This paper discusses the innovation and development of the sharing economy in the digital currency era [10].

## 2. Materials and Methods

Digitization has created a huge and seemingly invisible economic activity, the digital economy, which has brought about the greatest changes since the Industrial Revolution. With the development of Internet Finance in digital economy, block chains are more mentioned and even applied. Explained in terms of technical terms, block chain is a new application mode of computer technology, such as distributed data storage, point-to-point transmission, encryption algorithm and so on. The new digital currency system is based on the distributed general ledger consensus network system, in which each node has a unique identity. Each node can join (connect) and exit (disconnect) freely and voluntarily, and the nodes are mapped to specific roles in the digital currency system. A new business model using the mobile Internet. The sharing economy is an institution or individual with idle resources. The right to use the resources is given to others, and the transferor receives a certain economic or non-economic return. A new format in which a sharer uses other people's idle resources to create value. It can be seen that the sharing economy is both a new business model and a new format.

Money itself should have low transaction costs to reduce the overall transaction costs, mainly the high efficiency of payment and circulation, and the low cost of issuance and management. Although electronic money is more efficient in payment and circulation than paper money. However, the issuance and management of banknotes have higher costs, so they have a certain substitution effect on banknotes in different countries. In other words, ownership equals the sum of fragmented rights of use. Under the traditional commercial economic structure, in order to obtain the right to use, people must have ownership. Because at the cognitive level at that time, ownership was basically complete and indivisible (not excluding a few exceptions). Therefore, a person has to bear the cost of the entire period of time to purchase the ownership of the goods or services for the right to use for a certain period of time. This brings great waste and idleness. With the development of social economy, people will put forward new requirements for the use of money to improve the efficiency of market transactions. From the perspective of the supply side, the development of science and technology has made the evolution of the currency form a new possibility. The form of currency choice is determined by the technological level at that time. The selection and use of the currency material is closely related to the industrial technology of a certain era.

Digital money is the replacement of money in the form of electronic money. Digital gold coin and password currency belong to digital currency. At present, the most popular micro-payment and Alipay are the products of the digital currency era. If we compare the block chain of the Internet above to a new generation of underlying technology, the Internet payment form such as Bitcoin is the basic application of core technology. The P2P business generated by ICO in this section is a derivative application at this stage. However, through large-scale network matching, the shared economy exploits and utilizes idle ownership in a fragmented way. Such a business operation model can effectively save the overall cost of both the supply and the demand, thereby drastically reducing the money payment in the form of coins. There are so many examples like this, no need to rumor. It makes it difficult to conduct accurate statistical analysis of transaction information; its distribution and withdrawal have time lag, which affects the accuracy and timeliness of national monetary

policy transmission to a certain extent. Although electronic money is easy to collect data and statistical analysis, it still poses systemic risk because the Internet still has great anonymity. The characteristics of digital currency are shown in Table 1.

Table 1 Characteristics of Digital Money

| | Supervise | Regulation |
|---|---|---|
| Real-time transferability | 10.35 | 6.38 |
| Transparency of transactions | 9.62 | 7.18 |
| Regulability of transactions | 8.14 | 7.95 |

## 3. Result Analysis and Discussion

Deep-seated disputes among the subjects of currency issuance are the issue of credit guarantee. In the era of credit currency, money itself has no value. Behind it is the issue of issuer's credit. Under different currency issuing systems, there are great differences in credit guarantee. Pure government issuing legal credit currency system is essentially government credit guarantee, which guarantees currency circulation value. The credit monetary system linked with gold and other physical objects is essentially a double guarantee of commodity value and government credit. The credit monetary system linked to strong currencies such as the US dollar is essentially a multiple guarantee of the credit of different subjects. Money not only needs to deal with real-time transactions, but also needs to react to exchange rates, interest rates, etc., and commodities are gradually moving toward non-physical, even intangible, virtual, and digital. This makes tangible banknotes less and less able to meet more efficient, digital business needs. Therefore, various types of electronic money based on the Internet payment system came into being.

In the early stage of the development of this confused digital currency, there will be a contention among hundreds of schools of thought, but the basic application population of virtual currency (taking Bitcoin as an example) still exists, and it also exists as a global high-efficiency, low-cost circulation value. By cutting the price of Bitcoin at the waist, we can see some clues. Compared with the traditional economic model with high time cost, high coin cost and zero privacy cost (almost zero), the shared economy has low time cost, low coin cost and high privacy cost. But the core of the banknote is the risk of redemption, that is, the original subject matter that is converted into banknotes. After subdividing, there are two risks. One is its own anti-counterfeiting risk. The appearance of counterfeit currency often has a very serious impact on banknotes. The second is the credit risk of the issuing organization. Due to the huge amount of the coinage tax, regardless of the history of the Chinese and Western countries, the banknotes are spammed, and the overdraft credits are unable to be fulfilled, eventually eliminating the banknotes. The regulation of digital currency is shown in Figure 1.

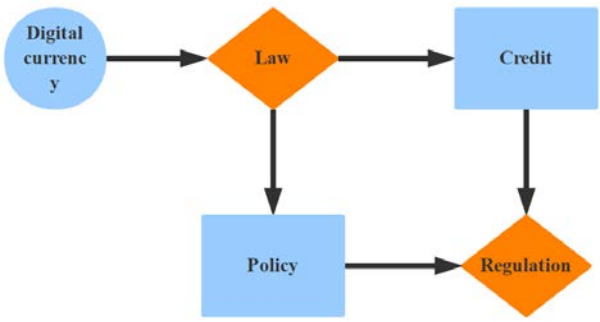


Fig.1. Regulation of Digital Currency

Because of information asymmetry, there are principal-agent problems in the process of currency issuance. The digital currency system will gradually develop from dual principal-agent to one-tier principal-agent problem. Traditional monetary system is a dual principal-agent problem with double

credit. The traditional currency circulation system is an indirect financing process dominated by banks. Money issuance is a disposition of national credit among financial institutions, that is, there is a principal-agent problem in the primary market. In individual financing, individual units rely on their own credit to financial institutions for secondary financing to obtain funds, that is, there is also a principal-agent problem in the secondary market. The transmission of digital monetary policy is shown in Figure 2. However, electronic money also has obvious risks: one is technical risk, because its own encryption method will be deciphered, and once it is deciphered, due to the extremely fast spread of the Internet, it is easy to cause a large number of "counterfeit currency". The second is regulatory risk. At present, the level of supervision of Internet commerce, electronic money and its issuers is not yet clear. In particular, the use of the Internet can quickly carry out cross-regional, cross-country, fast anonymous transactions, and easy to money laundering tools. The third is moral hazard. In particular, private issuers, due to their own problems, lead to credit crises and moral hazard, which will cause immeasurable losses to the holders, such as prepaid cards and game coins.

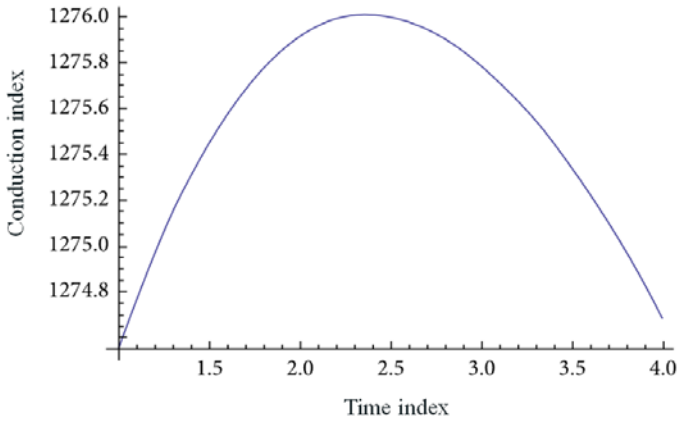


Fig.2. Digital Monetary Policy Transmission

## 4. Conclusion

Nowadays, the Internet technology revolution is opening the third industrial revolution. The emergence of block chain technology has inherent matching degree with the improvement of financial efficiency in its own characteristics. With the tide of this era, the financial industry will set sail in the big boat of digital economy, using various forms of currency as oars. From physical to virtual, but constantly evolving in form. Digital money, a new form of money, meets the demand for money in modern and future commercial activities, so its birth is inseparable from the trend of globalization and Internet-based commercial activities. The use of financial technology means to realize the dynamic monitoring of the personalization of credit personality from the one-dimensional mechanism to the multi-dimensional mechanism design can reduce the information asymmetry in the financial transaction process. At the same time, the three-dimensional digital currency system of personality credit helps the regulatory agencies to obtain corresponding data and adjust policies in a timely manner to make the digital currency operate effectively. Therefore, the three-dimensional credit system is the key to a comprehensive system of risk management for digital currencies. Or the essence of the sharing economy is a process of chasing, an economy, an economy that pursues, shares, and creates together.

## References

[1] Martin,Cecil K J.Coeckelbergh, Mark.Money machines: electronic financial technologies, distancing, and responsibility in global finance.vii, 204 pp.bibliogr.Farnham, Surrey: Ashgate, 2015. £62.99 (cloth)[J].Journal of the Royal Anthropological Institute, 2017, 23(3):652-653.

[2] Theory of Money: A Reply to Neil Wallace [J].Journal of Political Economy, 2013,

121(4):796-801.

[3] Cheah E T,Fry J.Speculative bubbles in Bitcoin markets? An empirical investigation into the fundamental value of Bitcoin [J].Economics Letters, 2015, 130:32-36.

[4] Angel J J,Mccabe D. The Ethics of Payments: Paper, Plastic, or Bitcoin?[J].Journal of Business Ethics, 2015, 132(3):603-611.

[5] Fujiki H,Tanaka M.Currency demand, new technology, and the adoption of electronic money: Micro evidence from Japan[J].Economics Letters, 2014, 125(1):5-8.

[6] Coeckelbergh M.Money machines: electronic financial technologies, distancing, and responsibility in global finance [J].Information Communication & Society, 2016, 19(12):1-5.

[7] Diniz E H,Siqueira E S,Eric V H. Taxonomy of digital community currency platforms[J]. Information Technology for Development, 2018:1-23.

[8] Bettencourt L A, Lusch R F, Vargo S L.A Service Lens on Value Creation[J].California Management Review, 2014, 57(1):44-66.

[9] Goh T T,Sun S.Exploring gender differences in Islamic mobile banking acceptance[J].Electronic Commerce Research, 2014, 14(4):435-458.

[10] McGoun, Skip. How would you like to pay: how technology is changing the future of money [J].Consumption Markets & Culture, 2016:1-1.