

Conference Paper

Discussion on Block Chain Technology and Trade Settlement Methods of Traditional Commercial Banks

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Abstract

At the present stage, the rapid development of block chain technology has received high attention from all countries in the world, all the governments, financial circles, scientific and technological circles and the business community are competing for the development of block chain technology. And the related technology research and development institutions and start-ups companies have also obtained the capital investment of geometric growth. In view of this, the authors define the traditional trade settlement of commercial banks as a related subject by the impact of block chain technology, discusses the practical features of block chain technology and block chain finance at the present stage, and describes the related concepts and application scenes. At the same time, I think that it will be very valuable to study the block chain technology as soon as possible for the transformation of traditional trade settlement methods.

Keywords: block chain, commercial bank, trade settlement method

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1. Introduction

The advantage of the paperless block chain trade settlement model is that it can get rid of the predicaments that low efficiency, lengthy and error prone predicament of the traditional model, and can be a good substitute for the traditional settlement. Although, concerned the existing technical conditions, the block chain trade settlement has not been fully promoted, but after several iterations, it is bound to bring a subversive significance to the traditional trade settlement process. Block chain cannot be roughly equated with bitcoin, in fact, it is the underlying support for the bitcoin. Not long ago, the information and software service department of the Ministry of industry and information issued *the white paper on the development of China's block chain technology and application*. The block chain is defined as the innovative application model of computer technology, such as distributed data storage, point to point transmission,

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consensus mechanism, encryption algorithm and so on. This also fully reflects that the central government has begun to clarify the function and value of the block chain, and also provides important guidance for the development and related research of China's block chain technology.

Block chain technology is a new thing, the state, industry and related fields have not yet formed a unified understanding and standardization. All walks of life have different understanding and evaluation of block chain, and ordinary workers have no clear application trend on block chain. Experts and scholars who are optimistic point out that the technology will lead the future revolution in the financial field and bring about subversive changes in traditional trade settlement and completely replace the single business of trade companies and banks. However, the scholars who have the opposite opinions point out that the practical value of the block chain is not very important, and there are still a large number of technical loopholes and legal blind areas, which will not impact the traditional settlement business of commercial banks. In fact, from the point of view of history, all the emerging technologies have the foresight and guidance of the law of human social development, and have different degrees of effect on the various fields of human society, but this process is slow. Therefore, everyone must take a comprehensive and objective attitude to treat the emergence of new technology, and dialectically evaluate its inherent characteristics and application prospects, as well as the transformation or replacement of traditional business. Only by maintaining an open attitude to deal with the new changes caused by the new technology and properly adjusting the existing policies can we seize a favorable position in the future social and economic changes. And rational analysis block chain technology is crucial to the sustainable development of domestic financial institutions.

2. Overview of Related Theories

At present, China's official definition of block chain is the innovative application mode of computer technology, such as distributed data storage, point to point transmission, consensus mechanism, encryption algorithm and other computer technology in the Internet age. At the practical level, most scholars regard it as a core supporting technology, such as the digital encryption currency involved in bitcoin. It has six core technologies, intelligent contract, consensus mechanism, privacy protection, encryption algorithm, network protocol and data storage.

Block chaining technology was born in the financial field, which can improve the efficiency and speed of financial business. The representative application is the block

chain finance, and the related scenes are banking, securities, insurance and other financial industries, and involve two important contents, namely, traditional finance and self-finance. The traditional finance includes indirect finance and direct finance. The indirect finance is undertaken by financial intermediaries such as banks, while the direct finance is the financial activity of direct loan by both parties represented by P2P net loan. Due to the growing popularity and maturity of Internet technology, the efficiency, security and openness of financial transactions have become a growing concern for people. This is precisely the problem that the traditional financial model is difficult to provide. So gradually formed a new financial thing, that is, automated finance.

On the whole view, the revolutionary value of block chain will bring about a tremendous change in the field of financial science and technology with its revolutionary value, and bring a profound and profound effect on the domestic financial system, accelerate the integration of financial science and technology, accelerate the integration of industrial financing, and bring further influence on the development of the financial industry in the future.

3. A Brief Introduction to the Traditional Trade Settlement of Commercial Banks

Traditional trade settlement of commercial banks has been undertaking a basic financial function for a long time, playing the most extensive and profound influence. Generally speaking, dealing with trade creditors' liquidation is the main function of trade settlement, which is mediated by commercial banks to facilitate trade and complete liquidation with currency. Remittances, collections and letters of credit are the three main ways. The first two kinds are based on commercial credit, that is, banks only take intermediary role, and the latter is based on bank credit, that is, banks also need to take responsibility for debt. Because they have certain independence, so they have been the most commonly used form of settlement in international business for a long time

Remittance refers to the customer's entrustment to the bank, which is delivered to the payee by the remittance. This process is inseparable from the financial system between the banks and related to the corresponding clearing tools. For the applicant, the termination of debt should be completed by transfer of funds. Remittance includes three main types: telegraphic transfer, mail transfer and foreign exchange. Wire transfer (T/T) refers to a remittance application that is applied by a remittance

person to indicate a joint or agency line in another country or region by a remittance or SWIFT, to deliver the amount of the specified amount to the payee designated on the payment order. M/T refers to the way of mail or quick mail to send the payment instructions to the remittance, without the need for power generation, the cost is cheaper than the wire transfer, and the mail delivery speed is slow. D/D is to refer to the application of the remittance of a remittance, to open a draft at sight, to be a foreign joint or agent, to indicate the way the payment is paid to the payee or the holder of the bill on the bill of exchange. Collection refers to the payment or acceptance by the bank in accordance with the instructions received from the exporter, the delivery of documents on the basis of payment and acceptance, and the delivery of the documents in other terms and conditions. The documents are divided into financial documents and commercial documents. The function of the letter of credit is reflected in the application of commercial credit instead of commercial bank, so as to deal with the credit problem of international commercial parties. Because international business involves many subjects and many processes, paper documents should be transferred in many links, resulting in the audit problem in the letter of credit business.

4. SWOT Analysis of Bank Traditional Trade Settlement

In the traditional trade settlement, I choose the most common letter of credit as a case to carry out the SWOT analysis of the settlement process.

First of all, the advantage of L C lies in security. In the practice of international trade, a letter of credit is irrevocable, that means, the issuing bank must pay if it confirms the conformity of the documents. Therefore, as for the importers, the audit responsibility of the bank has increased the payment security, and the credit card has saved the cost of capital also. At the same time, the letter of credit has the effect of circulate necessary funds, which makes many of the credit financing products derived from the letter of credit, which provides the margin of capital for the two sides of the trade, which is beneficial to reduce the financial risk. The more common products are import and export bills, overseas payment, interbank payment, forfeiture and so on.

Secondly, the weakness of L C is also obviously. Because of the multiple subjects involved in international commercial affairs, the business of documents is cumbersome and the examination and approval links are numerous, resulting in the lengthy business process of letter of credit. Because the letter of credit is based on the bank credit, it is necessary to confirm its own interests under the legal framework of anti-money laundering. It has to confirm the customer's qualification repeatedly, from the business

application to the final loan, through multi-level approval, the internal links and the strict verification of the documents. At the same time, because the letter of credit has certain characteristics of independence and documentation, its content is not related to many documents formed by the basic exchange. That is to say, the bank is only responsible for examining the compliance of the documents, and is not responsible for the transport, goods, quantities, warehousing or other factors contained in the underlying transaction. And in accordance with the customary spirit of the International Chamber of Commerce, banks do not need to be accountable for forgery or loss of documents, or for inappropriate professional terms. If the exporter fails to deliver the goods according to the plan, the importer will have the right to ask the issuing bank to refuse payment. At this point, the bank credit of the letter of credit is no longer exist, thereby losing its due settlement advantage.

Thirdly, the opportunity for a letter of credit is reflected in the third party status of a bank. Bank credit is crucial to the existence of a letter of credit. Since China's foreign exchange control has been more stringent for cross-border payment for a long time, banks have undertaken the vast majority of cross-border payment transactions. At present, the third party payment is in the ascendant, which deserves the high attention of the bank. We must rely on the policy advantage given by the state as soon as possible, develop the cross-border payment business and products fully, and excavate the third party settlement demand of the potential customers. At present, cross-border e-commerce is developing rapidly, bringing a large number of cross-border payment services, fully cooperating with these businesses and embedding its trading system, not only is the technology relatively mature but also security, and it also increases the dependence and recognition of the e-commerce platform customers on the bank. At present, supply chain finance is developing rapidly in many industries and fields, and it also brings a lot of opportunities for banks. In the commercial banks and industrial chains, enterprises share the links of supply chain finance, enabling goods, information and capital to circulate efficiently and form a hub link. In this cycle, the bank should rely on its own key position to dredge the capital flow, create a trade financial online platform as soon as possible, develop a wide variety of full process financial service chain, and use good data technology to collect and extract all kinds of information uploaded and stored in the platform. It lays a solid foundation for the efficiency and quality of financial services.

Finally, introduces the threat aspects of the letter of credit. In the future, more and more mode of settlement can be chosen by both sides of trade, especially the rapid development of Internet finance, which will reduce the living space of commercial

bank's traditional trade settlement undoubtedly. For a long time, the trade settlement services provided by banks are hard to break through the inherent mode, and there is no room for innovation and breakthrough. At the same time, because the 2008 global financial crisis, the governments' efforts to prevent and control financial risks are increasing day by day, which has also seriously squeezed the free adjustment space of banks. The recovery rate of the world economy has not yet reached its expectations. The economic growth of the major economies is obviously influenced by the upgrading of industrial transformation and the reduction of the demographic dividend, and the profit space of the commercial banks of various countries is shrinking from the real economic growth. Therefore, the willingness of commercial banks to research and development of traditional trade settlement is obviously insufficient, and it is gradually lagging behind the development of the times and the needs of the enterprises. Therefore, it is very likely to lose some of the long-term cooperative customers and potential young customers.

5. Analysis of The Relationship Between Block Chain Technology and Trade Settlement Mode of Commercial Banks

From an optimistic point of view, the first step should be to optimize the existing business efficiency as soon as possible. In view of the de centralization and de trust property of the block chain, it provides a guarantee for the international business parties to carry out point to point settlement directly, thus effectively getting rid of the former low efficiency dilemma. At the same time, the block chain trade settlement eliminates the third party credit endorsement which is necessary in the traditional way of trade settlement, and avoids the troubles and concerns of the two parties to confirm each other's credit and qualification repeatedly, that is to say, the characteristics of the district chain clearing can still be effective under the conditions of both sides. The basic contracts of the international business parties can be stored in the form of intelligent contracts, thus getting rid of the natural problems of the traditional commercial transactions due to the tampering, loss and lag of the documents in many subjects and links, and to optimize the efficiency and quality of the settlement of the two sides to the greatest extent. Because the account book of block chain exists in the symbiotic network, it needs to participate in the maintenance, so it greatly improves the openness and transparency of the block chain trade settlement, and

greatly reduces the audit work and audit expenditure that many institutions have to deal with before.

From a negative perspective, block chain has many advantages and characteristics that traditional trade settlement methods cannot provide. However, the birth time of the block chain technology is not long, there are still many technical loopholes and legal blind areas, and the world has not formed a wide and universal application practice, especially the legal supervision and the introduction of industry standards have shown obvious lag. Therefore, block chain technology still has a negative impact on traditional trade settlement of commercial banks. This is mainly because the government is not fully aware of the block chain technology, and the corresponding regulatory measures are bound to have a certain time lag. This unclear and uncontrollable grey space directly affects the legality and operability of the block chain trade settlement, thus the extension and application of the block chain settlement in a wider range. From this point of view, the traditional way of trade settlement has many shortcomings and disadvantages, but the customary regulations system based on long term practice and a large number of cases has played an important role. Whether it is the International Chamber of Commerce *The Uniform Collection of Documentary Collection rules* or *International Documentary Letter of Credit Unified Rules*, is generally accepted, recognized and observed by the international business parties. In addition, the International Chamber of Commerce has set up a special arbitration commission, which can basically solve all the disputes that may be formed in the international business, and thus maintain the order of international trade to the greatest extent. In contrast, the international countries and various international organizations and organizations have not yet formed a highly unified understanding and definition of the block chain technology, so in the future, once it happened the dissension of the trade and settlement of the block chain will form a long-term unsolved situation.

6. Conclusion

In this paper, the impact of block chain technology on the traditional trade settlement of commercial banks is taken as the research object. After careful argumentation, we can conclude that there are two positive and negative effects. On the positive side, block chain technology can achieve the point to point block chain trade settlement without the participation of third parties, improve business processing efficiency, reduce transaction costs and ensure the safety of transactions. In negative aspects,

block chain technology still faces technical bottlenecks, legal supervision and industry standard formulation problems. In the short term, time and resources need to be widely invested, and comprehensive income may be small. Large-scale commercial applications still need technology and regulation further maturity, but the trend of development is unstoppable.

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