

A Digital Economy Perspective: Research on Legal Issues of Fintech Regulation

Yucheng Lei¹

¹ School of Law, Guangdong University of Finance & Economics, Guangzhou, China

Correspondence: Yucheng Lei, School of Law, Guangdong University of Finance & Economics, Guangzhou, China.

doi:10.56397/LE.2022.12.03

Abstract

The Internet digital economy is reshaping the global financial system with an irreversible trend, driving the transformation and development of financial technology. Due to the professional complexity and cross-border integration of financial technology, while improving the efficiency of traditional financial operations and reducing financial transaction costs, it also poses new challenges to Chinese regulatory authorities. In view of this, it is necessary to understand the development status of financial technology, clarify the regulatory subjects and principles of financial technology supervision, and sort out and summarize the existing regulatory model and its shortcomings. Finally, I will give advice on the problems existing in the practice of financial technology supervision, and theoretical support is put forward for improving the legal system of financial supervision, so as to promote the healthy development of financial technology.

Keywords: fintech, RegTech, technological development, legal system

1. Introduction

1.1 Introduce the Background

In recent years, global financial technology has developed rapidly, and various Internet information technology applications have sprung up in the financial field. According to KPMG's FinTech Pulse 2015-2019 data, investments in the fintech sector reached US\$135.7 billion worldwide, involving 2,693 transactions worldwide. (KPMG, 2021) Chinese companies also continue to be among the largest fintech marketplaces in the Asia-Pacific region.

The Fintech Development Plan (2019-2021) released by People's Bank of China pointed out that in the next three years, the financial technology work should further enhance the ability of the financial industry to apply technology. (People's Bank of China, 2019) From clearing and payment, credit leasing, to investment and financial management, it can be said that financial technology has penetrated into all aspects of the financial field and is evolving from a tool role to a core part of financial development. Some scholars say that the development of financial technology is in line with the "Disruption Innovation" (Christensen, Clayton M., Raynor, Michael, McDonald & Rory, 2015) proposed by economist Schumpeter, believing that financial innovation and the development of technology are closely integrated to promote the transformation of financing methods, usually in the form of disruptive innovation.

1.2 Introduce the Problem

However, the essence of financial technology is still finance, and it still has the risk attributes of traditional finance. Developed countries such as the United States and the United Kingdom have earlier carried out supervision and legislation on financial technology and have adopted a flexible and prudent attitude towards this: first give financial technology innovation independent development space to ensure competition and form

industry standards; then identify the problems from practice, clarify the division of labor and cooperation of regulatory entities, establish relevant regulatory principles to eliminate regulatory blind spots that cannot be covered by current laws, introduce certain forward-looking regulatory policies and laws in a timely manner, and build a legal framework for the supervision of financial technology to solve the adverse impact of the lag of financial laws on supervision.

In summary, China also needs to clarify the regulatory subjects, regulatory scope and regulatory principles and principles of the current technology, optimize regulatory policies, and improve legal guarantees.

2. Literature Review

Since the Internet technology began to penetrate into the financial market, all financial fields involving computer technology such as blockchain technology, cloud computing technology, digital information technology, and network communication technology have been called financial technology. But at the official level, there is no clear definition of fintech; And there is no consensus in the academic community on this.

Fintech first appeared in the nineties, and Citibank in the United States was the first institution to realize that technological innovation could be applied to the financial field, so they launched a research project called Financial Services Technology Consortium, which set a precedent for the combination of the words finance and technology. (HM Treasury, 2015) After that, Western countries will use electronic information, computer technology, and communication and Internet technology in the financial field, collectively known as Financial Technology, that is, financial technology, and at the same time derived a new word Fintech. Based on this, the Financial Stability Board (FSB) preliminarily defines fintech as the financial innovation brought about by technology, resulting in business models, technology applications, and processes and products that have a significant impact on financial markets, institutions, and financial services.

Zhou Xiaochuan (2019) believes that the essence of the financial industry is the information industry from the perspective of application, so the core of financial technology is the practical application of these information technologies in the financial field. (Zhou Xiaochuan, 2019) Fintech is driven by cutting-edge technologies such as big data, artificial intelligence, and blockchain, all of which rely on the development of information technology. From the perspective of technological innovation, Lu Minfeng (2017) believes that financial technology is a process of integrating the information technology of the Internet with the traditional financial industry, and using technological advantages to re-innovate the original financial business, model and operation process. (Du Qingyu, 2020) For example, traditional financial services can achieve accurate portraits of customers through large databases in order to provide personalized services and optimize user experience. Chen Hong and Guo Liang (2020) believe that modern scientific and technological achievements are only a means to better promote the quality and efficiency of the financial industry, thereby promoting inclusive financial development and preventing financial risks. (Chen Hong & Guo Liang, 2020) For example, fintech companies can help traditional financial institutions shorten transaction processes, reduce transaction costs, and quantify risks in the link of financial activities. Dong Zhenliang et al. (2020) believe that technology is the foundation and finance is fundamental from the perspective of reality theory. (Zhenliang Dong, Zongxiao Xie, Baiwan An & Runhui Lin, 2020) For financial technology, financial attributes and technological attributes should not overemphasize one party, neither should be discarded, and should be treated as an organic whole.

Although there are differences in the scope and definition of fintech in different departments and scholars, its core elements include: new technology, finance, application innovation, efficiency, and other keywords. Therefore, according to the above elements, financial technology can be summarized as the combination of traditional financial industry and digital information technology, applying artificial intelligence, big data, cloud computing, database, and other technologies to traditional financial services, promoting financial innovation with high financial efficiency and greatly reduced consumption costs.

3. The Dilemma of Fintech Regulation

3.1 *The Risk of Financial Technology*

With the increasingly fierce market economy, the field of financial technology has attracted unprecedented attention from capital from all countries, and financial technology innovation has become the key to affecting the high-quality development of the economy and finance of various countries. In recent years, adhering to the principle of 'no innovation and no development', China's Internet finance technology giants, especially in the field of electronic payment, have appeared a hundred flowers in the situation, extending the payment industry chain to Internet enterprises, merchants, individuals, and constantly penetrating into other financial services such as credit and Robo-Advisory. In the heyday of third-party payments, there were not only cases where commercial banks were abandoned. (Wang Qufei, 2019) Moreover, under the guise of innovation, illegal fundraising, pyramid schemes, fraud and other illegal and criminal activities are carried out. Up to now, the explosion of P2P, cash loans, campus loans, virtual currency prices soaring and plummeting and other chaos

have frequently exploded. (Sun Xueying & Sun Han, 2017) Fintech not only affects the traditional financial ecology and changes the development of the financial industry, but also changes the transmission mode of traditional financial risks. Its cross-regional and cross-field characteristics make the external spillover effect of market stability greater, and bring new challenges to financial supervision, competition supervision and data privacy supervision. (Chen Yanda, Wang Yufeng & Zhang Qiang, 2020)

3.2 The Regulatory Failure of the Legal System

In the long history of Chinese financial supervision, the cycle of “deregulation-excessive innovation-financial crisis-strict supervision-suppression of innovation-deregulation” highlights the problem of balancing financial efficiency and security, especially in the context of the rapid advancement of financial technology. (Yang Dong, 2018) In the early stage of the development of financial technology supervision, it was mainly aimed at online payment and credit card payment of traditional financial institutions, and the supervised entities in this period were credit card fraud, cash-out, securities fraud and other problems in banks, securities and other financial institutions. In order to encourage innovation policies that tend to be prudent supervision, the regulatory policies at this stage are relatively moderate, targeting P2P, crowdfunding and third-party payment institutions such as online fraud, illegal fundraising, and illegal establishment of capital pools. (Du Qingyu, 2020) At this stage of the development of financial technology, although the subject of supervision continues to expand, from traditional financial institutions to non-financial institutions, the original principle of prudential supervision has changed to the principle of fair supervision, and the supervision has also changed from relaxed supervision to strict compliance supervision, but in the face of the accelerated rise of scientific and technological innovation, there are obviously many regulatory gaps in the existing financial regulatory system and legislation. For example, the essence of a fintech company’s joint loan has penetrated into the bank credit business, but because the existing legal and regulatory rules do not include the credit business of non-bank institutions into the regulatory system, it can legally circumvent supervision, fully exposing the limitations of the regulatory system.

3.3 The Lag in Financial Regulatory Legislation

The innovation of financial technology is generally advanced, risk prediction is difficult, with professional complexity, usually requires related majors such as computer, mathematics and other technical personnel to operate. For example, in the 2015 stock market crash, the new technology represented by the HMS system was one of the causes of the stock market crash, and the behavior of securities companies opening accounts for the allocation company through the HOS system, as well as the risks brought by this behavior, regulators lacked sufficient technical means to monitor and warn, let alone take effective monitoring measures. (Liu Yan & Xia Daile, 2016) On the one hand, most of the existing regulators are from economics, finance and other majors, and do not have relevant technical knowledge and means, on the other hand, the lack of interdisciplinary compound talents in financial technology regulators is not only detrimental to supervision and cannot achieve effective regulatory effects, but also may cause systemic risks in the financial field. In addition, fintech companies are increasingly showing a trend of cross-border development, and the financial products or services they provide are integrated. Internet technology giants use the advantages of data and algorithms of product platforms to enter the financial industry in the fields of payment, wealth management, online lending, investment and financing, making it more difficult for traditional regulators to determine regulatory behavior and regulatory objects. (Li Min, 2019) The regulatory system is also decentralized, for example, the management of financial information service business belongs to the Internet information management department, the online lending business belongs to the banking regulatory department, and the supervision of equity crowdfunding financing belongs to the securities department, etc. (Zhong Huian, 2018) It is difficult for different financial institutions to exercise their supervisory powers under the current regulatory system, and many problems such as unclear regulatory responsibilities, cross-supervision and regulatory gaps have emerged.

4. Improvement of the Legal System for Fintech Regulation

As a norm, the content of law is abstract and general, and if the law is not stable and concrete, it will not only be difficult for the people to adapt, but also the judiciary will not be able to apply it. The innovation of financial technology is the generation of new things, which will definitely be ahead of the current regulations, otherwise it is not called innovation. However, while the pace of innovation continues, financial regulators should also strengthen supervision and enhance the forward-looking and predictability of the law, so as to play a positive role in guiding and promoting development.

4.1 Clarify the Subject of Supervision

In China’s regulatory system, the banking regulatory authority under the State Council and its dispatched agencies are responsible for formulating a supervision and management system for the business activities of online lending information intermediaries and implementing conduct supervision. The Ministry of Industry and Information Technology is responsible for supervising the telecommunications business involved in the business

activities of online lending information intermediaries. The Ministry of Public Security takes the lead in supervising the security of Internet services of online lending information intermediaries, investigating, and punishing illegal activities that violate network security supervision in accordance with law, and cracking down on financial crimes and related crimes involved in online lending. The Cyberspace Administration of China is responsible for supervising financial information services, Internet information content and other businesses. (Sun Xueying & Sun Han, 2017) It can be seen from this that the above-mentioned classified supervision involves a large number of complex departments and unclear boundaries, and it is easy to have low supervision quality, difficult to pursue responsibility, and insufficient supervision. Fintech has technical complexity and cross-border integration, which makes regulators in a rather weak position in financial activities. Therefore, the method adopted by financial technology supervision must be multi-angle, multi-level, all-round and cross-departmental, requiring the internal unity of the target system of financial supervision, and must move from separate supervision to further overall supervision, or strengthen the coordination and cooperation of different regulatory entities under the existing regulatory system to form a regulatory synergy and improve regulatory efficiency.

4.2 Establish Regulatory Standards

If regulatory rules and standards are not transparent and transparent, market players will be at a loss; if the standards are formulated unreasonable and unscientific, market entities will flee if they cannot do so, and market competition may appear disorderly. Promoting fair competition in the market is one of the goals of regulation. When performing their duties, regulators should not take into account the nature, scale, background, etc. of the objects of supervision, nor should they have special tendencies, but should treat them equally in accordance with legal requirements, implement the principles of competition and fair supervision, accelerate the improvement of an open and transparent regulatory rules and standard system, clearly define the boundaries and scope of supervision, and achieve regulatory purposes such as maintaining the stable operation of the market, fairness and justice. In addition, the object of supervision should jump beyond the scope of the original financial licensed institutions, and some non-licensed Internet technology enterprises should also be included in the scope of supervision as long as they engage in links related to financial business. Different regulatory measures should be determined according to the specific business, risk size, market influence, importance of the business involved, market share in the entire business chain, etc. of different participants of fintech enterprises, and timely regulatory intervention should be carried out, and the standards of legal supervision should also be determined according to the principle of proportionality in a targeted manner to prevent one-size-fits-all supervision from hindering the innovation and development of fintech.

4.3 Improve Laws and Regulations

At present, the norms of financial technology supervision are scattered in the laws, financial policies and some rules and practices of various departments, and a relatively complete legal system has not been formed as a whole. The basic legislation at the national level is the core and foundation of a country's legal source, and all kinds of regulatory rules and other subordinate laws must be based on the basic legislation of the state. In the absence of basic national legislation, it is easy to have regulatory difficulties, conflicts of rules, and conflicts between law enforcement and justice, which is not conducive to the unification and implementation of national laws. However, due to the rapid pace of change of technology financial services and products, existing laws cannot keep pace with the innovation of technology finance. Digital information technology has become the core driving force of financial development, build a legal framework for financial technology, formulate systematic, principled, and professional financial technology legislation in a timely manner. In addition, certain and stable laws should be formulated on macro issues such as the entry threshold, enterprise capital holding and risk management process of the technology and finance industry. However, more detailed, and comprehensive policies and rules and regulations should be relied on to solve micro details of the technology and finance industry. This is in response to the cumbersome and time-consuming revision procedures of the law, in order to give full play to the role of effectively regulating the technology and financial sectors.

Finally, integrating regulatory concepts and regulatory paradigms into the provisions of legal norms is crucial to promoting the country's adaptation to the changes of the times, accelerating the high-quality development of finance, and maintaining the financial stability and national security of the market.

References

- KPMG, (2021, January 16). The Pulse of fintech, 2015–2019. <https://home.kpmg/us/en/home/insights/2017/02/the-pulse-of-fintech-archives.html>.
- People's Bank of China, (2019, August 22). Fintech Development Plan, (2019–2021). <http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/3878634/index.html>.
- Christensen, Clayton M., Raynor, Michael, McDonald, Rory, (2015). What is Disruptive Innovation? Harvard

- Business Review, (12).
- HM Treasury, (2015, March 18). Budget Report, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/416330/47881_Budget_2015_Web_Accessible.pdf Jan,4,2018.
- Zhou Xiaochuan, (2019). The Interaction between Information Technology and Financial Policy, *China Finance Journal*, (15), 9–15.
- Du Qingyu, (2020). Research on the Construction Strategy of China's Fintech Regulatory System, *Journal of Technology Economics and Management*, (1), 84–88.
- Chen Hong and Guo Liang, (2020). Causes of Fintech Risks, Negative Effects and Construction of Their Prevention System, *Journal of Reform*, (3), 63–73.
- Zhenliang Dong, Zongxiao Xie, Baiwan An and Runhui Lin, (2020). Fintech Context, Research Review and Future Prospects: A Literature Review Based on the Perspective of Society-Organization, *Journal of Financial Theory and Practice*, (9), 42–51.
- Wang Qufei, (2019). Analysis of Some Relationship Issues in the Development of Fintech, *Journal of Finance and Economics*, (5), 4–8.
- Sun Xueying and Sun Han, (2017). Legal Analysis and Risk Regulation of Online Lending Platforms: From the Perspective of the Chaos of Campus Loans, *People's Journal of Justice*, (28), 5.
- Chen Yanda, Wang Yufeng, Zhang Qiang, (2020). Fintech Regulatory Challenges and Responses in China, *Journal of Financial Theory and Practice*, (1), 49–56.
- Yang Dong, (2018). RegTech: Regulatory Challenges and Dimension Construction of Fintech, *China Social Sciences Journal*, (5), 69–91.
- Liu Yan and Xia Daile, (2016). Legal Analysis of Leverage Mechanism in Stock Crashes: A Perspective of Systemic Risk, *Journal of Securities Law Review*, (1), 107–131.
- Li Min, (2019). Systemic Risk in Fintech: Regulatory Challenges and Responses, *Securities Market Herald Journal*, (2), 5–6.
- Zhong Huian, (2018). Research on Fintech Development and Risk Prevention, *Journal of Financial Development Research*, (3), 81–84.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).