

# Risk Analysis and Supervision of P2P Online Lending

Fulian Chen<sup>1</sup>, Chuan Yin<sup>2,\*</sup>

<sup>1</sup>Hunan University of Science and Technology, Xiangtan, Hunan, 411201, China

<sup>2</sup>Hunan University of Science and Technology, Xiangtan, Hunan, 411201, China

\* Corresponding author: Chuan Yin (Email: 2265266596@qq.com)

**Abstract:** In the new era of rapid development of science and technology, the combination of finance and technology has brought new financial cognition to people, but the emergence of financial technology has also brought great challenges to risk management in the financial field. With the development and maturity of Internet technology, the rapid innovation of Internet finance has promoted the prosperity of online lending, well met the financing needs of various entities in the market, and effectively solved the problem of expensive financing for small and medium-sized enterprises and private enterprises. However, the rapid development of Internet finance has also spawned a wider range of financial risks and updated forms. Taking P2P online lending as an example, this paper analyzes the causes and effects of the rise of P2P online lending, finds that there is asymmetric leverage effect in the fluctuations of P2P online lending, analyzes the risks, existing problems and causes of final failure of P2P online lending, and explores the development model of online lending in the post-P2P era and the construction of big data risk control system. Finally, some practical suggestions and countermeasures are given.

**Keywords:** P2P online lending, big data risk control system, financial risk.

## 1. Introduction

The combination of finance and science and technology provides a more novel experience for the development of financial activities. With the rapid development of Internet finance in China, the growth rate of the real economy continues to decline, and the phenomenon of capital "from real to virtual" is becoming more and more serious. At the same time, the entire financial system is also expanding rapidly, and risks are gradually accumulating in all aspects of the financial system and the operation of the real economy. This, in turn, may lead to broader and deeper financial risks. Therefore, the Party stressed in the economic report that it is necessary to improve the financial supervision system, promote the healthy development of multi-level capital markets, enhance the ability of financial services to serve the real economy, and hold the bottom line of no systemic financial risks.

Although P2P online lending platform has completely withdrawn from the stage of history, other forms of Internet finance such as Internet technology finance, small loan enterprises, third-party payment are still developing rapidly in China. Online lending is still favored by small and medium-sized enterprises and private enterprises as an effective supplement to traditional bank lending. Therefore, it is necessary for us to continue to pay high attention to the risks of Internet finance.

## 2. Literature Review

Internet finance has the dual attributes of Internet and finance. Internet finance mainly includes six major models: third-party payment, P2P, big data finance, crowdfunding, information-based financial institutions, and Internet financial portals. The core of Internet finance is finance, and the Internet is only a means and method, so P2P will also face the risks faced by traditional finance: systemic risk, liquidity risk, credit risk, technical risk, operational risk, etc. [1]. As a former business model of Internet finance, P2P online lending

is the most consistent with the ideal effect of disintermediation of Internet finance compared with other business models such as third-party payment, Ali Finance and crowdfunding. According to Ye Xiangrong's research, P2P online lending in China has certain common risks, such as the technical risks of small capital lending, the financial disclosure risks of platform fund transactions, the risks of intermediate capital account security and lack of supervision [2]. At the same time, due to the different operation modes of P2P online lending, the characteristic risks of the platform will be generated. Such as compliance risk, related party risk, lending product alienation risk, illegal fund-raising risk. Through in-depth analysis of the operation mode of P2P online lending platforms, domestic scholars point out that the operation of P2P online lending is likely to form a capital pool [3]. The operation process often involves large amounts of capital, which may lead to moral hazard. Some scholars believe that the P2P online lending industry urgently needs to clear the source, clarify the positioning of platform information intermediaries [4], further regulate the operation, rectify the existing platforms, and accelerate the removal of bad platforms, so as to promote the development of the industry and help inclusive finance [5].

In terms of P2P supervision, Chen Qian believes that the main external reasons for the continuous problems in China's P2P online lending industry are inadequate supervision by regulatory authorities and imperfect credit investigation system [6]. The main internal reasons are inadequate or even lack of internal risk control of relevant platforms, improper fund supervision leading to concerns about fund safety, insufficient capacity of industry participants, and technical security problems of platforms [7]. Ruan Hongling believes that P2P online lending, as a part of China's financial system, plays an important role in the development of inclusive finance, which can meet the financing needs of small and micro enterprises, play the role of private capital investment, and have a positive impact on the competition and development of the industry [4]. Therefore, it is very important to strengthen the local supervision of P2P online

lending. Wang Renxiang and Zhan Yuanzhuang believe that the virtual characteristics of the network also exist in P2P online lending platforms, and information asymmetry makes P2P online lending easy to lead to regional financial risks and may also exist investment fraud. Improving local regulatory policies will help avoid relevant risks<sup>[8]</sup>. In recent years, our country has achieved some achievements in local financial supervision. However, the regulatory development policies of Internet finance are homogeneous and fragmented, and there is still a lot of room for improvement, which needs to be further strengthened in terms of the positioning of regulatory bodies, the division of responsibilities, and the ability to perform duties.

### **3. The Development of P2P Online Lending**

The period from 2007 to 2011 was the embryonic stage of the development of P2P. In this stage, P2P online lending platform only provided information services for both lenders and borrowers, and promoted the direct lending of different entities through the platform, which neither took deposits nor lent money.

From 2012 to 2015, China's P2P online lending industry developed rapidly, the number and scale of platforms continued to expand, and the business model became more mature and diversified. Many large state-owned banks and state-owned enterprises have gradually participated in the process, integrating more "Chinese elements", and have begun to sell financial products, which are rapidly becoming offline and popular. It was also at this stage that the regulatory policies of banks were not sufficiently implemented, and P2P online lending enterprises evolved from information intermediaries into credit intermediaries, illegally forming capital pools through the sale of financial products, thus accumulating a large number of financial risks.

Since 2016, China has carried out a centralized rectification of the P2P online lending industry, but in the rectification process, there are still many P2P online lending platforms that do not operate in accordance with the regulations. In June 2018, P2P online lending enterprises concentrated thunder, there was a surge of thunder, which also indirectly accelerated the liquidation of P2P online lending enterprises in China. In July 2019, Lujin announced the cessation of online lending business, which was interpreted by the industry as a signal of the termination of the record. In November 2020, the Central bank announced the complete liquidation of P2P online lending enterprises. This has ended the development of P2P industry in China for more than ten years. P2P industry from the rise to the exit of the historical stage, which contains many opportunities and pitfalls, we only learn the redeeming advantages of P2P, see the shortcomings and limitations of P2P development, sum up lessons, the future of the Internet finance field can go better and further.

## **4. P2P Network Lending Problems**

### **4.1. Incomplete information disclosure, regulatory "vacuum zone"**

On the one hand, the business model of online lending determines that in order to expand the scale of lending as much as possible, online lending platforms often do not have rigorous and standardized reviews of borrowers' credit status, repayment ability and other information like commercial

banks. At the same time, the use of funds and project risks of borrowers have not been standardized and investigated offline, and investors may face huge credit risks and default risks. The serious lack of information disclosure of online lending platforms leads to great uncertainty in the security of funds in the whole process of online lending, which seriously limits the development of online lending.

On the other hand, because online lending uses the Internet to carry out online lending business, the industry threshold is relatively low, and a large number of non-compliant enterprises rush into the outlet of online lending to profit from it. In terms of policies, there are no legal and regulatory restrictions on this emerging industry, and there are cross-departmental cooperation restrictions in the implementation. As the only information and business interface between the lender and the borrower, once the platform is poorly operated and there is a funding gap, no institution can cover the business continuity of the online lending platform, and the fund lender faces the risk of platform thunderstorms at any time.

### **4.2. There is a risk of personal information disclosure**

If borrowers want to borrow money through P2P online lending platforms, it is inevitable to authorize personal information to P2P online lending enterprises. A survey shows that many borrowers have information leakage. In fact, not only in the P2P industry, but in the entire Internet field, users' personal information is highly likely to be leaked, such as the financial status and use of funds registered by borrowers and lenders on online lending platforms. Borrowers do not have the right to "refuse" the exposure of personal information, and many users' personal information has been leaked without their knowledge. Therefore, although P2P online lending has withdrawn from the stage of history, the problem of personal information disclosure is still worth our attention.

### **4.3. High interest rates coexist with disguised guarantees**

In order to improve business scale and profitability, many online lending platforms often provide investors with deposit interest rates much higher than those of traditional commercial banks. Although the CBRC has issued relevant regulations for many times, prohibiting online lending platforms from guaranteeing their investment projects, some platforms still evade supervision by constantly changing the contract terms of investment projects. In the way of "illegal fund-raising" to provide disguised guarantees, in addition, online lending platforms with high interest rates, high returns to attract investors to invest. In the event of poor operation, the platform's own funds cannot make up for the losses caused by the project default, resulting in centralized payment by investors, and the commitment of rigid payment cannot be realized, and the platform may face the risk of bankruptcy and liquidation. The social idle funds are diverted to non-compliant lending platforms by high interest rates, which seriously affects the normal flow of national financial funds and undermines the national financial management order.

## 5. Suggestions for Promoting the Healthy Development of Online Lending Industry

### 5.1. Establish a risk monitoring and early warning system

In order to cope with complex online lending risks, we can start from the risk control concept and risk control implementation, guide the risk control implementation with the risk control concept, and actively build a special monitoring and early warning system. In recent years, the prevention of online lending risks has become the focus of preventing financial risks, and all online lending platforms should implant the concept of risk control in people's minds, deeply aware of the importance of risk control, and not limited to the surface. The development of the online lending industry is related to the investment and financing of enterprises and many small and medium-sized investors. Online lending platforms must have sufficient risk control awareness and social responsibility to contribute their own strength to the healthy development of the online lending industry. At the same time, online lending platforms themselves should actively join industry associations and disclose their own information, so that investors and financiers can clarify the actual operation of the platform and increase mutual trust. Risk control management departments do their job at the same time, the possible risk in a timely manner to determine the platform and the customer, the easy problems for all kinds of risk contingency plans in advance, to pay special attention to the customer as early prevention, and the platform for the implementation of the risk control monitoring and prevention system strict censorship, risk control and monitoring system in existence flaw or defect, Give early warning to control department in time.

### 5.2. Introduce "blockchain + big data" risk control technology

Government regulatory departments and online lending platforms should strengthen cooperation, combine blockchain and big data technology, jointly build an immutable blockchain database, share information in real time, and make use of the characteristics of blockchain technology, such as decentralization, openness, and immutable, so that the data of each node can restrict and monitor each other. Ensuring the authenticity and integrity of the data in the blockchain database helps solve problems such as big data silos, information security, and data quality. On the one hand, when the customer applies for a loan to the online loan platform, it needs to provide the corresponding collateral, so the original value of the collateral can be identified through blockchain technology, or whether it has been mortgaged multiple times on different platforms. On the other hand, regular monitoring of the business operation of the online lending platform,

monitoring whether the borrowed funds are used for the agreed purpose in advance, and strengthening the attention of the borrower's future cash flow, to see whether the future cash flow matches the repayment amount and repayment period, and to identify the possible risk points of the online lending platform. From the two dimensions of customers and online lending platforms, risks are identified in advance and prevention and control measures are taken to improve the ability of the entire financial system to prevent and resolve systemic financial risks.

### 5.3. Access to the Internet financial market will be raised

The European Union requires that only bank-type financial services institutions and enterprises with relevant qualifications can engage in electronic payment services. However, China should raise the entry threshold of the Internet finance industry, establish relevant laws to restrict Internet enterprises' entry into the financial industry, improve the access and exit mechanism, and formulate corresponding standards for risk control, rules and regulations, operating standards, talent reserve, and profitability. Establish relevant examination and approval agencies, strictly examine Internet financial enterprises, provide certain support and encouragement for Internet financial enterprises with good credit, and severely punish Internet financial enterprises with poor credit information.

## References

- [1] Xie Ping, Zou Chuanwei. Research on Internet finance model [J]. *Financial Research*,2012(12):11-22. (in Chinese)
- [2] Ye Xiangrong. Study on model risk and supervision of P2P lending [J]. *Financial Supervision Research*,2014(03):71-82.
- [3] Alkindy. Risk prevention of P2P online lending platform [J]. *China Finance*, 2012(14) : 79-81. (in Chinese)
- [4] Ruan Hongling. Big reshuffle of P2P online lending industry under Inclusive finance -- Interpretation of Interim Measures for the Management of Business Activities of Online Lending Information Intermediaries [J]. *The Banker*,2016(11):127-129.
- [5] Wang Renxiang, Zhan Yuanzhuang. Legal Regulation and supervision Suggestions of online lending -- taking "Ezubao" as an example [J]. *Fujian Forum (Humanities and Social Sciences Edition)*,2016(12):206-213.
- [6] Feng Xiaoxia. "Just demand" is the key to the rise of P2P finance [J]. *Luster*,2016(02):32-33. (in Chinese)
- [7] Hu Guosheng. Analysis of Internet Finance based on Behavioral Finance [J]. *Wuhan Finance*,2015(1); 58-59.
- [8] Huang Jing, Li Yujia. Discussion on the impact of the rise of P2P online lending platform on the financing of small and micro enterprises [J]. *Finance and Economics (Academic Edition)*,2015(18):103. Aikinty. Risk prevention of P2P online lending platform [J]. *China Finance*, 2012(14) : 79-81. (in Chinese)