

Internet financial innovation and financial risk prevention

Yun Hao

Abstract:

With the rapid development of e-commerce, the application of Internet technology has promoted the circulation of commodities and domestic consumption. However, with the development of Internet finance, there are also many unforeseen risks that traditional finance can not foresee. Therefore, at the same time of development, it is necessary to do a good job of regulation and prevention to ensure the healthy development of Internet finance. We must carefully sort out the impact of Internet finance on Chinese enterprises and the impact of traditional models, learn from the advanced concepts and models of Internet finance, constantly innovate and develop, improve business competitiveness, and consolidate our competitive position. This paper introduces the related concepts of Internet finance, analyzes the innovation bottleneck of Internet finance, and finally studies the countermeasures to solve the innovation bottleneck of Internet finance.

Keywords: Internet +; Financial innovation; Financial risk

I. The meaning and characteristics of Internet finance

(1) The meaning of Internet finance

The meaning of finance is to finance funds through the transfer between various market entities to achieve the matching of supply and demand. As far as the boundary of Internet finance is concerned, in a broad sense, Internet finance is an emerging field based on the current Internet technology, which is the manifestation of traditional finance relying on the current Internet technology to realize capital circulation and its capital financing method can be direct or indirect. As long as the traditional financial business applies Internet technology innovation, it belongs to the category of Internet finance. It is not the narrow concept generally recognized and accepted by the industry; it is limited to third-party payment, online finance, credit review, financing intermediaries, and other models. This paper focuses on the broad concept of Internet finance because the author believes that the difference between Internet financial services and traditional financial services is not only the media used by financial services but, more importantly, through the Internet and network technology and other tools, traditional financial services have higher transparency, higher participation, stronger collaboration ability, and lower costs. A series of features, such as convenient operation.

(2) Characteristics of Internet finance

1. Data and technology

The core competitiveness of Internet financial enterprises is that they have mastered big data; the so-called big data is the real business and consumption data of merchants and users accumulated by the platform. Although the single transaction volume is small, the sum up becomes huge big data, which can help fund providers evaluate and

judge the credit level of customers and the corresponding repayment ability. Thus, financial products suitable for capital demanders can be provided to form a closed loop of funds. Therefore, the success or failure of Internet financial business operations largely depends on the accumulation and precipitation of platform data. And this big data must be continuous and dynamic, capable of dynamic monitoring and error correction of user data.

Taking Ali Group as an example, it took the lead in establishing a small loan company, relying on the massive real consumption data accumulated by Alipay to build a merchant credit rating system and provide loan services for small and medium-sized merchants on this basis. Here, it is required that Internet companies have a high network technology level and can mine, collect, organize, and effectively develop and utilize big data.

2. Low cost and high efficiency

Under the Internet finance model, resources are shared, information is symmetrical, and transactions are transparent. Ideally, the entire process does not require traditional intermediaries, transaction costs, or monopoly profits. On the one hand, Internet financial institutions save the capital investment and operating costs of setting up physical outlets. Business processes are online and no longer limited by time and space. Users do not need to wait in line or worry about non-business hours when they urgently need to handle business. On the other hand, Internet financial business is highly dependent on computers, which not only have fast computing speed and accurate results but also, because of the unified standard of Internet financial operation process, users handle business by themselves, which greatly improves the efficiency of business handling and greatly reduces the operating cost. For example, Ali Xiaodai relies on the credit database precipitated by the e-commerce platform to achieve 10,000 daily loans and become a real "credit

factory.” Another example is the Rakuten Credit Card; customers fill in their personal information online and start the card application, and the system reviews and issues the card. The efficiency is much higher than that of traditional physical network marketing.

3. Inclusive and flat

To amortize the higher operating costs and operating costs, traditional financial institutions have set up a higher door for the financial services provided, such as the channel of large customers, the preferential interest rate strategy of large enterprises, and the purchase of financial services by ten thousand yuan, which is typical of the characteristics of “dislike the poor and love the rich.” The integration of Internet technology and traditional finance improves the transparency and accessibility of information and effectively reduces the asymmetry of information obtained by both sides of the transaction, thus realizing the open sharing of information resources, saving credit costs, and lowering the threshold of financial services. The grassroots, such as small and micro enterprises, individual industrial and commercial businesses, rural people, and school students, which cannot be considered or fully covered by traditional finance, also enjoy equal treatment. The flattening of Internet financial services and traditional finance achieves complementary advantages to customer resources and effective resource allocation.

4. High-risk and weak supervision

The risks of Internet finance are mainly reflected in two aspects: The lack of regulatory mechanisms and legal constraints. Internet finance in China is still in the initial stage; the relevant regulatory regulations have not been formally established, there are no access door abuse requirements and industry norms, the legal system is unclear, the business positioning is vague, and the entire industry is facing many policy and legal risks. For example, many funds deposited on third-party platforms have major security risks due to the lack of effective depository systems and regulatory regulations. Second, the risk control ability of Internet financial enterprises is weak. On the one hand, because of the short time and lack of experience, Internet financial enterprises have a weak understanding and identification of risks and a lack of consideration for constructing professional talents in corporate culture. On the other hand, due to cost considerations, Internet financial enterprises often lack finance-level and rigorous risk control processes and technologies, and some infrastructure in this area does not even meet enterprise-level standards.

2. Problems encountered in Internet financial innovation

(1) Risks of third-party payment

There are mainly two types of business risks of third-party payment platforms. The first is the information risk of capital flow. In the virtual network world, the financial model must be carried out with the help of platform turnover. This platform transfer has anonymity and time-space leapfrog, but it also complicates the fund dynamics and the tracking of funds more difficult. The second is the risk of precipitation funds. Take Alipay as an example. As the largest third-party payment platform, Alibaba has a huge amount of precipitation funds every day, and how to define the treatment of these funds is a problem. However, the third-party payment platform is not open and transparent in processing this part of the funds.

System risk includes hardware risk and software risk. The problems or failures of the machinery and equipment of the third-party payment platform cause hardware risk. There are many factors causing hardware risk, such as insufficient operation standards or some natural disasters that are unavoidable to human resources and cause systemic damage to the equipment of the platform. The third-party payment industry has high personnel and technical requirements, and personnel need to have rich professional knowledge and ability and need to come from different professional fields. Enterprises need to have more hard technical strength to ensure that customers’ needs are met to provide customers with high-quality services. Hardware plays a very important role in third-party payment. Once the problem fails to be repaired in time, it will not only cause serious damage to the third-party payment platform but also confuse the settlement of the bank payment system, resulting in incalculable consequences. Software risks include low software efficiency, slow business processing speed, and other factors. In the “Double Eleven” in 2019, the transaction volume of Alipay exceeded 50 billion yuan. Data show that in the first 60 seconds of the morning of Double Eleven, the transaction volume of Alipay reached 525 million yuan. After about half an hour, it exceeded 10 billion yuan. If the load balancing mechanism and parallel processing capacity of the third-party payment software system are not strong enough to deal with these transactions promptly and effectively, it is easy to cause transaction confusion, affecting the efficiency of the platform and user experience.

(2) P2P lending model risks

P2P lending institutions will strengthen the control over the input and recovery of loan capital according to the

data model, which improves the efficiency of lending. However, due to the strong cross-regional type of Internet finance, verifying information face-to-face is difficult, which gives people ulterior motives to operate space. Some users maliciously write their personal information, which is a malicious financial crime. There are still many problems in constructing the citizen credit information system in China, and the corresponding mechanism is not perfect. In particular, it is difficult to share credit information, and financial institutions have not reached an agreement on information sharing, which causes problems in the credit judgment and model simulation of customers by financial institutions. At the same time, it is difficult for the accountability mechanism to play a deterrent effect. This brings risks to the P2P platform business.

One of the characteristics of the Internet is that it cannot guarantee the security of data. When conducting Internet financial transactions, a series of transactions occur on the computer network, which is easy to leave traces. If there is a problem in the transaction process, the data and information on the computer are likely to be leaked. The Internet financial platform lacks an effective and secure information protection system, and the information that traders fill in during registration on the Internet platform is easily stolen by malicious means. In addition, the application of Internet technology makes the trading personnel no longer subject to geographical restrictions, which is not uncommon for some hackers to intentionally invade the trading system, maliciously obtain data, and then achieve illegal purposes, which is extremely unfavorable to the development of the entire market. P2P lending was born in developed countries; the United Kingdom, Germany, and the United States have promoted the P2P lending model. P2P lending on the network of countless small funds together in the network platform, the need to borrow people can obtain financial support through the platform. This kind of network loan model can quickly accumulate more funds by the vast user base. In the past, many non-issuers tried to drill the hole of P2P network lending, only borrowing money and not returning money, which also brought greater losses to the network lending platform. Still, now, the risk control technology of big data has been integrated into all walks of life, as long as some of the old participate in lending, their information will be quickly known by P2P network lending, P2P network lending has the right to refuse to borrow, so that, Non-performing loans are much smaller. In China, Lufax is the largest P2P platform with a more than 40 billion yuan transaction volume and is still growing.

(3) Risk of “crowdfunding”

The risk of the crowdfunding business stems from improper capital control. Internet finance should

follow the change in people’s financial management concept, launch different types of products, and enhance customers’ confidence in financial institutions. The risk of crowdfunding business is hidden behind the development of Internet finance, and traditional money laundering has gradually started to circle money in this way, especially money laundering in the crowdfunding model. The characteristics of Internet finance allow criminals to use the Internet to launder money. Meanwhile, its methods and methods are impossible to guard against, and the financial information of crowdfunding participants cannot be effectively circulated and shared in industry institutions. For example, the quick payment method we commonly use relies on inputting a verification code sent to the mobile phone to complete the transaction, which bypasses online banking. The regulatory role of banks can not play its function. It can not make up for the risks brought by the financial and legal systems, thus increasing the probability of network money laundering crimes. Internet finance has not eliminated the information asymmetry in the market. Its virtuality also enables investors to make investment and financing decisions only through the surface of the open information and data, and a lot of effective information is hidden. In addition, China’s credit information system is still under construction and imperfect. For the credit scoring technology and data mining technology necessary for constructing an effective and sound credit investigation system, China is still in its initial stage, and it is difficult for market players to obtain effective information data. As a result, investors will take on more risk, creating systemic risk for the market.

3. Strengthen measures to prevent financial risks under the Internet Plus

(1) Enhance the self-discipline and supervision of Internet financial platforms

To prevent financial platforms on the Internet from being blinded by the interests and ignoring the risks existing in the development, individuals and enterprises blindly invest a large amount of money, which requires a high degree of self-discipline within the industry. At present, many countries have gained a lot of experience in the financial risk management of the Internet industry, and the most distinctive feature of the UK is to use the industry to implement supervision and replace government responsibilities. In the development process, China also needs to pay attention to industry strength and learn from the advanced regulatory experience of other countries. Compared with the strict regulatory measures regulated by the government, the Internet industry is more self-disciplined, and its perception of industry risks is also higher. In the development process, if the industry’s self-

discipline is higher, the financial risk is less, affecting the government's administrative supervision behavior. Therefore, in this process, it is necessary to enhance the coordination between the administrative supervision of our government and the self-discipline of the Internet industry, give full play to the role of administrative supervision and the self-discipline of the Internet financial industry so that the two complement each other, and ultimately form a regulatory synergy to ensure the orderly development of the Internet financial industry.

As an emerging market in China, Internet finance is widely distributed and has strong flexibility, so many problems remain to be solved. Therefore, the relevant government regulatory departments should timely issue the corresponding regulatory regulations, build and develop a mature legal, regulatory system, use legal means to inhibit and prevent the occurrence of illegal acts in the financial market, and ensure the effective and stable operation of the Internet financial market. The current Internet financial market access threshold is low; capital providers can not form effective competition. Therefore, a strict market access mechanism is also very necessary; regulators should conduct basic qualification examinations to reduce user defaults in China's Internet financial market based on the credit rating scores of participants, the main asset status, and other aspects of the participants. Avoid further financial risks caused by the market mix. It should be noted that there is a big difference between the operation mode of Internet finance and traditional finance, so the Chinese government needs to formulate a regulatory system and legal policies with strong applicability according to the current development situation and characteristics of Internet finance in China.

(2) Improve the establishment of the Internet financial credit information system

P2P lending and equity crowdfunding put forward high requirements for supporting the credit investigation system, and the maturity of such platforms in Europe and the United States largely depends on their perfect credit investigation system and the efforts of the rating agencies in the market. Given this, China should speed up establishing an efficient credit information system to regulate the credit collection and inquiry of Chinese enterprises and workers. Due to the development of Internet financial service institutions and under the new financial regulatory system, special attention needs to be paid to the monitoring and restriction of dishonest personnel. To further promote the Internet financial credit information system, we need to start from the following aspects: First, we should solve the problem of mutual communication between Chinese personal credit information as soon as possible and establish a

comprehensive and effective database to change the current isolated credit inquiry method and improve the accuracy of customer credit. Secondly, based on an extensive collection of information, establish an effective and comprehensive basic database, integrate the credit information resources of credit bureaus, and do a good job at the grassroots level. Supervisors should actively establish a core database and comprehensively collect credit information. Finally, Internet finance companies implement a credit rating system, and Internet companies implement a credit rating system based on unified standards to standardize self-regulation in the industry.

In 2018, China's P2P online loan platform frequently thundered, which further reflected the drawbacks of China's current Internet financial market. Among them, many P2P platforms do not reasonably isolate user funds and their funds. When the platform operation crisis occurs, the relevant person in charge of the platform absconds with the money. To solve this problem, a guarantee mechanism can be introduced. The regulatory authorities need to put forward requirements for each online loan platform to separate platform funds from customer funds, and the platform needs to advance part of the funds to be used as guarantee funds. The introduction of the guarantee mechanism can urge P2P lending platforms to pay attention to platform customers' credit status, fund status, and repayment ability when carrying out loan services to ensure that the borrowed funds can be returned on time. A perfect credit evaluation system is an effective prerequisite for the risk management of financial institutions. Currently, the People's Bank of China's credit information system is our country's perfect credit evaluation system. Still, its coverage is not wide enough, and the scope of application is small for technical reasons. The credit evaluation system can incorporate a large amount of transaction behavior data and information into the system and ensure certain accuracy and timeliness, which is key to evaluating a market entity's credit status and risk structure. Therefore, a perfect credit evaluation system has a far-reaching impact on constructing the Internet financial market.

3. Strengthening internal control systems

Comprehensively build an internal control system that conforms to the characteristics of consumer finance operations. Improve the function, construction, and performance capacity of the Board of Directors and the Board of Supervisors; Establish an integrated risk Management Committee, Product Committee, Audit Committee, NPL Disposal Committee, Compensation

Committee, and other specialized committees to ensure that these committees are properly performing their duties to establish systems and procedures. Establish an audit department, compliance department, and finance department reporting directly to the board of Directors or management, and each department shall perform relevant functions according to the division of responsibilities. Each committee reviews and revises the risk strategy, risk management guidelines, comprehensive risk management framework, and the company's internal control processes; oversees and evaluates the establishment of management, organization, work processes, and influence; and monitors and evaluates management's credibility. Market and business activities, including relevant management aspects and regular risk status assessment. The Board of Directors is the company's main risk management and decision-making body, as well as the risk management strategy. Senior management must review policies and procedures to determine the overall risk lenders can tolerate and take the necessary steps to identify, measure, monitor, and control the various risks. Monitor and evaluate the integrity and effectiveness of risk management and the performance of management in risk management. Establish a risk management system, make the risk management system run through the whole process of business promotion and marketing, loan approval, and post-loan management, establish a scientific risk monitoring and analysis model, and regularly monitor the quality of loans. From the quality of the input, loan customer age, industry concentration, regional loan quality concentration, dealer channel loan quality, and concentration, pay attention to the rolling situation and migration of loans. Regularly summarize the loan collection situation, summarize the loan fraud cases, analyze the causes of fraud, and adjust and optimize the previous business process.

Sum up

The development model of "Internet + finance" has become an irresistible development trend in China's financial industry, and Internet technology will further play a driving role in the industry's future development. However, it should also be recognized that in the context of the Internet, the development of the financial market has certain risks and is more susceptible to the objective factors from the Internet platform. A key content is how to make the financial market effectively avoid risks. Only when the potential risks are fully assessed and timely measures are taken to prevent and avoid them can the innovation of Internet finance achieve corresponding success. In daily life, we should also pay more attention to

the dynamics of the Internet financial market and achieve rational consumption and healthy consumption, which is also an effective way to promote the safe and stable development of the financial market.

references

- [1] Xiang Junbo. Prevention of financial risks and improvement of legal system [J]. *Financial Research*, 2005, (08): 1-9.
- [2] YAN Xiaoyan. Exploring the new development model of consumer finance with Chinese Characteristics [J]. *China Finance*, 2010, (17): 71-72.
- [3] Ye Xiangrong. Analysis of the New Trend of Consumer Finance Development under the Background of Internet Finance [J]. *Credit Investigation*, 2015, 33(06): 73-77.
- [4] Qian Haili. Internet Giants Power Consumer Finance. *Legal Person*, 2014, (10): 34-35.
- [5] ZHOU Yang. Research on Risk Management of Consumer Finance [J]. *Journal of Jilin Normal University of Engineering Technology*, 2016, (06): 39-41.
- [6] Feng Ke, He Li. Innovation of consumer finance. *China Finance*, 2016, (11): 32-34.
- [7] ZHOU Yang. Analysis of consumer finance based on P2P platform [J]. *Time Finance*, 2016, (15): 36+48.
- [8] MENG Rulan. Research on the development trend of consumer finance in the post-regulation era. *Modern Economic Information*, 2016, (06): 300.
- [9] Xiao Zhenyu, Zhang Jie, Gu Ying. Study on virtual credit Risk of Consumer Finance [J]. *Journal of Mudanjiang Normal University (Philosophy and Social Sciences Edition)*, 2016, (01): 42-44.
- [10] Li Gaoyong, Xie Lingfeng. Research on the development of consumer finance under Internet finance [J]. *Commerce*, 2016, (08): 164.
- [11] Kong Xiaowen. Discussion on the development trend of consumer finance under Internet finance [J]. *Modern Economic Information*, 2016, (01): 301.
- [12] Wang Bing. Advantages of Internet + Consumer finance [J]. *China Finance*, 2015, (22): 46-47.
- [13] Ma Houjuan. Analysis of consumer finance based on e-commerce platform [J]. *Modern Business Industry*, 2015, (20): 135-136.
- [14] Huang Xiaoqiang. The definition, Developing Current situation and Suggestion of consumer Finance in our country [J]. *Wuhan Finance*, 2015, (10): 39-41.
- [15] ZHANG X. On the current situation and trend of consumer finance in our country. *Commerce*, 2015, (34): 202.]
- [16] Research on the current situation and trend of Chinese consumer finance. *China Collective Economy*, 2015, (24): 95-97.]
- [17] Shi Q. On the Criminal Law Protection of Personal Financial Information in Chinese Internet Consumption [J]. *Southern Finance*, 2015, (07): 94-98.