

Reasons and Theoretical Explanations for the Rapid Development of Internet Finance in China

The Secret Worry and Countermeasures

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Abstract. As an emerging industry, the Internet finance industry is of great significance to the prosperity of China's economic development. This paper firstly defines the connotation of Internet finance and believes that the essence of Internet finance is to undertake the intermediary role of financing in the financial market by relying on Internet technology. Secondly, from the four aspects of the convenient external demand for financing, the support role of network technology, the lead of e-commerce platform and loose new biological regulation, the practical reasons for the rapid development of Internet finance in China are discussed. At the same time, from the perspective of economics theory, three aspects of information asymmetry theory, search theory and reputation mechanism provide theoretical support for the rapid development of Internet finance. In addition, this paper discusses the secret worry behind the prosperity and development of Internet finance from three aspects of market monopoly, customer information disclosure and Ponzi scheme. Finally, in response to the experience and secret worry of the Internet's prosperity and development, this paper proposes corresponding policy recommendations.

Keywords: Internet finance, prosperity and development, theoretical explanation, policy recommendations.

1. The Connotation of Internet Finance

Internet finance is a new financial model and operational structure that combines Internet technology with traditional financial systems. Compared with the traditional financial model, Internet finance has the characteristics of low cost and high efficiency. Taking traditional financial institution banks as an example, banks as economic organizations that operate money are intermediaries of social financing. However, with today's high development of economy and society, the inefficiency of traditional banks, the inconvenience of banknote circulation and the high transaction cost make banks impossible to quickly play the role of the core financial media in a rapidly changing financial market, which provides conditions and opportunities for the rise of an efficient and convenient Internet financial platform system.

Although Internet finance is significantly different from traditional financial institutions, it is inherently consistent with the traditional financial system. Like traditional finance, service object of Internet finance is also the real economy, with the same purpose of asset transformation, risk management and information processing. However, Internet financial platforms can integrate the functions of finance and reduce risk and cost due to information asymmetry by high-tech information technologies such as big data and cloud computing with significant advantages. Besides, Internet finance can exist in financial markets in a non-physical way, such as crowdfunding under the premise of keeping the contractual meaning of equity, creditor's rights, insurance, etc. unchanged. Although crowdfunding is a product of Internet finance, its essence is the same as financing, which spreads the interests of shareholders to thousands of people. However, each shareholder has the right to dividends and voting, which is conducive to the realization of benefits and risk sharing. This is impossible for traditional financial institutions. Therefore, Internet finance has realized the optimization of wealth management, subverted the concept of people's management of the financial system at the decision-making level and lowered the threshold of shareholders and market supervision, enabling Internet finance to expand indefinitely, which is conducive to the realization of the infinity of Internet finance.

2. Why Can Internet Finance Develop Rapidly?

2.1 Convenient Financing Needs Brought about by Rapid Economic Development

With the rapid development of China's economy, the number of state-owned, foreign-funded, private-owned and individual private enterprises is increasing and the level of national income and social security is growing rapidly. In this context, the great increase in people's demand and consumption power has led to the booming and growing of various diversified enterprises, which has led to strong demand from enterprises and individuals for efficient, convenient and multifunctional financial markets. Besides, Chinese government's support for emerging companies, especially those with high-tech support, is gradually increasing, which is conducive to creating a good social development environment for the prosperity and healthy development of enterprises. Moreover, the general establishment of regional entrepreneurship parks and incubators in various provinces and cities in China is also conducive to improving the viability of small and medium-size enterprises (SMEs). Developing a good external environment and diverse consumer demand for enterprises of all types of ownership has led to an increase in the demand for corporate fundraising and loans to an unprecedented level. However, financial institutions such as traditional banks cannot meet the real social needs of enterprises and consumers. However, the development and maturity of Internet technology has injected new blood into the financial industry. In the past, bank loans were the main source of financing for SMEs and individuals. Now, through Internet finance, a certain amount of online loans can be made. The loan speed is fast and procedures are flexible, which can meet the daily financial needs of enterprises and individuals (Li Jizun, 2015), for example, well-known online lending platforms for short-term loans, such as Lujin clothing and Renren loans.

2.2 Technical Support Provided by Network Technology

Internet technology, which is based on high-tech information technology such as big data and cloud computing, provides two advantages for the prosperity and development of Internet finance. Firstly, compared with traditional financial institutions, the use of big data is conducive to the Internet financial platform to reduce the degree of information asymmetry. The degree of symmetry, which makes the Internet financial market obtain information more comprehensively and efficiently, and is beneficial to all kinds of enterprises to improve their risk pricing and risk management efficiency in information processing. Moreover, the accurate analysis and prediction of data by Internet technology is indispensable for the management and protection of the stock market. At the same time, the accurate prediction of big data and the potential endogenous diversification model in observation data are extremely important for stabilizing financial markets. The credit evaluation and scoring system based on big data is conducive to digitalization and informationization of enterprise management, which can effectively improve the transformation ability of its assets. Secondly, the application of cloud computing helps reduce the operating and transaction costs of financial institutions, and directly or indirectly affects the replacement of manual services or reduces the physical network of financial institutions and enterprises. At the same time, the widespread use of cloud computing and big data in the financial industry can reduce the number of financial intermediaries. They use the Internet platform to let demand side and supply side directly trade, which greatly improves inter-enterprise efficiency and reduces transaction costs.

2.3 The Lead of Ali, Jingdong, Tencent and Other E-commerce Platforms

It is no accident that Internet technology enterprises enter Internet finance as first-class enterprises. The e-commerce platform needs to have the following foundations to lead the development of financial enterprises: big data, cloud computing, e-commerce platform and capital supply and demand, but traditional financial institutions do not have the objective conditions of big data, cloud computing and electronic platforms. Therefore, the Internet finance industry was first dominated and led by Internet technology companies (Huang Hailong, 2013). As far as the e-commerce platform is concerned, it is the core node for maintaining the entire e-commerce financial activities. On the one hand, the e-commerce platform is required to use big data to guarantee the capital demand side. On

the other hand, the e-commerce platform is required to supervise the operation of various capital flows to ensure the normal and safe operation of the entire e-commerce financial platform.

Taking Ant Financial of the Ali Group as an example, its Internet financial service platform—Ant Financial has huge reserves of e-commerce transaction data, customer data and logistics data, and can improve the database based on the evaluation information of the e-commerce buyers and sellers to accurately control risks and set up appropriate fund monitoring systems, making information as transparent as possible. Therefore, any financial services of Ant Financial can operate efficiently and with low risk (Feng Xiao and Chen Yi, 2015). In addition, third-party payment led by Alipay of the Ali Group is a model for establishing electronic payment between users and traditional financial institution banks. Alipay, WeChat and other electronic payment methods have gradually replaced traditional banknote payments. However, electronic payment data and information and the recorded fund flow can better help the financial market to assess the credit and asset status of individuals, so that the market can be more effectively monitored and risks can be controlled.

2.4 Loose New Biological Regulation

Part of the reason for the booming, development and even crazy growing of Internet finance is that the government is more lenient in regulating new things. From the perspective of similar problems in the past, only when the supervision of new things inadvertently caused major loss of people's property, will the relevant departments issue relevant laws, regulations and related knowledge publicity. Internet finance is a double-edged sword. Its skills effectively facilitate enterprises and consumers, providing financial intermediaries for prospering social production and transactions. But at the same time, if Internet technology is used improperly in financial development, it will be easily used by criminals as a means of fraud, thus falling into Ponzi schemes or pyramid schemes based on Internet finance, or be used for illegal fund-raising, fraud etc., which will ultimately result in the loss of people's lives and property and disrupt the normal economic development order of society. Therefore, it is necessary to dialectically treat the prosperity and development of Internet finance and take effective measures to supervise and control the Internet financial bubble and illegal accumulation of wealth by virtue of Internet finance (Gan Shijian, 2011).

3. Theoretical Support: Changes in Information and Transaction Costs

The Economics of Information, which originated in the 1960s, began with information asymmetry and gradually formed subject system including reverse selection and signal transmission, principal-agent theory and incentive mechanism design, price dispersion theory and information search theory. Nowadays, information economics has gained a new extension in the practice of Internet finance.

3.1 Information Asymmetry Theory in Internet Finance

The biggest difference between Internet finance and traditional finance is information processing (Xie & Zou, 2013). Information has become the most important resource in the financial industry and has changed the industry value chain. With the advantage of information processing, Internet micro-loan is exploring a new path to solve the two major information asymmetry problems before and after debit and credit. "Ali Small Loan" builds a credit information system based on the basic information voluntarily provided by the seller and the extensive and frequently updated database formed by the hundreds of millions of transaction records of the Ali e-commerce platform over the past decade. The fixed investment in information systems is high, but once the systems are started, the operating costs are lower. Before the loan, to extract data from the database, to import the credit evaluation model, to introduce cross-checking technology and to transform the implicit "soft information" into explicit "hard information" improve the accuracy of credit level screening. During the loan, the scattered and disordered information forms a dynamic and continuous sequence of information, giving any borrower the dynamic default probability and risk pricing in dynamic change with the marginal cost tending to zero, which provides the possibility of remote monitoring and real-time warning; After the

loan, the e-commerce platform and the small loan system have strict punitive measures such as exposure and ban, thus reducing the opportunistic tendency.

3.2 Search Theory in Internet Finance

The reason why search behavior exists is that the general reason is the “search front” caused by information asymmetry. The narrow reason is “price dispersion”, that is, the price gap of the same region and the same quality products caused by the unbalanced distribution of information between the two parties. Domestic scholars Han Minchun and Chen Xiaoluo (2001) have empirically proved that the Internet makes information appear in a balanced distribution in the market, and the transparency of cost and price is improved, so that online commodity prices tend to converge. Compared with traditional financial markets, if the search cost of Internet financial market will not drop much, the market will lose its development potential.

Take the money fund market as an example. In the traditional market, the search cost is high and the information is seriously distorted. It is difficult to find a high word-of-mouth supply side. If the low word-of-mouth supply side may compensate for the word-of-mouth disadvantage by lowering the price (that is, lowering the spread or handling fee), it is impossible for the high word-of-mouth supply side to occupy the entire market because of the cost limit of establishing, maintaining, and promoting word-of-mouth. Therefore, there will be a balance between high product prices and market share of high word-of-mouth supply side and low product prices and market share of low word-of-mouth supply side. Besides, price competition is weak and the degree of dispersion is high. The search cost is greatly reduced, and the high word-of-mouth supply side is more likely to be selected by the demand side. The price competition will be strengthened within the supplier group and the degree of price dispersion changes during equilibrium. The low word-of-mouth supply side must further reduce the price, and may be difficult to survive because the price of the product is lower than the cost, making market structure change, leading to the situation that “good money drives out bad money”.

3.3 Reputation Mechanism in Internet Finance

The reputation mechanism is based on information economics and game theory. “Reputation” is a kind of transmissible signal that shows the behavioral tendency or inherent traits of the economic entity and identifies its type (Liu Jianghui, 2004). Different reputation information flows are connected and interacted by social relationships, forming a “reputation information network”. In the Internet environment, the formation and accumulation of reputation is faster, and the reputation information flow and reputation information network are easier to generate.

Internet finance enterprises may form a commission-contract relationship with financial consumers and act as agents. Reputation can replace “explicit incentives” and bring “implicit incentives” to agents (Holmstrom, 1982). In the P2P online loan industry, the P2P online loan platform must be subject to the review and inspection of the principals of both the borrower and the lender. Each customer’s evaluation which widely spreads via the Internet and the formal evaluation of third-party organizations constitute the “reputation” of the P2P platform, which is the decisive factor for customers to “vote with their feet” in many P2P platforms. A good reputation will increase profitability and promote the continued growth of the scale of operations, so even without explicit incentives, the P2P platform has the enthusiasm to adopt highly credible and responsible strategies to improve and maintain its reputation.

4. The Hidden Crisis behind the Rapid Development of Internet Finance

In the current rapid development of Internet finance, there may be multiple hidden crises behind this rapid development, which are mainly manifested in three aspects: the formation of a monopoly market resulting in inefficient allocation of economic resources, the disclosure of users’ private information leading to social vicious events and trust crisis and significantly increased probability of Ponzi schemes with Internet finance as the main feature.

4.1 Market Monopoly

Technology giants in the Internet finance industry, such as Alibaba, Tencent, Baidu, and Jingdong, are the leaders in the development of technologies such as big data and cloud computing. Traditional financial intermediaries, using their market dominance and information asymmetry advantages, have formed monopolies in the past financial markets, resulting in unfair social resource allocation and market inefficiency. The high profits of traditional oligarchic financial intermediaries are not from their services but from its monopoly on information. The oligopoly problem existing in traditional financial intermediaries may re-emerge in the emerging Internet financial oligarchy competition, thus undermining the efficiency of market economy. The existence of big data makes the emerging Internet financial institutions enough to challenge the traditional financial system and order in the current international economic environment. Big Data has become the most critical foundation resource in the world. Many large Internet enterprises have accumulated a large amount of user data in the process of business development, and the use of data can help Internet enterprises to improve the quality of products or services and attract more customers. By the massive data they acquire through high-tech such as cloud computing, they can predict the consumption information of each customer almost accurately, or predict the trend of all product markets, in order to imitate or acquire. For example, Baidu in the technology giant BAT has mastered information of 95% Chinese netizens, through their search input to predict their needs and to advertise accurately. Therefore, data monopoly has gradually become a new monopoly in the 21st century, and Internet finance itself is a service. When the habits and psychology of customers are mastered by technology companies, the financial products of these technology companies will more accurately meet the customers' needs, resulting in small and medium-sized enterprises cannot grow in this situation.

4.2 Customer Information Disclosure

In the Internet finance industry, the identity information and privacy of customers are easily acquired by criminals in online transactions, and thereby are stolen, creating a crisis of trust in financial markets. According to Mobile Internet Finance App Information Security Status White Paper published by China Communications Institute, the number of platforms that have experienced major security incidents in 2014 accounted for 18.86%, and in 2015 this ratio rose to 55.38% (China Communications Institute, 2016). The white paper also pointed out that from the 88 financial applications extracted, almost all the extracted software has hidden dangers of data privacy disclosure, including the data encryption transmission system that the client interacts with the server, in which, the customer account can be cracked. Besides, many important data such as the login password of the client application are stored locally or encrypted, but the data can still be cracked by the analysis program. At the same time, from the technical level, there is still a big hidden danger in the mobile financial client, which is inextricably related to the low economic cost and short development time. In the privacy of the financial system, financial intermediaries are responsible for ensuring the privacy of customers, including the personal identity of customers, account information, transaction information, and ensuring that customers have the right to know about any use of customer information by financial institutions. Therefore, in the era of big data, information privacy security is inevitably a basic right that everyone enjoys and must be guaranteed through legislation.

4.3 Ponzi Scheme Caused by Inefficient Supervision

The essence of Internet finance is still finance. The illegal issues that may be involved in the traditional financial system still exist in the Internet financial industry, and even more prominent. Ponzi schemes use the funds of new investors to pay interest and short-term returns to old investors, but they themselves do not create profits for customers. In the Internet finance industry, there are also many examples. In the early 2016, Ezubao (full name Jin Yirong Network Technology Co., Ltd.) was suspected of illegally raising more than 50 billion yuan. The estimated number of victims is 900,000. The number of executives within the company whose annual salary is respectively as high as one million is as many as 80. Such a scorpion of Internet finance groups, relying on private fund-raising methods to swindle fraudulently from private capital markets, has emerged one after another in the

booming development of Internet finance, and should be highly paid attention to by the government. According to Internet Finance Blue Book by Rui Xiaowu and Liu Liehong(2013), traditional supervision methods or means are difficult to effectively monitor transparent, ambitious and borderless emerging Internet financial enterprises due to technical and regulatory models, resulting in numerous online loan and Internet finance enterprises still arbitrarily outside the regulatory system. Due to the lack of industry self-discipline and effective government supervision system, China's Internet finance industry still does not have a stable institutional environment to promote the stability and prosperity of the Internet financial industry. Zhang Yixin(2013) mentions in Study On China's Internet Financial Risk and Its Supervision Issues that China's legal system on Internet finance industry access and electronic contract is very deficient, which leads to great legal risks for China's Internet finance while it is developing.

5. Conclusion and Policy Implications

As an emerging industry, the Internet finance industry is of great significance to the prosperity of China's economic development. This paper firstly defines the connotation of Internet finance and believes that the essence of Internet finance is to undertake the intermediary role of financing in the financial market by relying on Internet technology. Secondly, from the four aspects of the convenient external demand for financing, the support role of network technology, the lead of e-commerce platform and loose new biological regulation, the practical reasons for the rapid development of Internet finance in China are discussed. At the same time, from the perspective of economics theory, three aspects of information asymmetry theory, search theory and reputation mechanism provide theoretical support for the rapid development of Internet finance. In addition, this paper discusses the secret worry behind the prosperity and development of Internet finance from three aspects of market monopoly, customer information disclosure and Ponzi scheme. Finally, in response to the experience and secret worry of the Internet's prosperity and development, this paper proposes the following policy recommendations.

Firstly, for the healthy operation and development of the Internet financial system, it is necessary to construct a sound legal system and supervise package systems. In the supervision of Internet finance, it is necessary to promote development by the supervision and regulation pattern to treat Internet finance should be consistent with the supervision of traditional financial industry. As with the supervision of the traditional financial system, the supervision of Internet finance needs to do the following. First, it must strengthen the monitoring of the assets and liabilities of Internet financial institutions. Second, it must strengthen the supervision of the management personnel and shareholders of Internet financial institutions. Third, it must supervise the transactions and funds of Internet financial institutions.

Secondly, it is necessary to resolutely prevent the emergence of Internet financial monopoly factors and actively guide the healthy and competitive development of the Internet financial industry.

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