FAC-SIMILE THESIS 4-YEAR BACHELOR’S DEGREE AND MASTER’S DEGREE FRONTISPIECE

LUISS

Department of_Business and Management__ Chair__Markets, Regulations and Law_

TITLE

The Innovation of Regulation in the Internet Finance Industry of China

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ACADEMIC YEAR 2015 2016

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Abstract

This thesis summarizes the development model of China's Internet financial development and the status quo of regulation, and analyzes the regulatory system of Internet Finance in the developed countries like the United States, the European Union and so on. Study found that: with the rapid development of China's Internet Finance, there exist the problems like fuzzy legal status of operation platform, common fraud and lag of legislation, regulatory system is not unified, supervision strength is difficult to grasp. Main ideas and characteristics of Internet financial regulation in the developed countries are: regards the Internet Finance as the emerging financial industry to complement the traditional regulatory framework, focuses on the formulation and implementation of the legal supervision system, fully plays the role of industry self-discipline groups, emphasizes the information disclosure and transparency, and focuses on the customer information security protection. In reference to the U.S. & EU regulatory experience based, and combined with the actual development and the problems faced of the Internet Finance industry in China, this paper from the following aspects like: clear main regulatory subject and supervisory position, regulation mode and principle, internal and external coordination and control, dynamic regulation and risk protection to propose innovative suggestions to construct the Internet Finance regulation system in China.

Key words: Internet Finance, financial regulation, development mode, regulation principles, regulation system, regulatory innovation

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Introduction

The rapid development of Internet technology and the rapidly growing popularity of innovative thinking of the Internet make it possible for active integration between various industries and the Internet. The integration of the finance industry and Internet generated the Internet Finance. The Internet Finance refers to the new financial business model that the traditional financial institutions and Internet companies use Internet technology and information and communication technology to realize the functions of the financing, payments, investments and information services.

The trend of deep integration of Internet and finance, which has a more profound impact on the financial products, services, organizations and services, is becoming a hot topic in the financial research field. In recent years, thanks to the development by leaps and bounds of cloud computing, big data and network security technologies, the emerging of innovative thinking and the appropriate liberal environment, the Internet Finance is developing extremely rapidly in China. The Internet Finance provides more efficient and better financial service to the public, achieving a dream of more inclusive finance. But in the development process, there have been a variety of problems, and the cognition and practice to the risks and regulation is lagging behind. So it seems quite necessary to study and research its development and existing problems in order to find a better regulatory approach. The Internet Finance business in Europe and the United States developed earlier and faster than China. It is helpful to study the foreign experience of regulation, which can better help provide ideas and suggestions for the innovation of the regulation of the Internet Finance in China.

To propose innovative suggestions of the regulation of the Internet Finance in China, firstly I will study and analyze the development status and mode, and existing problems of the Internet Finance in China. The emergence and development decide the possible specific regulatory requirements of the Internet Finance.

Secondly, I will focus on to research the necessity, current situation and dilemma of the regulation in China using factual evidence. Suggestions could not separate from the current situation. The current situation and dilemma is both the limitation to innovation and a help to guide the direction of regulatory innovation.

Then, I will study and reference the regulatory experience of the developed countries. It is important to study the successful practice and learn lessons of the failed or imperfect aspects from the relatively advanced countries in Internet Finance.

Finally, I will try to propose suggestions on the regulatory innovation from the regulation objectives, principles and innovation path, based on the reference to the foreign experience and the combination with the domestic current situation.

Literature Review

Many researchers made research and analysis on China's Internet Finance model and risk. Yu Hongkai analyzes the format of China's Internet Finance from the aspects of third party Internet payment, P2P, crowd funding, virtual currency and other financial services network platform. [1] Tang Gao summarizes the five main risks of Internet Finance in China: high risk potential, business and institutional legitimacy is difficult to delimit, stenosis of the regulatory system, and imperfect regulatory measures. Therefore, the author puts forward to speed up the legislation to regulate the development of Internet Finance. [2] Wang Nian, Wang Haijun, Zhao Lichang analyse the background, concept and the basic model of Internet Finance in China, and summarize the big social and economic impacts on the following four aspects: the realization of Inclusive Finance, promotion of transaction disintermediation, promotion of marketization of interest rate, and the development of small and medium-sized enterprise. [3]Starting from the nature characteristics of Internet Finance in China, Xu Qingwei and Zhang Xiaofeng made a profound analysis of the nine risks of China's Internet Finance. [4] Zhang Lijuan, Wang Hongyan believes that China's Internet Finance industry has the problems including safeguard measures of individual customers, the risk resistance is poor, the serious safety and homogenization, the shortage of social responsibility and regulatory measures to support the economic construction, and legitimacy is difficult to define. [5]

For the regulation of Internet Finance, through the review of related literature of the modern theory of financial intermediation and Internet Finance, Xie Qinghe analyzes the opportunities and challenges facing China's Internet Finance, and proposes to strengthen the application technology and construction of operational mechanism of safety management, and strengthen the training of personnel to promote the healthy operation of Internet Finance. [6] Xie Ping, Zou Chuanwei and Liu Haier mainly analyze the necessity and specialty of Internet financial regulation, point out that the functional regulation on traditional finance can also be used to Internet Finance, but should highlight the regulatory coordination to deal with the Internet financial mixed supervision. [7]Mao Lingling takes the consensus of the legal profession on the Internet financial regulatory as the starting point, analyzes the problems of risk control, and points out the legal risks contained in the Internet financial regulatory path. [8] From the perspective of promoting innovation and standardized development of Internet Finance, Zhang Guangtao points out that the current urgent need of China's Internet Finance of new thinking to construct effective regulation mechanism. [9]Gao Han analyzes the risks according to the types and features of the Internet Finance, and believes that it should be considered from the credit system, business licensing system, dispute relief system and industry self-discipline criterion four aspects to construct the Internet financial regulation legal system. [10]

Anyway, there are many existing researches on China's Internet Finance involved the current situation, risk analysis, and the corresponding regulatory proposals. But there are few researches from the point of view of the development pattern of China's Internet Finance, combined with foreign relatively mature regulatory practice and experience, to construct the suitable regulation system of Internet Finance in China. This thesis on the basis of the analysis of the development pattern, business mode, and current situation of the Internet Finance in China, combining with the foreign regulatory experience, puts forward the suggestions on how to construct innovative and suitable regulatory framework and system, to ensure the healthy operation of the Internet financial industry in China.

1. Background

1.1 The Development of the Internet Finance

1.1.1 The Rise of the Internet Finance

The emergence and development of anything are inseparable from the push of social demand and technological progress. The Internet Finance is the same. The rise of the Internet Finance is the inevitable result of the pushing of social needs and development of the era, with its profound humanities, social and technical background.

Firstly, advances in information and network technology provides a technical background for the rapid development of the Internet Finance. Technical breakthrough makes it possible for the rapid development of the Internet Finance. The continual improvement of a new generation of information technology represented by the Internet and information and communication (cloud computing, search engines, social networking, big data, and mobile payment) makes the rise of the Internet Finance. The new technology can bring more financial innovation. Technology-driven financial innovation probably can greatly reduce the use of cash, such as the emergence of the automatic teller machines. And the new financial innovation during the integration between the finance and the Internet also reduces the use of cash.

Internet technology will promote the development of the financial industry. Computer technology has now developed to the cloud computing era, which perfectly solve the problems of the massive computing and mass data storage required by clearing financial transactions. On the basis of such technology, financial professionals and Internet developers can design a variety of Internet-based financial products, to achieve even more innovative financial model.

In recent years, smart phones are widely used, people can more easily access the Internet. "37th Statistical Report on Internet Development in China" released by China Internet Network Information Center on January 22, 2016 shows that till December 2015, Chinese netizens reached 688 million, Internet penetration rate reached 50.3%, Chinese Internet population covered more than half. The report also shows that Internet users is more and more likely to access the Internet via mobile terminal equipment. Mobile phones become the main factors driving the growth of Internet users. Till December 2015, the scale of China's mobile phone users reached 620 million, 90.1% of Internet users through the mobile Internet. The mobile Internet users who only use mobile devices reached 127 million, accounting for 18.5% of overall Internet users. Such a large scale of

Internet users access the Internet via mobile phone, allows firms competing to develop a variety of innovative financial products, such as the financial management, payment and investment services provided anytime and anywhere via the Internet.

Secondly, the Internet thinking promoted the development of finance. Openness, equality, cooperation and sharing are the main features of the Internet spirit, and the current hottest term “Internet thinking” has more content. The development of the Interne Finance owes to the insistence of the Internet thinking. Internet thinking makes the finance more open, more equal to the public, so that the finance is more people-oriented. A variety of Internet financial products are designed based on the Internet thinking, such as a variety of very convenient mobile payment services, helping the general public to enjoy a better financial services.

Thirdly, the rapid development of the virtual economy especially e-commerce provides an economic background for the development of the Internet Finance. In recent years, China's e-commerce market continued to grow rapidly. The latest data shows that in 2015 China's online shopping market transactions amounted to 3.8 trillion yuan, and online shopping has become the trend of consumption. With the development of electronic commerce, its penetration of China's industry and trade of agricultural production, commerce and trade circulation, and community service continues to deepen. The integration of the entity economy and network economy, online and offline continues, and the trend of cross-border cooperation and global expansion is significant. The rapid development of e-commerce has led to the urgent need for convenient online payment methods, and become the initial opportunity for the development of the Internet Finance.

Then, changes in lifestyle and trading habits of the residents provide the humanities background for the rise of the Internet Finance. At this stage, people born in eighty, or ninety years of twentieth Century become a part of the main bank customers. The group characteristics of hating to line up, and mastering the network application and operation will challenge our existing offline service model. According to the “2012 NICE consumer channel preference survey", the Internet has become one of the main channels to contact for consumers and service providers, 28% of consumers use Internet to communicate with service providers at least once a week. Among them, the frequency of customers of financial services using the network is the highest. 60% of respondents at least once a week visit the service provider network channels; 74% of respondents were able to use the network to successfully trade.

Finally, the innovation accumulation of many new financial services model like third party payment, P2P and crowd-funding provides the historical background for the Internet Finance's meteoric rise. Many Internet innovation enterprises appeared, gradually infiltrated all aspects of networks and mobile payment, individuals and small business credit and financial management, greatly accelerated the integration of traditional financial institutions and Internet companies, setting off an upsurge of the Internet Finance era.

1.1.2 The Trend of the Internet Finance

(1) The Internet Finance developed rapidly.

The Internet Finance is the integration of finance and Internet, is the new financial model to achieve rapid allocation and accommodation of funds in the Internet era. At present, the domestic Internet Finance provides in addition to the traditional function of the bank on the net, mainly in the forms of online sales of financial products, online sales of insurance products, online securities trading, the third party electronic payment and network microfinance. For example, since June 13, 2013, when Alipay launched a new product “Yuebao”, which is actually monetary fund, according to incomplete statistics, as of mid-August, it increased to 25 billion yuan of scale business volume in two months, but also showing strong momentum of development of high speed, and the other Internet Finance services also showed rapid development trend.

(2) The Internet Finance filled the gaps in the traditional financial industry.

The advantages of the Internet Finance is to achieve financial information docking and transactions through the Internet. Capital supplier and demander don't even need to meet, greatly reducing the transaction cost. Its biggest feature is relatively small amount of a single deal, the simple procedure is simple, and the relatively high income. The Internet Finance mainly focus on the customers of scattered individuals and small and micro enterprises, whose loans are small, the cycle is short, risk is relatively low and procedures are simple. Because the traditional commercial banks did not attach great importance to these customers, and the Internet Finance just filled the blank, naturally being pursued, thus rapidly developing.

(3) The Internet Finance model is flexible and diversified.

At present, the Internet Finance models are various. The main institutions including third-party payment, P2P loan platform and network credit agency. And in recent years, the traditional financial companies have also joined the ranks, competition trend is increasingly obvious, such as: the “Good Financial Business” launched by the Construction Bank, and the "mobile wallet" business launched by Merchants Bank, both are parts of the Internet Finance. Internet financial models are mainly online banking, third party electronic payment, online sales of financial products, online sales of insurance products, online securities trading and network microfinance, etc.

(4) The Internet Finance business is wide and large.

Firstly, the Internet financial business has large transactions, and obviously showed the features of small amount of single deal, and the high frequency of transactions. Secondly, compared to the traditional industry and the traditional financial industry, Internet financial products involve a wide range of industries. It has many products, a wide range of businesses. Almost every industry, every enterprise can find their own position in the field of Internet Finance.

1.2 The Model Analysis of the Internet Finance

The Internet Finance firstly rose in Europe and the United States, in recent years the Chinese market is developing rapidly, the development speed of the P2P lending business even greatly exceed the foreign "originator". The big differences between China's credit, system, and culture environment with developed countries in Europe and the United States also make these "imported" in China's soil appears some obvious alienation and innovation. In this part, we will briefly introduce the main modes of Internet financial development in Europe and America, and focus on the analysis of its adaptability in China.

1.2.1 The International Mode

1996 was the first year of the international development of the Internet Finance. The American Charles Schwab Corporation began to provide online stock trading services and the release of Scottrade.com marked the opening of the age of the Internet Finance. So far, after more than ten years of rapid development, the Internet Finance business involves all the aspects of payment, financing and financial management, and a large number of outstanding Internet financial enterprises emerged.

According to the different forms of business and clients, the Internet Finance business model in Europe and the United States can be divided into seven kinds:

(1) Third party payment

Outstanding representative is PayPal in US, mainly for online suppliers and auction sites to provide collection services, is currently the world's most widely used online trading tools.

(2) Internet banking

It can be divided into personal banking (such as Fundsdirect is Britain's first Internet fund supermarket) and community banking (such as LearnVest, is a financial community platform set up for specific customer groups (female) based on personal financial consulting, services and communication).

(3) Network financing

It mainly consists of crowd funding, small loans and P2P three models.

(4) Service platform

Such as, the LendingTree to search and compare consumer financial products, and Zillow, to provide the market information of real estate and mortgage.

(5) Credit card service

(6) Internet securities firms

Such as Schwab Charles, the largest online securities dealer in the United States, providing customers with a low price of online brokerage.

(7) Internet exchange

Such as Market Second, a platform to provide customers with transactions for restricted shares, bankruptcy claims, limited partnership interests, structured products (MBS, CDO, and ABS) and non-listed company equity transfer.

The typical enterprises of different type of internet financial models are shown in table 1.

Table 1 the typical Internet Finance enterprises in US and Europe

<table>
<tr><th></th><th colspan="4">Mode</th><th>Typical International Enterprises</th></tr>
<tr><td>1</td><td colspan="4">Third Party Payment</td><td>PayPal (1998) / Paymate (2001) / MoneyBookers (2001) / Adyen Amazon Payment (2007) / Google Wallet (2011)</td></tr>
<tr><td rowspan="2">2</td><td rowspan="2">Internet Banking</td><td colspan="3">Personal</td><td>Bankrate (1996) / Lower My Bills (1999) / MINT (2006) / Fundsdirect (1999)</td></tr>
<tr><td colspan="3">Community</td><td>LearnVest (2009) / DailyWorth (2009) / Mint (2007)</td></tr>
<tr><td rowspan="5">3</td><td rowspan="5">Network Financing</td><td colspan="3">Crowd Funding</td><td>Indiegogo (2008) / Kickstarter (2009) / Rockethub(2010) / CrowdCube (2011) / Seeders (2012)</td></tr>
<tr><td colspan="3">Small Loans</td><td>Kabbage (2008)</td></tr>
<tr><td rowspan="3">P2P</td><td colspan="2">Non-Profit</td><td>Green America (2008) / Aqush (2009) / Funding Circle (2011) / Assetz Capital (2012)</td></tr>
<tr><td colspan="2">Platform</td><td>Prosper (2006)</td></tr>
<tr><td colspan="2">Compound Platform</td><td>Zopa (2005) / Lending Club (2006)</td></tr>
<tr><td>4</td><td colspan="4">Service Platform</td><td>Beat That Quote (2005) / LendingTree (1998) / Zillow (2005)</td></tr>
<tr><td>5</td><td colspan="4">Credit Card Service</td><td>Credit.com (2006) / CreditCard.com (2004)</td></tr>
<tr><td>6</td><td colspan="4">Internet Securities Firms</td><td>Sottrade (1980) / Charles Schwab (1996) / E-Trade (1991)</td></tr>
<tr><td>7</td><td colspan="4">Internet Exchange</td><td>Second Market (2004) / Shares Post (2009)</td></tr>
</table>

1.2.2 The China Mode

In China's Internet business, the most common mode called C2C (copy to China), that is to say when a kind of new mode of Internet services in the United States and other developed countries emerged, China will quickly appear corresponding version (for example, Yahoo! induced Sohu, Google induced Baidu). The development of Internet Finance in China also basically followed the rules, but at the same time, it also has its own unique innovation and development. In this part, we will sort out the main Chinese model of Internet financial development. Specifically, according to the mode of Internet Finance business functions, there are four categories: one is the payment platform type; the second is financing platform; the third is the financial platform type; the fourth is the service platform. Below, we will start from these four categories to explain the specific details of China's Internet financial model.

1. The payment platform based Internet financial model

Network payment is the monetary funds transfer behavior relying on a public or private networks between the receipt and payment of funds, including Internet payment, mobile payment, payment of fixed telephone, digital pay TV, etc., of which the first two ways have begun to take shape. In the network payment industry, commercial banks with their own funds and channel advantages still firmly occupy the main position. In addition to traditional online banking and mobile banking development, commercial bank is also active in product innovation, launched innovative payment products like B2B, B2C payment platform (such as ABC's “online trading market payment platform”, ICBC's “ICBC E payment”) and mobile payment products like “mobile wallet”.

With the integration of the Internet and payment, the source of the Internet Finance - the third party payment is absolutely the most shining star in the network payment. Today, the third party payment has occupied most of the market of micropayments in China. The issuance and acceptance of prepaid cards, bank cards and Internet payment is the three main business segments of the third party payment. In the third party payment field, the core enterprise market share has stabilized: whether in the field of Internet payment or mobile payment, Alipay in the third party payment market is in the absolute leading position, and TenPay is following tightly as second. As for the participation institutions of the third-party payment industry, on the one hand, with the deepening degree of the e-commerce of the traditional industry, Suning, JD, and Pingan as corresponding representative of traditional retailers, online retailers and financial institutions joined the third-party payment market one after another; on the other hand, with the booming o f all similar innovative monetary fund financial products (such as the Yuebao), it is a trend for third-party payment companies to enter the traditional financial services market.

2. The Financing platform based Internet financial model

Financing platform based Internet financial business is born in order to meet the financing needs of small and medium-sized enterprises and individuals, to act as the role of financial intermediation in the market. There are mainly three types in China: one is crowd funding, for example, Demohour; the second is peer-to-peer lending, such as Yirendai; third, small network loans, for example, Ali small loan. Here, we are to analyze and illustrate the three models respectively.

(1) Crowd Funding

Crowd funding, refers to a financing model that the small business or individuals use the Internet and Social Networking Services to show their creativity to the public, to seek financial assistance. Unlike the general commercial financing mode, in the crowd funding mode, there is no transfer of equity, the project sponsors 100% enjoy the autonomy of the project. In essence, the crowd funding is in the form of “group buying + Pre-Order” to get the funds needed to complete the project, belonging to one step of the “Pre-consuming”. By the whole experience of screening out good ideas, investing and then witnessing the whole process of the product from design to production, consumers can get a new consumer experience different from the traditional model of consumption.

It was a bit late when crowd funding entered into China. But it developed rapidly in just a few years, there emerged a lot of crowd funding platforms, such as Demohour, Dreamore and Tmeng. Its development mode is basically the same with that in other countries in the world: the project sponsors (with creative ability but lack of funds) show their ideas on the platform, within a set period of time, if the funds provided by supporters reach or exceed the target amount, then the project is successful and the project sponsors can obtain funds; otherwise, the raised funds should be returned to the supporters, the project is closed. Among them, Demohour is the first and so far the most mature crowd funding platform, mainly in order to help a number of creative persons, with great ideas but lack of funds. The others, like Dreamore and Tmeng are crowd funding platforms, respectively to support micro films and technology innovation.

Now, crowd funding in China focuses more on the profit pattern of market segmentation, for example, Demohour focuses on the market of creative investment, Dreamore focuses on the market of micro film. Considering the overall size of these segments of the market, and the return forms investors get (only for non-financial products or non-monetary rewards), the scale of crowd funding platforms in China is limited, and their profitability is also slightly poor than other Internet financial businesses.

(2) P2P Lending

P2P (Peer-to-Peer) lending, is the biggest bright spot in the Internet financial business innovation. It refers to the financing services model that using the Internet as the media, matchmaking borrowers and investors through the platform for lending transactions. After entering the Chinese market, P2P model has shown great vitality, and arose a number of obvious alienation and innovation promptly. According to the nature of the credit platform, P2P credit enterprises in China can be divided into four categories: pure online intermediary mode, compound intermediary online mode, offline authentication mode, and non-typical P2P mode.

Pure online intermediary mode: the role of the network lending platform is just matchmaking. It is responsible for inspection of the borrower's credit status, but do not promise the protection of the investor’s principal. The borrower and the lender on the platform make and complete the transaction by themselves, such as “paipaidai” and “hongling capital”.

Compound online intermediary mode: similar to the foreign compound intermediary mode, in China also emerged a large number of P2P financing platforms who at the same time act as the interest rate designated person, the guarantor or (and) the joint pursuit of the money. Anxindai and Renrendai are the typical representatives. Anxindai provides the joint guarantee for the lenders in the platform, and Renrendai provides a principal protection plan for the lenders.

Offline authentication mode: the offline authentication is full of Chinese characteristics. It is a measure to reduce the borrower default risk because in China the personal credit system is not perfect. Helidai is the typical representative. The biggest difference with the ordinary P2P lending model is that Helidai requires the offline application for the authentication of parts of the borrowers (borrowing needs are more than 30 thousand yuan).

Non-typical P2P mode: it is China’s unique P2P lending mode. Its most prominent feature is mostly offline. CreditEase is the typical representative. There are mainly two steps for CreditEase to accomplish the transaction between the borrower and the lender through the credit transfer: firstly, the legal representative or the shareholders of the platform business formats the relationship of credit and debt with the borrower in the name of an individual; secondly, the lending platform spins off the credit’s right into a series of financial products and then transfer the right to the real money lenders. That is, in the business chain, the real lending parties did not form a direct loan relationship.

(3) Small loans

E-commerce platform data and small loans are the core elements of the mode. And to dig its own e-business data to establish a corporate and individual credit rating is becoming its core competitiveness. Ali small loan is a pioneer in the model. We think that Ali small loans connect Alibaba's B2B, B2C and C2C platform accumulated massive customer behavior and credit data through all the sharing, through the deep data mining and cloud computing technology to translate the customer behavioral data in the e-business platforms to the enterprise and individual credit rating, establishing the small and medium-sized enterprise loan database, realizing the "P2P small loans + o2o mode" quantitative lending and implementing cost reduction.

The success of Ali small loan prompted a large number of establishment of platform financial enterprises. For example, Suning via its independent loan business license opened a special subsidiary to operate network loans. And Jingdong, HC, Dunhuang take in cooperation with the bank, curve into lending platform. In addition, eBay, who in the e-commerce business encountered Waterloo, also corporates with PingAn Bank, entering the microfinance field.

3. The financial management platform based Internet financial model

The financial management in Internet Finance refers to that the financial or non-financial institutions through the Internet provide to financial products and services investors, including the sales and trading of funds, insurance, bonds, foreign exchange, futures, precious metals, banks and other financial products. Yuebao of Ali group is a pioneer of the business. Later the big banks, securities, funds and others successively seize the Internet financial management markets.

The innovation in this field in China is basically learnt from the development model of Europe and the United States. There are two modes of personal financial services and financial community. The first mode mainly refers to the financial products sales network platform represented by Alipay, designed to help users of fragmentation finance. In insurance field, in the Insurance industry solutions launched by Kuaiqian, 30 enterprises including PICC, CPIC, PingAn, Taikang and Sunshine Insurance Group already have full access. The "zhong an online property insurance company" established in 2013 is China's first pure Internet insurance company.

The financial community in China has been quietly rising. Large financial institutions invested much to create exclusive online financial community platform, such as Agricultural Bank of China's interactive e station and China Merchants Bank's "I banking", providing communication and interaction platform via social networks service.

4. The service platform based Internet financial model

The service platform in Internet Finance refers to the business model providing price search services about financial products to help consumers easily access to lower rates of loans, financial services, insurance and other services. The rapid development of the financial industry brings various kinds of loans and other financial products for consumers to choose, how to quickly and easily choose from more suitable and low rate products has become the important topic of consumers. As a result, the search service platform Internet financial enterprises came into being. The Rong360 founded in 2011 is a pioneer.

The current Rong360 is essentially a search engine, focused on loans, aiming to provide suitable loan options of big banks and small loan companies for funding needs, saving the query time for users to go to banks and small loan companies respectively, helping borrowers more conveniently to make decisions. With the impact of the Internet on user behavior, in Europe and the United States market, 88% of Internet users will search and research the financial products on the Internet before making decision financial products. It is a promising field.

Of course, the Internet Finance industry is in a stage of rapid development, is bound to continue to innovate new business model with the development of the diversification of human financial service needs.

1.3 The Features and Comparative Advantages of the Internet Finance

1.3.1 The Features of the Internet Finance

1. Internet Finance breaks the geographical and time constraints

As long as there is network, you can carry out the Internet financial services, which is 24 hours of uninterrupted service. Information is an important factor affecting financial investment. Its quality, transfer speed and investor information screening capacity directly affect the success or failure of the financial investment. The Internet Finance takes full advantage of the Internet openness, sharing, high transparency, in accordance with the support of big data and cloud computing technology, realizes the deep excavation and analysis of the information of user's credit status, behavior mode and investment preferences, then provides personalized services for customers, which is difficult to do for the traditional financial industry.

2. Internet Finance makes fragmentation finance possible

Traditional financial industry pays more attention to the high net worth clients or institutional customers, VIP customers (personal quality customers), which leads to that a considerable number of small investors is difficult to achieve effective preserve and increase on the value of assets. And Internet Finance can solve this problem perfectly through fragmented financial way. Take Yuebao(the balance value-added services provided by the third party payment platform Alipay for individual users) as an example, according to the "thirty-second Chinese Internet development report" released in July 2013 by the China Internet Information Center, China's Alipay mobile phone payment has more than 100 million users, Alipay wallet user number is also close to 100 million, of which the users with monthly income of less than 3000 yuan accounted for 70.7%, and the users with monthly income of less than 5000 yuan accounted for 88.8%. Such users hot on online shopping and online payment have a high viscosity. Their fragmentation of money is gathered by the network company through the Yuebao business, which connected the account balance of users with Monetary Fund, making the funds for shopping value-added. And the money in Yuebao can be used for online shopping. It has a huge commercial value.

3. Internet Finance has the advantages of high speed innovation, information openness and convenience

Internet financial products innovate very fast, such as the investing and financing products like Yuebao, Xianjinbao and Huoqibao, and P2P lending and crowding funds are all able to innovate and release in a very short time. And the big data and cloud computing technology directly strengthen the specific advantage of Internet Finance. The Internet Finance builds relationship for the both sides of supply and demand, clearly and dynamically disclose the information of financial products like the supply and demand in the market, transaction price, transaction size, profitability and so on. It and on a deeper level solves the problem of “information asymmetry” in a deeper level, and expand “collection of possible transactions”. Internet Finance also provides users with more convenient services. With Yuebao as an example, through a convenient “one key to open account” process, the user can always transfer the reserve funds in or out, achieving a quick conversion between shopping and financial. In contrast, the bank's fund sales generally have higher constraints, there are restrictions on the purchase and redemption time, the cost of conversion between cash and financial is also higher.

4. Internet Finance has the characteristics of low cost, low threshold and high income

The biggest advantages of network business is the saving cost of the physical outlets, able to get customer information at a very low cost, and the investment threshold is pulled low, thus effectively reducing the labor cost and store cost of financial services. Internet companies participate in the financial business, not primarily in order to obtain the financial revenue, but in order to get more customers and more data stream, and then to get more advertising business. As a result, Internet companies and financiers can lower the cost, at the same time transfer more profit to investors, thereby improving the rate of return of investors.

1.3.2 The Comparative Advantages of the Internet Finance

The rapid development of the Internet Finance is largely due to some advantages the traditional financial institutions don't have. The advantages can be summarized as the following five aspects:

1. Customer experience is better.

Internet Finance can provide convenient services and interactive services anytime and anywhere when needed.

2. The operation is more efficient.

On the one hand, the application of the new technology of the Internet makes financial services can quickly find and respond to customer needs, and achieve efficient operation through intelligent operations. On the other hand, the Internet Finance greatly improves the capital allocation efficiency and reduces the cost of matching, which has been verified in Ali small loans, P2P and crowd funding financing field.

3. Information is more transparent.

Efficient data and information processing technology can alleviate or completely eliminate the information asymmetry between the two parties, and realize the effective organization, sort, search and match of the information.

4. There are more inclusive services.

On the Internet Finance platforms, there is open sharing of resources, and the groups of the small and micro enterprises, small businesses, farmers and students, who are not involved by the traditional financial enterprises, can also be treated fairly and enjoy the services. It not only makes up the weakness of traditional financial, but also effectively supports the development of the real economy.

5. It boosts financial development.

The development of Internet Finance forced the traditional financial services continue to explore innovative service model, to promote the financial sector to focus more on customer experience, convenience and efficiency, low-cost, and wide coverage.

1.4 Problems in the Development of Internet Finance in China

Internet Finance provides more efficient and better financial services to the public, achieving the general financial dream, but in the development process various kinds of problems arose. In recent years, the Internet Finance develops rapidly, as a new thing, due to the lack of industry experience, normative system and perfect regulation, along with the development various problems appeared inevitably.

1. Credit risk problem.

The Internet, especially the mobile Internet is characterized by anytime, anywhere. These characteristics of the Internet, make financial transactions become more virtual, the geographical scope of the transaction is extremely wide, and information of counterparty is also virtual, causing serious information asymmetry of financial transactions. And probability of adverse selection is big. All of these lead to credit risk. When choosing the financing options, Internet financial platform makes decision based on the identity information, proof of property and credit records provided by the borrower. At present, China's Internet credit system has not been yet fully universal. The borrower's credit judgment is mainly based on the central bank's personal credit system. In the absence of support of an effective credit system, the Internet financial platform cannot fully acquaint the borrower's information, which increases the credit risk. The credit problem of investors cannot be ignored, either. For example, the malevolent investors invested part of the funds firstly, the platform launched a series of business and the project runs smoothly, but at this time the investors refused to response or directly disappear, which caused damage to the project without follow-up funds. The frequent outbreaks of absconding of the P2P network lending platform also makes people worry about the credit risk problems of Internet Finance.

2. Technical risk issues

Internet Finance needs to rely on strong security technology, cloud computing technology, big data technology, etc. For some Internet Finance platform without strong technical strength, once there happens significant system failure or security incidents, it will cause the significant property losses of consumers or investors. The pursuit of the ultimate customer experience is the core idea of the thinking of the Internet, but it is under the guidance of this idea that some Internet Finance platform get rid of some of the most important audit process to purse the ultimate experience, which brings security risk for the user property, such as the function of transferring to others and retrieving payment passwords only via mobile phone number in some

Internet financial products.

3. The issue of personal information leakage

Internet Finance developed up to now, the real personal information of most of the users are stored on the Internet Finance platform. Compared with the traditional financial institutions, some of the emerging Internet financial institutions haven’t taken enough actions in the protection of personal information. The frequent outbreak of the personal information leakage incident, making the public in the state of the Internet "streaking". A massive personal information leakage may even endanger national security.

4. The problem of false operation and fraud

False operation and fraud problems mainly exist in financial business based on Internet platform, the new Internet Finance and financial support of the Internet, especially in P2P and crowd funding. Since the platform information is opaque, to win over investors, violators offer false packaging information on the financing platform scale, financing sources and uses of funds, exaggerate the merits of the project, and carry out false propaganda, to attract more capital flows. Illegal Internet platform will promise a very high level of income, making the rate of return on investment is far higher than the average rate of return on social funds, which is a significant threat to the steady operation of the platform.

5. The protection of the interests of dispersed investors

Due to the short history of China's financial market, investors' rational degree and investment experience are limited, making it easy for them to appear “herd effect” and other irrational behavior. Individual investors know little about the financial knowledge of the Internet Finance, and their capability to bear the risk is weak, resulting in them vulnerable in the Internet Finance.

6. Transaction information security issues

Internet financial enterprises carry out the business based on a large number of data and information. The transaction information transmit through the Internet, which needs higher requirement of network information security. In the situation where Internet information protection ability is poor, if criminals steal user information for illegal operation, or illegal operators disclose the transaction information for profit, it will cause a devastating impact on users, customers and Internet Finance itself, in some serious cases it will even result in the collapse of the Internet Finance.

7. The legal status of products and platforms

All kinds of Internet financial products, institutions and platforms emerged continually, but its legitimacy remains to be discussed. At the beginning of the establishment Internet financial institutions will delineate its business scope. With the expansion of its scale and business scope, there is a large difference between the actual business and the initial delineation. There is no illustration for the business beyond the initial scope and its legitimacy, and it is difficult for investors to make a clear judgment. In addition, currently China has no clear regulatory agencies specifically for Internet Finance regulation. The allocation of the regulation responsibilities is not clear. It is hard to effectively track the legitimacy of Internet financial institutions, the platform and products.

1.5 Risks and Challenges to Macroeconomic Regulation and Financial Stability

1. Increase the difficulty of the central bank financial regulation

Under the traditional economic and financial environment, the central bank uses the policy tools such as rediscount, deposit reserve ratio and open market operation to influence the intermediary goal, thus achieving the ultimate goal. But in the Internet financial environment, on the one hand, the continuous expansion of electronic payment method increases the difficulty of the currency supply monitoring. On the other hand, the faster speed of capital flow makes the risk form more diversified, and the difficulty of the central bank to monitor financial risks and maintain financial stability is increased.

2. Challenge the current financial management system

At present, China takes classified financial regulation. The development of Internet Finance greatly exceeded the business scope of banking, securities and insurance business. The scope of transactions is expanding constantly, and transactions are increasingly diversified, thus it is difficult for classified regulation model to be an effective regulation.

3. Financial consumers' rights and interests are vulnerable

At present, China's Internet financial products and services are developed collaboratively by financial enterprises, but financial enterprises don’t have a good understanding of the risk characteristics of cross market and cross industry. So in the design of financial products and services, they tend to be inclined to protect the company's own financial interests. Overly complex cross financial products and services will exacerbate consumer’s disadvantage of financial information, which increases the risk of suffering loss because of purchasing products not suitable or accepting inappropriate service.

4. Increase the difficulty of anti-money laundering work

Internet financial capital flows is more difficult to monitor relative to the traditional financial business, coupled with the lack of relevant regulation, there is money laundering risk in the model of whether the third party payment, P2P network or crowd funding. At present, although the third party payment has been included into the anti-money laundering supervision scope, it is difficult to control the money laundering risk because of the regulatory policy lag and the complicated operation mode, and because anti-money laundering system started late and the anti-money laundering internal control system is not perfect. For other business models not included in the regulation system, on the one hand, it is hard to identify the customer identity and monitor the capital flows. On the other hand, the lack of supervision makes institutions lack of responsibility and obligation to establish anti-money laundering internal control system, to monitor, disclose and report suspicious transactions, which increases the difficulty of the anti-money laundering work.

2. The Regulation of the Internet Finance

2.1 The Background of the Regulation of the Internet Finance

Internet Finance, namely, finance in the form of Internet, still belongs to the scope of finance in essence. It is relative to the traditional finance. Traditional finance places more emphasis on the direct contact and transaction behavior between financial institutions and their customers. Its platform includes counter and the entity institutions. It emphasize that money demand and supply sides complete the financial transactions via the entity of financial institutions as an intermediary, such as through paper text. While Internet Finance is the finance highly integrated with network, its biggest feature is that the capital demand and supply and the financial behavior subject search information and complete the transactions via Internet, which involves complex IT technology. What should be emphasized is that traditional finance and Internet Finance is not completely distinct. The online banking, mobile banking and traditional financial products purchase via the Internet all belongs to the generalized Internet Finance model. However, if define the form of financial entities or the Internet used as the entity's financial tools defined for the traditional finance, then the Internet as financial intermediary is our current widely called “Internet Finance”. The reason why the current academic circles research the Internet Finance as a new type of financial mode is due to the particularity of its background, that is, it came into being under the environment of “financial repression”. The rapid development of Internet Finance makes it to a certain extent a certain degree of system importance, the problem caused by without regulation may exceed the hidden social costs of regulation. With the increase in the number of people involved in the transaction, the need for regulation has increased. Because of the existence of path dependence, the existing regulatory system has lagged behind in the rapid development of Internet Finance, regulatory institution shortage already exists, such as the requirements of the capital adequacy ratio, provision coverage and leverage ratio required by the current regulatory system are not applicable for Internet Finance. When the revenue brought by the regulation is higher and higher than the cost of the implementation of regulation, Internet financial regulatory innovation is imperative.

2.2 The Necessity of the Regulation of the Internet Finance

After the 2008 international financial crisis, financial and academic circles generally believe that laissez faire regulatory philosophy is only applicable to financial markets with effective ideal situations (UK FSA, 2009). We take this ideal scenario as a reference point, to argue the necessity of Internet financial regulation.

In the ideal situation of efficient market, market participants are rational, individual self-interest behavior make the “invisible hand” help automatically achieve market equilibrium, and the equilibrium market prices fully and properly reflect all information. At this time, the financial regulation should follow laissez-faire philosophy, and the key goal is to exclude the factors which will cause the market non effective, to let the market mechanism play a role, and there is supposed to be less regulation or without regulation. There are three specific points: (1) because the market price signal is correct, we can rely on market discipline to effectively control harmful risk taking behavior; (2) to let the troubled financial institutions do the bankruptcy liquidation, in order to assure the survival of the fittest in the market competition; (3) the financial innovation regulation is not necessary. Market competition and market discipline will eliminate the financial innovation unnecessary or do not create value, and manage the financial institutions not to develop high risk products. Consumers with abundant information will choose the products that fully meet their own demand. As for as determining whether financial innovation creates value is concerned, the regulatory authorities do not have an advantage relative to the market, but it may inhibit beneficial financial innovation.

But for the Internet Financial market, before achieving the ideal scenario, there still exists a large number of non-effective factors of information asymmetry and transaction cost, etc., thus the laissez faire regulatory concept is not applicable.

First, in the Internet Financial market, individual behavior may not be rational. For example, in the P2P network loans, the actual purchase of the investor is the borrower's personal credit loans. Even if the P2P platform can accurately reveal the borrower's credit risk, and the investment is enough dispersed, personal credit loan is still a high risky investment, investors may not be able to fully understand the impact of investment failure on the individual.

Second, individual rationality does not mean collective rationality. For example, for the products represented by Yuebao as the collaborative product of “the third party payment + money market fund”, investors are buying money market fund shares. Investors can redeem their funds at any time, but money market fund positions generally have a longer period of time, or need to pay a certain discount in order to sell the two market. Here, there is a problem of maturity mismatch and liquidity transition. If there is a sharp fluctuations in the money market, investors redeem the capital to control risk, as individual behavior, it is perfectly rational; but if it is large-scale redemption, money market funds would have suffered a run, as the collective behavior it is irrational.

Third, market discipline is not necessarily able to control harmful risk taking behavior. In China, there exists a large number of various implicit or explicit guarantees to the investment risk, such as the implicit promise for deposit insurance, the implicit guarantee of bank to the counter sales of financial products. People are also used to the rigid payment, thus risk pricing mechanism in a certain extent is invalid.

Fourth, if the Internet financial institution involves a large number of users, or achieves a certain scale of funds, when they encounter problems it is difficult to solve through the market clearing settlement. If the institution also involves the basic business of payment and liquidation, bankruptcy may also damage the financial system infrastructure, and constitute a systemic risk. Such as Alipay and Yuebao involve so many users and its business scale is so large, they already have a certain degree of system importance.

Fifth, the Internet financial innovation may have major defects. For example, our P2P network loan has been uneven in quality situation. In some of the P2P platform, there is no effective isolation between the client funds and the platform funds. There happened some events that the platform responsible person escaped with money. Some of the P2P platform take aggressive marketing, sell high risk products to people who do not have a risk identification and risk-bearing capacity(such as pensioners).

Sixth, there may exist fraud and irrational behavior in Internet financial consumption, financial institutions may develop and sell high risk products, consumers may buy the products they totally do not understand. For example, in the online sales of financial products, for some products there is only some general disclosure of the expected rate of return, there is little to explain how to achieve the income rate through what strategy, what risks, etc. And because some consumers have limited financial knowledge and are used to the rigid payment, they may not know the difference between P2P network loans and deposits and financial products.

Therefore, for the Internet Finance, cannot take laissez faire regulatory philosophy, should regulate and promote its development. Within the negative list, the bottom line of thinking and regulatory red line, encourage financial innovation in the Internet.

2.3 The Current Situation of the Regulation of the Internet Finance

The vigorous development of Internet Finance has vigorously promoted the reform of China's traditional financial industry, but the risk of Internet Finance is more complex than the traditional finance, which asks for higher requirements for the regulation. Since 2014, China's Internet financial industry exposed a lot of risk problems, the idea, scope and measures of the Internet financial regulation from the academic community to the government is still in the initial stage. The regulation of Internet Finance relates to broad field and quite a lot regulatory subjects, including the Ministry of Industry and Information Technology, Ministry of Public Security, the People's Bank of China, the China Banking Regulatory commission, the China Securities Regulatory Commission and the China Insurance Regulatory Commission, etc.

At present, Internet Finance overall is in the state of "weak supervision", except for the third party payment which has formed a comparatively systematic supervision system, supervision of other modes is still in the exploratory stage, some of the modes are even in the status of “no barriers to entry, no industry standard, and no regulatory agency”. The current situation and problems of China's Internet financial regulation mainly include:

1. The legislation of relevant regulatory institutions lagged behind, difficult to form a unified regulatory system

The strong innovative ability of Internet Finance makes its products, business mode and operating institutions emerge in an endless stream. Regulatory legislation cannot quickly include all Internet banking products. It is relatively difficult to establish a unified regulatory system. Regulators are unable to predict the possible risks before they are developed, so they pay close attention rather than take actual regulatory actions. Take the P2P industry which arose a lot of problems as an example, although Guidance on Promoting the Healthy Development of Internet Finance promulgated on July 2015 by People's Bank of China and other departments clearly stipulates the China Banking Regulatory Commission will regulate the P2P, but specific regulatory measures has still not been released. Table 2 is the relevant laws and regulations which have been promulgated and implemented in China.

Table 2 the Regulatory Laws and Regulations Promulgated by China's Financial Regulators on the Internet Finance Recent Years

Regulation Subject	Release Time	Laws and Regulations	Main Content
the People's Bank of China	June,2010	“Non-financial institution payment service management approach”	Make provision of behaviors, risks, rights and interests of the third party payment service.
	June,2010	“Payment institutions prepaid business management approach”, “Payment institutions clients reserve depository approach”, “Bank card acquiring business management approach”, “Measures for the administration of the Internet payment service of the payment institutions”, “Guidance on the development of mobile payment service”	Rules for the third party payment and mobile payment, and norms of the behavior and the rights and interests of the subjects
	July,2015	“Guidance on promoting the healthy development of Internet finance” (jointly issued by ten ministries)	The basic laws and regulations of Internet financial supervision, it provides the basic regulatory responsibilities of the Internet Finance industry, and makes clear business boundaries.
the China Banking Regulatory Commission	January, 2006	“Electronic banking business management approach”	Provides the risk management of electronic banking, legal liability, and procedures and so on. It is an important regulatory laws and regulations of the network bank.

	August, 2011	"Notice on the risk of peer-to-peer lending"	For all loans in the P2P industry to make a warning
the China Insurance Regulatory Commission	April, 2011	"Internet insurance regulatory requirements (Draft)"	The improvement of Internet insurance supervision.
	September, 2011	"Internet insurance business of Insurance agency and Broker's Firm regulatory approach (for Trial Implementation)"	Important regulatory regulations of insurance agency and Broker's Firm's Internet insurance business.
	May, 2012	"Notice on the risk of Internet insurance business"	For the Internet insurance business to make a warning
	April, 2014	"Notice of the relevant issues concerning the regulation of the operation of the Internet insurance company (Draft)"	Provides the information disclosure system of insurance products online sales.
the China Security Regulatory Commission	September, 2013	"Notification on the alleged unauthorized issuance of shares in some of the companies on the Taobao.com"	According to the notice of the general office of the State Council on crack down on the issue of illegal issuance of stocks and illegal business related issues, notify and halt the alleged unauthorized release of the shares of some companies on Taobao.com
State Administration of Taxation	September, 2008	"Official reply on the question of the individual income tax on individuals through Internet trading virtual currency"	Make a clear provision on the tax treatment of virtual currency
Ministry of Culture, Ministry of Commerce	June, 2009	"Notice on strengthening the management of virtual money in online games"	On the network game virtual currency market access, the issue of the main body, the management of trading services to put forward more requirements.
Supreme People's Court	January, 2011	"Interpretation of the Supreme People's Court on Several Issues concerning the application of law in the trial of criminal cases of illegal fund-raising"	Make a provision on illegal fund-raising behavior of crowd funding
Representative local laws and regulations	January, 2015	"Interim Measures for promoting the sustained and healthy development of Internet banking in Zhejiang Province"	Elaborate the Internet financial and marketing platform in Zhejiang Province

2. The regulatory standing point of the traditional finance does not adapt to the Internet financial business

In traditional financial regulation there are many laws and regulations to ensure the stability and operational safety of the traditional finance, and it is clearly defined about illegal behavior in the process of financial operation, punishment measures and prevention. But it is not appropriate to apply these regulations directly to the emerging Internet financial business. Compared to the traditional finance, the business mode of Internet Finance is experiencing innovation constantly, the scope and the environment also continue to extend and change. The regulatory object and subject are far beyond the domain of traditional supervision system. The regulatory standing point of the traditional regulatory subjects is not applicable now. The cross and mix among industries of Internet Finance is much more complicated than the traditional finance. Its regulation requires new regulatory subjects and regulatory positions, in order to improve the regulatory efficiency and eliminate the regulatory vacuum.

3. It is hard to grasp the intensity of regulation of Internet Finance.

Market mechanism plays an incomparable role in the operation of the Internet Finance. Although administrative supervision can play a certain role, but it makes the market mechanism more efficient to regulate and constrain all type of market behavior of Internet financial enterprises through laws and regulations. But it is a big problem to decide how big the intensity of the legal supervision is and how freely to develop for the Internet Finance. If the intensity of legal supervision is too small, it cannot play a regulatory role, leading to growth of Internet Financial barbaric, threatening to the financial system and social stability. If too big, then the Internet Finance will be suppressed excessively, the development will be limited, affecting the economic development negatively. It is a difficult problem how to grasp the moderation of Internet financial regulation.

4. It is difficult to define the scope of Internet financial regulation.

Internet financial business data are transferred, exchanged and stored on the Internet, and its scope of business is constantly changing. After the business scope of the regulatory authorities is defined, the new business will force the regulatory authorities to continue to update the law. If the pace of legal updates is lagging behind the pace of the Internet financial development and innovation too much, it will lay latent danger in the financial development of the Internet, and may threaten the stability of the Internet financial system. At the same time, it is more difficult to monitor if a business or transaction behavior is illegal. Because in order to judge the legitimacy, we need to collect, review and demonstrate the transaction data, and transaction data is likely to be tampered with and fabricated, which increases the difficulty of regulatory agencies to judge.

2.4 The Dilemma of the Regulation of the Internet Finance

1. Internet financial risk regulatory content is more complex

Internet Finance is fragile in both finance and information. In addition to the traditional credit risk, Internet financial risks are more prominent in loss of customer funds risk, customer information disclosure risk and abnormal system operational risk. These risks are the more concrete manifestation of the traditional financial risks including legal risk, reputational risk, information technology risk, and operational risk. Internet companies generally hold a large number of customers and account information, and sometimes will sell the customer information for the interests, and violate the confidentiality of customer information. It not only makes customers face the risk of theft of funds, but also will lead to the trust crisis from the public to the Internet financial institutions qualification, credit and other aspects. Internet Finance operates with the network platform, the vulnerability of its technology determines the risk of failure or damage, resulting in serious customer data leakage and loss of transaction records. Due to the lack of industry qualification management, or due to the lack of audit supervision mechanism of customer identification and transaction process, it is easy for traditional financial illegal activities like cashing or money laundering to happen. Internet companies and even any enterprise will run some business beyond authorization. For example, some institutions are suspected of illegal fund-raising and cash money laundering. Some Internet companies who run financial business beyond authorization, value the actual interests, ignore the actual constraints, thus the risk is accumulated seriously. Take P2P network lending platform as the example, firstly it is the transaction intermediary, should not involve strong leverage business, but some P2P network lending platforms in order to open up the market and solicit funds, started to offer guarantee, and creditor's rights transfer and establish the pool of funds, transferred from "information intermediary" to "credit intermediary". But due to the lack of mechanism of capital replenishment and asset constraints, the risk is very conspicuous. In addition, the Internet service customers are people with relatively poor risk resisting ability, more likely to cause a chain of risk, and the impact on economic and social stability is also stronger.

2. The regulatory system has defects

From the point of view of the status quo of China's Internet Finance regulation, different types of Internet financial model is in different management condition, and fragmented regulatory or regulatory gaps and cross regulation coexist. Mainly in: First, the People's Bank of China regulation. The introduction of the “non-financial institution payment service management approach” declares the central bank in charge of examination and approval authority, but it just undertakes the function to maintain competition and avoid the risk of payment, which cannot regulate Alipay, Kuaiqian and other new payment platforms. Second, the China Banking Regulatory Commission’s regulation. The China Banking Regulatory Commission regulates the formal banking sector. Mostly it undertakes the coordination function in the regulation of illegal fund-raising and private lending. Though the state has made it clear that the CBRC is responsible for the regulation of illegal fund-raising and private lending, it is still in a research and initial stage. Third, the regulation of government departments. Along with the deepening of financial reform, local government generally established financial office, responsible for the preparation and supervision of the new financial subjects like the local small loan companies and private lending registration service center. In addition, with the rule of “who approved, then who regulated”, the financial guarantee institutions engaged in Internet Finance business are regulated by the Ministry of Industry and Information, and investment guarantee corporations are approved and regulated by the industrial and commercial administrative departments. It can be said that most of the Internet financial businesses don’t have a professional regulatory authorities, only regulated by the Ministry of Industry and Information for traditional technical supervision, and the intensity is limited. Besides, the mixed development of Internet Finance is also challenging the mode and level of the current classified regulation.

3. The regulation means are relatively insufficient

In the traditional financial regulation, the regulatory authorities regulate and inspect by the three major means of off-site supervision, on-site inspection and market access. However, these means are not applicable to the Internet Finance. For the off-site supervision, the Internet Finance business has not yet included in the off-site supervision system, it also has not achieved docking in technology, and the huge data of Internet financial enterprises will also bring off-site supervision heavy workload and increase the difficulty of off-site analysis. For the on-site inspection, the huge amount and complexity of Internet financial business make it difficult for on-site inspection, especially the uncertainty of capital flows. And it is hard to assess the rectification effect, and it is also difficult to guarantee the on-site inspection effect. In terms of market access, due to legal restrictions, we are temporarily unable to do the technical review for standards of admittance into industries and capital threshold. Even if there is legal, review of access will also be strict and complicated, and it need to be based on perfect off-site supervision and on-site inspection. It asks for harsh requirements of the regulatory standards and levels, and it also shows the current inadequacy of financial supervision resources.

4. The legal system of regulation is not perfect

First, the level of Internet financial regulatory laws and regulations is low. At present, Internet Finance regulation is mainly departmental rules or jointly issued guidance, there is no authoritative regulatory laws like Banking Supervision Law, there is no fixed regulation system, which leads to that in the actual operation the execution is ineffective or the regulatory unit does not cooperate so well.

Second, The Internet Finance is technology intensive. From the interaction of system and technology, system tends to lag in technology and driven by technology, current existing laws and regulations cannot match the development of Internet Finance technology, such as big data and cloud computing. The industry regulatory rules are also unable to fully cover the financial business of Internet companies.

Third, the Internet Finance industry standards are not perfect. The emergence and operation of Internet Finance business, make more detailed and technical standards and norms need to be perfect synchronously, but there is no clear provision about financial security, trader's credit management and the confidentiality of personal information of Internet Finance platforms.

In addition, in terms of the construction of self-regulatory mechanism, although the Internet Financial Association has been established, but the industry conventions, self-discipline and other systems are not perfect, its role has not been fully played.

3. The Regulatory Experience of the Internet Finance in Developed Countries

3.1 The Regulation to Different Internet Finance Business Model in US and Europe

1. The third party network payment

(1) The United States: involve the third party payment business into the currency transfer business regulation

The regulation on the third party payment in the United States is functional regulation, regulatory focus on the transaction process rather than the institutions engaged in the third party network payment.

First, the legislative level. The United States has no special laws and regulations for the business of the third party network payment, just use existing regulations or supplementary provisions to be bound by law. In US the third party payment is regarded as a money transfer business, its essence is still an extension of the traditional payment services. The institutions engaged in the third party payment do not need to obtain a banking license.

Second, the level of regulatory mechanism. The United States adopts the regulation system of separate regulation of state and federal. The Federal Deposit Insurance Corporation (FDIC) is responsible for supervision of the third-party payment institutions, but it’s clearly defined that the state relevant regulatory authorities can make the provisions which applies to itself best, on the basis of not violating the state superior law.

Third, the deposit management level. American law clearly defines the precipitation funds on the third party payment platform as liabilities. FDIC stipulates that the third party payment platform must be deposited in the FDIC's interest free account of commercial bank. The interest generated by the deposit funds is used for the payment of insurance. FDIC regulates the deposit funds through the provision of deposit extension insurance.

(2) The EU: include the third party payment institutions to the financial enterprises to regulate

The EU regulation of the third party payment is to regulate the institutions, giving a clear definition of the third party payment agencies.

First, the legislative level. The EU requires that electronic payment service provider must be a bank, and non-banking institutions are required to obtain the banking institution related business license (complete banking license, Bank Limited business license or electronic money institutions license) to engage in third-party payment services. This also determines the legal status of the third party payment platform, that is, financial enterprises.

Second, the deposit management level. The EU stipulates that third party payment platform is required to set up a special account at the central bank, the deposit funds must be deposited in this account, these funds will be strictly supervised, to restrain third party payment institutions to diverse for other purposes.

2. Network Credit

(1) The United States: included in the securities industry regulation, focusing on market access and information disclosure

In the United States, the federal Securities and Exchange Commission (SEC) requires Internet credit platform to be registered as a securities broker, and define that the products sold by the Internet credit platform belong to securities. The higher cost to register with the SEC, prevents other potential market participants to enter, such as the registration of network lending platform Lending Club costs up to $400 million, the British largest net credit platform Zopa therefore gave up to enter the American market.

SEC focuses on if the net credit platform disclose information as required. Once the capital risk appears, as long as investors are able to prove that the key information in the specification is missing or erroneous, investors can through legal means recover the losses. In addition to register with the SEC, net credit platform also need to register on the corresponding state securities regulators. The registration requirements of state securities department is similar with the one of the SEC, but some states increased some personal finance related standards to investors, including minimum income, the maximum proportion of securities investment assets to the total assets.

(2) The UK: included into the category of consumer credit management, through industry self-regulation to lead the development of the industry

First, industry self-regulation. British Internet credit lagged behind the United States on the size and growth rate, but the industry self-discipline is strong. On August 5, 2011, the industry self-regulatory organization (British P2P Finance Association) was established. It includes the main three British net loan companies. It officially introduced the P2P finance platform operation guidelines in June 2012, proposed the nine basic principles P2P Finance Association members should meet, which played a good role in promoting the normative development and financial consumer protection of the whole industry.

Second, the government management. Britain adopts loose regulation on the network credit, lacking more rigid legal constraints except the Consumer Credit Law. In terms of business access, in Britain it needs to apply and obtain a credit license to set up a network credit company, but without the threshold limit of minimum capital. Laws provide for strict information disclosure system that the both sides of the credit need to identify the factors of interest rate, duration, etc. And it also made detailed provisions of the conclusion, performance and termination of contract, debt recovery, administrative adjudication, and judicial intervention. However, these regulations focus more on compliance management, mainly on the norms of the credit behavior of the borrower and the investors, there are few norms and constraints on the the lending platform providers.

(3) The EU: no special code regulatory constraints, refine regulatory requirements to safeguard the rights and interests of consumers

The network credit related legislation is mainly on the guidance documents of consumer credit, unfair commercial operation and condition. These guidelines made the provisions the information provided by the both sides before the credit contract transaction (for example, the cost of credit including all predictable taxes and fees) and obligations of all parties. It Includes the contents of the five aspects: only registered credit provider has the right to release credit advertisements through the network; there are additional disclosure requirements to release credit advertisements through the network; the disclosure requirements of network credit are more rigid than other forms of credit; consumers should have sufficient time to consider contract information and relevant explanation before the signing of credit contract, and can take these information materials away to compare with other products; there is provision that the borrower can revoke without reasons within 14 days.

3. Crowd funding

In 2012, the United States passed Jumpstart Our Business Startups Act (JOBS Act). It is designed to enable small businesses to meet the requirements of the securities laws of the United States, meanwhile more likely to attract investors and investment, to solve unemployment problem currently facing the United States. JOBS Act take loose actions on crowd funding, and made detailed provisions on the protection of the interests of investors.

First, the appropriate liberalization of the public to raise equity financing. Jobs Act clearly states that the financing platform who meets the following conditions does not need to register with the SEC to equity financing: the SEC registered broker acts as an intermediary; fundraiser each year through the network platform to raise no more than $100 million in funding. The investment amount of investors with income less than $10 million within the first 12 month shall not exceed $2000 or 5.0% of the annual income. The investment amount of investors with income more than $10 million within the first 12 month can be 10% of their income for such investment, but the limit is $10 million.

Second, protection of the interests of investors. JOBS Act proposed the corresponding requirements on the financing platform for financing and providing services, in order to protect the interests of investors. For fund raisers, JOBS Act defined the four requirements: the fund raisers are required the complete record in the SEC, and disclose required information to investors and intermediaries; do not allow to use advertising to promote the issuance; be restricted how to compensate for the promotion; must submit an annual report on business operation and financial situation to the SEC and investors. At the same time the act restrained the platforms from the business access, industry self-regulation, and the transfer of funds, risk disclosure, fraud prevention, consumer protection and other aspects.

4. Internet banking

Take the Internet banking (PayPal) regulatory practice in the United States as an example. Because the PayPal money market funds is operated by the independent entity non-affiliated to PayPal, and strictly abides by the regulations of the federal Securities and Exchange Commission (SEC) to operate and to be supervised daily. And the capital of the money market fund is not reflected in PayPal's balance sheet, so the authorities have no precedent to follow, take the policy to maintain the status quo and be relatively cautious, rather than make special laws to regulate.

3.2 The Different Regulation in Developed Countries

1. The United States: legislation as the core.

The United States has formed a relatively sound legal system consisted of market access, daily regulation and exit mechanism. In US there are no specialized regulatory agencies for the Internet Finance. It is the Office of the Comptroller of the Currency, the Federal Reserve and other regulatory authorities, and the National Credit Union Association and other industry self-discipline organizations that regulate in the performance of their duties within the scope of the relevant business regulation. In terms of regulation approach, take on-site inspection as the core and off-site inspection to complement. Due to the characteristics of the virtuality and digitization of Internet, on-site inspection will take specific measures considering business risk and the detailed issues, including the level, the number and frequency of checks of the regulation subjects of implementation of inspection. Off-site inspection is to take the basis of on-site inspection, regulators often take data analysis methods and other indirect examination of the relevant business, to the greatest extent to find the problems and deal with them, to ensure that the regulation is effective.

2. Britain: moderate caution.

Britain's regulatory approach is relatively simple, its Internet financial business is mainly regulated by the Financial Conduct Authority. In terms of regulatory principles, take moderate caution as the basic principle, apply the traditional banking regulatory approach to the Internet financial business, which reflects the inclusion and flexibility of the British legal system. At the same time, the constitution and system of the industry self-discipline organization highly constrain the members of the association, which plays a positive role in regulating the industry development, creating a fair competitive environment, and protecting the interests of financial consumers.

3. Germany: industry self-regulation.

Internet banking business is much maturer in Germany. It didn’t make new regulations because of the specific characteristics of Internet. Its regulation is the same with the one of the traditional financial services. According to the relevant provisions of the German Banking Act, the German central bank and the federal banking regulatory authority to cooperate with each other and regulate together. Germany's central bank is responsible for the making and implementation of monetary policy, and the federal banking regulatory authority is responsible for the release of administrative regulations. At the same time, the network media Association of the German industry self-discipline organizations, is authorized as a non-governmental organization to examine the contents of the German Internet, and to provide standards and recommendations for practitioners.

4. Japan: focus on overall effectiveness.

Japan's highly centralized financial management system for Internet Finance: the government departments are responsible for building a sound information security, law and other regulatory system, and the implementation of strict regulatory programs. Japan's financial services agency, the Bank of Japan, MITI, postal service, and the Ministry of justice and its affiliated institutions regulate in the performance of their duties within the scope of Internet Finance regulation, from the industry planning, risk management, information security, legal system and other aspects to promote the development of the whole Internet Finance industry. At the same time, the law made clear the responsibility system for the maintenance of the transaction order, and formulated the disciplinary measures against fraud, tax evasion, money laundering and other illegal acts related to the protection of financial consumer rights and interests.

3.3 The Characteristics of Regulation of the Internet Finance in Developed Countries

1. Focus on improving relevant laws and regulations

From the level of system design include the Internet Finance into the category of legal constraints. Regard the legitimacy of financial behavior as the most basic requirements of the Internet financial services and this was regarded as an important basis for the development of Internet Finance. Based on the existing banking supervision system, combined with the characteristics of Internet virtualization and digitization, through supplement or amending the law to make the original regulatory rules adaptable to innovative change brought by the use of Internet technology to the financial industry.

2. Play the role of industry self-discipline groups

In a transparent legal environment, adhere to the principle of moderation and protection of consumers, and emphasize the network reliability and security. Such a regulatory approach often needs less regulatory resources, and the rigid or legal constraint to the Internet Finance is weak. And by giving the industry self-regulation groups a certain regulatory functions, to promote the overall development of the industry.

3. Emphasize the information disclosure and transparency

There is strict registration audit access system for the Internet Finance enterprises. Strictly review the authenticity of the reporting information, provide the mandatory disclosure obligation of significant information of the operators of Internet Finance enterprises, maintain the financial transactions information symmetry, and fully protect the right to know of financial consumers.

4. Focus on information security protection

In the orientation of market, with the technical support as the core, build a comprehensive and efficient information security strategy. Apply the encryption, electronic signatures and other technologies to the Internet financial transactions, improve the public infrastructure, and maintain the privacy of financial consumers.

3.4 Implications for China's Internet Financial Regulatory Policy

1. Establish and improve relevant laws and regulations

Improve the existing legal system as soon as possible, from the legal level define the business scope of Internet Finance, and determine the development direction of Internet Finance, to regulate the development of Internet Finance industry. Modify and improve the supporting rules and regulations related to the Internet Finance. For example, the Internet financial enterprise information disclosure system, the financial consumer rights protection measures, the trader's online identity authentication methods, electronic contract validation criteria and other aspects of the rules and regulations.

2. Build an effective regulatory system

The People's Bank of China, the China Banking Regulatory Commission, the China Securities Regulatory Commission and the China Insurance Regulatory Commission shall effectively play the role of the inter-ministerial joint meeting of the coordination of financial supervision, strengthen the joint supervision of financial conglomerate. According to the Internet financial business model and the type of related risk, implement departmental classified regulation, carry out their duties. Attach importance to the industry self-discipline. Financial regulation department can strengthen communication and contact with microfinance industry, banking, securities, insurance industry associations, Internet marketing alliance and other industry associations and self-discipline organization. With the help of the binding force of the industry association, to further standardize the behavior of Internet financial operators.

3. Speed up the construction of social credit system

Expand credit system data acquisition range. Based on the People's Bank credit system, include the credit information of Internet Finance platform, including transaction records, payment records and records of evaluation, to the scope of the collection of enterprise and individual credit information database. Expand the connotation of the social credit system, based on the establishment of the basic industry standards and legal framework, to construct a complete credit system including credit system, registration system and information disclosure system. Promote the further development of the social credit system, and lower the risk caused by the virtuality of Internet Finance.

4. Strengthen the protection of financial consumer rights

Promote the popularity of Internet financial knowledge, strengthen risk education, increase public Internet financial literacy efforts, and guide consumers to establish a correct investment philosophy, improve the risk prevention awareness of investors. Improve internet financial consumer rights and interests protection mechanism, establish a unified Internet Finance complaints mechanism. And establish the online dispute mediation mechanism because the Internet banking business operators and the consumers may not be at the same geographical place.

4. Proposals on the Innovation of Regulation of Internet Finance in China

4.1 The Innovation Framework of Regulation of Internet Finance in China

4.1.1 Regulation Objectives

At the present stage, the target of financial supervision can be divided into the overall target and the specific target. The overall objective is to prevent and defuse financial risks, to maintain the stability and security of the financial system; to improve the protection of fair competition and financial efficiency, to ensure the steady operation of China's financial industry and the effective implementation of monetary policy. The specific objectives include: the safety of operation, the fairness of competition and the consistency of the policy. Throughout the developed countries of the financial supervision of Internet experience, whether the strength of the regulatory boundary and mandatory, regulators stressed the identity authentication and information disclosure on transactions on the Internet platform, in order to protect the transaction information transparency and fairness. China should learn from this regulatory concept to determine the regulatory objectives, by increasing the transaction information to fully back up and real name system and other ways to protect the interests of financial consumers. This paper argues that in the traditional target framework of sticking to guard against financial risks, and improve the financial efficiency, Internet Finance supervision objectives can be summarized as: to encourage financial innovation, to supervise the market to build compliant Internet Finance platforms, to balance the Internet financial innovation and supervision, to protect the financial interests of consumers, to prevent and resolve the financial systemic risk of diversified development, to maintain confidence in the financial market and fair competition environment, to realize the healthy development of the financial industry as a whole, and to effectively promote the scientific and sustainable development of entity economy.

4.1.2 Regulation Principles

What will be the future of China's Internet Finance industry? The answer is in our own hands. On the one hand, it depends on the unremitting exploration of the enterprises and the self-discipline of the whole industry; on the other hand, it also needs the guidance of laws and regulations and regulatory agencies. For the new thing Internet Finance, financial regulation in general should reflect the openness, inclusiveness and adaptability, also adhere to the encourage and regulate, emphasize both cultivation and risk prevention, and simultaneously, maintain good competition order, promote fair competition, construct the safety net including market discipline, judicial intervention and external supervision, to safeguard the steady operation of the financial system. Adhering to this idea, this paper proposes twelve principles of Internet financial regulation, and tries to provide a foundation and starting point for the discussion in this field in the future.

Principle 1: Internet financial regulation should reflect the appropriate risk tolerance

Different with the innovation of financial derivatives to adapt to changes in demand, Internet Finance is mainly a kind of financial innovation to adapt to changes in supply (the development of information technology). It is the development and application of Internet technology that give birth to the Internet Finance. Internet Finance helps to better serve the real economy and financial consumer. For such a kind of new financial format, financial supervision needs to leave a certain space of trial and error, premature and strict regulation will inhibit innovation and not conducive to improving the financial efficiency as a whole. American economist Slipher believes that any institutional arrangements need to balance between the two social costs of the “disorder” and “authoritarian”. “Disorder” refers to the increase in the social cost because of private harm to others, and the “authoritarian” means that the government or officials harm private interests and lead to the increased social costs. If P2P and crowd funding business models can adhere to that the single deal amount is small, number of involved people is small, and then it should be standardized by private order, industry self-discipline and judicial norms. The natural withdrawal of P2P without regional and systematic impact, is a market self-elimination and restraint mechanism. Although it may not be a good thing to the transaction parties, but for the long-term development of the Internet banking it is not necessarily a bad thing. On the other hand, the overall risk of Internet Finance industry should be in the controllable range, we can find the way in the exploration, but cannot lead to systemic financial risks, making a fatal mistake. Therefore, the good practice of Internet financial regulation should be: to encourage innovation, to standardize the development, not only to avoid excessive regulation, but also to prevent major risks.

Principle 2: implement dynamic proportional regulation

Financial regulation in both Chinese and English is a very vague concept, need to be further clarified. In fact, from loose to strict, financial regulation can be divided into four levels. The first level is the market self-discipline, by the financial enterprises and industry associations to release self-discipline guidelines, mainly to take the way of voluntary implementation. The second level is registration, the relevant departments through the registration can be timely grasp of the relevant body of information. The third level is the supervision, continuous monitoring of the operation of the market or institutions, if it is not necessary do not take direct regulatory measures. The fourth level is the most stringent prudential regulation, put forward capital, liquidity and other regulatory requirements to the relevant agencies, and has the right to conduct on-site inspections. In addition, the law itself also has a regulatory role in regulating the behavior of market players, can be regarded as a generalized form of regulation. In violation of the law, the judicial organ shall be responsible for the handling. A typical example is that in Hong Kong the police department is responsible for the supervision of small loan institutions.

According to the development, the impact of the extent and level of risk of the Internet Finance, the relevant financial regulatory authorities should regularly evaluate the social and economic impact and risk level of different Internet financial platforms and products, according to the results of the assessment to determine the regulatory scope, mode and intensity, to implement classified regulation. For the ones with small impact and low risk, take market discipline and registration regulation; for the ones with high impact and risk, we should involve them into the regulation scope, take the most stringent supervision, in order to build flexible (rather than rigid), targeted and effective (rather than general and ineffective) system of Internet financial regulation. It should be noted that the assessment should be carried out on a regular basis, the regulatory approach also depends on the assessment results to adjust dynamically.

Principle 3: combination of the principle-based regulation mode and rule-based regulation mode

In the principle-based regulation mode, regulatory authorities mainly guide the regulatory objects, only concern if the ultimate goal of regulation can be realized, generally not put forward so many detailed requirements to the regulatory objects, less intervention or to interfere with specific business. While in rule-based regulation mode, the regulatory authorities mainly make detailed provisions on the business content and procedures of financial enterprises based on the provisions of the law, and enforce the strict implementation of each institution. It belongs to the process control regulation, require regulators respectively for different organizations and agencies operating at different stages, different products and different market to develop detailed rules, and according to the compliance of regulatory object to take corresponding measures.

Both the principle-based regulation and rule-based regulation have advantages and disadvantages, in the

Internet financial regulation they should be closely combined with each other, to complement each other. On the one hand, Internet financial regulation must be based on a clear regulatory objectives, to achieve the principle of the first. The regulation principle should fully reflect the characteristics of the business model of Internet Finance, to the industry to provide the necessary space for innovation, and at the same time to guide and restrict operators to bear the necessary responsibility for the consumers and society. On the other hand, based on the combing of the Internet financial main risk points, mainly in order to prevent and control regional and system risk and to strengthen financial consumer protection, to formulate necessary regulatory rules to the business formats and transactions with high and frequent risk, prior to be standardized. The combination of the principle-based regulation and rule-based regulation will help to achieve a good balance between the maintenance of the market vitality of Internet Finance and the risk control, and to promote the sustainable development of the Internet Finance.

Principle 4: prevent regulatory arbitrage, and focus on regulatory consistency

Regulatory arbitrage refers to that the financial institutions use the differences of regulatory standards or fuzzy zone, to select the relatively loose standard to develop business, in order to reduce regulatory costs, avoid control and obtain excess returns. Before the outbreak of the international financial crisis, whether in academia, industry, or the policy sector, regulatory arbitrage is a neutral term. After the crisis, the global regulatory agencies made profound retrospections on the shadow banking and other regulatory avoiding actions, and marked the regulatory arbitrage negative. The main reason is that it is not conducive to fair competition, disrupt the market order, and impair the effectiveness of regulation. For the developing countries, the more serious thing is that it will damage the credibility of regulation.

The payment, lending and other services provided by the Internet financial institutions are similar to the traditional financial ones. If the regulatory standards for financial services or products with similar financial functions are different, it will easily lead to regulatory arbitrage and unfair competition. As a matter of fact, there are more and more licensed financial institutions to complain that why they are regulated differently when they are running the same payment or loan business. In order to ensure the effectiveness of regulation, and maintenance of fair competition, in the design of Internet financial regulatory rules, we should guarantee the two consistency: one is whether Internet companies or traditional licensed financial institutions, as long as the financial business is the same, in principle they should be subject to the same regulation; the second is for Internet financial companies, the regulations to the online and offline businesses should have consistency.

Principle 5: pay attention to and forestall systemic risk

The development of Internet Finance has a dual effect on the systematic risk, which should be the focus of financial regulatory agencies. On the one hand, the development of Internet Finance helps to reduce systemic financial risks: (1) May by increasing the supply of financial services, reduce the dependence of real economy on the traditional financial system. (2) Through the introduction and promotion of large data analysis, it helps to reduce information asymmetry, and improve the overall effectiveness of risk management. (3) Improve the efficiency of resource allocation, and promote the sustainable development of the real economy.

On the other hand, the Internet Finance may also amplify systemic financial risks through a number of channels. Mainly: (1) to reduce the value of the franchise of financial institutions. Franchise value cannot be cash in short term. It must be obtained for a long time of continuous operation by financial institutions, which is equivalent to an additional long-term equity of licensed financial institutions. Theoretically it helps to reduce the moral risks of financial institutions. American research shows that the development of shadow banking has reduced the value of the license of commercial banks in the United States, which led to the issuance of a large number of high risk subprime housing loans, and eventually led to the subprime mortgage crisis. Internet financial access threshold is low, which may make a large number of nonfinancial institutions involved in the financial business in a short time, to reduce the value of the franchise value of financial institutions, to increase the motivation of financial institutions to venture business. (2) Information technology risk. Network security is the key and difficult point of the Internet Financial sound operations. Technical vulnerabilities, management deficiencies, human factors and natural factors all may endanger the safety of the network. For example, the factors of downtime or hacker attacks results in transaction payment system outage, and Internet financial business does not have a disaster recovery processing and emergency treatment ability, resulting in business continuity is damaged or paralyzed. The rapid processing functions of Internet technology, provide convenient and quick financial services, but at the same time speed up the accumulation of relevant risks, the system is very easy to form a risk. (3) There are risk contagion between Internet financial enterprises and traditional financial institutions due to business associations and reputation risk. Bank regulators have carried out risk warning. (4) Liquidity risk specific to certain business models. For example, the Internet direct marketing fund could trade in 7 days every week, and in 24 hours every day, but money market funds have fixed transaction time, the third-party payment agencies launching Internet direct marketing fund need to take the overnight market risk and liquidity risk, this kind black swan event of “small probability and big loss” has important influence on the success or failure of this kind of financial model on the Internet and even the whole financial system. For the above systemic risks, financial regulators should maintain a high degree of alert, timely resolve and intervene.

Principle 6: data monitoring and analysis in the full range

Data monitoring of the full range is the premise of understanding the risks and taking the necessary regulatory action if need. In the era of big data, a large number of data accumulation and the improving capability of data processing lay the technical foundation for the development of Internet Finance. For example, relevant companies start from the Alipay customers' characteristics of scattered, small single deal volume and relatively stable flow, make full use of big data technology, make deep data mining analysis on payment rules and the factors that will affect the money fund liquidity especially like the "big promotion" and pre-holiday consumption, estimate the liquidity of capital, to promote the safe operation of Yuebao mode. In fact, the big data also provides the means for the implementation of the full range of data monitoring and analysis, and to strengthen the identification, monitoring, measurement and controlling of Internet financial risks. For regulators, timely access to enough information especially data information is the basis and the key to understand the Internet financial risk picture, is an important means to avoid regulatory loopholes and prevent the regulation "black hole". Thus, regulators need to propose the definition of indicators, statistical scope, frequency and other technical standards of data monitoring and analysis based on the good practice of the industry. Such as the periodic and real-time reporting and analysis mechanisms of operational indicators and risk indicators designed for the P2P platforms. In the process of building a data monitoring and analysis system, we should pay attention to maintaining enough flexibility, continuously improve on the basis of regular assessment, to capture the new risks timely.

Principle 7: crack down on Financial Crimes

Apart from caring and protecting the innovation and inclusive nature of Internet Finance, we must promptly punish all kinds of financial crimes, and effectively maintain financial order. At present, the development of Internet Finance is uneven in quality. A few Internet companies in the garb of the Internet's coat, are doing the traditional financial business without licensing and generally haven't built the data acquisition and analysis system during operation, even some of the platform enterprises challenge the bottom line of the law. For example, a considerable part of P2P enterprises separate themselves from the intermediary function of the platform, first in the name of the platform obtain funds and then do the funds dominating or even use the funds for other purposes. The investor and the borrower do not directly contact, which has broken through the traditional P2P lending category, and evaluate to illegal fund-raising. Therefore, we must continue to track the development and the evolution of the business model of Internet Finance, draw the boundaries between the various business models and the illegal and criminal acts like illegal fund-raising, illegal absorbing public deposits, illegal public issuance of stocks and bonds, and fraud. Timely make clear legal and regulatory red line, crack down on Financial Crimes according to the law, to promote the orderly, healthy and sustainable development of Internet Finance. Apart from fighting against financial crime, it should be considered to amend some of the legal provisions advancing with the times to support the healthy development of Internet Finance. In the United States, for example, the Jumpstart Our Business Startup Act (the JOBS Act) is through amendments to the provisions of the law that the required number of shareholders who need to register with the SEC and disclose the financial information publicly increased from over 499 to 2000, to encourage small businesses in US to do the public financing.

Principle 8: strengthen information disclosure and market constraints

Information disclosure refers to the act that the Internet financial enterprises perform the obligation of informing the operational information, financial information, risk information and management information to stakeholders of customers, shareholders, employees and intermediary organizations. Timely, accurate, relevant, sufficient and combinative of qualitative and quantitative information disclosure framework is pretty helpful. Firstly, it is helpful to enhance the transparency of the operation and management of the whole Internet Finance industry and single enterprises, to allow market participants to get timely and reliable information, and then assess the Internet financial business and the inherent much better, play a good role of external supervision of the market, and promote the Internet financial enterprises to standardize the management. Secondly, it is helpful to enhance the trust of financial consumers and investors, to lay the foundation for the sustainable development of the Internet Finance industry. Thirdly, it helps is to avoid regulatory agencies because of lack of information, and lack of understanding of the operations and risk situation of industry, to publish inappropriate regulatory measures, and excessively suppress the development of Internet Finance. The foothold to strengthen information disclosure is to take industry self-discipline as the basis, to establish the statistics analysis system of various Internet Finance subdivided industries, and to reach a consensus on the index definition, content, frequency and scope of the information disclosure. At present, the starting point to enhance the transparency of the Internet Finance industry if the financial data and risk information transparency.

Principle 9: Internet financial enterprises and financial regulators should maintain a good, smooth and constructive communication

Good, smooth and constructive communication between Internet financial enterprises and financial regulatory agencies is an important way to enhance mutual understanding, eliminate misunderstanding and reach consensus. On the one hand, Internet financial enterprises should take the initiative to communicate with regulators, and strive to reach understanding and understanding on the business model, product characteristics, risk identification and other difficulties encountered in the development of the industry. Especially for what is not clearly defined in the law, communicate with the relevant departments in a timely manner, and strive to avoid legal risks. In this process, promote the gradual improvement of the rules of the industry. On the other hand, constructive communication mechanism helps to promote regulatory authorities according to the incentive and compatible principle to design regulatory rules, fully recognize the specialty of Internet financial enterprises in operation and internal risk management, promote the consistency of regulatory requirements and industry risk internal control requirements, improve the pertinence and effectiveness of the rules, and reduce corporate compliance costs.

Principle 10: strengthen consumer education and consumer protection

To strengthen consumer protection is an important goal of financial regulation, is also the focus of the Internet Finance regulation of many countries. Strengthening Internet financial consumer education, helps the public to understand the Internet financial products, enhance the Internet financial risk awareness, and enhance consumer confidence in Internet Finance. In fact, the good development of the Internet Finance is helpful to solve some of the difficulties of financial consumer protection. For example, in the sale of financial products, the traditional financial institutions often have the problems that the sales staff exaggerate the proceeds, mislead sales or risk warning is not sufficient. While for the Internet sales of approved financial products, usually we don’t meet the customers, as long as the customer read the content of related product information and tips of risks and click on the “reading risk warning, and agreed to accept”. If the disclosure of return characteristics of online sales of financial products is comprehensive and accurate, risk warning is attentive enough, it can effectively protect the financial interests of consumers, and effectively manage and control the compliance risk of financial products sales. The focus of China's Internet financial consumer education is to guide consumers to strengthen the understanding of Internet Finance, to clarify the difference between Internet financial and traditional financial business, and to be aware of the main properties and risk of the Internet financial services and products. What’s more, safeguard the legitimate rights and interests of financial consumers in the Internet financial products and business management, including lenders, borrowers, payers, and investors. The focus of financial consumer protection is to safeguard the confidential customer information, to safeguard consumer information security, and to increase the regulatory and combat efforts to the all types of infringement of consumer rights and interests according to the law. For example, aimed at the problems of fraud, theft of funds, and information security without being guaranteed in the third party payment transactions the consumers are faced with, we should strengthen risk warning specifically, and in a timely manner take mandatory regulatory measures.

Principle 11: strengthen industry self-discipline

Industry self-regulation is that in order to protect and promote common interests, the professional organizations and personnel of the same industry organize to make rules together on a voluntary basis in accordance with the law, to restrict the their own behavior and realize the industry self-management. There are two basic elements: first, the self-discipline is derived from the common interest; second, the makers of the rules are also the practitioners at the same time. Compared to government regulation, the advantages of industry self-regulation lies in: scope and space is greater, the effect is more obvious, and the consciousness is stronger and so on. For the new financial format Internet Finance, the industry self-regulation is essential. At present and in a period time of the future the degree and effect of industry self-regulation, and whether the development of the industry is ordered or unordered, will affect regulatory attitude and strength in a large extent, which also affect and even decide the future development of the Internet financial industry. Therefore, the industry leading enterprises must play the initiative, as soon as possible be the first to make self-discipline standards, establish industry internal complaint handling mechanism, and do not blindly wait for the mandatory intervention of the government. Recently established Internet Banking Association should play a role and influence as soon as possible on the aspects of making rules and standards in the development of the Internet Finance industry, and guiding the healthy development of the industry. Especially, should establish legal compliance management awareness in the whole industry, strengthen the all types of risk control ability of the industry, including: customer funds and information security risk, IT risk, risk of money laundering, flow and payment risk, legal risk, and so on.

Principle 12: strengthen regulatory coordination

Internet Finance involves across a number of industries and markets, there are a wide range of transactions and many participants. It cannot be separated from effective regulatory coordination to effectively control the risk infection and proliferation, and promote sustainable development of the industry. First, through the existing coordination mechanism of financial regulation, strengthen inter departmental Internet financial information sharing of operations and risks, communication and coordination of regulatory positions. Second, focus on the cracking down Internet financial crime, strengthen the coordination and cooperation between the judiciary and financial regulators. Third, strengthen coordination and cooperation between financial regulatory authorities and local governments, to maintain the financial stability, hold the bottom line of without regional and systemic financial risk. At present, increasing the intensity of information sharing and position coordination is an important part of strengthening the regulatory coordination of the above levels.

4.2 China's Internet Financial Regulatory Innovation Path

1. Improve the Internet financial regulatory laws and regulations

At present, China has already set up the CPC central network security and information technology leadership team. So we can take the leading group as the main subject, from a strategic height to make the development plan of China's Internet Finance, and to make a series of important matters clear including Internet operation mode, business boundary, mechanism of examination and approval, and the competent departments. And by making the detailed research on the provision and use of funds, compliance management and control measures to standardize its development.

Firstly, to improve traditional financial institutions regulations: to rebuild the regulatory system, indicators and means of supervision for the Internet financial business involved by traditional financial institutions, to establish dynamic monitoring mechanism, and to take strict precautions against the risk.

Secondly, to improve the legal system of Internet Finance. Through formulating the supervision and management law of the Internet Finance to clarify the principles of Internet development, mode, regulatory duties and legal responsibilities. On this basis, for the different objects of network lending, crowd funding, payment platform, and financial big data to establish laws and regulations and the detailed implementation rules, formatting a large and unified system of laws and regulations of the Internet Finance. At present, it is not mature for China to formulate special legislation of Internet Finance. It may be considered to amend, complement and improve the financial regulations by adding in Internet financial regulations.

Thirdly, to reshape the industry standards. For the key technological segments to guarantee the financial security and information security like network technology interface standard and identity authentication, to fully investigate the existing international certification standards and industry standard, and then to supplement and improve them, especially to accelerate the construction of the center database and to avoid dependence on key technologies.

2. Improve the mechanism of the Internet financial regulatory system

Firstly, to promote the construction of the financial market price mechanism. To accelerate the reform of interest rate liberalization and exchange rate formation mechanism, and improve the financial market price means to guide the reasonable competition in the financial market.

Secondly, to improve the financial market exit mechanism. To establish and improve the market exit mechanism for traditional financial institutions and Internet financial institutions, and protect financial consumers' rights and interests and maintain financial market stable.

Thirdly, to clear the relationship between the Internet banking and traditional banking industry from the policy level, define the scope of their business, establish a “firewall” between them, and strengthen dynamic monitoring to the Internet financial products and early warning mechanism, to prevent the risk of infection and spreading.

Fourthly, to establish a classification collaborative regulatory mechanism. The current Internet financial model, is namely the third party payment, P2P, the crowd funding, Internet banking, and Internet insurance business. Their content and model both have different characteristics. In China, the regulatory system is made up of one bank and three commissions. It is supposed to clear and definite the subjects in accordance with the content of every different Internet Finance business. At present, the official view is more inclined to be that, the third party payment is supervised by the People's Bank of China, P2P supervised by the China Banking Regulatory Commission, the crowd funding supervised by the China Securities Regulatory Commission, Internet Insurance business supervised by the China Insurance Regulatory commission. And Internet banking has both the characteristics of the deposit and the fund investment, its subject has a greater uncertainty, thus it is still not certain if supervised separately by the China Banking Regulatory Commission or the China Securities Regulatory Commission, or supervised by two commissions together. In addition, as Internet Finance needs the IT technology to support, it is imperative to involve the Ministry of Industry and Information Technology and Internet Security Department into the collaborative regulatory subject, and especially to develop a data transmit system used by regulatory institutions and Internet financial businesses. On this basis, it is supposed to fully seek the Internet financial regulatory cooperation with other countries, to unify standards and to improve the effectiveness of supervision.

3. Enhance the specific risk supervision of the Internet Finance

Place emphasis on the risk supervision of the Internet Finance. Clearly state that illegal fund-raising is banned and define the bottom line. Put the technology risk management and operational risk supervision a more important position.

On the one hand, guide to improve the design and application of Internet financial enterprise software and hardware equipment, and supervise its reasonable choice. On the other hand, through the innovation of regulation technology to improve the level of scientific and technological risk regulation.

Develop and apply the real-time intelligent surveillance early-alarming system, via technical rules to monitor and screen the transactions, prompt, with manual verification, eventually lock the transaction risk, control the risk accounts. Change from afterwards-supervision-oriented to prevention-and-monitoring-oriented, so as to improve the risk prevention and control more targeted and effective. As for the trade behavior regulation, through the application of the big data in terms of security, the large number of behavioral state records of mobile and online payment is stored in the cloud server, comprehensively and continually judge the transaction behavior of both sides, which can effectively reduce the risk.

At the same time, to establish the corresponding risk sharing and compensation mechanism for the business of credit transactions and leveraged finance business. Clearly define the compensation responsibility of the legal person and shareholders of the Internet Finance enterprises, involve the financial sector and the third party guarantee institutions into the financial contribution category, and dock with small micro enterprise risk compensation fund, to get the maximum realization of compensatory risk and reducing the loss of rights and interests of investors and consumers.

4. Promote the Internet financial regulatory infrastructure and environmental construction

Firstly, strengthen the social credit constraints. Improve the market position of social credit intermediaries, through the services of paid credit report and network query to guide it develop orderly, query in the network services, and guide the development of norms, give full play to the complementary role of intermediaries in the credit rating, credit counseling letter certification and credit counseling services, gradually reduce the risk caused by openness and virtuality of the Internet Finance. Continue to improve the credit system of the People's Bank of China, make use of the characteristics of Internet Financial inclusion to enhance public financial participation, and lay the foundation for the basic data collection, arrangement and standardization of enterprise and individual credit record.

Secondly, actively offer Internet Finance policy tilt. Local governments should play a leading role in supporting the development of Internet Finance via local policy and financial support. For example, offer substantial exemptions and concessions of business tax and income tax, allocate funds to establish micro finance risk compensation funds or bridging funds, implement list management of high-quality small and micro enterprises and agriculture with strict audit screening system, in order to guide Internet financial companies adhere to the "grassroots" financial position, and committed to building an inclusive financial system.

Thirdly, enhance the role of industry self-regulation. Internet Financial Industry Association as supplement of legislation and market regulation, undertake the regulatory function of “quasi government agency”. It should effectively improve the Convention, advocate fair competition, standardize and guide the behavior of Internet financial institutions, to create a good market environment and order.

5. Build a new type of financial consumer protection and supervision mechanism

Firstly, strengthen the responsibility of market players to protect the rights and interests of consumers. Regulators should establish special department or special job for the Internet financial consumer rights and interests protection, full-time responsible for Internet financial consumer protection and the rights, so that there is somewhere to complain to when the Internet financial consumer rights and interests are infringed. The public security organization should announce the cases involving network financial crime and fraud to the public via television, newspapers, wechat and other media. Banking and self-regulatory organizations should strengthen the protection and education of consumer rights and interests, to undertake more social responsibility.

Secondly, strengthen information disclosure. Internet financial institutions should be subject to strict information disclosure rules, in accordance with the principle of “costs can be considered, risk can be controlled”, disclose the product terms, establish the online copy and electronic validation rules, to guarantee buyer's voluntary and seller's responsibility. And regulatory departments should discover regulatory loopholes promptly through information disclosure and financial consumer complaints, and call for timely rectification.

Thirdly, strengthen the means of rights. Establish compensation mechanism and litigation mechanism for financial consumers. After the international financial crisis, the United States extended litigation rights originally only allowed to stock investors collective now to most of the financial consumers, provides that consumers who encounter fraud of financial products can complain the banks, securities firms and insurance companies, after winning the consignment will also bear the joint and several liability. The lawsuit mechanism can be applied in Internet Finance consumer protection. At the same time, consumers can claim compensation if they encounter the misleading consumption, exaggerated propaganda, fraud and other issues when buying financial products. (In real life, some “quasi fraud products” of Internet financial institutions are difficult to be found by regulators).

Fourthly, make use of the Internet platform to enhance the information diffusion effect of financial consumer rights complaints. Financial consumers should enhance the awareness of their own rights and financial literacy. When their rights have been violated or they find financial risk, they should raise the sense of responsibility, use the power of the network of public opinion, timely release the information, to further expand the positive external effect of the consumer protection.

Conclusion

With the high improvement of Internet technology, the integration of Internet and Finance is the general trend, which gives birth to the Internet Finance. The Internet Finance develops so fast that the relevant regulation is lagging behind. With the efficient financial services and the good influence provided by the Internet Finance, there also pops out several specific problems of the Internet Finance industry. The Internet Finance is a new format of finance, it belongs to finance, but is also different from the traditional finance. So its regulation is also different from the traditional financial regulation. The Internet Finance industry of the developed countries is relatively maturer than the one in China. Through the analysis with the regulation characteristics in developed countries, and combined with the actual development and the problems faced of the Internet Finance industry in China, this paper puts forward several proposals about the innovation of Internet Finance regulation in China, including the regulation objectives, regulation principles and regulatory innovation path, hoping to bring some inspirations for the further work in regulation practice or research.

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Summary

The rapid development of Internet technology and the rapidly growing popularity of innovative thinking of the Internet make it possible for active integration between various industries and the Internet. The integration of the finance industry and Internet generated the Internet Finance. The Internet Finance refers to the new financial business model that the traditional financial institutions and Internet companies use Internet technology and information and communication technology to realize the functions of the financing, payments, investments and information services.

The trend of deep integration of Internet and finance, which has a more profound impact on the financial products, services, organizations and services, is becoming a hot topic in the financial research field. In recent years, thanks to the development by leaps and bounds of cloud computing, big data and network security technologies, the emerging of innovative thinking and the appropriate liberal environment, the Internet Finance is developing extremely rapidly in China. The Internet Finance provides more efficient and better financial service to the public, achieving a dream of more inclusive finance. But in the development process, there have been a variety of problems, and the cognition and practice to the risks and regulation is lagging behind. So it seems quite necessary to study and research its development and existing problems in order to find a better regulatory approach. The Internet Finance business in Europe and the United States developed earlier and faster than China. It is helpful to study the foreign experience of regulation, which can better help provide ideas and suggestions for the innovation of the regulation of the Internet Finance in China.

To propose innovative suggestions of the regulation of the Internet Finance in China, firstly I will study and analyze the development status and mode, and existing problems of the Internet Finance in China. The emergence and development decide the possible specific regulatory requirements of the Internet Finance. Secondly, I will focus on to research the necessity, current situation and dilemma of the regulation in China using factual evidence. Suggestions could not separate from the current situation. The current situation and dilemma is both the limitation to innovation and a help to guide the direction of regulatory innovation.

Then, I will study and reference the regulatory experience of the developed countries. It is important to study the successful practice and learn lessons of the failed or imperfect aspects from the relatively advanced countries in Internet Finance.

Finally, I will try to propose suggestions on the regulatory innovation from the regulation objectives, principles and innovation path, based on the reference to the foreign experience and the combination with the domestic current situation.

The Rise of the Internet Finance

The emergence and development of anything are inseparable from the push of social demand and technological progress. The Internet Finance is the same. The rise of the Internet Finance is the inevitable result of the pushing of social needs and development of the era, with its profound humanities, social and technical background.

Firstly, advances in information and network technology provides a technical background for the rapid development of the Internet Finance. Secondly, the Internet thinking promoted the development of finance. Thirdly, the rapid development of the virtual economy especially e-commerce provides an economic background for the development of the Internet Finance. Then, changes in lifestyle and trading habits of the residents provide the humanities background for the rise of the Internet Finance. Finally, the innovation accumulation of many new financial services model like third party payment, P2P and crowd-funding provides the historical background for the Internet Finance's meteoric rise.

The Trend of the Internet Finance

1. The Internet Finance developed rapidly.
2. The Internet Finance filled the gaps in the traditional financial industry.
3. The Internet Finance model is flexible and diversified.
4. The Internet Finance business is wide and large.

The Business Model of the Internet Finance

The Internet Finance firstly rose in Europe and the United States, in recent years the Chinese market is developing rapidly, the development speed of the P2P lending business even greatly exceed the foreign "originator". The big differences between China's credit, system, and culture environment with developed countries in Europe and the United States also make these "imported" in China's soil appears some obvious alienation and innovation.

According to the different forms of business and clients, the Internet Finance business model in Europe and the United States can be divided into seven kinds:

(1) Third party payment

Outstanding representative is PayPal in US, mainly for online suppliers and auction sites to provide collection services, is currently the world's most widely used online trading tools.

(2) Internet banking

It can be divided into personal banking (such as Fundsdirect is Britain's first Internet fund supermarket) and community banking (such as LearnVest, is a financial community platform set up for specific customer groups (female) based on personal financial consulting, services and communication).

(3) Network financing

It mainly consists of crowd funding, small loans and P2P three models.

(4) Service platform

Such as, the LendingTree to search and compare consumer financial products, and Zillow, to provide the market information of real estate and mortgage.

(5) Credit card service

(6) Internet securities firms

Such as Schwab Charles, the largest online securities dealer in the United States, providing customers with a low price of online brokerage.

(7) Internet exchange

Such as Market Second, a platform to provide customers with transactions for restricted shares, bankruptcy claims, limited partnership interests, structured products (MBS, CDO, and ABS) and non-listed company equity transfer.

In China's Internet business, the most common mode called C2C (copy to China), that is to say when a kind of new mode of Internet services in the United States and other developed countries emerged, China will quickly appear corresponding version (for example, Yahoo! induced Sohu, Google induced Baidu). The development of Internet Finance in China also basically followed the rules, but at the same time, it also has its own unique innovation and development.

1. The payment platform based Internet financial model

2. The Financing platform based Internet financial model

(1) Crowd Funding

(2) Peer-to-peer lending

(3) Small loans

3. The financial management platform based Internet financial model

4. The service platform based Internet financial model

The Features of the Internet Finance

1. Internet Finance breaks the geographical and time constraints

2. Internet Finance makes fragmentation finance possible

3. Internet Finance has the advantages of high speed innovation, information openness and convenience

4. Internet Finance has the characteristics of low cost, low threshold and high income

The Comparative Advantages of the Internet Finance

The rapid development of the Internet Finance is largely due to some advantages the traditional financial institutions don't have. The advantages can be summarized as the following five aspects:

1. Customer experience is better.

Internet Finance can provide convenient services and interactive services anytime and anywhere when needed.

2. The operation is more efficient.

On the one hand, the application of the new technology of the Internet makes financial services can quickly find and respond to customer needs, and achieve efficient operation through intelligent operations. On the other hand, the Internet Finance greatly improves the capital allocation efficiency and reduces the cost of matching, which has been verified in Ali small loans, P2P and crowd funding financing field.

3. Information is more transparent.

Efficient data and information processing technology can alleviate or completely eliminate the information asymmetry between the two parties, and realize the effective organization, sort, search and match of the information.

4. There are more inclusive services.

On the Internet Finance platforms, there is open sharing of resources, and the groups of the small and micro enterprises, small businesses, farmers and students, who are not involved by the traditional financial enterprises, can also be treated fairly and enjoy the services. It not only makes up the weakness of traditional financial, but also effectively supports the development of the real economy.

5. It boosts financial development.

The development of Internet Finance forced the traditional financial services continue to explore innovative service model, to promote the financial sector to focus more on customer experience, convenience and efficiency, low-cost, and wide coverage.

Problems in the Development of Internet Finance in China

Internet Finance provides more efficient and better financial services to the public, achieving the general financial dream, but in the development process various kinds of problems arose. In recent years, the Internet Finance develops rapidly, as a new thing, due to the lack of industry experience, normative system and perfect regulation, along with the development various problems appeared inevitably.

1. Credit risk problem.
2. Technical risk issues
3. The issue of personal information leakage
4. The problem of false operation and fraud
5. The protection of the interests of dispersed investors
6. Transaction information security issues
7. The legal status of products and platforms

Risks and Challenges to Macroeconomic Regulation and Financial Stability

1. Increase the difficulty of the central bank financial regulation

In the Internet financial environment, on the one hand, the continuous expansion of electronic payment method increases the difficulty of the currency supply monitoring. On the other hand, the faster speed of capital flow makes the risk form more diversified, and the difficulty of the central bank to monitor financial risks and maintain financial stability is increased.

2. Challenge the current financial management system

At present, China takes classified financial regulation. The development of Internet Finance greatly exceeded the business scope of banking, securities and insurance business. The scope of transactions is expanding constantly, and transactions are increasingly diversified, thus it is difficult for classified regulation model to be an effective regulation.

3. Financial consumers' rights and interests are vulnerable

At present, China's Internet financial products and services are developed collaboratively by financial enterprises, but financial enterprises don’t have a good understanding of the risk characteristics of cross market and cross industry. So in the design of financial products and services, they tend to be inclined to protect the company's own financial interests. Overly complex cross financial products and services will exacerbate consumer’s disadvantage of financial information, which increases the risk of suffering loss because of purchasing products not suitable or accepting inappropriate service.

4. Increase the difficulty of anti-money laundering work

Internet financial capital flows is more difficult to monitor relative to the traditional financial business, coupled with the lack of relevant regulation, there is money laundering risk in the model of whether the third party payment, P2P network or crowd funding.

The Background of the Regulation of the Internet Finance

Internet Finance, namely, finance in the form of Internet, still belongs to the scope of finance in essence. It is relative to the traditional finance. Traditional finance places more emphasis on the direct contact and transaction behavior between financial institutions and their customers. Its platform includes counter and the entity institutions. It emphasize that money demand and supply sides complete the financial transactions via the entity of financial institutions as an intermediary, such as through paper text. While Internet Finance is the finance highly integrated with network, its biggest feature is that the capital demand and supply and the financial behavior subject search information and complete the transactions via Internet, which involves complex IT technology. The rapid development of Internet Finance makes it to a certain extent a certain degree of system importance, the problem caused by without regulation may exceed the hidden social costs of regulation. When the revenue brought by the regulation is higher and higher than the cost of the implementation of regulation, Internet financial regulatory innovation is imperative.

The Current Situation of the Regulation of the Internet Finance

1. The legislation of relevant regulatory institutions lagged behind, difficult to form a unified regulatory system

The strong innovative ability of Internet Finance makes its products, business mode and operating institutions emerge in an endless stream. Regulatory legislation cannot quickly include all Internet banking products. It is relatively difficult to establish a unified regulatory system. Regulators are unable to predict the possible risks before they are developed, so they pay close attention rather than take actual regulatory actions. Take the P2P industry which arose a lot of problems as an example, although Guidance on Promoting the Healthy Development of Internet Finance promulgated on July 2015 by People's Bank of China and other departments clearly stipulates the China Banking Regulatory Commission will regulate the P2P, but specific regulatory measures has still not been released. Table 2 is the relevant laws and regulations which have been promulgated and implemented in China.

2. The regulatory standing point of the traditional finance does not adapt to the Internet financial business

In traditional financial regulation there are many laws and regulations to ensure the stability and operational safety of the traditional finance, and it is clearly defined about illegal behavior in the process of financial operation, punishment measures and prevention. But it is not appropriate to apply these regulations directly to the emerging Internet financial business. Compared to the traditional finance, the business mode of Internet Finance is experiencing innovation constantly, the scope and the environment also continue to extend and change. The regulatory object and subject are far beyond the domain of traditional supervision system. The regulatory standing point of the traditional regulatory subjects is not applicable now. The cross and mix among industries of Internet Finance is much more complicated than the traditional finance. Its regulation requires new regulatory subjects and regulatory positions, in order to improve the regulatory efficiency and eliminate the regulatory vacuum.

3. It is hard to grasp the intensity of regulation of Internet Finance.

Market mechanism plays an incomparable role in the operation of the Internet Finance. Although administrative supervision can play a certain role, but it makes the market mechanism more efficient to regulate and constrain all type of market behavior of Internet financial enterprises through laws and regulations. But it is a big problem to decide how big the intensity of the legal supervision is and how freely to develop for the Internet Finance. If the intensity of legal supervision is too small, it cannot play a regulatory role, leading to growth of Internet Financial barbaric, threatening to the financial system and social stability. If too big, then the Internet Finance will be suppressed excessively, the development will be limited, affecting the economic development negatively. It is a difficult problem how to grasp the moderation of Internet financial regulation.

4. It is difficult to define the scope of Internet financial regulation.

Internet financial business data are transferred, exchanged and stored on the Internet, and its scope of business is constantly changing. After the business scope of the regulatory authorities is defined, the new business will force the regulatory authorities to continue to update the law. If the pace of legal updates is lagging behind the pace of the Internet financial development and innovation too much, it will lay latent danger in the financial development of the Internet, and may threaten the stability of the Internet financial system. At the same time, it is more difficult to monitor if a business or transaction behavior is illegal. Because in order to judge the legitimacy, we need to collect, review and demonstrate the transaction data, and transaction data is likely to be tampered with and fabricated, which increases the difficulty of regulatory agencies to judge.

The Dilemma of the Regulation of the Internet Finance

1. Internet financial risk regulatory content is more complex

Internet Finance is fragile in both finance and information. In addition to the traditional credit risk, Internet financial risks are more prominent in loss of customer funds risk, customer information disclosure risk and abnormal system operational risk. These risks are the more concrete manifestation of the traditional financial risks including legal risk, reputational risk, information technology risk, and operational risk.

2. The regulatory system has defects

From the point of view of the status quo of China's Internet Finance regulation, different types of Internet financial model is in different management condition, and fragmented regulatory or regulatory gaps and cross regulation coexist.

3. The regulation means are relatively insufficient

In the traditional financial regulation, the regulatory authorities regulate and inspect by the three major means of off-site supervision, on-site inspection and market access. However, these means are not applicable to the Internet Finance. For the off-site supervision, the Internet Finance business has not yet included in the off-site supervision system, it also has not achieved docking in technology, and the huge data of Internet financial enterprises will also bring off-site supervision heavy workload and increase the difficulty of off-site analysis. For the on-site inspection, the huge amount and complexity of Internet financial business make it difficult for on-site inspection, especially the uncertainty of capital flows. And it is hard to assess the rectification effect, and it is also difficult to guarantee the on-site inspection effect. In terms of market access, due to legal restrictions, we are temporarily unable to do the technical review for standards of admittance into industries and capital threshold.

4. The legal system of regulation is not perfect

First, the level of Internet financial regulatory laws and regulations is low. Second, The Internet Finance is technology intensive. From the interaction of system and technology, system tends to lag in technology and driven by technology, current existing laws and regulations cannot match the development of Internet Finance technology, such as big data and cloud computing. Third, the Internet Finance industry standards are not perfect. In addition, in terms of the construction of self-regulatory mechanism, although the Internet Financial Association has been established, but the industry conventions, self-discipline and other systems are not perfect, its role has not been fully played.

The Characteristics of Regulation of the Internet Finance in Developed Countries

1. Focus on improving relevant laws and regulations

2. Play the role of industry self-discipline groups

3. Emphasize the information disclosure and transparency

4. Focus on information security protection

Implications for China's Internet Financial Regulatory Policy

1. Establish and improve relevant laws and regulations
2. Build an effective regulatory system
3. Speed up the construction of social credit system
4. Strengthen the protection of financial consumer rights

Proposals on the Innovation of Regulation of Internet Finance in China

1) Regulation Objectives

At the present stage, the target of financial supervision can be divided into the overall target and the specific target. The overall objective is to prevent and defuse financial risks, to maintain the stability and security of the financial system; to improve the protection of fair competition and financial efficiency, to ensure the steady operation of China's financial industry and the effective implementation of monetary policy. The specific objectives include: the safety of operation, the fairness of competition and the consistency of the policy. Throughout the developed countries of the financial supervision of Internet experience, whether the strength of the regulatory boundary and mandatory, regulators stressed the identity authentication and information disclosure on transactions on the Internet platform, in order to protect the transaction information transparency and fairness. China should learn from this regulatory concept to determine the regulatory objectives, by increasing the transaction information to fully back up and real name system and other ways to protect the interests of financial consumers. This paper argues that in the traditional target framework of sticking to guard against financial risks, and improve the financial efficiency, Internet Finance supervision objectives can be summarized as: to encourage financial innovation, to supervise the market to build compliant Internet Finance platforms, to balance the Internet financial innovation and supervision, to protect the financial interests of consumers, to prevent and resolve the financial systemic risk of diversified development, to maintain confidence in the financial market and fair competition environment, to realize the healthy development of the financial industry as a whole, and to effectively promote the scientific and sustainable development of entity economy.

2) Regulation Principles

What will be the future of China's Internet Finance industry? The answer is in our own hands. On the one hand, it depends on the unremitting exploration of the enterprises and the self-discipline of the whole industry; on the other hand, it also needs the guidance of laws and regulations and regulatory agencies. For the new thing Internet Finance, financial regulation in general should reflect the openness, inclusiveness and adaptability, also adhere to the encourage and regulate, emphasize both cultivation and risk prevention, and simultaneously, maintain good competition order, promote fair competition, construct the safety net including market discipline, judicial intervention and external supervision, to safeguard the steady operation of the financial system. Adhering to this idea, this paper proposes twelve principles of Internet financial regulation, and tries to provide a foundation and starting point for the discussion in this field in the future.

Principle 1: Internet financial regulation should reflect the appropriate risk tolerance

Principle 2: implement dynamic proportional regulation

Principle 3: combination of the principle-based regulation mode and rule-based regulation mode

Principle 4: prevent regulatory arbitrage, and focus on regulatory consistency

Principle 5: pay attention to and forestall systemic risk

Principle 6: data monitoring and analysis in the full range

Principle 7: crack down on Financial Crimes

Principle 8: strengthen information disclosure and market constraints

Principle 9: Internet financial enterprises and financial regulators should maintain a good, smooth and constructive communication

Principle 10: strengthen consumer education and consumer protection

Principle 11: strengthen industry self-discipline

Principle 12: strengthen regulatory coordination

3) China's Internet Financial Regulatory Innovation Path

1. Improve the Internet financial regulatory laws and regulations
2. Improve the mechanism of the Internet financial regulatory system
3. Enhance the specific risk supervision of the Internet Finance
4. Promote the Internet financial regulatory infrastructure and environmental construction
5. Build a new type of financial consumer protection and supervision mechanism

With the high improvement of Internet technology, the integration of Internet and Finance is the general trend, which gives birth to the Internet Finance. The Internet Finance develops so fast that the relevant regulation is lagging behind. With the efficient financial services and the good influence provided by the Internet Finance, there also pops out several specific problems of the Internet Finance industry. The Internet Finance is a new format of finance, it belongs to finance, but is also different from the traditional finance. So its regulation is also different from the traditional financial regulation. The Internet Finance industry of the developed countries is relatively maturer than the one in China. Through the analysis with the regulation characteristics in developed countries, and combined with the actual development and the problems faced of the Internet Finance industry in China, this paper puts forward several proposals about the innovation of Internet Finance regulation in China, including the regulation objectives, regulation principles and regulatory innovation path, hoping to bring some inspirations for the further work in regulation practice or research.