

# An analysis on the current development and risk control of the internet financial of China

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## Abstract

The so-called Internet Financial is the usage of Internet technology to develop a platform for financial services. For finance development of the Internet, we have to see its innovation should also see its risks both, and focus on risk prevention. In this paper, the concept of Internet banking, characteristics, China's Internet presence and type of financial models were analyzed and summarized with deep analysis of the financial risk types of Internet, the market risk, policy risk, operational risk, security risk, and the risk of trading platforms, etc. And Case Study on P2P and Yu Ebao are to solve problems of how to control these risks by putting forward their own proposals and how the security measures are taken in two ways.

*Keywords:* internet finance, features, opportunity, the financing mode, risk control, risk response

## 1 Introduction

In June 13, 2013 Yu Ebao monetary fund attached to Alibaba was established. Just a month later, asset size has exceeded 1 billion Yuan, as of December 31, 2013. The balance of on-line treasure the fund scale has reached 18.5 billion and 30 million Yuan. This kind of speed, size directly stimulates the birth of more sub-products and makes the relevant innovation activities emerge in an endless stream. Various institutions have been involved in the enterprise: electronic Business Company, IT, mobile operators are also very active, and the evolution of a rich business model, blurred the boundaries between the financial and non-financial. In this paper, based on the characteristics of the current situation of the Chinese Internet financial development, we analyze its risks and opportunities, such as P2P. And we put forward the relevant suggestions of Internet financial compliance and the development prospect.

## 2 The concept and characteristics of internet finance

The Internet Financial blue book will redefined Internet Financial as Internet and financial function, relying on big data and cloud computing, financial form open, functional form on the Internet platform and service systems.

The Internet finance has the following characteristics:

1) The Internet finance is non-direct financing or indirect financing, but to go the third way, it relies on the Internet for financial integration. By essentially each "node" on the Internet that is Internet platform to achieve efficient docking client, enterprise, the third party.

2) The Internet finance is based on the long tail theory, which makes the Internet finance cover customer for those funds. Investment objective is not random, and this part of the customer is not the banks' target, because of the cost of human resources, a fixed place, office software. But the Internet Financial avoids these costs so it can be more flexible

to control this part of the resources.

3) From the product design level, the Internet is emerging from the demand side. The various needs of the grassroots society generated automatically out and become a product. But the traditional financial institutions were the first to design products, and then sold to investors after standardization related. This makes the Internet financial form more flexible and adjustable.

## 3 The internet finance mode

At present the development of various forms of China's Internet Financial are everywhere, which is going to displace the Bank Internet payment window. In general, the main form are P2P net loan financial model, Internet type monetary fund mode, crowd funding platform mode, and the third party payment platform mode.

First. P2P Net Loan Finance Mode

This is the aggregation of a small amount of money which will be dispersed through the network lending platform for needs of the population's business model. The company benefits by extracting from the lender and borrower about 2%-3% Commission. P2P net loans have extended the range of the traditional lending mode, to meet the needs of enterprise and individuals. Now the common practice is that P2P platform is online for financial services, provide lending related services online.

Since the beginning of 2006, the domestic P2P platform have gotten growth from 9 in 2009 to 110 in 2012. As of the first quarter of 2013 there were at least 132 P2P lending institutions, which have greater influence. In 2012, 16 home lending platforms' turnover rose from 1.94 billion Yuan to 16.97 billion Yuan, almost an increase of 7.75 times.

Second. The Internet Currency Fund.

In fact 'YuEbao' is a kind of Monetary Fund, but its sales channels turns from the traditional channels into Aliped, and the kind of investment is more flexible. In addition to

the sales channels of different things, there is no difference with other monetary fund from 'YuEbao'. The design of the product has very strong pertinence. It fully considers the customers needs. Funds distribution characteristics of Aliped users are less, but the overall size is not small. However, because the distribution of scattered and small scale, it failed to attract attention. Although the fund company has been promoting monetary fund, which is the first cash management tool, but in the sales it means there has been no innovation. The design of balance of treasure net provides convenience, and it is the primary advantage to win customers. In addition, 'YuEbao' can do daily settlement, every day it may take the proceeds into the fund share, so that investors can benefit from it other than the fund money fund.

Third. Crowd Funding Model.

About the project sponsor of the Internet platform, we introduce their own propaganda crowd funding project. The project accepts small investors who are interested in investment, and the project sponsors are to raise operating funds. In China, crowd funding return method can be the material or non-material, but it is not connected with funds and equity. As of 2013 October, the main domestic four crowd funding website (roll call, dream network, Amoy Monte net, sleep jue.so) is to raise funds 11629704 Yuan. Crowd funding platform mode need to avoid the same operation mode and content of group purchase website, which is showing a rise of like a swarm of bees, and a large falling down situation in future. This requires the crowd funding site operators to show their difference, and highlight the characteristics of its own.

Forth. The Third Party Payment Platform.

According to the people's Bank of China "non-financial institution payment services management approach", the third party payment mechanism is defined as: according to the relevant provisions of the "measures" have "the payment business license", and based on the Internet provides non-financial corporate enterprise payment services. The third party payment front-end for businesses and consumers, for the middle of the third party payment platform, and the back end is a financial institution. This kind of platform is to pay treasure.

#### 4 The characteristics of the internet, China's financial development opportunities

The characteristics of the Internet, China's financial development opportunities:

- 1) The Internet becomes a new platform for financing.
- 2) The business enterprise becomes the new financial participants.
- 3) The Internet technology makes the traditional financial institutions had to change the original operation mode, innovation.
- 4) The Internet Financial creates the network virtual money from the central bank issued currency in circulation, in specific areas and in some cases it gradually spread to the real economy.

To sum up, with 'YuEbao', P2P as the representative of the Internet Finance in our country in recent years. The rapid development of the Internet makes more comprehensive financial services to the real economy, greatly promoting the development of Small and micro businesses and agriculture through the P2P, 'YuEbao' and various ways of service, in the creation of employment, increase of per capita national

income, balance the income gap has played a certain role. But its impact is positive or negative, on the combination of Internet and financial process, risk is also permeable conduction. We should not just see the positive benefits it brings, we have to pay more attention to the potential risk to the early establishment of early warning mechanism.

#### 5 Internet financial risk identification

As same as traditional finance, the Internet finance face market risk, operational risk, information asymmetry risk, but these risks are caused by the incorporation of the Internet Finance. In addition, the Internet has also brought some new financial risk and technology risk, such as the risk of unique legal system, the risk of innovation mode etc. The following 'YuEbao' is to explain the potential Internet Finance risk of different mode.

First. Market risk.

Market risk is the risk inherent in the traditional financial system. But the Internet financial market risk has its unique side. Including interest rate risk, liquidity risk, scale risk etc.

1) Interest rate risk.

The basic method of Internet Pricing of financial products are mainly based on the discounted cash flow valuation method. In this method, the product expected rate of return is based on market interest rates change decisions, the level of market interest rates through this channel influence of Internet financial products in the market rate of return, because of the fluctuation of interest rate on the generation of the Internet financial product pricing fluctuations in the interest rate risk. The Internet financial institutions in the face of some credit the bad condition of the clients, it may not be independent improve yields to reduce the credit risk and can only be denied to the customer in the face of loan; credit situation better customer may be because the rate of return is too low and does not attract customers.

As a financial product, 'YuEbao' is extremely sensitive on the reaction of the market, 'YuEbao' launched in June, and the holder thought he had found a good time to launch a product, but few people know it, and monetary market appeared a serious breach of contract within a month. In just one day, a sum of up to billions of Yuan of funds lending appears between the bank and the rival bank (although it was transferred to the account in second days for the money, but this caused panic in the market, which allow interest rates soared). In 2013 'YuEbao' dual-eleven-festival, the one day redemption goes to 6.1 billion Yuan. If a one-day redemption is above 10 billion Yuan, it is possible to trigger the redemption terms, that is to say, this time's increasing Liberty Fund may announce a delay or suspend the redemption of fund.

2) Liquidity risk.

Liquidity risk refers to the Internet mechanism at some point, which does not have sufficient funds to meet the customers demand. The Internet financial institutions often play the role of capital turnover, and sedimentation funds may be in the third party intermediary Department, due to the lack of the guarantee and supervision effective, it is easy to cause the misappropriation of funds. If there is lack of liquidity management and the capital chain rupture, it will trigger a crisis of payment.

Celestial increased liberty agreement deposits of more

than 90%, this is very high to the liquidity management requirements. Once the concentration of redemption happens, the potential problem is very big. At present, every day there is a sustained growth in net purchase scale. Now it has not encountered tight liquidity shocks risks as it was in June last year. But the potential risk cannot be ignored.

3) Risk of the size.

'YuEbao' scale is too large, and its coverage is too wide, a minor technical fault and income risk may cause the investment community earthquake, and even lead to mass incidents, resulting in regulatory intervention, the big size risk of 'YuEbao' is getting larger and larger and more and more obvious.

Second. Policy risk.

Policy risk is due to the policy environment of country industry macroeconomic policy, policy and regulatory policy, tax policy volatility risk to bring internet financial. In our country, the Internet finance is something new, the sensitivity of policy change is very strong, a policy induced "resonance effect" may be caused by the impact of the financial system on the internet. For example, in April 13, 2014, the CBRC, the central bank issued a "people's Bank of China CBRC on the strengthening of commercial banks and the third party payment mechanism of cooperative business management notice", the notification to the customer ID, transaction limit, liability and other aspects of the fine and standardization. Commonly known as the 10 article, it means that the bank and third party payment account correlation threshold increase, the Internet financial special fast payment will be slower, and weaken the third party payment strong position, which affects its customer resources.

Third. Operational risk.

Operational risk refers to the possibility of potential loss caused by the major defect of system stability, reliability and safety of the operation failure, mainly due to staff. For example, the Internet has changed the traditional bank financial payment instructions to stamp as a means of settlement, while the use of digital signature on the effectiveness of payment instructions for confirmation. Because of the virtual nature of the Internet, the reliability of the digital signature depends entirely on the Internet financial control system is tight. The transaction of people do not understand the Internet financial operation specification and requirements, there may occur the improper operation, and even the emergence of a lack of liquidity, payment and settlement interruption issues in the transaction process, causing unnecessary loss of funds.

Forth. Safety Risk (including technical data security risk, security risk).

1) The technical safety risk mainly includes three types: the computer virus can spread rapidly through Internet and infectious, two is the key of mismanagement. Three is some internet financial institutions technical compatibility differences lead to risk outbreak. Risk and in some special moment cannot be timely response to short time large transaction burst and the adverse consequences.

In the morning of February 12, 2014, there are "no return" gains commitment of 'YuEbao', which let many users worry about their own safety of funds. The holder of it explained reason that the system is upgrade, earnings issued later. Until 10 in the morning, the user gains were in succession to account. The original time should be 3 a.m. to account and

there was 7 hours late. Technical risk let 'YuEbao' uncover its hidden information on the surface of the water, with more than 500 billion Yuan of funds and about 81000000 users. 'YuEbao' every day has to deal with astronomical data information, and I am afraid that it is difficult to be completely without error, and hackers, in addition system downtime and various unforeseen natural calamities and man-made misfortunes will be dangers of the investors.

2) Data security risk disclosure customer information from data being stolen or leaked in the transmission process. These will cause public panic large area.

6 To deal with the risk of internet finance

First. The Internet financial enterprises should have their own micro risk prevention measures, such as to third party transfer risk, real-time monitoring, real-time tracking of implementing risk, and it has to establish the risk early warning mechanism and the risk pool, with qualification certification system to guard against the risk of potential customer information.

1) Small micro-gold-suit has an internal data of the "workshop", and it is in charge of analysis of businesses based on the Tao bao data, including transaction growth and volatility, shop star and flow, advertising, community action etc. Hundreds of models of these data are packed into Alibaba, including customer layered model, revenue model, insolvency introduction model, risk early warning model.

2) The Aliped is as an example, it introduces the insurance company to pay its fast underwriting, and users in the use can get the fast payment process if suffering stolen risk, and capital loss will be professional third party insurance companies offer 100% payment.

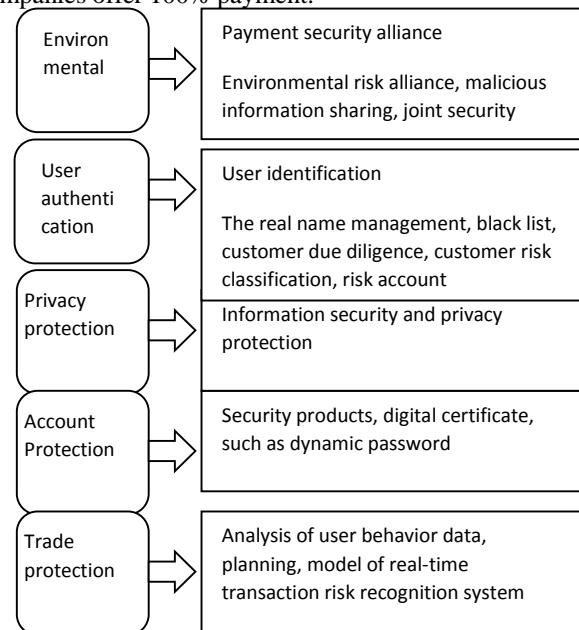


FIGURE 1 Pay treasure to the whole process of ladder type information security risk management

3) P2P in the process of development faces illegal fundraising boundary problem, ponzi fraud issues, problems, false bad debt rate problem etc. As the net credit platform P2P, appropriate methods in risk control are mainly to take 4 measures: one is the customer information authentication.

The second is to promote small loan, risk dispersion. The third is the establishment of an independent risk of repayment account. The fourth is the appropriate company and each month will give customers send bills, for the money, remittances and situation, it is seen Figure 2.

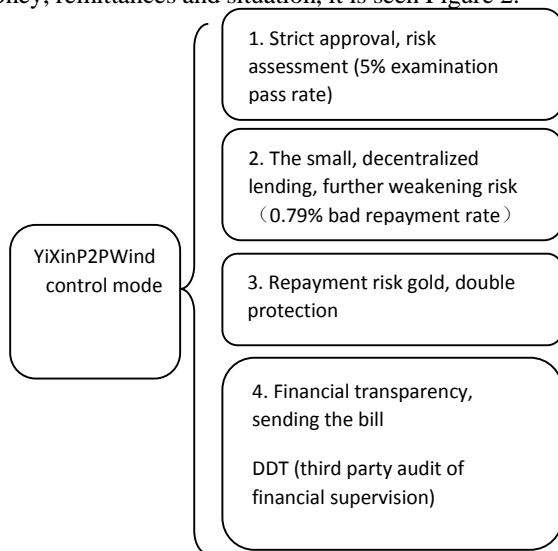


FIGURE 2 Risk control model of Li Xin

Second. Society of Internet financial risk prevention measures of macro.

1) Information security risk prevention measures.

1.1) The Internet financial establishment of defense system and respond to aggressive context.

1.2) Integrity network system establishment of the Internet financial promotes network real name authentication.

1.3) Construction of credit information platform of Internet financial industry. The integration of Internet, electronic commerce, social networking platform, government credit resources (industry and commerce, taxation, court) data information through the Internet, the financial industry to build mechanism, the establishment of the Internet financial industry credit information sharing platform infrastructure, as a supplement of people's implicit credit rating system.

1.4) The formulation of the Internet financial information security standards, guides the Internet financial service platform to safe construction and operation.

1.5) Follow the information system of national financial industry security rank protection requirements.

2) The Internet financial development policies and measures.

2.1) The improvement of the financial laws, regulations. From a legal perspective, the establishment of the Internet financial category defines the industry access threshold, standardizes the market main body transaction behavior, and establishes pertinent regulations, laws and regulations, the specific norms of behavior norms of Internet financial operators, front, rear participants.

2.2) Strengthen the industry supervision.

The improvement of the financial supervision system: one is to establish a national network of financial management system; the other is the establishment of the Internet financial supervision mechanism, promoting the implementation of relevant measures for the management of new network financial service and rules. It has to strengthen the network of international cooperation in financial supervision; three is to develop Internet financial barriers to entry criteria. It has to establish a market access system, the implementation of classification management, classification standards formulated.

2.3) Optimization of Internet financial development environment.

On the one hand, it is to actively give appropriate risk subsidies and interest subsidies support for Internet financial business and product innovation; on the other hand, it is to establish a sound credit system and intermediary service system, which builds the Internet financial service platform to promote the development of industry specifications.

2.4) Promote the integration of traditional finance and Internet

First it has to encourage institutional innovation of financial industry. Second it has to strengthen the traditional financial institutions and Internet enterprise strategic guidance and internal coordination. Then it has to encourage the development of large data, financial institutions to enhance the customer experience.

2.5) strengthen consumer protection of Internet Finance.

The first is the construction of trans-regional, cross industry of Internet financial consumer protection mechanism. The second is the establishment of specialized financial disputes mediation Internet platform. The third is to enhance the consumer's risk awareness and self-protection capability.

In a word, the Internet financial development in China is undergoing the initial stage, we should see it as our financial innovation, and we have to face its own risks, we should make it grow into better service to the entity economy in the successful implementation of the transformation of financial structure.

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