

# Analysis of Internet Consumer Credit Service in China

## -- Take JD Baitiao as an Example

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### Abstract

In recent year, one of the priorities of China's economic development is to expand domestic demand and stimulate consumption. Internet consumer credit service further release consumers' consumption potential and accelerate consumption upgrades, but various risks have been exposed in recent years. We should objectively evaluate this risks and do some risk prevention. JD Baitiao can be treated as the prelude to internet consumer credit services in China and it has a strict risk control system which effectively reduces the risk of internet consumer credit service. This paper discusses the method of the internet consumption credit risks prevention based on the analysis of JD Baitiao.

### Keywords

Internet Consumer Credit Service; JD Baitiao.

## 1. Introduction

In 2014, JD Finance launched the "JD Baitiao" (a kind of Credit Pay) service and it's the prelude to internet consumer credit services. In June 2015, the Chinese State Council proposed to extend the pilot of consumer finance companies to the whole country. The support from policy is a huge benefit to the development of consumer credit service. From a long-term economic perspective, expanding domestic demand including investment and consumption can promote healthy economic development. And consumption has become the "stabilizer" of economic growth. Thus, consumer credit services further release consumers' consumption potential and accelerate consumption upgrades, which promotes the growth of the real economy. Various types of consumer credit products have been launched in the market. Internet consumer credit products have allowed consumer credit to penetrate rapidly among consumers. According to the "Analysis Report on Market Outlook and Investment Strategic Planning of China's Consumer Finance Industry" by the Prospective Industry Research Institute, the scale of internet consumer credit service in China has expanded rapidly from 2014 to 2019, rising from 18.7 billion RMB to close to 16.3 trillion RMB [1]. However, due to the unclear positioning of credit intermediaries and information intermediaries, the risks of many internet platforms in the market have begun to be exposed. Beginning in the second half of 2017, Chinese government has issued a series of regulatory policies to rectify the chaos in the industry, ranging from P2P special rectification and standardizing cash loans and commercial banks' internet loans, to the clean-up of big data violations from grassroots, illegal lending, and regulating the private institutions' lending interest rates. With all these efforts, Chinese Internet consumer credit business has gradually entered a stage of standardized and healthy development.

## 2. Overview of Internet Consumer Credit Service

### 2.1. Definition of Internet Consumer Credit Service

Consumer credit service is the core of consumer finance, and the internet is a modern means to promote the development of consumer credit service. There is currently no standardized

definition of internet consumer loans. In combination with the definition of consumer credit service given by banks, internet consumer loans can be understood as financial institutions and internet companies that use internet technology to provide consumers short-term and small-amount consumer credit services without collateral or assurance. This consumer credit services are only for the reasonable purpose of personal or family lawful consumption not including purchasing a house or investment[2]. And the entire processes including application, review, loan and repayment are completed on the internet.

## **2.2. Features of Internet Consumer Credit Service**

### **2.2.1. Internet-based**

Internet consumer credit providers rely on the internet to develop online business. Unlike traditional consumer credit services, in addition to consumers and borrowers, internet consumer credit services also involve online transaction platform providers and third-party payment platforms. The whole process of internet consumer credit service from application to lending, is completed online.

### **2.2.2. Micro-loans**

Internet consumer credit services limits the use of the loan, only for consumption. According to this feature, the internet consumer credit line is generally Micro-loans. On the funding side, internet consumer credit service providers mainly use its own funds or lend from small loan company. Compared with traditional consumer credit services, it does not have very strong financial support or a large number of offline outlets.

### **2.2.3. Based on Big Data Technology**

Internet consumer credit services rely on big data technology to classify customers' consumption level, to identify their repayment ability, to conduct lending reviews, and to infer the users' probability of default. It is not like traditional financial institutions that have a face-to-face consideration of customer credit qualifications. Compared with traditional consumer credit services, internet consumer credit services have lower capital costs and higher approval efficiency. With the help of big data and financial technology, it can further reduce the problem of information asymmetry.

### **2.2.4. Convenient and Efficient Operation**

The process of consumer credit service is simple, convenient and fast. Internet consumer credit services eliminate the cumbersome process of traditional loans, and have a short approval process without requiring third-party guarantees.

## **2.3. Risks of Internet Consumer Credit Service**

### **2.3.1. Credit Risk**

Internet consumer credit service has fewer restrictions and adopts the "unsecured, zero-guaranteed" credit loan model. Under this model, consumers can get loans only through a simple review. The main risk of this model is credit risk. Simply based on this lending process, it is difficult to intuitively and accurately conduct a more in-depth investigation and understanding of the users' creditworthiness and other information on the internet platforms. If the borrower has overdue payments, it will be likely to cause credit risk. Moreover, internet consumer credit services stimulate consumption at a macro level, but the customer's repayment ability has not changed in essence, depending on the customer's income. The application of the internet consumer credit model has made more consumers willing to obtain the "pleasure" of spending first and paying later through using consumer credit services, making it easier to make ends meet and customers' defaulting.

### 2.3.2. Technical Risks

Internet consumer credit institutions often use internet platforms to carry out business acceptance, credit evaluation, and post-loan supervision activities. Especially when conducting credit investigations on customers, platforms often obtain customers' personal information through the internet. A slightest mistake may pose technical risks, which easily give rise to losses of loan platforms or consumers. For example, the network security of the internet financial platform, which can easily cause the leakage of customer information, is often neglected. If customer information is leaked and the customer's platform password is stolen, it will cause unpredictable losses to the customer.

### 2.3.3. Regulatory Risk

Internet consumer finance, as an innovative financial product, is developing rapidly, but there are no relatively complete supporting regulatory measures, which has caused multiple problems. For example, fraudulent loans by multiple parties, and the continuous increase in the rate of bad debts, etc., the market has limited self-purification capabilities and requires the attention of the supervisory authorities. Fundamentally, the development of the internet has the characteristics of fictitiousness and concealment, and lacks corresponding policy restrictions and basis. Therefore, government agencies and other relevant departments need to implement effective supervision and management of internet consumer credit behavior.

### 2.3.4. Risk of Credit Loan Cashing out

Internet consumer credit products generally have no cash withdrawal function, and are only used for online consumption. Criminals conduct false transactions through E-commerce platforms and other media, cashing out credit loans for others and charge a certain percentage of fees. Thus, the profits for them are relatively high and attractive. Like JD Baitiao, there are consumer credit products such as Ant Credit Pay and Suning's Credit Pay, and these platforms are also facing the risk of credit loan cashing out. "Ant Credit Pay" has the problem of credit loan cashing out agreements with Taobao merchants, which seriously damages the legitimate rights and interests of the platform [3]. the use of internet products has now become an underground gray industry to a certain extent. There is a serious phenomenon of cashing out on internet products. The primary driver is high profits. In addition, there is a lack of prior supervision and the existence of cross-supervision problems.

## 3. JD Credit Pay

### 3.1. Overview

#### 3.1.1. Introduction

JD Finance launched JD Baitiao in 2014. JD Baitiao is a new payment method that relies on the scene of JD Mall, where users can consume first before payment. JD Baitiao basically covers the basic characteristics of credit cards and is an attempt by internet finance in the field of virtual credit cards. The main purpose is to stimulate consumption and provide consumers with a more convenient payment mode. JD Baitiao provides customers with a small loan of up to 50,000 yuan and up to 24 installments. JD Baitiao does not support bank transfers. At present, only a few users can have JD Baitiao cash withdrawal service. According to data from JD Finance, during the JD 618 promotion period in 2020, JD Baitiao payment users set a record of breaking one billion transactions in 180 seconds [4], indicating that more and more users have begun to accept and are accustomed to using JD Baitiao.

### 3.1.2. Features

#### 3.1.2.1 Service Convenience

The operation is simple, convenient and fast. If having the consumption records of JD Mall, users can apply for JD Baitiao credit quota to create an electronic credit card account with their JD account. The whole process from the application to the acquisition of the loan can be done online.

#### 3.1.2.2 Micro-loans

Through big data analysis which is based on customer consumption data, JD Baitiao can infer users' consumption ability and repayment ability. Different quotas of small loans will be provided based on different customers' credit rating. JD Baitiao has developed from a maximum credit line of 15,000 yuan in 2014 to currently provide customers with small loans of less than 50,000 yuan.

#### 3.1.2.3 Relying on the Specific Scenes of JD Mall

The operation model of JD Baitiao is divided into two parts: the first part is the payment for each product supplier of JD Mall, which is funded by the bank, and the JD platform carries out risk control. The other part is for users who use Baitiao services. JD, as the creditor, provides internet consumer credit service with a maximum amount of 50,000.

## 3.2. Risks Faced by JD Baitiao

### 3.2.1. Credit Risk

Consumer loans mainly depend on the income level of the borrower. There are many determinants of personal income level, such as subjective factors such as the knowledge level and skills of the borrower, and objective factors such as the development prospects of the borrower's employment agency. The borrower's willingness to repay also depends on his ability to repay. JD Baitiao has no third-party guarantee and it is difficult to recover the cost in the later stage, thus, the recovery cost after the customer default is too high, which leads to high risk of lending. Therefore, a reasonable loan amount is the basic prerequisite for guaranteeing loan security. Another reason for credit risk is the lack of credit awareness of some consumers who have inadequate understanding of the consequences and harms of non-repayment of borrowings at maturity. This is also one of the bottlenecks in the development of internet consumer credit industry. In addition, the internet personal credit information system developed relatively late in China and it has a great limitation [5].

### 3.2.2. Technical Risk

In reality, criminals often use "technical loopholes" of JD Baitiao to do credit loan fraud, damaging the interests of customers. The repeated incidents of fraudulent use of "JD Baitiao" have caused consumers to question the security of JD's financial accounts and the ability to discriminate risks.

### 3.2.3. Risk of Credit Loans' Illegal Cashing out

One reason for the appearance of illegal cashing out is because of an interest-free period gave by loan providers [6]. Therefore, some people use the consumption function to withdraw cash without interest. Although JD Baitiao has launched the cash withdrawal function for some users in 2020, many other users who do not have the cash-out function may still choose to cash out illegally because of the interest-free period and the low installment rate. JD Baitiao's method of spending first and paying later has eased the economic pressure of many people to a certain extent. However, many criminals are exploiting the loopholes of JD Baitiao's credit loan to engaged in illegal activities [7]. Among them, there are many cashing out scam traps with advertisements such as JD Baitiao Cashing-out, causing damages to the interests of customers [8]. At present, there is no way to fully block illegal cashing and other derived illegal activities.

### 3.2.4. Legal Risks

The main lenders of traditional consumer credit are commercial banks and other specific financial institutions, but the reporting form of "JD Baitiao" is personal loan business, and its main reporting subjects are Chongqing Liangjiang New District Shengji Microfinance Co., Ltd. and Immediate Consumer Finance Co., Ltd. company. Many users questioned that the personal loan line reported by JD Finance for the credit investigation is the whole credit line, regardless of whether the user uses its amount or not. This move caused JD Finance to fall into the moral hazard and legal risk of using user credit to lend money for JD. At the same time, the lending records may have a certain impact on customer credit. In addition, there is no related laws and regulations about the illegal cashing out of Internet consumer credit loan.

## 3.3. JD Baitiao's Risk Management and Control Measures

### 3.3.1. Big Data Risk Control System

JD Baitiao evaluates the user's repayment ability and credit level and other big data based on the user's shopping consumption data in JD.com, screens out the credit white-list, and then builds the model, implements quantitative analysis, and establishes JD's internal consumption rating system. In addition, JD Baitiao has set a maximum limit of 50,000 yuan to control risks through "small and decentralized".

### 3.3.2. Liquidated Damages System

JD Baitiao allows users to charge a certain installment service fee while repaying in installments, and remind users by sending repayment information through JD Mall and the user's reserved mobile phone number before the repayment period. If the payment is not repaid in full on the repayment date, the outstanding consumption principal will be charged daily on a daily basis starting from the consumption date. For users who are overdue or fail to use the loan for the purpose specified in the contract, the liquidated damages will be calculated from the first day of overdue and will be calculated at 0.015% of the overdue or embezzled amount each day until the principal and expenses are paid off. Those who do not return for a long time will be reduced or restricted from using the JD Baitiao, and will even be held accountable in accordance with the law.

### 3.3.3. Connecting to the Credit System of People's Bank of China

Sharing the breach of contract to the industry supervision system and credit investigation system of People's Bank of China. The user's loan information, repayment information, frequency of overdue, overdue time, etc. will be reported to the credit investigation system of People's Bank of China. Banks and other financial institutions can check the user's credit status on the platform from the credit report. Thus, the behavior for no-repayment or overdue will have great influence for users in future life. On the other hand, connecting the credit investigation system of People's Bank of China can also enable the internet consumer credit industry to move towards a standardized development.

### 3.3.4. Intelligent Risk Control System

JD independently developed the "Sky-strategy" decision-making engine system, "Sky-shield" account security and anti-fraud system, and "Sky-net" transaction risk monitoring system to protect user account security and avoid user economic losses in time [9]. The early warning of JD Finance's "Sky-net" risk control system can detect malicious behavior and intercept high-risk orders by identifying JD Baitiao usernames when logging in remotely or in multiple machines at the same time, and place the account in the sensitive account information database, and automatically track when the account is reactivated. If non-personal operation is confirmed, the risk control interception will be activated.

### 3.3.5. The Partial Open of the Cashing-out Function

In order to reduce illegal cash-out behaviors, JD Baitiao has opened a quota withdrawal function for some high-quality users. This function makes the users' using range vaster. Even though it is not for all users, this action makes JD Baitiao differ from many other similar products like Ant Credit pay.

### 3.3.6. Active Response to Relative Requirements of Laws and Regulations

A new notice was issued in March 2021 to rectify the chaos of college students' internet consumer loans. The notice has stricter requirements on lending entities, marketing activities, qualification review, post-loan management, and information protection for college students' internet consumer loans. In this regard, the quota of JD Baitiao was deducted or the account was temporary blocked for the student groups who have reached the age of 18 but less than 23, and passed the student certification. As for whether the JD Baitiao can be used and what's the quota size, comprehensive evaluation of the system shall prevail.

## 4. Risk Prevention of Internet Consumer Credit Service

### 4.1. Internet E-commerce Platform

#### 4.1.1. Credit Risks

Some scholars believe that due to diversified reason of credit risk, it is impossible to prevent credit risk [10]. But I believe that the measures taken to prevent credit risk can greatly lower the probability of credit risk and reduce the loss caused by the occurrence of credit risk. For internet consumer credit providers, the prevention of credit risk is a major work.

On one hand, the E-commerce platform grants credit to customers by analyzing the user's past transaction information, but the historical credit record of personal information is not complete. The consumer credit information of each platform is not interoperable, so internet consumer credit service based on E-commerce platforms cannot fully judge users' credit. Sharing of default information records between platforms, or docking with the credit investigation system of the People's Bank of China, shall be implemented in accordance with the credit investigation management norms of the People's Bank of China. Overdue behavior will be recorded as non-performing loans and included in the credit investigation list of the People's Bank of China. The borrowing and returning records of users will be reflected in the credit investigation report, which will help other financial institutions to reduce non-performing loan and remind users to keep a good credit record.

On the other hand, E-commerce platform should improve their ways for demanding overdue payment and a malicious overdraft recovery mechanism should be established, which can use the user's shopping information and logistics information to track the user's area located. Then E-commerce platform can arrange staff to collect debts accompanied by third parties such as local streets. However, employees should be trained to avoid violent debt collection and other illegal phenomena.

In addition, platforms also can strengthen the promotion of the concept of integrity and encourage consumers to repay on time. For example, E-commerce companies can also provide different preferential discounts according to consumers' credit ratings, and give affirmation and encouragement to consumers who repay on time.

Besides, through analysis of consumers' purchase history and preference etc., platform can get consumers' deep-level information, such as spending power, repayment ability. Giving a credit rating to customers, E-commerce platforms can provide customers with different product installment services, and provide them other financial services. For consumers who have not obtained right of credit service and whose the credit line is not enough to cover part of the

commodity price, consumers can use JD Baitiao only if they freeze the corresponding amount funds, which effectively strengthens the platform's risk prevention and control capabilities.

#### **4.1.2. Technical Risks**

On one hand, platforms should establish a complete information security system to ensure users' information security. Whether it is JD Baitiao or similar Ant Credit pay, they are all relying on real-name authentication accounts. In the current sharing era, personal information data leakage incidents emerge in an endless stream. Therefore, it is very important to establish a complete information security system to ensure users' information security, which may prevent the fraud incidents and other situations that harms the interests of users due to users' information leakage. On the other hand, platforms should also formulate emergency plans for emergencies to reduce losses when emergency happen. The construction of network security technology should be strengthened and a security prevention system should be established. In addition, performing regular stress tests continually is good to improve system performance.

#### **4.1.3. Risk of Credit Loans' Illegal Cashing out**

Technology research and development should be conducted to timely detect and prevent occurrence of illegal cashing out. Then, internet credit loan providers can record the credit of participating merchants and nature persons in the illegal activities, and report to the relevant regulatory departments. Besides, a sharing platform for the negative list of users' behaviors can be established.

#### **4.1.4. Regulatory Risk**

The compliance of internet consumer credit companies' operations may develop into its lifeline in a more standardized market environment. Internet consumer credit companies should comply with the laws and regulations, establish a complete compliance risk control system.

### **4.2. Consumer**

#### **4.2.1. Technical Risk**

Consumers should pay attention to the protection of personal information. Personal online accounts need to be protected with multiple guarantees and cannot be borrowed to others casually. Leak of consumers' personal information or account information easily get users into credit loan fraud.

#### **4.2.2. Credit Loan Fraud**

Users need to take precautions against credit loan fraud. In the event of credit loan fraud, rights should be safeguarded in time. Damaged party should report to the police immediately, and the relevant platform should be contacted for feedback.

#### **4.2.3. Credit Risk**

On-time repayment will be good to keep good credit for consumers. Besides, consumers should adjust their expenditure to their income, which is the best way to avoid falling into a credit crisis. In addition, users should be alert to the fraud traps of illegal cashing out and make cash loans from formal channels.

### **4.3. Related Departments**

#### **4.3.1. Credit Risk**

In March 2021, the General Office of the China Banking and Insurance Regulatory Commission and other related departments jointly issued the "Notice on Further Regulating the Supervision and Administration of College Students' internet Consumer Loans", which clearly prohibits micro-finance companies and illegal licensed institutions from granting loans to college students. However, college students are still one of the groups of internet consumer credit service, and relevant departments still need to focus on strengthening online integrity

education for college students. Education department must focus on publicizing and educating college students about the concept of network integrity, and let them know their rights and obligations, and understand the possible risks and consequences. Moreover, relevant polices for further improvement on establishing personal credit system should be made.

#### **4.3.2. Risk of Credit Loans' Illegal Cashing out**

In response to situations such as illegal cashing out and fraudulent use, as well as new online shopping frauds derived from them, relevant departments need to formulate and promulgate corresponding industry norms and laws to improve the level of supervision over illegal cashing out and fraudulent use. On the other hand, it is necessary to urge the corresponding platforms to establish a sound risk control system, improve risk control capabilities, and reduce personal losses caused by risky behaviors such as illegal cashing out. Moreover, it is important to clear the illegality of the Internet credit products' illegal cashing out behavior, so that more users can realize the possible serious consequences of their behavior.

#### **4.3.3. Regulatory Risk**

Government needs to keep improving the legal system. Since 2017, a series of regulatory policies and supporting regulations have been issued in China to cope with the chaotic situation in the consumer credit market. While eliminating companies that do not comply with market access rules, it has also strengthened rectification efforts. Therefore, in the internet finance industry, some platforms with weak financial strength, non-compliant operations, and insufficient risk control capabilities will be gradually eliminated. In the long run, under strong regulatory measures, the risk bubble will inevitably be squeezed deeply under the rapid development of the industry, which can allow the consumer credit industry to enter an orderly development and to have high-quality opportunities. In the process of gradual establishment of the regulatory system, speed up the establishment and improvement of a unified legal system for internet financial supervision, so that relevant regulatory authorities in the process of implementing supervision can have laws to follow and the relevant responsibilities can be clarified.

## **5. Conclusion**

Through the analysis of JD Baitiao, it is concluded that internet consumer credit products represented by JD Baitiao currently mainly have credit risks, technical risks, legal risk, regulatory risks, and illegal cashing out risks. The most significant risk is credit risk. Different parties including E-commerce platform, Consumers and related department, have corresponding preventive measures for different risks. The regulation of the internet consumer credit industry does not only rely on credit platforms to use information technology and risk control systems to resolve various risks in the operation process, but also requires relevant government departments to formulate relevant regulatory measures and legal provisions to create a good consumer credit market environment. Consumers also need to improve their own risk awareness and actively maintain their own credit. Only with the joint efforts of many parties can the development of the Internet consumer credit industry become more standardized and well developed.

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