

Research on Risk Control of My Country's Third-party Payment Platform

--Taking Alipay as an Example

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Abstract

With the popularization of the Internet, information technology and e-commerce have also developed rapidly. Third-party settlement platforms have developed rapidly, and Internet finance has ushered in a new period of active development. In 2017, the online payment business transaction volume of non-bank payment institutions exceeded 100 billion yuan, and Third-party payment platforms continued their rapid growth inertia. With the expansion of the Third-party payment market and business expansion, there are also many problems, and the regulatory guidelines of Third-party payment platforms have gradually improved. Due to the high pressure of competition and active innovation of Third-party payment institutions, many uncertain factors have been added, and more and more risks have been exposed, which affects the healthy development of Third-party payment. Therefore, it is particularly important to quickly study the risk control of Third-party payment institutions. This article takes Alipay as an example, analyzes its development profile, risks and risk control measures, and finally proposes countermeasures and suggestions to improve the supervision of China's Third-party payment platform.

Keywords

Third-party Payment Platform; Risk Control; Alipay.

1. Overview of the Development of Third-party Payment Platforms

(1) Definition of the concept of Third-party payment platform

The Third-party payment platform is a new development, and its origin is to serve the development of e-commerce. Third-party payment is a transaction in which the company uses its own reputation as a guarantee during the transaction, and it refers to a transaction in which the buyer and seller are independent of the market. In the transaction process, major companies use their own reputation as a guarantee, and establish inter-bank payment channels, and then complete the transfer of funds from the buyer to the seller.

(2) The status quo of the development of Third-party payment platforms in my country

1. The market size is gradually increasing

It can be seen from Figure 1 that the transaction scale of Third-party payment in my country has increased by nearly 20 times in the past five years, with an annual growth rate exceeding 100%, and the scale of Third-party settlement transactions has expanded rapidly. In 2019, the scale of payment transactions on Third-party payment platforms has reached 264.1 trillion yuan, a year-on-year growth rate of 38.6%. From 2015 to the present, the transaction scale of Third-party payment has been showing an upward trend. This trend is closely related to the current development of my country's e-commerce industry. In particular, e-commerce websites for online shopping such as Alibaba, JD.com, and Suning.com are developing well, and the scale of Internet users is rapidly expanding.

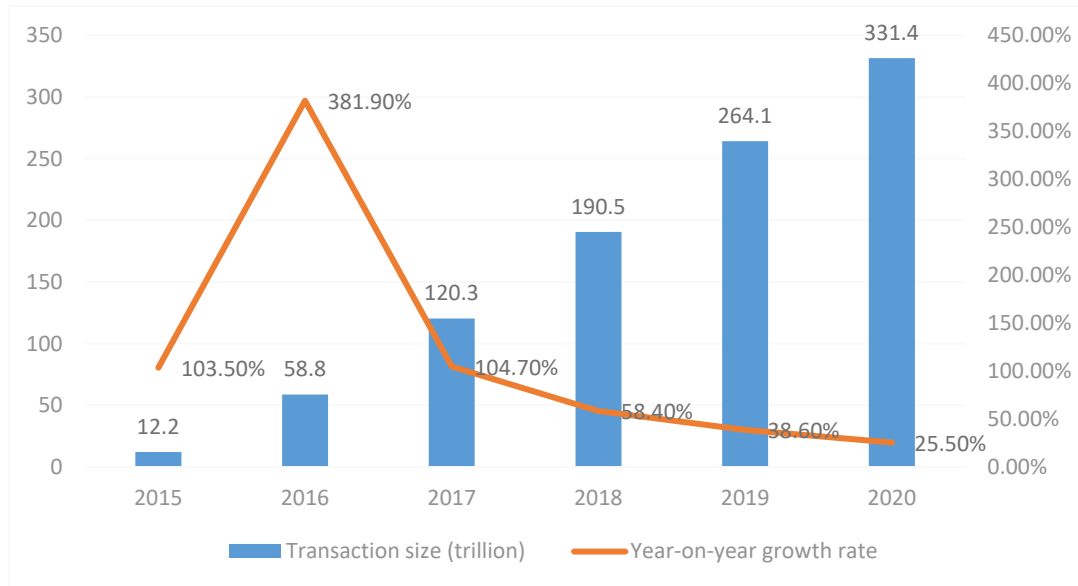


Figure 1. 2015-2020 China's Third-party payment transaction scale

In 2019, the transaction scale of my country's Third-party payment mobile payment market reached RMB 248.3 trillion, with a month-on-month growth rate of 45.40%. The transaction scale of the mobile payment market has shown an upward trend since 2015.

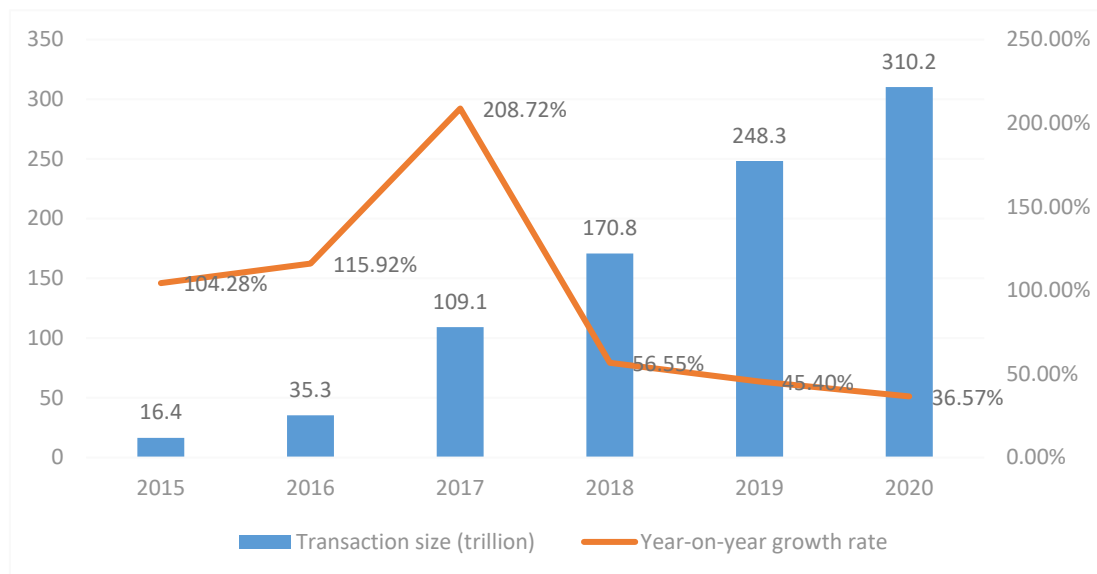


Figure 2. 2015-2020 China's Third-party payment mobile payment market transaction scale

2. Rapid development

At present, the Third-party payment industry is still in a period of explosive growth, and the position of companies led by Alipay and Tenpay in the market is relatively stable. Figure 3 shows that Alipay and Tenpay accounted for the main share of the Third-party payment market. Alipay accounted for 55.1%, Tenpay accounted for 38.9%, and the market share of the two was as high as 94%. Among them, Alipay accounted for more than the market share. The remaining 6% of the market share is shared by more than 260 Third-party payment institutions.

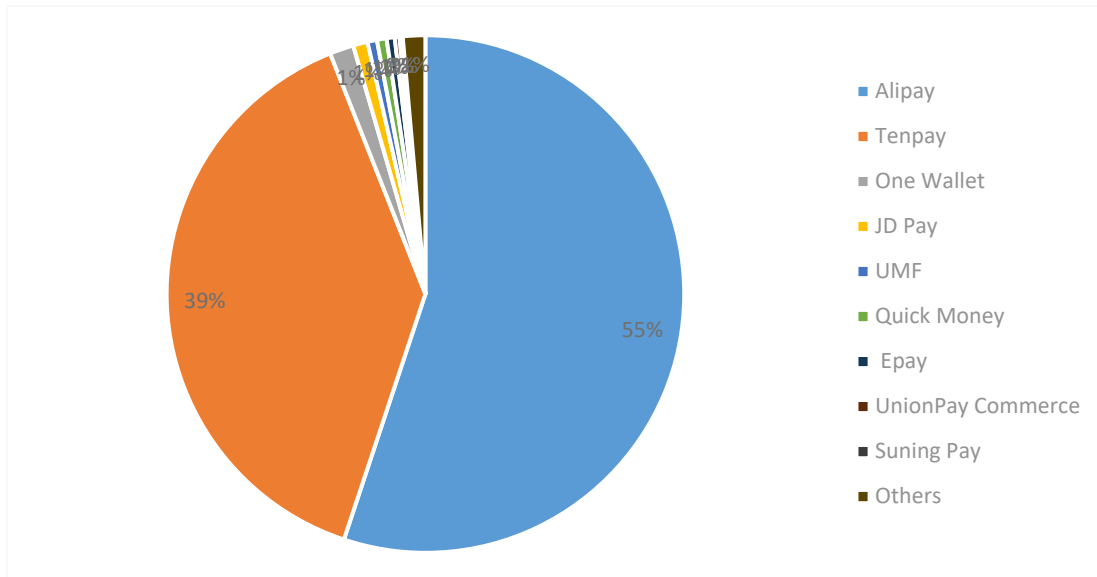


Figure 3. Market share of Third-party payment transaction companies in 2020

3. Diversification of mobile payment

It can be seen from Figure 4 that with the creation and use of various APPs, the scale of mobile market transactions has expanded rapidly. For example, WeChat red envelopes, Alipay transfers, Yu'eobao and various other applications have gradually penetrated every corner of people's lives.

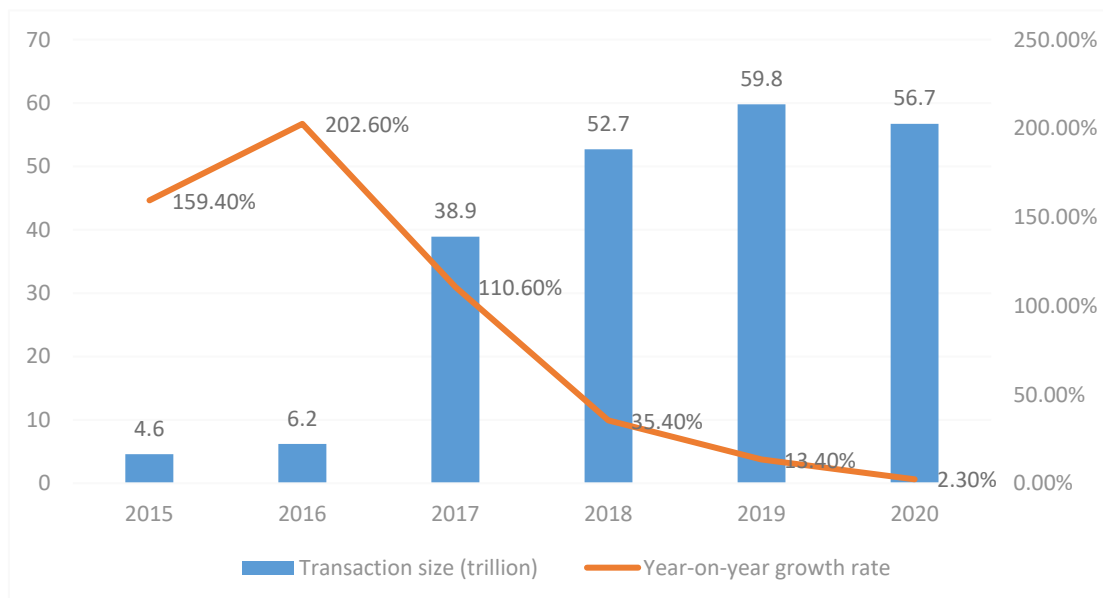


Figure 4. 2015-2020 mobile payment market transaction scale

4. Wide range of use

With the development of the globalization of the Internet, the global economic integration is becoming closer and closer, and the payment transaction amount between countries is on the rise. The total amount of cross-border Internet payments made by Third-party payment institutions has increased year by year, from 145.4 billion yuan in 2015 to 741.5 billion yuan in 2019, a growth rate of more than 50%.

2. Case Analysis of Third-party Payment Risk --Taking Alipay as an Example

(1) Overview of the development of Alipay

Alibaba established Alipay in 2004, which was first attached to Taobao, mainly to solve the problem of information asymmetry between buyers and sellers of Internet shopping. After that, the number of users and the scale of development continued to increase, and it gradually became independent of Taobao and became an auxiliary intermediary platform. After continuous innovation, the scope of business has been expanded and developed rapidly. In 2019, the number of Alipay's global users exceeded 1.2 billion, and the daily transaction volume and the number of transactions are constantly increasing. According to the official website of Alipay, Alipay has cooperated with more than 200 financial institutions in foreign countries to help each other. Alipay continues to cultivate and expand various businesses, and is committed to creating a platform that integrates consumption, life services, financial technology and social activities.

(2) Risks faced by Alipay

1. Credit risk

Alipay's business scope includes not only the settlement field, but also finance, wealth management, insurance and other businesses that contain credit risks. In the transaction, due to various reasons, the failure of both parties to perform the debts caused credit risk. Buyers are consumers, and usually do not pay or cancel orders, and do not apply for refunds online. The seller is a merchant and cannot agree that consumers provide goods or services during the transaction, nor can they become the object of consumers' timely transactions. Regardless of whether the buyer and seller fulfill their promises, the transaction will bring certain losses to both parties, increase the operating costs of the Third-party settlement platform, and increase the cost of news. It will also hinder the establishment of a national credit system.

2. Market risk

With the growth of online payment, the Third-party payment and settlement industry will become more competitive. However, market risks continue to increase. First of all, Alipay is leading in e-commerce, but it lags behind WeChat in the field of communication. WeChat is a platform that integrates communication and payment. It is not difficult to see that Alipay will gradually compete in the field of communication in the future.

In June 2013, Alipay launched Yu'e Bao. Yu'e Bao provides value-added services and current fund management services for users' balances. This is a flexible wealth management product. And WeChat launched Lianqiantong in November 2018. The current seven-day annualized rate of return of Yu'e Bao is 2.131%, while the seven-day annualized rate of return of Lianqiantong is 2.312%, and the rate of return for Lianqiantong is slightly higher than that of Yu'e Bao. It can be seen that due to the emergence of WeChat Lianqiantong, Yu'e Bao's industry status has been greatly threatened.

3. Technical risk

Alipay faces the danger of information leakage. First of all, Alipay requires real-name authentication, and real-name authentication requires the user's personal information. If hackers or computer viruses attack, it is easy to leak customer information and cause harm. The CEO of Danshi Fund broke the news through Weibo and chose Alipay to pay 50,000 yuan to other accounts within 2 hours, but it has not arrived after 24 hours. Investment analyst Lu Shang believes that Alipay seems to be transferring defaults and delays in reaching the account status, which may be caused by frequent bank operations and system failures. On the surface, payment is made through Alipay, but the essence is the backstage operation of the bank. If the banking system fails, Alipay's transfer payment will inevitably fail.

(3) Alipay risk control measures

1. Multi-level risk control system

Alipay has conducted five levels of protection monitoring in the risk control system. The first level is the protection of system security issues. Users monitor the payment environment during the login process. The second layer is to authenticate the user's identity, which can only be used after identity authentication. The third layer is the protection of user information, a strict program management mechanism to avoid information leakage. The fourth layer is the protection of account information. Even if the user's password is leaked, others cannot log in to another device. The fifth layer is the protection of the transaction information process. Users must perform identity verification during the transaction process, which strengthens the ability to prevent and control risks.

2. Focus on compliance risk management

While continuously pursuing innovation, Alipay has also added important content to compliance risk management in accordance with regulations. For all the risk rules that meet the regulations, Alipay actively responds and proposes corresponding solutions, followed by Alipay's risk management strategy. In other words, in order to impact money laundering, Alipay established an internal anti-money laundering structure. The strictness of user identity information is to state to the central bank, timely monitor the transaction process, and establish an anti-money laundering database. First, before the release of the Third-party payment platform, Alipay established a national anti-money laundering agency. Secondly, Alipay has implemented a strict user identity information assessment system, and all users must undergo real-name authentication, which greatly controls employees and related companies. Finally, Alipay has established an anti-money laundering database, which completely records the records of all users and stores all information related to money laundering transactions to improve business efficiency.

3. Personal credit evaluation

Personal credit evaluation is a quantitative analysis of consumers' past reputation. By obtaining personal credit, people's credit status can be comprehensively evaluated. Alipay uses Sesame Credit Score to evaluate users' credit status, credit history, behavior evaluation, achievements, etc. Objective evaluation based on identity characteristics and comprehensive evaluation of users' personal relationship operations. Consumers with higher scores can get more discounts when they spend online. Using Sesame Score, Alipay can allow merchants and users to participate in the interaction, so as not to allow themselves to be marginalized.

3. Risk Control Measures for Third-party Payment Platforms

(1) Platform-based perspective

1. Establish a sound risk control system

First of all, the platform can build a reasonable hazard management structure and set up various professional risk management departments. It mainly includes the risk management department, the legal department, the audit department, the technology department and the public administration department, and the risk responsibility system must be clarified. At the same time, various departments should cooperate with each other to improve the risk early warning and handling mechanism and improve the level of risk prevention.

Secondly, it is necessary for the platform to design and manage the risk control plan for the entire region. It is mainly to prevent risks, used for monitoring and emergency treatment, to prevent possible risks in product design in advance, and undergo rigorous tests before product release. In process monitoring, the platform must conduct hazard assessments for

unannounced products. Finally, the platform must establish a risk compensation mechanism, which is primarily used to compensate customers for losses.

2. Prevent illegal transactions

First, all customers need clear real-name authentication, but it cannot be completed in one day. Therefore, Third-party payment platforms must speed up their pace, and business activities cannot be transferred without real-name authentication, and they cannot be used as payment services without real-name authentication.

Second, after real-name authentication, the platform should establish a strict monitoring system to continuously monitor users' transactions for 24 hours and record whether the user's trading environment is safe. If a risk is discovered, report it to the People's Bank of China immediately, conduct illegal transactions, and establish a complete customer management system. In order to better resolve the platform's unidentified users, all details can be reported to the public security organs.

Third, the platform must strengthen restrictions on users of illegal transactions and refuse to provide any services for them in the future.

3. Improve the security of network technology

In terms of network security technology, Third-party payment platforms not only need to improve the security of existing hardware equipment, but also need to be constantly updated. Software and hardware equipment should also keep up. The transaction volume of Third-party payment platforms is increasing every day, especially during the Double Eleven and Double Twelfth Shopping Festivals, which can reach a peak. This type of large transaction volume must be supported by a higher hardware system, otherwise it will only paralyze the system. Therefore, Third-party payment platforms must have a series of strict computer service systems to ensure that a large number of real-time transactions occur from the software technology, and they can also run normally. The platform should also cooperate with domestic professional anti-virus software organizations to jointly control these network technology security risks.

(2) From the perspective of the supervisory level

1. Improve the supporting legal system

The central bank has gradually strengthened the supervision of Third-party payment platforms and regulated the business of Third-party payment platforms to a certain extent, but there are still many shortcomings: for example, the central bank has strengthened the supervision of Third-party payment platforms, and relevant regulations on Third-party payment platforms. There are multiple departmental rules and regulations in the guidelines. Look for Third-party platforms to strengthen business space. Regulatory authorities monitor platform development, correctly evaluate platform businesses, improve risk control capabilities, and establish a flexible legal system. A platform based on legal textbooks should not be limited to business innovation.

2. Establish a sound credit scoring system

Establish a sound reputation scoring system, which can reflect the customer's credit status based on the customer's reputation score. At present, some Chinese companies are developing some credit scoring models, but compared with foreign countries, they still have shortcomings and need to learn some foreign experience. There are also many Third-party payment platforms in China that can provide a variety of reputation scoring products. For example, Alipay has developed a Sesame Credit Score. This product has played a role in some small financial institutions and credit card applications, but it relies too much on Alipay for data collection, resulting in incomplete data, which is only for information, and information disclosure is also Not fulfilling. Therefore, Chinese regulators need to establish reliable credit scoring payments and more general data collection, including transaction data for integrated multi-payment

platforms. Combining this with previous bank data can improve reputation. It also gives customers the right to understand and guarantee the transparency of the rating framework, and will greatly improve the customer's credit knowledge.

3. Improve the post-processing mechanism

The Third-party payment platform is a financially innovative product and carries great risks. Even if the platform does its utmost to avoid risks in technology updates, staffing, trading behavior supervision, and national supervision, illegal activities cannot be ruled out. Criminals have discovered loopholes in the crime, so post-processing mechanisms need to be improved. First of all, the responsibility must be clear. If the platform itself causes the error, then the platform must bear all the responsibility; if the error is due to the customer's fault, then the natural responsibility is borne by the customer. This not only reminds customers that they are negligent, but also pays more attention to the security of the payment process in the future. It also encourages the platform to do better for its customers. In addition, in some cases, it may be necessary to identify criminals who have committed illegal activities and severely punish them.

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