

# ***Innovations and Future Development Pathways of Internet Finance Asset Securitization in China: A Case Study of Ant Group***

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**Abstract:** With the evolution of the Internet age, e-commerce giants have established small loan entities to accommodate the booming B2C business model. While these online small loan providers retain the traditional attributes of their counterparts, they are adept at addressing the financing needs of micro-enterprises and individuals. Furthermore, these digital lenders have a broader reach in terms of geography and demographic distribution and possess enhanced capabilities to assess borrowers' creditworthiness. Such strengths make them well-suited for asset securitization, an emerging financing approach. This paper will analyze "China International Capital Corporation -Ant Financial special asset management program" which is one of the important asset securitizations of Internet small loan in China. The analysis will focus on the basic features and innovations of the structure of the securities. In addition, various economic indicators of Ant Financial will be considered to analyze the effectiveness and risks of Ant asset securitization. This study provides both theoretical and practical insights into Ant Financial Services' asset securitization. Moreover, the research has analyzed the reasons behind the suspension of Ant Group's IPO, its subsequent rectifications, as well as the future trends of internet finance in China, providing beneficial reference for other companies.

**Keywords:** Internet Finance, Asset Securitization, Ant Financial, IPO Suspension, Future Trends.

## **1. Introduction**

### **1.1. Research Background**

With the development of the Internet in China, many e-commerce platforms are evolving into Internet asset securitization. Compared to traditional banks, whose services are limited to large enterprises with high borrowing credit, e-commerce business platforms have reduced borrowing restrictions for

small and medium-sized enterprises in China. This could meet the lending needs of a broader range of businesses. Moreover, as people's demand for Internet finance rises, more financial products are gradually being issued. This triggered the combination of Internet finance and asset securitization. This combination not only improves the liquidity of funds but also helps to solve the problems of high Internet financing costs and restricted financing channels for SMEs while expanding the market size of SMEs. The Internet can provide more comprehensive and customized services to meet the needs of different investors for financial loan products. Several factors have driven the growth of asset securitization in China's e-commerce sector. One is the growing importance of financing and financial services in online retailing. As e-commerce platforms grow in size and sophistication, they can offer customers a diverse range of financial products and services, such as loans, insurance, and wealth management. These services require a reliable source of funding, which can be provided by asset-based credit [1].

In recent years, asset securitization has just begun for China's Internet financial sector [2]. This paper analyses the innovations and problems of asset securitization of e-commerce platforms under the Internet based on the development status of asset securitization of e-commerce platforms.

## **1.2. Research Purpose**

Our study undertakes a comprehensive analysis of Ant Group's case, examining its structure, innovative outcomes, and associated risks. Additionally, we delve into the reasons behind the halting of its IPO, as well as the rectification measures that followed. Through this investigation, we aim to explore the development trajectory and future direction of internet finance in China.

## **1.3. Research Significance**

The use of asset-backed securities in e-commerce is more prevalent in China than in other countries due to the prevalence of mobile payments and digital transactions. In China, almost all transactions are now conducted digitally, providing companies with a wealth of customer data. This data can identify the customers that are most likely to pay their bills on time. This allows them to control the risk and, therefore, offer lower interest rates to investors. Using asset-backed securities in China is still relatively new and requires greater transparency and oversight. The Chinese government has taken steps to regulate the market. However, there are concerns that some firms are not complying with the regulatory regime when managing existing asset-backed securities and creating new asset-backed bonds.

There are well-established regulatory frameworks in other countries, and companies must follow strict guidelines when creating and managing these securities. By studying the securitization of Internet e-commerce platforms, (see Anthem mentioned in this paper), we can understand the structure of securitization of assets at a deeper level. [2]

## **1.4. Research Methods**

This paper mainly adopts the case study method and the literature analysis method, the case study method is mainly based on the premise of theory, with the asset securitization of ant gold service as an example, the company's relevant data for comprehensive collection and collation, and read and collated domestic and foreign related literature and cases after the perspective of securitization of the assets of the e-commerce business under the Internet, and the innovations and risks arising from the process of securitization of the assets of ant gold service as an analytical Object. The literature review method is mainly through reviewing domestic and international literature on the securitization of e-commerce platforms under the Internet to collect and organize the relevant theories and information and to explain the theories, definitions, and operation methods of asset securitization.

## **2. Literature Review**

This paper aims to study the methods, processes and potential risks of accounts receivable asset securitization of Chinese Internet finance enterprises taking Ant Financial as an example, and the literature related to the current research mainly includes two aspects: first, the current market status of asset securitization products of Chinese Internet finance enterprises, second, the current situation of Internet finance and Internet finance enterprises in China, and third, the characteristics of consumer loans and their impact in China.

### **2.1. Market status of asset securitization products of Internet finance enterprises in China**

According to Tang et al., the origin of Chinese securitization can be traced to 2005 when China first launched a pilot securitization scheme. This was halted in the wake of the US subprime mortgage crisis in 2008 [3]. In 2012, the securitization scheme was restarted and has experienced rapid growth since 2014. Besides, the total amount of ABS issuance in China reached US\$34 billion in 2019, an increase of 16.69% over 2018. Total ABS outstanding at the end of 2019 was \$56.6 billion, an increase of 27% over 2018 [4]. China's onshore asset-backed securities (ABS) market is growing rapidly, driven by significant investment from domestic and foreign institutions.

### **2.2. Internet finance and the current situation of Internet finance enterprises in China**

Internet finance is a new financial business model in which traditional financial institutions and Internet enterprises use Internet technology and information and communication technology to realize financing, payment, investment and information intermediary services. The deep integration of the Internet and finance is the trend of the times, which will have a more profound impact on financial products, businesses, organizations and services. [5] Over the years, China's Internet finance business has been growing in a straight line. In December 2020, the number of Internet finance users in China reached 854 million, accounting for 86.4% of the total Internet users, and the total consumption of various financial services exceeded 4 trillion yuan [6].

Make full use of the advantages of big data technology to build an Internet financial risk prevention management system, which can deeply mine all kinds of data of Internet finance business, achieve accurate risk prediction and efficient management, and improve the comprehensive management level of Internet finance industry and the stable development of China's Internet finance industry. [7] With the rapid development of Internet finance, it also has a strong influence on the financial field, making it a new economic model. Even many commercial banks have begun to turn their advantages into benefits [8].

### **2.3. The characteristics of consumer loans and their impact within China**

As one of the main financial services today, consumer finance provides loans to consumers through relevant financial business institutions to help them consume. The characteristics of Internet consumer finance mainly include diversified forms of display, popularization of target groups, developed scientific and technological means, and increasingly obvious advantages [9]. However, at the same time, Internet finance also contains the dual risks of the Internet and finance, that is, the risk spreads rapidly, spreads widely, becomes more complex, and further increases the difficulty of risk management [10].

With the rapid development of China's economy, people's consumption power has been improved, consumption concepts have also changed, and the research field of consumer finance is receiving more and more attention. At present, most of the various Internet consumer financial institutions engaged in consumer finance business originated or rely on e-commerce platforms, especially e-

commerce consumer finance business mainly relies on online shopping user pools, with the advantage of e-commerce platform user traffic and Internet consumption scenarios, it has achieved explosive growth in a short period of time. Moreover, compared with commercial banks and traditional consumer finance companies, Internet consumer financial institutions have unique advantages in online business [11]. In the past two years, on the basis of vigorously developing the payment business, Ant Financial has carried out asset securitization financing based on the income of the underlying asset pool, predictable cash flow and relatively stable handling fees [12].

### 3. Overview of Ant Financial

#### 3.1. Policy Background

Table 1 provides an overview of significant policies that have impacted Ant. These policies, sourced from the official website of the China Banking and Insurance Regulatory Commission and other online materials, cover a period from December 2017 to February 2021. They address a range of issues from regulating the "Cash Loan" business, clarifying standards for asset-backed securities (ABS) in interbank and market trading, to setting guidelines for information disclosure and antitrust measures in the field of platform economy.

Table 1: Policies that have a significant impact on Ant (Data source: Official website of China Banking and Insurance Regulatory Commission and online materials) [3-5].

Time	Policy Name	Main Contents
2017.12	Notice on Regulating and Rectifying the "Cash Loan" Business	ABS stipulates that the leverage ratio of small loan companies should not exceed 1
2018.04	Guiding Opinions on Strictly Regulating Other Financial Institutions to Carry out Personal Fixed Asset Management Related Business	Clearly define interbank and market trading ABS as standard assets
2019.02	Guidelines for Information Disclosure of Consumer Securitization of Personal Loans	Put forward relevant requirements for information disclosure of Securitization issuing personal consumption credit
2020.11	Interim Measures for the Administration of Online Microloan Business	The balance of funds that a small loan company integrates into its funds through the issuance of bonds, ABS and other standardized debt assets shall not exceed four times its net assets
2021.02	"Antitrust Guide in the Field of Platform economy"	It aims to prevent and stop monopoly in the field of Platform economy, and promote the standardized, orderly, innovative and healthy development of Platform economy

From the policies outlined in Table 1, it's evident that the Chinese regulatory authorities have been progressively tightening the regulatory framework for fintech companies, especially like Ant. Starting from specific guidelines on "Cash Loan" businesses to more comprehensive measures addressing asset-backed securities and information disclosure, the policies reflect a broader effort to ensure

financial stability, protect consumers, and promote healthy competition [3]. By February 2021, the issuance of the "Antitrust Guide in the Field of Platform Economy" indicates the regulators' intention to ensure large platform economies do not monopolize the market and stifle innovation [5]. For companies such as Ant, it's crucial to stay agile, adapt to these regulatory changes, and ensure they remain compliant while continuing to innovate and serve their vast customer base.

### 3.2. Industry Background

The traditional banking and financial system mainly serves high-quality large enterprises and a few high-quality individuals. However, there is also a huge demand for funds from a large number of individual entrepreneurs and small and medium-sized enterprises in China. The indirect financing channels provided by traditional financial institutions have high financing costs and cannot provide sufficient funds to meet the needs of industry development. The emergence of internet finance companies has satisfied their financing needs, and the scale of the internet finance market has been continuously expanding. In 2015, the scale of internet consumer lending reached 118.35 billion yuan, and by 2017, it reached 434.73 billion yuan, with a growth rate of 267.33% [13].

The scale of asset securitization products in China has been growing rapidly, as shown in the Figure 1 of account receivable asset-backed securities from 2014 to 2020.

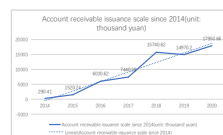


Figure 1: Account receivable issuance scale since 2014 (unit: thousand yuan) Data source: Chinabond.com.cn [13].

In conclusion, it is evident from the data table that since the recovery in 2014, the growth of account receivable asset-backed securitization in China has been rapid. Both the scale and variety of issued products have experienced significant growth, which greatly demonstrates the enormous value and attractiveness of this type of product.

### 3.3. Company Background

Ant Group is our case company and can be regarded as a pioneer in the development of internet finance companies. Ant Financial's Ant Credit Pay, launched in April 2015, had a lending scale exceeding 80 billion yuan and accumulated a large number of internet consumer finance assets. At

the end of 2020, prior to its planned IPO, Ant Group was valued at up to \$320 billion. According to the prospectus, out of Ant Group's 2.15 trillion yuan credit scale, only 2% was self-funded, with 98% of the funds coming from partner banks and issuing ABS.

However, after the failure of the IPO plan, significant uncertainty greatly affected its valuation. Warburg Pincus adjusted its valuation to between \$200 billion and \$250 billion at the end of 2020. With the failure of Ant Group's initial public offering and the widespread attention caused by leveraging capital through the issuance of asset securitization products, it becomes crucial to have a clear understanding of asset securitization, as well as how to use it reasonably and manage risks.

#### 4. Case Study: CICC Ant Credit Pay Consumer Credit Financing Asset-Backed Special Program

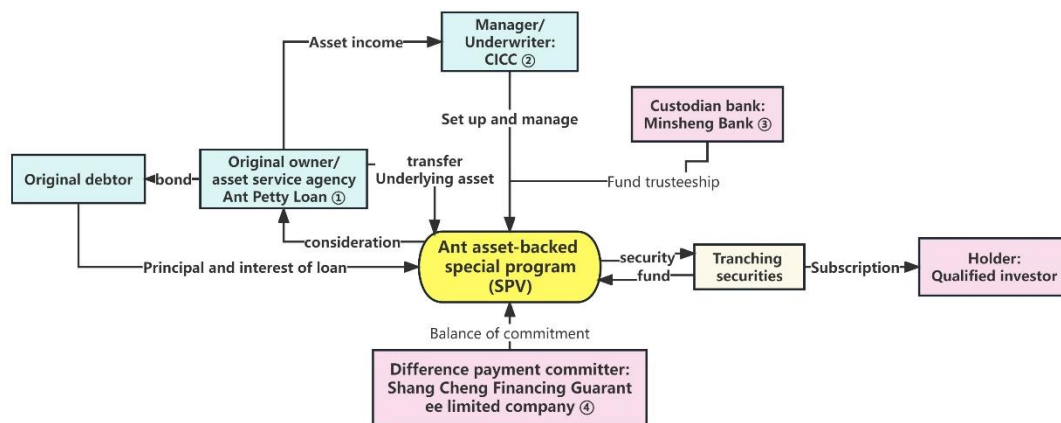


Figure 2: CICC Ant Credit Pay Consumer Credit Financing Asset-Backed Special Program Transaction Structure. Source: compiled by the author.

##### 4.1. Program Participants:

Main participants are as follows (Figure 2):

- ① Original Equity Owner/Asset Service Agency: Ant Petty Loan
- ② Program Manager / Promotion Agency: China International Finance Corporation ("CICC").
- ③ Custodian Bank: China Minsheng Bank Hangzhou Branch ("Minsheng Bank Hangzhou Branch").
- ④ Spread Account Provider / Excess Spread Provider: Merchant Surety Financing Guarantee Co., Ltd.

##### 4.2. Underlying Assets

The underlying assets, or the targets in the process of asset securitization, are part and parcel of the entire securitization procedure. This process involves the bundling, separating, credit enhancement, and selling of these less liquid underlying assets. A necessary attribute of these underlying assets is a predictable, steady cash flow in the future [14].

The underlying assets of the special program are the Ant Credit Pay consumer credit financing assets, which are internet-based microloans, a new type of asset category with higher interest rates due to elevated risk, such as credit risk and fraud risk, providing investment flexibility and a quick payment recovery [15].



#### 4.2.1. Overall review of the underlying asset of Ant: immense potential

As of the end of June 2017, the balance of Ant Credit Pay bill installment assets was 893.24 billion yuan; the bad debt rate was 1.29%, and the overdue rate was 1.83%. As of the end of June 2017, the loan balance of Ant Credit Pay transaction installment business issued by Ant Micro Loan was 98.86 billion yuan; the asset overdue rate was 0.01% [16].

These figures underscore the efficacy and significance of securitization in Internet finance. In this context, Internet financial companies such as Ant Financial can access vast funds via asset securitization, effectively manage credit risk of borrowers through credit assessment and risk control techniques, ensuring that the bad debt and overdue rates remain relatively low. This also demonstrates the immense potential and prospects of asset securitization in the field of internet finance.

#### 4.2.2. Diverse distribution of the asset pool

From the perspective of the distribution of credit financing in different regions shown in Figure 3, as of the end of June 2017, users of Ant Credit Pay bill installment are mainly distributed in the middle reaches of the Yangtze River, the Yangtze River Delta, the southern coastal areas, the southwest, and the middle reaches of the Yellow River, with the credit financing balance of the above five regions accounting for 76.16% of the total. Among them, the total balance of credit financing in the middle reaches of the Yangtze River and the Yangtze River Delta accounted for 35.73% [16]. From the perspective of regional defective rate, the defective rate of the first two major regions is at a low level in the national business scope.

Geographical distribution of debtors in Ant Credit Pay (also known as Huabei) installment billing business

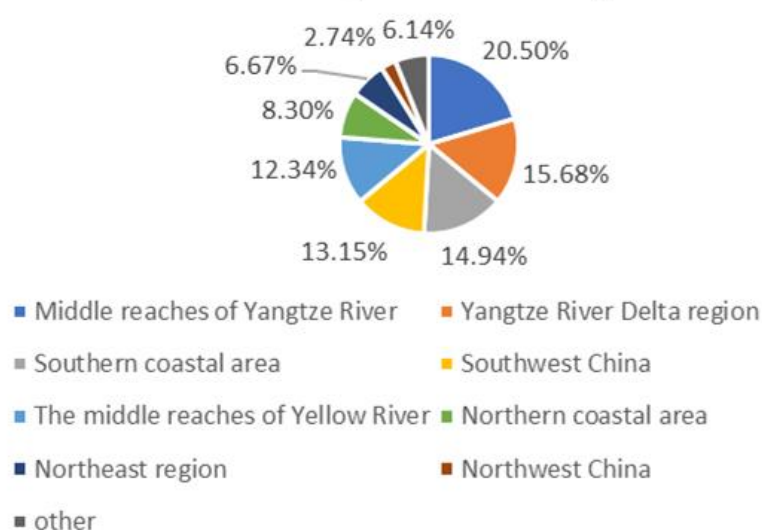


Figure 3: Geographical distribution of debtors in Ant Credit Pay (also known as Huabei) installment billing business. Data source: CICC - Huabei consumer credit financing asset support special program report 2017 [16].

In terms of the non-performing rate, borrowers under the age of 25 have the lowest non-performing rate of 0.93% [16], and the age of the debtor is positively correlated with the non-performing rate. Judging from the age distribution of debtors shown in Figure 4, as of the end of June 2017, the age of debtors in the installment business of Huabai bill was mainly under 35 years old, accounting for 82.07% [16]. Therefore, it can be seen that some small and individual investors who are difficult to

reach in the traditional asset securitization market are attracted to participate in the transaction of the new Internet platform and show a good ability to repay the loan.

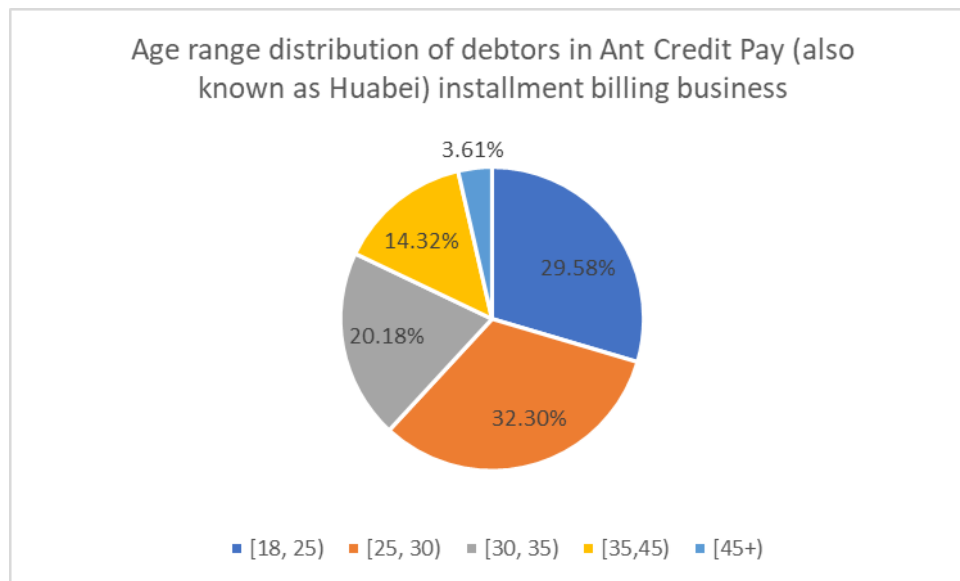


Figure 4: Age range distribution of debtors in Ant Credit Pay installment billing business. Data source: CICC - Huabei consumer credit financing asset support special program report 2017 [16].

Thus, the internet platform may attract a broader investor base to participate in securitization transactions, including some small and individual investors that are difficult to reach in traditional asset securitization markets. The original assets in internet finance are usually composed of a large number of microloans or other small-scale financial products. These original assets are more widely distributed across regions and industries, thereby diversifying and reducing concentration risk.

#### 4.2.3. Revolving purchase structure of underlying asset

Revolving purchase structure refers to a mechanism in some asset-backed securities (ABS) where the funds from maturing short-term assets can be used to purchase additional short-term assets for a certain period, keeping the pool of assets backing the security replenished or "revolving". And the details of this structure can be seen in Figure 5.

Ant ABS program adopts a revolving mode, which will cyclically purchase Ant Credit Pay consumer credit financing assets that meet the qualification criteria to form a dynamic asset pool. Furthermore, basic assets are not determined on a per-transaction basis before the establishment of the special plan, but are randomly extracted from the original equity owner's loan assets.



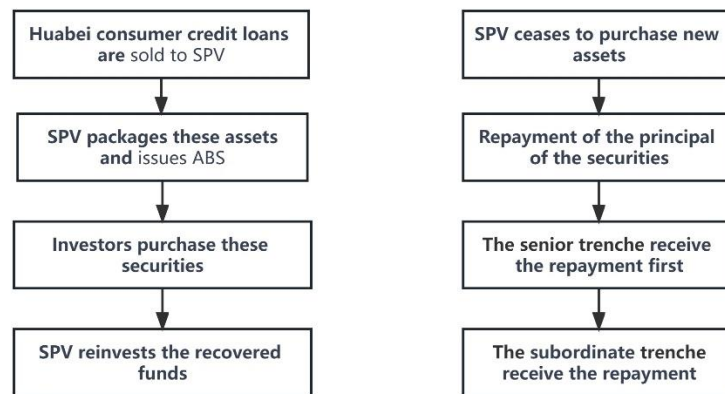


Figure 5: Revolving period process (left) and Allocation period process (right). Source: compiled by the author [14].

#### 4.2.4. The advantages of revolving structure in terms of distribution

The specific program adopted is the revolving structure, and the revolving purchase is the first time Alibaba has applied it to the process of asset securitization. Revolving purchase effectively solves two obstacles commonly faced in the securitization of small loan assets.

(1) Duration Mismatch: Duration mismatch is an inevitable issue in the asset securitization process where the underlying assets are diversified. The underlying assets of this specific plan are mostly small consumer credit loans, with a vast number of loans and varying repayment periods for each borrower. As of the end of June 2017, the outstanding credit financing balances for the Huabei bill installment business with installment terms of one month and twelve months totaled 724.81 billion yuan, accounting for 81.14% of the total. Other installment business terms are three months, six months, and nine months. However, the expected maturity date of the issued ABS is the eighth working day after the 12th month from the date of establishment of the special plan. Therefore, due to the inconsistency in the term of the underlying assets and the issued securities, it is necessary to use the revolving purchase method to replenish the assets when some of the underlying assets are due to ensure a stable and continuous interest income.

(2) Prepayment: Ant Small Loan mainly provides short-term consumer credit loans, characterized by "small amount, short term, and repay at any time," where "repay at any time" can lead to prepayment risk. The revolving purchase uses the principal of the loan that is prepaid to immediately purchase new loans, and the revolving structure can maintain a dynamic asset pool during the revolving period, so this structural design can effectively avoid prepayment risk. When entering the allocation period, all recovered funds are used to repay the interest principal of the securities, not used to purchase new underlying assets. At this time, there may be a risk of prepayment. The allocation period of this special plan is relatively short, and the risk of prepayment is relatively low.

#### 4.3. Tranching of Ant Credit Pay Asset-Backed Securities

Tranching in asset securitization is the process of dividing securities into different levels of priority for the allocation of cash flows and risks. Securities with a higher priority level (i.e., senior or priority securities) are usually paid first from the cash flows generated by the underlying assets, hence carrying lower risk but also lower returns. Conversely, securities with a lower priority level (i.e., subordinated or junior securities) are paid from the cash flows generated by the underlying assets only after the senior securities have been fully paid, hence carrying higher risk but also higher returns [17].

This tranching mechanism not only provides the investment choices needed by investors with different risk tolerances, but also enhances the market attractiveness of the asset pool, facilitating the marketization process of asset securitization [18].

In 2017, CICC - Huabei Asset securitization public issuance of 5 small loans to support the special plan, the cumulative scale of 30 billion yuan. Each special program backed security is divided into senior tranches, mezzanine tranches, subordinated tranches with a ratio of 88.5%/3.0%/8.5% (Table 2) [16], of which the secondary asset-backed security is held by the original owner.

The basic technical indicators of securities products supported by each special plan are listed in Table 2.

Table 2: CICC - Tranching of Ant Credit Pay Asset-Backed Securities.

Securities stratification	Issue size (billion yuan)	Scale proportion	Credit rating	Expected maturity date	Interest rate type	Target investor
Senior Tranche		88.5%	AAA		Fixed interest rate	Target investor
Mezzanine Tranche	30	3.0%	AA+	12 months	Fixed interest rate	Qualified investor
Equity Tranche		8.5%	-		-	*Qualified investors

Data source: CICC - Huabei consumer credit financing asset support special program report 2017 [16]

The senior asset-backed securities can obtain credit support of 11.50% from the mezzanine and subordinated tiers. The senior and mezzanine asset-backed securities can get 8.5% credit support from the mezzanine tier. This tranching and credit support mechanism is a internal credit enhancement measure which can reduce credit risk for senior and mezzanine investors, making them more willing to invest in these securities. This, in turn, makes it easier for the entire project to obtain financing.

## 5. Analysis of the asset securitization effect of Ant Financial Services

### 5.1. Analysis of financial indicators of Ant Group

#### 5.1.1. Profitability analysis

We start with the analysis of Ant Financial and find that asset securitization can promote the development of Internet finance profitability. The specific analysis is as follows:

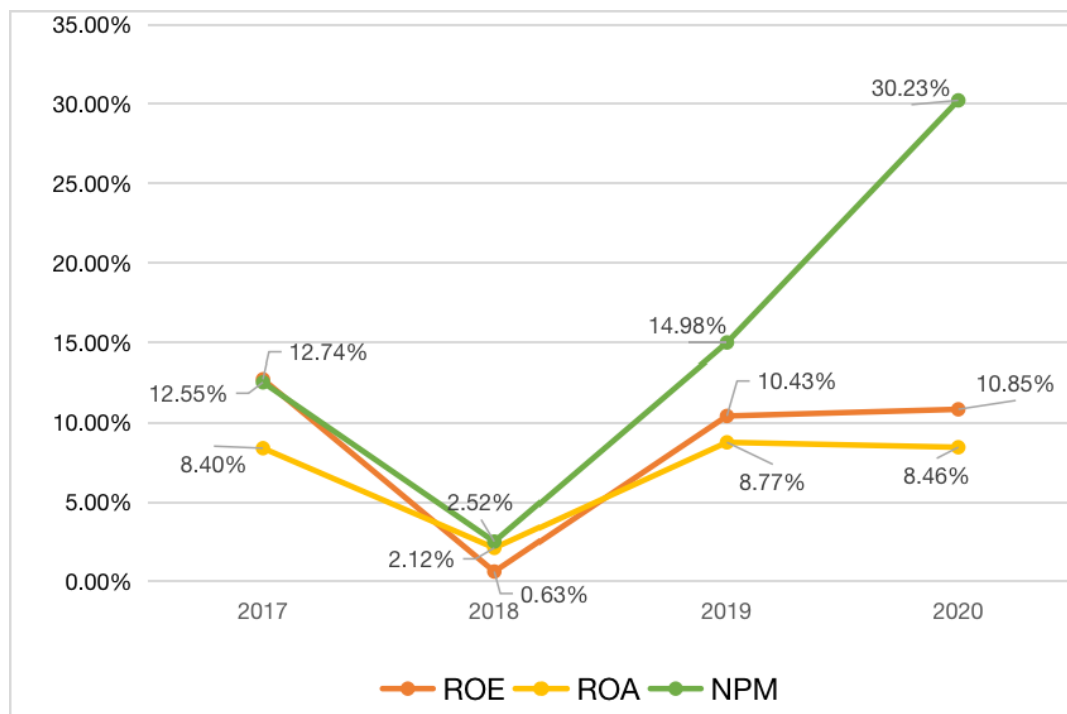


Figure 6: Trends of key indicators of profitability [19-22].

Ant Financial started asset securitization in 2015. According to Figure 6, we shows that the ROE, ROA and NPM indicators of Ant Group showed a sharp decline in 2018, due to ant Financial's increased investment in technology product innovation and international business, which led to profit losses. The ROE index of Ant Group has increased steadily year by year, mainly due to the leverage effect brought about by the change of capital structure and the increase of debt ratio. The company's ROA, NPM is increasing year by year.

Therefore, on the whole, the indicators show an upward trend, which indicates that Ant Financial has improved the profitability of its enterprises in the process of asset securitization from 2017 to 2020.

### 5.1.2. Insolvency analysis

We start with the analysis of Ant Financial and find that asset securitization can promote the development of Internet finance's solvency. The specific analysis is as follows:



Figure 7: Trend of key indicators of solvency [19-22].

In Figure 7, it can be found that the LR and CSR indicators of Ant Group are increasing year by year, indicating that the short-term solvency increases after the implementation of asset securitization. Secondly, the asset-liability ratio of Ant Group decreased from 0.51 to 0.32 from 2017 to 2020, which also shows that the long-term solvency of Ant Financial also increased after the implementation of asset securitization. Before 2015, Ant Financial's financing channels were relatively single, and its business volume expanded significantly, resulting in a rapid increase in the company's short-term borrowing and related party borrowing, and a significant decrease in monetary funds. Under the condition of the basically unchanged capital, the substantial increase in liabilities caused a rapid increase in the asset-liability ratio. However, after the implementation of asset securitization in 2017, Ant Financial expanded its financing channels and eased the situation before 2015.

Therefore, in general, after the implementation of asset securitization, Ant Group's short-term solvency and long-term solvency have been improved.

## 5.2. Operation capacity analysis

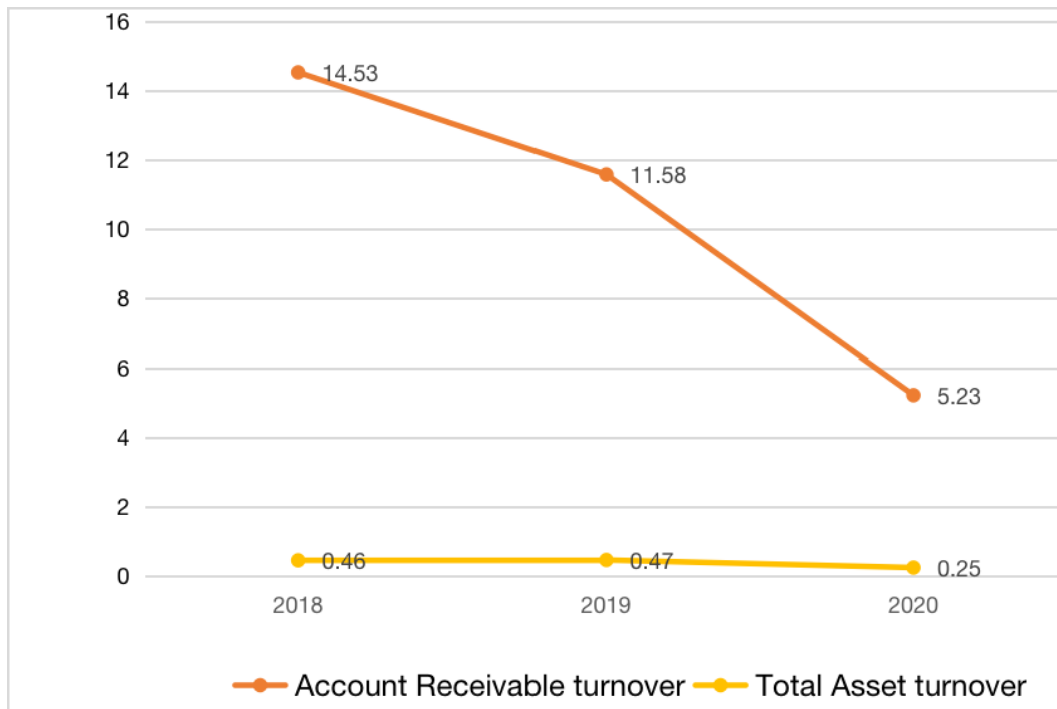


Figure 8: Trends of key indicators of operating capacity [19-22].

As observed in Figure 8, Ant Group's accounts receivable turnover rate has decreased significantly year by year. This is due to Ant Financial's asset securitization. The issued asset securitization business such as Huabei and Jiebei increases the proportion of customers' credit sales. In order to expand the business scope of asset securitization, Ant Financial will allow customers to pay in installments. Or if a customer with poor credit deliberately delays payment, with a delay of payments that should be recovered in the current period, or maybe the customer has some financial problems, the inability to pay for the loans has occurred, leading to accounts receivable not being collected as scheduled. These are the reasons for the decline in Ant Group's accounts receivable turnover rate. Next, Ant Group caused the increase in receivables due to the above reasons, in turn, which has led to a decline in its total asset turnover, down from 0.46 in 2018 to 0.25 in 2020. Therefore, due to the above reasons, Ant Financial itself has limited funds. To expand the market requires massive financing through a variety of financing methods. Currently, there are still imperfect factors in the financing management of Internet financial enterprises. Ant Financial's pursuit of high returns, released the constraints on financing management, leading to weak financing management links. Eventually, Ant Financial's financial leverage was overleveraged. This is also the main reason why Ant Financial was eventually suspended from listing.

Therefore, to sum up, after asset securitization, Ant Financial leads to the excessive financial leverage of the enterprise, which further improves the operating risk of the enterprise and reduces the operating capacity of the enterprise.

### 5.3. Liquidity analysis of accounts receivable

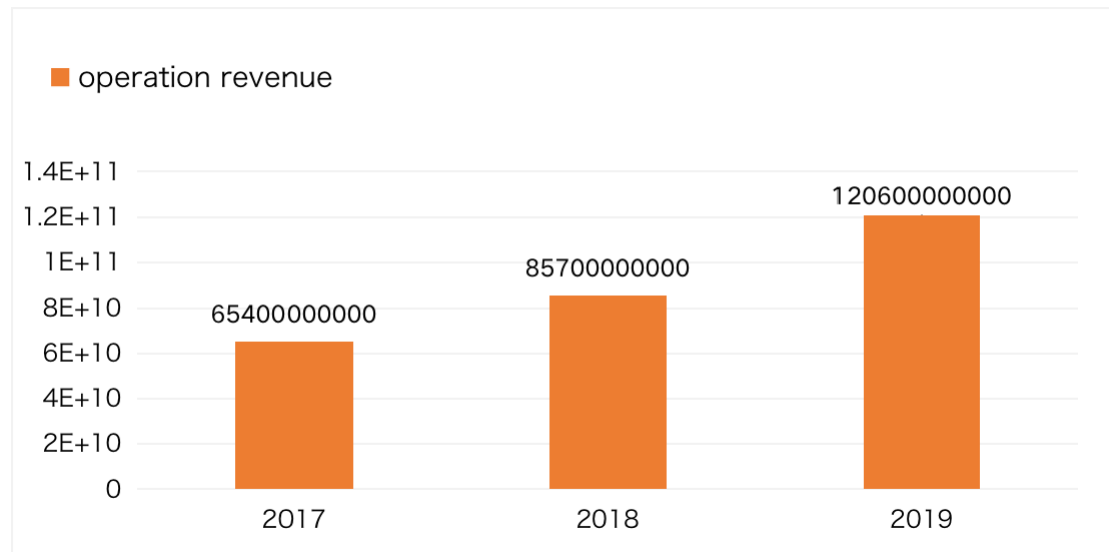


Figure 9: Operating income situation [19-20].

As can be seen from Figure 9, since asset securitization in 2015, the operating income has increased every year and increased to 120.6 billion yuan in 2019. Ant gold take using ants micro loan asset securitization project not only makes the enterprise's own accounts receivable liquidity, but also is an important source of income for the ant group, the ant gold take securitization earnings partly through share embellish agreement will net profit of 37.5% back to the group, complete the closed loop operation of cash flow.

### 5.4. Risk control ability analysis

In terms of risk control, Ant Financial is a credit risk assessment method for borrowers by using the big data accumulated on Tmall, Taobao and Alibaba business platforms.

In the pre-loan review stage, for Tmall and Taobao customers, the credit data and behavior data accumulated by borrowers on the e-commerce platform are first extracted, and these data are replaced into the specific network data model combined with the online video credit survey mode, so as to determine the authenticity of customers through cross-inspection. Customer credit level assessment mainly depends on the borrower accumulated in the e-commerce platform behavior data, combined with the behavior data of the borrower repayment ability and repayment willingness, according to the evaluation results to determine whether lending, and extract effective e-commerce platform transaction data and bank water to determine the loan loans.

In the loan management stage, the loan customers of Tmall and Taobao will be included in the A-GDS early warning and monitoring system. This detection system is an early warning system specially designed by Alibaba Group for potential borrowers and repayment risks. When sellers borrowers in the e-commerce platform to carry out business rate decline, star decline, false trading, virtual trading, excessive pedestrian credit reporting system, refund ratio, 7 days after no transactions, complaints compensation and infringement punishment, and so on and so forth, the system will issue warning, loan management personnel will according to A-GDS alarm type specific problem borrowers check, timely found the borrower problems, screening abnormal information.



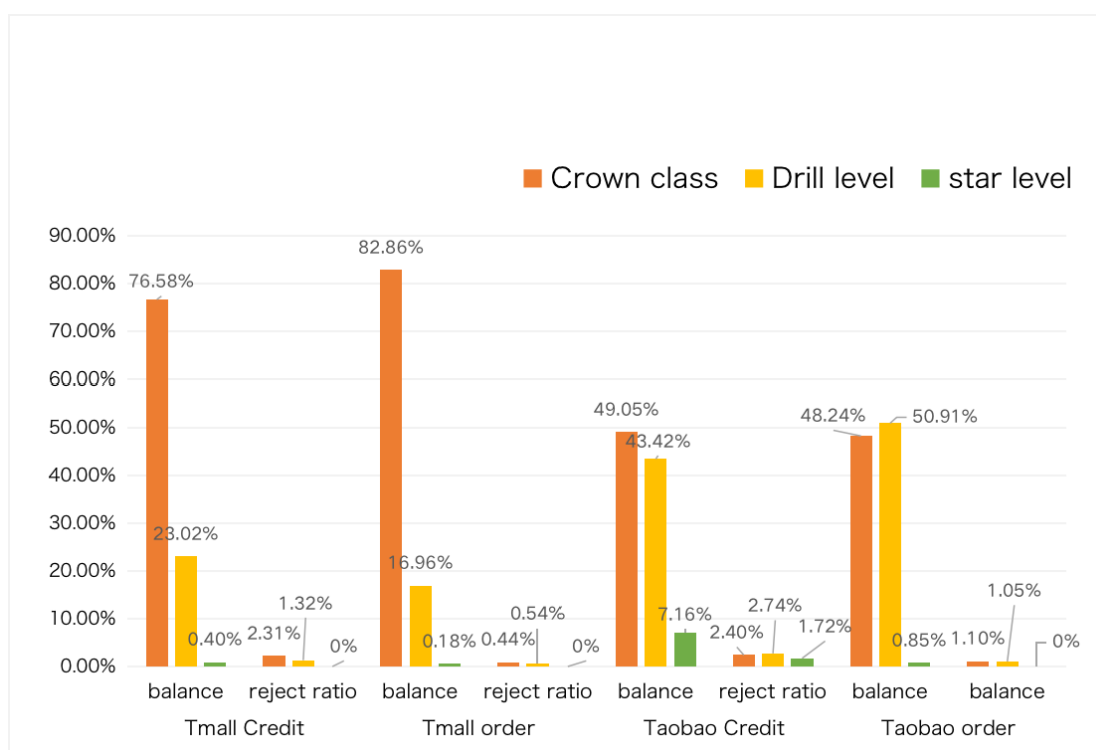


Figure 10: Distribution of star balance of different loan customers [19-22].

From Figure 10 The distribution of the star star balance of different loan customers, it can be seen that the star diamond level with high praise and high star level obtains more loan allocation, while the loan balance ratio of the lower star diamond level is very low. The non-performing loan rate of different star diamond grades also remained low, indicating that its A-GDS monitoring system has played A good effect. The majority of the rise in bad loans is due to the gradual accumulation of bad loans due to the rapid increase in loan balances. However, from the overall risk control, the company still maintains a low defect rate and a good level of risk control ability.

## 6. The Future of Internet Consumer Finance Asset Securitization

### 6.1. Reasons for Ant Financial's ABS being Regulated

One of the primary reasons Ant Financial's ABS needs to be regulated is to promote investor protection. Given that ABS is a complex financial instrument, it requires in-depth credit analysis and risk evaluation before it is sold to investors. This necessitates a high level of transparency in the financial markets, and the issuers of asset-backed securities have a duty to provide such transparency to protect investors' interests. ABS issuers must also adhere to strict accounting and auditing standards to ensure the financial information provided is accurate and reliable.

Another reason for regulating ABS issued by financial institutions like Ant Financial is to maintain the stability of the financial system. Given the recent subprime crisis, regulators are aware that ABS can be used to easily transfer financial risk within the financial system. Ant Financial can be regarded as a leading player in the field of digital payment, online lending, and wealth management in China's internet finance. The company's strategic collaboration with merchants has further consolidated its control in the industry. By offering discounts and incentives to Alipay users, the company has effectively diverted market share from other payment providers. This monopolistic behavior has allowed the company to gain significant market control and competitive advantages. This subtle form

of monopolistic behavior led Chinese regulators to believe that it could harm other financial companies wanting to grow. If people rely too much on one product, it could harm consumption. If the proportion of people using Ant Financial's products in the market is too large, regulators want to create a healthy and competitive market, hence the regulation of Ant Financial's ABS.

## **6.2. Suspension of Ant's IPO and Rectification Plan**

Under the supervision of the Chinese government, the ABS scale that Ant can issue has been greatly reduced. On November 2, 2020, the China Banking and Insurance Regulatory Commission and the People's Bank of China jointly drafted the "Interim Measures for the Management of Online Small Loan Business (Draft for Comment)", which required Ant Financial's leverage. The balance of funds raised by small loan companies through issuing bonds, asset securitization products (i.e., ABS), and other standardized debt-type assets must not exceed four times its net assets. In 2018, the issuance scale of Jiebei ABS was halved to 55.5 billion yuan, and it shrank further to 11.5 billion yuan in 2019. After the IPO was halted in 2020, Ant only got approval for two ABS products (total value 20 billion yuan) at the end of the year, and no new ABS has been approved for listing and sale since then.

To be listed again, Ant has taken corresponding rectification measures. Specifically, the first is at the company structure level. Alibaba and Ant began to split at the group level. On January 7, 2023, Ant Group issued a notice showing that it has adjusted the upper structure of the company's shareholders, from Jack Ma and his concerted actors exercising voting rights to major shareholders independently exercising voting rights without concerted action (each shareholder independently exercises voting rights and does not interfere with each other). This adjustment has reduced Jack Ma's voting rights from the original 53% to 6% [23]. The 'decoupling' of Alibaba and Ant is to cater to the needs of regulatory compliance. The user data of Alibaba's Tmall and Taobao cannot be shared with the data of Ant Group's Alipay. In the future, Ant may not be able to continue to obtain monopoly profits by using Alibaba's monopoly data advantage.

The second is in internal business, financial and technology businesses are separated, with the financial part based on compliance. Currently, Ant has isolated the brands of "Huabei" and "Jiebei", with banks and other financial institutions investing some funds to rename as "Credit Purchase". The "Huabei", originally operated by two small loan companies, was also established. "Jiebei", Ant's own consumer finance business, will be transferred to Chongqing Ant Consumer Finance Co., Ltd [23].

## **6.3. Future Prospects of Internet Finance Asset Securitization in China**

The future development trend of Ant Financial is positive. On June 3, 2021, Chongqing Ant Consumer Finance Company was approved for establishment by the former China Banking and Insurance Regulatory Commission, and "Huabei" and "Jiebei" also officially started the brand isolation work in the same year, becoming the exclusive brand of Ant Consumer Finance. To take on Ant's massive online loan scale, Ant Consumer Finance further increased its capital. By the end of 2022, the official website of the National Enterprise Credit Information Publicity System showed that Ant Consumer Finance's registered capital had increased from 8 billion yuan to 18.5 billion yuan, of which Ant Group increased its capital by 5.25 billion yuan at a ratio of 50%, and its shareholding ratio remained at 50%, being the largest shareholder. And in 2017, Ant Micro Loan's registered capital was only 12 billion yuan [24]. Among the 30 licensed consumer finance companies, its registered capital is the highest. In addition, Ant Consumer Finance turned a profit in 2022. The 2021 annual report of CATL (Contemporary Ampere Technology Co. Limited) showed that Ant Consumer Finance had a loss of 1.17 billion yuan for half a year of operation. On March 9, 2023, CATL's 2022 annual report disclosed that this year, CATL recognized an investment income of 67.24 million yuan

under the equity method for Ant Consumer Finance. Based on CATL's 8% shareholding, Ant Consumer Finance's net profit for the whole year of 2022 was approximately 840 million yuan.

On the evening of July 7, 2023, the dust settled on Ant's suspension of listing, and Ant Group and its affiliated institutions were fined 7.1 billion yuan [23]. It appears that China's internet consumer finance market will enter normal management. The special rectification of the financial business of 14 platform companies has been basically completed by the regulatory authorities, with a few remaining issues being urgently resolved, and normalized supervision will be implemented in the future. The regulator requires all financial activities of Internet technology companies to be included in the financial holding company for supervision, to improve risk isolation measures and regulate related transactions. After the regulation of Ant was implemented, Didi, Boss Zhipin, and Manbang and other Internet platforms have undergone regulatory review by the relevant departments, but since the end of last year, the aforementioned platforms have been relisted in app stores one after another. Judging from the continuously released positive signals, China's internet industry may usher in new development opportunities after the settlement of the Ant incident.

## 7. Conclusion

Ant Financial is a pioneer, taking the lead in trying out the securitization of internet consumer finance assets in China. This research delved into the securitization process of Ant Financial Services, by examining the 2017 CICC-Ant Huabei consumer credit financing asset-backed special program. It was found that the microloan base assets involved in Ant Financial Services, leveraging the advantages of the internet, managed to break through the geographical and industrial concentration restrictions of traditional microloans, thus significantly reducing inherent loan risks. The exceptional operational capacity of Alibaba Group ensured the high quality of the asset pool. Most of Ant Microloan's borrowers hail from consumer industries closely related to people's livelihood, and given that the consumer sector is currently in an upward cycle, a solid basis for debt repayment is provided. Moreover, the recycling structure of the special program effectively solves the mismatch in duration problem of microloan-based assets. Although microloans are generally high-risk, the tranching measures and external deficit supplementary agreements of this special program demonstrated excellent risk resistance capacity of this asset-backed security.

This study not only provides theoretical support for the securitization process of Ant Financial Services, but also evaluates various economic indicators to assess the level of risk control of Ant Group following asset securitization. It has been found that securitization has promoted Ant Group's operational capabilities, debt repayment ability, and asset liquidity, leading to an enhancement in its risk control. Moreover, the research has analyzed the reasons behind the suspension of Ant Group's IPO, its subsequent rectifications, as well as the future trends of internet finance in China, providing beneficial reference for other companies.

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