

# *Application and Development of Asset Securitization in China Auto Finance Corporation*

Peihong Xu\*

*School of Economics and Management, Guangxi Normal University, Guilin, Guangxi, 541000, China*

*\*Corresponding author: 1532309250@qq.com*

**Keywords:** Auto finance, Securitisation of assets, New energy vehicles

**Abstract:** The Chinese automotive industry has witnessed a new era of prosperity with the advent of the new energy automobile industry. The growth of automotive finance companies is inextricably linked to the fortunes of automotive companies, and it is of paramount importance for the development of automotive enterprises to diversify their sales channels and realise cash flow recovery through automotive finance companies. The development of auto loan asset securitisation not only recovers the cash flow of issued loans in advance for auto finance companies, but also effectively reduces their default risk. This, in turn, further promotes the business growth of auto finance companies and the expansion of the scale of auto enterprises. This paper provides a brief overview of the process of auto loan asset securitisation in China, highlighting the current challenges faced by auto finance companies in this area. These include low levels of asset securitisation, the lack of true sale in auto credit asset securitisation products, and the instability of underlying asset pools. The paper also suggests potential solutions to address these issues.

## **1. Introduction**

China's auto finance companies are non-banking institutions approved by the China Banking and Insurance Regulatory Commission (CBIRC) to provide financial services to buyers and sellers of automobiles in China. As of the present, 25 auto finance companies have been established in China. In recent years, the rapid development of new energy vehicles in China and the rising demand of consumers for car purchases have led to a rapid expansion of the auto loan business of China's auto finance companies. However, this growth has also exposed the weakness of the liquidity of these companies. As China's auto finance companies are unable to accept public deposits for their asset business in the same way as traditional financial institutions, the speed of recovery of funds by auto finance companies is constrained by the speed of lending. This significantly limits the speed of auto finance companies. The aforementioned factors have greatly limited the development of auto finance companies. Furthermore, high capital expenditures have increased the operating risks of auto finance companies. Asset securitisation has the potential to achieve the complete divestment of the underlying assets from the originator [1], while recovering the project funds in advance, which greatly eases the pressure on the liquidity of auto finance companies and their operating risks. Consequently, following the resumption of asset securitisation issuance in China in 2014, auto

finance companies began to utilise asset securitisation as a significant means of capital recovery operations [2], with the objective of expanding their operational scale and profitability while simultaneously reducing operational risks.

## **2. Asset securitization process of auto finance companies**

### **2.1 Asset securitization process of auto finance companies**

In contrast to other forms of financing, the primary advantage of asset securitisation is that it can transform assets that are illiquid over the long term but have a stable cash flow or projects that can generate a stable cash flow in the future into usable cash flow in the short term[3]. Currently, the asset securitisation of auto finance companies in China is dominated by the securitisation of credit assets. This paper primarily introduces the securitisation process of auto loan assets of auto finance companies in order to facilitate a more comprehensive understanding of the asset securitisation operations of auto finance companies. The asset securitisation process of auto finance companies is not significantly different from the traditional asset securitisation process. This process typically involves the formation of an asset pool, the establishment of an SPV, the implementation of credit enhancement and credit rating, and finally, the listing and issuance of the securitised assets[4].

The initial step is to establish an asset pool. The securitisation of auto loan assets typically involves a commercial bank or auto finance company acting as the originator, identifying the underlying assets of the self-proclaimed securitisation project and collating these assets for the pool. This process involves stripping and packaging numerous auto loan contracts and projects into the pool.

The second step is to establish an independent special purpose vehicle, or SPV. The sponsor transfers the pooled assets to the SPV, thereby effecting the divestment of the sponsor and the asset pool. Both parties jointly determine the transaction structure, price, quantity, and coupon rate of the issuance product, among other factors. The SPV is responsible for purchasing the underlying assets and repaying the investors' principal. In contrast, the SPV assumes the responsibility of purchasing the underlying assets, issuing green portfolio products, and repaying investors' principal and interest.

The third stage of the process is the implementation of credit enhancement and rating. The originator or relevant institutions may opt to upgrade the pooled assets in order to maintain the liquidity and safety of the assets, ensure the quality of the products issued and reduce the risks. This may be achieved either internally or externally. Internal credit enhancement can be achieved by dividing the product into tranches, such as preferred and subordinated tranches. The internal credit enhancement of auto loan securitisation is primarily dependent on the subordinated tranche of securities, which serves to supplement the repayment of the preferred tranche of securities in the event of a default of the securitised product. In addition, credit event triggers are established to enhance the credit enhancement. The external credit enhancement is primarily carried out through the use of a third-party appraisal agency to conduct credit assessment of the originator and asset rating of the assets. The external rating is primarily based on a third-party assessment agency's credit assessment and asset rating of the originator, which ultimately results in the issuance of a third-party assessment report with the objective of achieving external rating enhancement. In essence, the objective of internal rating enhancement for asset securitisation products is to achieve higher external ratings, thereby facilitating the issuance of asset securitisation products.

Finally, there is the issuance of securities. There are two principal methods of issuing asset securitisation. The first is to complete the transaction on the stock exchange, which is known as a public offering. The second is to conduct an interbank transaction, which is known as a private placement. In the case of general auto asset securitisation products, the aforementioned products are

issued in the form of a public placement, with a medium to long-term issuance period of approximately three to five years. At this juncture, the entire process of issuing asset securitisation products for auto loans is complete.

## **2.2 Green asset securitization issuance process of auto finance companies**

In recent years, with the continuous development of China's new energy automobile industry, the securitisation of green assets in the new energy automobile industry has also developed rapidly. The first green asset securitisation product of auto loans issued by an auto finance company in China is the "Shengshi Rongdi 2021 Phase II Individual Auto Mortgage Loan Green Asset-Backed Securities," issued by BYD Auto Finance Company, with an issue size of RMB 2 billion. The issue size was RMB 2 billion. In the current era, an increasing number of auto finance companies are engaging in the issuance of green auto loan securitised products. The process of issuing green auto loan securitised products is largely analogous to that of conventional auto loans. However, in the context of credit rating, it is essential to conduct green certification for the investment of funds in asset securitised products, as well as the originating institutions, among other relevant parties. Only those institutions that have obtained the requisite green certification are permitted to participate in the issuance of green asset securitised products. Furthermore, it is also necessary to manage the pooled assets subsequent to the issuance of green asset securitisation products. During the period of issuance, the asset manager is obliged to disclose pertinent information regarding the project to the public, to make available the asset operation report, and to issue rating tracking reports to investors, providing feedback on the progress of the project. At the same time, it is necessary to repay the principal and interest to investors. The custodian bank is obliged to repay the principal and interest to the investors and return the remaining funds to the originator once the investors' debts have been settled.

## **2.3 Asset securitization method selection of auto finance companies**

In comparison to conventional auto loan asset securitisation, green auto loan asset securitisation appears to offer a number of advantages. Firstly, the issuance cost of green auto loan asset securitisation is lower. Secondly, the main benefit of green auto loan asset securitisation is that it reduces the issuer's financing threshold, as well as their financing costs. This is achieved by reducing the interest rate on the green asset securitisation product to a level that is significantly lower than the bond market interest rate for an equivalent level of ordinary bond issuance. Furthermore, the interest rate on green asset securitisation may be lower than the Bank credit interest rates under the same conditions. Additionally, green asset securitisation reduces a certain financing threshold, enabling issuers who may otherwise be constrained by time, financial and operational indicators, or other factors to access capital markets with lower financing costs. Unlike traditional asset securitisation, green asset securitisation is based on the risk of the green project itself, independent of the qualifications of the issuer[3]. Consequently, the issuance of green auto loan asset securitisation represents a superior option for auto finance companies, particularly those engaged in the production of new energy vehicles, whereas many fuel vehicle companies are unable to participate in the issuance of green auto loan asset securitisation.

### 3. Status quo and problems of asset securitization of China auto finance company

#### 3.1 Development status of asset securitization of China Auto Finance Corporation

##### 3.1.1 Scale of asset securitization

A total of 25 auto finance companies have been established in China. Among these, BYD Auto Finance Co. has the highest registered capital of 10 billion yuan, while the lowest threshold of registered capital for the establishment of auto finance companies is 500 million yuan. According to the data disclosed by the Asset Securitisation Analysis Network (CNABS), as of May 2024, a total of 336 auto loan asset securitisation products were issued in China, with an issuance scale of RMB 14,561. The total issuance volume was 68 billion yuan, with 18 auto finance companies participating as the original equity holders. The total issuance volume was RMB 1,283.376 billion yuan. The auto loan of auto finance companies asset securitisation accounted for 88.13% of all auto loan asset securitisation scale.

Table 1: Accumulated issuance scale of registered capital and ABS products unit: 100 million yuan

corporate name	registered capital	Cumulative issuance scale
Saic GM Finance Co. LTD	85.00	2009.93
BMW Auto Finance (China) Co., Ltd	98.00	1213.69
Mercedes-Benz Auto Finance Co., Ltd	69.83	1131.07
Jizhi Auto Finance Co., Ltd	40.00	982.60
Dongfeng Nissan Auto Finance Co., Ltd	70.29	935.47
BYD Auto Finance Co., Ltd	100.00	896.13
GAC Huili Auto Finance Co., LTD	30.00	833.00
Tianjin Great Wall Binyin Auto Finance Co., Ltd	66.00	803.41
Volkswagen Auto Finance (China) Co., Ltd	82.00	723.36
Chery Huiyin Auto Finance Co., Ltd	15.00	669.72
Ford Auto Finance (China) Co., Ltd	37.60	617.51
Beijing Hyundai Auto Finance Co., Ltd	40.00	429.99
FAW Auto Finance Co., Ltd	28.40	426.94
Toyota Motor Finance (China) Co., Ltd	41.00	406.60
Rayford Auto Finance Ltd	20.00	388.45
Changan Automobile Finance Co., Ltd	47.68	284.89
Dongfeng Peugeot Citroen Auto Finance Co., Ltd	10.00	75.00
Sany Auto Finance Co., Ltd	26.84	6.00
amount to	907.64	12833.76

Data source: official websites of auto finance companies, asset Securitization Analysis network (CNABS)

As illustrated in Table 2, the scale of green auto loan asset securitisation, led by auto finance companies as originators, remains relatively modest. Only eight auto finance companies have participated in green auto loan asset securitisation issuance, with the total issuance scale amounting to RMB 79.51 billion.

As shown in Table 2, compared with the ordinary auto loan asset securitization, the scale of green auto loan asset securitization led by Auto Gold Company as the initiator is still very small. Only 8 auto finance companies have participated in the issuance of green auto loan asset securitization, and the total issuance scale is only 79.51 billion yuan.

Table 2: Scale of green asset securitization of auto finance companies Unit: 100 million yuan

corporate name	Issuance scale of green asset securitization
BYD Auto Finance Co., Ltd	605.00
GAC Huili Auto Finance Co., LTD	45.00
Jizhi Auto Finance Co., Ltd	42.00
SAIC Motor Group Finance Co., Ltd	9.10
Saic GM Finance Co. LTD	30.00
Tianjin Great Wall Binyin Auto Finance Co., Ltd	48.66
FAW Auto Finance Co., Ltd	10.34
Changan Automobile Finance Co., Ltd	5.00
amount to	795.10

Data source: Asset Securitization Analysis network (CNABS)

### 3.1.2 Relevant policy support

In recent years, China has implemented a series of favourable measures with regard to the supervision of automotive finance companies and the management of automotive loans. In 2023, the General Administration of Financial Supervision released a revised version of the Measures for the Administration of Auto Finance Companies and Measures for the Supervision and Ratings of Auto Finance Companies. This new edition provides further clarification on the classification and supervision of auto finance companies, as well as the methods of supervisory ratings and the standardisation of the operation and management of auto finance companies[5]. In particular, on 3 April 2024, the People's Bank of China and the General Administration of Financial Supervision jointly issued the Circular on Adjustment of Relevant Policies on Automobile Loans. This document optimised the maximum issuance ratio of automobile loans and increased the financial support for automobile trade-in scenarios. The Circular outlines a revised maximum issuance ratio for loans for own-use traditional-powered vehicles and own-use new-energy vehicles. The original ratio of 80% and 85% has been replaced with a more flexible approach, allowing financial institutions to determine their own lending ratios. This provides financial institutions, particularly automobile finance companies, with greater flexibility in their lending practices, which is beneficial for the automotive industry.

In the meantime, the securitisation of auto loan assets has been subject to a series of regulatory developments since the resumption of domestic asset securitisation in 2014. These include the Notice on the Workflow of Credit Asset Securitisation Filing and Registration (2014) and the Announcement of the People's Bank of China No. Announcement on Matters Relating to the Issuance and Management of Credit Asset-Backed Securities in 2015. The development of auto loan asset securitisation continues to mature, and the promulgation of the "Green Bond Support Project Catalogue (2021 Edition)" This formal inclusion of new energy auto loan asset-backed securities within the green scope also signifies that, in terms of new energy auto loans, the threshold for auto finance companies to engage in green asset securitisation has been reduced, and the issuance efficiency is considerably higher than that of traditional auto loan asset securitisation[6].

In particular, the development of the entire industrial chain of new energy vehicles has received considerable policy support. This encompasses the upstream production of power batteries, drive motors, automotive operating systems and other industries, as well as the downstream construction of charging piles, the recycling of new energy vehicles and other related activities. Automotive finance companies have concentrated their efforts on the sales side of the new energy vehicle market.

### 3.1.3 The most pertinent industry developments

The lending business of China's auto finance companies is highly correlated with the sales volume of the local auto industry. Consequently, it is of great importance to understand the recent auto industry trends when discussing the securitisation of auto finance companies' assets. According to data from the National Bureau of Statistics and the China Association of Automobile Manufacturers, China's annual automobile production reached 30.161 million units in 2023, representing a record high in the past 10 years. Of these, 9.587 million units were new energy vehicles. As illustrated in Table 3, the proportion of new energy vehicles in automobile production and sales is on the rise, and it is anticipated that the production and sales of new energy vehicles will continue to expand in the future.

Table 3: Domestic automobile production and sales Unit: ten thousand units

Production / year	2023	2022	2021	2020	2019
Car production	3016.1	2702.1	2608.2	2522.5	2572.1
Car sales	3009.4	2686.4	2627.5	2531.1	2576.9
Production of new energy vehicles	958.7	705.8	354.5	136.6	124.2
Sales of new energy vehicles	949.5	688.7	352.1	136.7	120.6

Data source: National Bureau of Statistics, China Association of Automobile Manufacturers

### 3.2 There are problems in the development of asset securitization of Chinese auto finance companies

The automotive industry in China is currently experiencing intense competition, particularly in the field of new energy vehicles. All automotive manufacturers are striving to enhance the quality of their products and engage in price wars to gain market share. Consequently, automotive manufacturers seeking to survive and continue developing in the face of intense competition must secure sufficient cash flow to maintain production and research and development activities, as well as to establish stable sales channels. All 25 Chinese auto finance companies have a background in automobile manufacturing, with the largest controlling shareholders being automobile manufacturers. The credit asset securitisation of auto finance companies offers the advantage of enabling automobile manufacturers to recover cash flow at an early stage, while simultaneously expanding their sales channels[7]. Nevertheless, it is important to acknowledge that the securitisation of assets of auto finance companies is not without its challenges.

#### 3.2.1 Low level of auto loan asset securitization

At this juncture, a number of auto finance companies in China have participated in the issuance of auto loan asset-backed securities and constructed a mortgage-backed securities mechanism, with the objective of packaging and selling such assets as auto credit to special purpose vehicle (SPV) institutions for asset-backed securities issuance. However, in practice, this kind of sale only exists in one form, and the auto finance company also has certain redemption rights. This means that the auto finance company itself also carries out a certain amount of interference with the asset securitised product. Furthermore, in the underlying asset pool of the asset securitisation product, the repayment direction of this kind of personal auto loans remains the responsibility of the auto finance company. Consequently, the asset securitisation product of the auto finance company has not yet achieved the "real sale" of assets.

### **3.2.2 The auto credit asset securitization products are not been sold**

At the present stage, many domestic auto finance companies have participated in the issuance of auto loan asset securitization, and built the mortgage securitization mechanism, so as to package the assets like auto credit and sell them to SPV institutions for asset securitization. However, in practice, this sale only exists in a form, and auto finance companies still have a certain right to redeem, which means that auto finance companies themselves also interfere with the asset securitization products to some extent. In addition, in the basic asset pool of asset securitization products, the repayment direction of such personal auto loans is still the account of the auto finance company. Therefore, the asset securitization products of auto finance companies have not realized the "real sale" of assets at present.

### **3.2.3 The quality and stability of the basic asset pool is poor**

The instability of the underlying asset pool for auto loan asset securitisation is primarily evident in the following areas: Firstly, the unavoidable vehicle recall by automobile manufacturers due to car quality problems may directly affect the scheduled repayment of auto mortgage loans, thus affecting the quality of the asset pool. Firstly, the risk of depreciation of the mortgaged vehicles, which is a risk common to all auto mortgage loans, is of particular concern. Compared to traditional fuel vehicles, the value retention rate of new energy vehicles is even lower, and there is a lack of a more complete valuation system for second-hand new energy vehicles. This will affect the quality of the underlying asset pool of the securitised collateralised vehicles when a change of ownership of the collateralised vehicles has been carried out.

## **4. Suggestions for countermeasures**

In order to further promote and protect the development of auto loan asset securitisation of auto finance companies, this paper puts forward a series of recommendations for the continuous improvement of auto finance company loan asset securitisation laws and regulations, regulatory system, industry standards and other aspects.

### **4.1 Improve the asset securitization system of auto finance companies**

The development of the automobile industry, particularly the new energy automobile industry, will undoubtedly lead to an increase in the demand for asset securitisation of automobile finance companies. However, the relevant legal and regulatory framework may not be sufficiently robust to adequately protect the interests of investors, which could potentially lead to market chaos. In order to safeguard the growth of the auto finance sector, it is imperative that the relevant authorities enhance the existing legislation and regulations governing the asset securitisation process employed by auto finance companies. This entails amending the registration requirements for the transfer of mortgage rights in auto loan asset securitisation products, establishing a robust legal framework for the realisation of underlying assets, and defining the legal status of special-purpose vehicles in the context of asset securitisation.

### **4.2 Improve the quality of the basic asset pool**

When an investor chooses to invest in an auto loan asset securitisation product of an auto finance company, the risk faced is highly correlated to the risk of default by the actual loan customer. In the event of a customer's failure to repay the relevant interest on time, this will have a detrimental effect on the investors' investment return and increase the risk associated with this asset securitisation

product. Consequently, when the auto finance company selects the assets to be included in the pool and creates the core asset pool, the initial step is to conduct rigorous quality control of the assets in the pool, which is the most crucial task for the auto finance company to issue auto loan securitisation products. In order to enhance the quality of the underlying asset pool and mitigate the risk to relevant investors, it is recommended that auto finance companies implement a rigorous auto loan pre-lending review system. Through on-site interviews and on-site inspections, it should be possible to investigate the creditworthiness and repayment ability of the lenders in an effective and comprehensive manner. In establishing the core asset pool, it is essential to consider the actual income, occupation and region of the lenders. Priority should be given to lenders with good creditworthiness and strong repayment ability, while a high degree of regional dispersion of the loans of the base asset pool should be avoided to minimise the risk of default brought about by unforeseen disasters.

### 4.3 Improve the valuation system of second-hand cars and establish a unified pricing standard

The valuation system for second-hand fuel vehicles has reached a relatively mature stage of development. However, the construction of a valuation system for second-hand new energy vehicles presents a challenge. The valuation of the electric system of new energy vehicles, and in particular the battery life condition, is of paramount importance. This is the factor that most significantly affects the value of second-hand new energy vehicles. However, there is currently a lack of assessment and testing standards, which results in inaccurate and inconsistent valuations. It is of great significance for the securitisation of new energy vehicle assets to establish a unified valuation standard for the new energy vehicle industry and to implement a process of constant revision and improvement.

## 5. Conclusions

As the Chinese new energy automobile industry continues to develop, it is inevitable that the resulting increase in demand for automobiles will contribute to the expansion of auto finance companies' loan portfolios. Consequently, the question of how to facilitate the rapid recovery of long-term capital for auto finance companies will become a significant concern. In the near future, the securitisation of personal auto loans by auto finance companies is likely to become a significant area of development. It is of significant importance to monitor the asset securitisation of auto finance companies, as this will serve as a crucial safeguard for the sustained growth of the automotive industry.

## References

- [1] MA Yong,Huang Aike,Chen Xinming. *The use of asset securitisation in electric vehicle financing*[J]. *Enterprise Economy*, 2015(06):189-192.
- [2] Lv Binbin. *Feasibility and risk management of asset securitization in consumer finance companies—Based on the perspective of the initiator institution* [J]. *Shanghai Finance*, 2019(02):69-73.
- [3] Zhang Yibin,Zhang Huaxi. *Green Asset Securitisation in China: Opportunities, Challenges and Suggestions for Countermeasures*[J]. *Tsinghua Financial Review*,2023(12):88-90.
- [4] Zhao Guangxu. *Analysis of the application of asset securitisation in auto finance industry*[J]. *Commercial Exhibition Economy*,2021(23):63-65.
- [5] Zuo Youzhen. *The application of asset securitization in auto finance companies in the new economic environment* [J]. *Enterprise reform and management*, 2019(06):106-107.
- [6] Tang Shan. *On the financing management and Application of credit ABS in auto finance companies* [J]. *Modern Economic Information*, 2019 (16): 308.
- [7] Li Minchong. *Research on the reasonable pricing of asset-backed securities for auto loans* [J]. *China produced economy*, 2022 (16): 46-48.