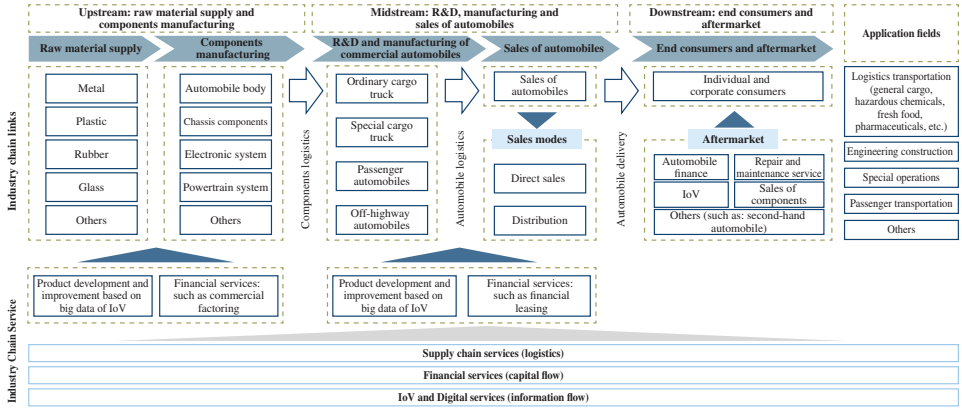
The information presented in this section is derived from the Frost & Sullivan Report, as well as various official or publicly available publications. The information derived from the Frost & Sullivan Report reflects estimates of the market conditions based on information from various sources. See "— Source of Information." We, the Sole Sponsor, the* [REDACTED]*, the* [REDACTED]*, the* [REDACTED]*, the* [REDACTED]*, or their respective affiliates or advisors or any other party involved in the* [REDACTED] *have not independently verified, and no representation is given as to the accuracy of the information and statistics from official government.

THE COMMERCIAL AUTOMOBILE INDUSTRY CHAIN SERVICE IN CHINA

Definition and Classification

The commercial automobile industry chain service refers to a series of services along the commercial automobile industry chain, including the procurement and production of raw materials/components, automobile manufacturing, automobile sales, and downstream market of commercial automobiles. It is a comprehensive concept, covering supply chain management, financial services, components sales in commercial automobile industry chain service market and emerging digital services in recent years. The commercial automobile industry chain is relatively long, with many intermediate links and players in each link, which create considerable demands for various kinds of services. In addition, the downstream application scenarios of the commercial automobile industry are very extensive, involving application scenarios such as logistics transportation, engineering construction, special operations, and passenger transportation.

The Commercial Automobile Industry Chain and Corresponding Industry Chain Services in China



Source: Frost & Sullivan

Overview of Commercial Automobile Industry Chain Service Market in China

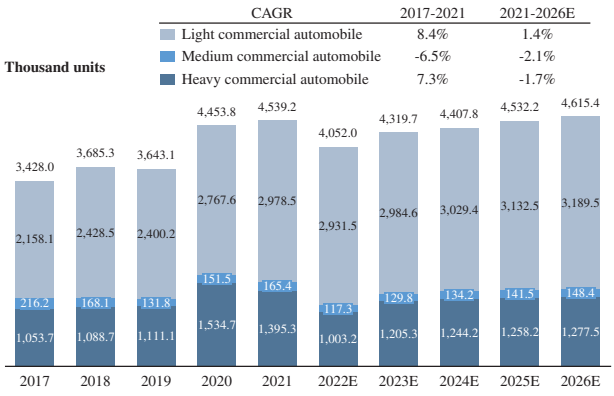
Trucks are the major categories of commercial automobiles, which can be called cargo carrying commercial automobiles. They are referred to as "commercial automobiles" in this document. In addition, the data in the document is based on trucks. The sales volume of commercial automobiles and penetration have a significant impact on the business development of service providers in the industry chain, so this indicator will be analysed in this section.

Sales Volume of Commercial Automobiles in China

Driven by national infrastructure construction projects and the development of the trunk logistics transportation industry, the heavy commercial automobile market has witnessed a rapid development in recent years. In 2021, the phase out of China III vehicles, the phased implementation of the China VI vehicle emission standards, and the construction of new infrastructure, the sales volume of heavy commercial automobiles in China reached 1,395.3 thousand units, maintaining a CAGR of 7.3% from 2017 to 2021. In the future, it is predicted that the sales volume of heavy commercial automobiles will return to a normal level in the next few years but still remain at a relatively high level, and will amount to 1,277.5 thousand units in 2026, representing a CAGR of -1.7% compared with 2021.

Sales volume of heavy and medium commercial automobiles in China reached to a historical high point due to multiple short-term positive factors. First is the Automobile Classification of Toll for Highway promulgated by the Ministry of Transport on 1 January 2020 (the "**New Toll Classification**"), which resulted in significant market demand for heavy and medium commercial automobile models with fewer axles for the same level of transportation capacity or truckload, leading to a wave of new market demand for trucks with fewer axles. Secondly, starting from 1 July 2020, the PRC gradually forbade the operation of Phase 3 Automobile Emission Standards vehicles, and require newly registered commercial automobile vehicles to meet Phase 6 Automobile Emission Standards, and such Government regulations have stimulated the growth of demand for environmentally friendly vehicles. Driven by above two factors, market demand for medium and heavy-duty commercial automobiles was driven to a historical high point in 2020 due to the policy window phase, after which the market demand for heavy and medium commercial automobiles are expected to gradually decrease to a normal level in the coming years from 2022-2026.

Sales Volume of China's Commercial Automobiles, by Light, Medium and Heavy Commercial Automobiles (2017-2026E)



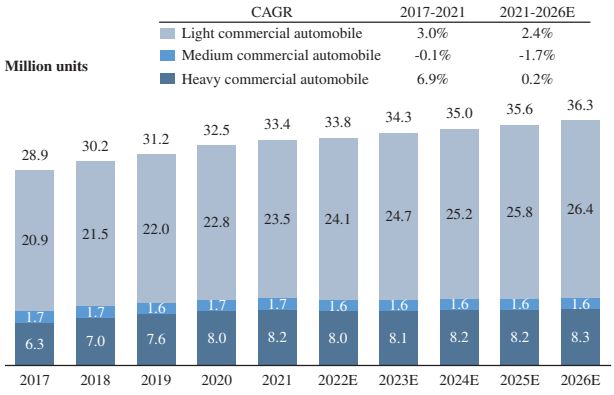
Source: China Association of Automobile Manufacturers, Frost & Sullivan

Existing Reserve Market of China's Commercial Automobiles

The continuous increase in the sales volume of heavy and light commercial automobiles has promoted the expansion of the corresponding existing reserve market. In 2021, the existing reserve market of China's heavy commercial automobiles reached 8.2 million units, representing a CAGR of 6.9% compared with 6.3 million units in 2017; regarding the light commercial automobile market, the existing reserve market reached 23.5 million units in 2021, representing a CAGR of 3.0% compared with 20.9 million units in 2017. In the future, as the

sales volume of heavy and light commercial automobiles stays at a relatively high level, the existing reserve market will continue to rise. By 2026, the existing reserve market of heavy and light commercial automobiles in China is expected to reach 8.3 million and 26.4 million, respectively, representing a CAGR of 0.2% and 2.4%, respectively compared with 2021.

Existing Reserve Market of China's Commercial Automobiles, by Light, Medium and Heavy Commercial Automobiles (2017-2026E)

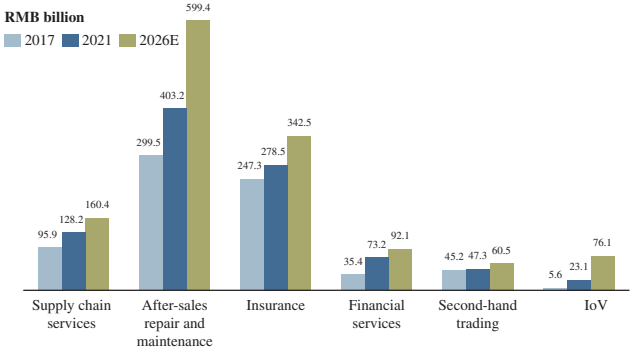


Source: China Association of Automobile Manufacturers, Frost & Sullivan

China's Commercial Automobile Industry Chain Service

The market for China's commercial automobile industry chain service mainly covers several categories: supply chain services, after-sales repair and maintenance, insurance, financial services, second-hand trading, and IoV. The market size of China's commercial automobile industry chain service reached RMB953.5 billion in 2021 and is expected to reach RMB1,331.0 billion by 2026, with a CAGR of 6.9% from 2021 to 2026. The main driving force is the steady growth of sales volume and existing reserve market of commercial automobiles.

Market Size of Main Segments of Commercial Automobile Industry Chain Service Market, by 2017, 2021 and 2026E



Source: Frost & Sullivan

OVERVIEW OF CHINA'S COMMERCIAL AUTOMOBILE LOGISTICS AND SUPPLY CHAIN SERVICE INDUSTRY

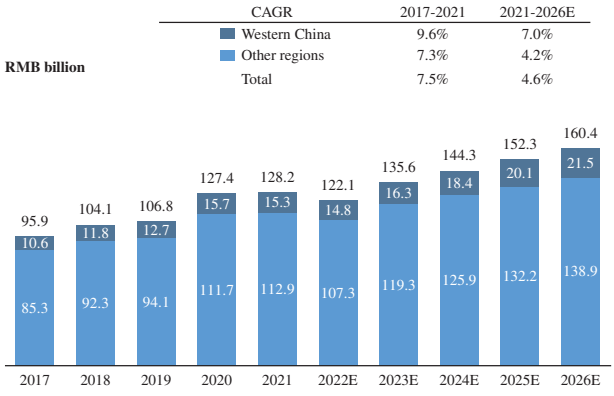
Definition and Classification of Commercial Automobile Logistics and Supply Chain Service

Commercial automobile logistics and supply chain service is the control of information flow, logistics and capital flow involved in the manufacturing, sales, and after-sales of commercial automobiles. It involves the procurement of raw materials, manufacture of intermediate products and final products, and the delivery of products to users through the sales network. The network connects suppliers, manufacturers, distributors, retailers, and end users through centralised management. In a narrow sense, the commercial automobile logistics and supply chain service refers to the provision of products to end users in the process of production and circulation, including logistics and warehousing services that enable the transportation of raw materials or commercial automobile components to factories (namely manufacturing-based logistics) or the delivery of automobiles or after-sales components to the downstream consumer market. The Company's logistics and supply chain service business mainly falls within the scope of this definition. Accordingly, this section shall focus on the same.

Market Size of Commercial Automobile Logistics and Supply Chain Service

China's commercial automobile logistics and supply chain service industry involves logistics-related services such as the transportation and warehousing of commercial automobiles and components thereof. As at 2021, the market size of China's commercial automobile logistics and supply chain service industry amounted to RMB128.2 billion, with a CAGR of 7.5% from 2017 to 2021, which was mainly due to the vigorous development of China's commercial automobile market. In the future, the commercial automobile logistics and supply chain service industry will grow alongside the commercial automobile industry. It is estimated that the market size of the commercial automobile logistics and supply chain service will amount to RMB160.4 billion by 2026, with a CAGR of 4.6%.

Market Size of China's Commercial Automobile Logistics and Supply Chain Service Industry (2017-2026E)



Source: Frost & Sullivan

Competitive Landscape in Commercial Automobile Logistics and Supply Chain Service Industry

The competition in the commercial automobile logistics and supply chain service industry in Western China is relatively fragmented, of which Tonghui ranked first among similar enterprises in Western China in terms of revenue of RMB1,459.9 million in 2021, followed by the revenue of RMB419.8 million from the second enterprise. Other market participants are small in scale, showing a highly fragmented industry competition.

The overall commercial automobile logistics and supply chain service industry in China is highly fragmented. Total number of players is approximately 1,000 in 2021, while most of which are small to medium enterprises. In 2021, we accounted for 1.1% market share in China by revenue, according to the Frost & Sullivan Report.

Ranking for enterprises in commercial automobile logistics and supply chain service industry in Western China, in terms of revenue in 2021

Company Name	Company profile	Revenue (in RMB million)	Market Share (%)
The Group	As a service provider of "Lean Integrated Logistics", the Group is engaged in logistics transportation and warehousing services.	**1,459.9**	**9.5%**
Chongqing Anji Hongyan Logistics Co., Ltd.	The company was incorporated in December 2005, with three bases of Huangmaoping, Yubei, Longxing, Yubei and Shuangqiao, Dazu. Its principal businesses include automobile logistics, inbound logistics of parts and components, network-based transportation value-added services and after-sales services.	**419.8**	**2.7%**

Source: Frost & Sullivan

Entry Barriers of Commercial Automobile Logistics and Supply Chain Service Industry

Heavy Investment

Commercial automobile logistics and supply chain service industry belongs to bulk cargo transportation, so the investment in transportation automobiles fleet, warehouse storage, information system and human resource systems will be very heavy. Plus the increasingly land cost and human labour cost, the industry is expected to become more capital intensive and will be the biggest challenge for market new entrants.

Clients Resources

This industry is highly time sensitive due to its direct correlation with client's namely the automobile manufacturer's production schedule, so only the players with strong service capability could get the opportunity to cooperate with large customers. Furthermore, most commercial automobile manufacturers in China have their affiliated commercial automobile logistics and supply chain service providers, making it more difficult for new market players.

Complex Technology Applications

Commercial automobile logistics and supply chain service are highly time-sensitive and has a strict requirement for efficiency, which requires large scale application of information technologies to conduct monitoring and management throughout the whole logistics process in real-time. These applications include transportation management system, Global Positioning System ("**GPS**") system, Personal Digital Assistant ("**PDA**") and wireless mobile telecommunications video visual system, etc. To take good advantages of these technologies requires long-term operation test and experience accumulation, which forms high entry barrier to new entrants.

Driving Forces and Future Trends of Commercial Automobile Logistics and Supply Chain Service Industry

Technology, operational and policy factors drive the development of the commercial automobile logistics and supply chain service industry. Driven by new technologies such as autonomous driving, new energy, and IoT for Industry, the commercial automobile supply chain will continue to improve in areas of intelligence and informatisation. Operational factors such as manufacturing costs, logistics costs, and truck life cycle costs will drive the commercial automobile supply chain to further develop in a highly efficient and energy-saving manner. To protect the safety of commercial automobile drivers and the environment, the government has issued a series of regulations, mandating addition of functions to commercial automobiles, and further increasing the type and number of commercial automobile components. These policy initiatives will drive the optimisation and change of the commercial automobile components logistics and inventory system.

In the manufacturing process, the addition of the IoT for Industry will help optimise the production process and technology and improve production efficiency. At the logistics level, the IoT for Industry can help optimise logistics solutions and reduce energy consumption. The dispatching system of automated guided vehicles and other informatization products will greatly improve the efficiency of logistics operation, hence achieving cost optimisation. In the field of after-sales service, the IoT for Industry can trace the source of components and provide remote diagnosis. Automated equipment such as intelligent warehousing can greatly improve the efficiency of warehousing and components transportation. In the field of supply chain management, big data systems and visualisation tools can optimise supply chain processes and improve efficiency. In 2020, the National Fourteenth Five-Year Plan has started smoothly in a special historical period. Supply chain innovation has become the core idea in the field of commercial circulation. Warehouse logistics will gradually change its model into precise matching of delivery, and its importance in commercial automobile supply chain management will become more prominent.

OVERVIEW OF CHINA'S COMMERCIAL AUTOMOBILE FINANCIAL LEASING MARKET

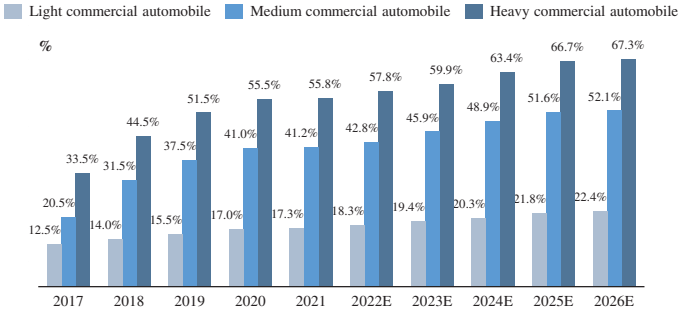
Definition and Classification of Commercial Automobile Financial Leasing

Financial leasing can be carried out in two models, direct leasing and leaseback: (i) Under the direct leasing model, a truck financial leasing company purchases corresponding automobiles from dealers according to customer requirements and leases them to users for their daily use. During the lease period, the financial leasing company owns the automobiles and customers have to make periodic payments to the company. After the lease contracts expire and all agreed rents have been settled, the automobiles are transferred to customers, and (ii) Under the leaseback model, a combination of purchase and lease, a user sells the automobile it owns to a financial leasing company, and then leases it back by paying rent. For users, the main purpose of adopting this model is to retain the right to use the automobile while obtaining capital inflows. Therefore, the leaseback model not only allows the existing assets of a user to be put into use, but also improves the user's financial situation, and the user can re-obtain the ownership of that automobile when the lease contract expires, which is the main model in financing leasing market. In the field of commercial automobile financial leasing, the main types of participants include the commercial automobile manufacturer-connected financial leasing companies, the financial institution-connected financial leasing companies and the third-party financial leasing companies.

Penetration rate of Commercial Automobile Financial Leasing Market

The penetration rate of commercial automobile financial leasing (The proportion of commercial automobiles sold under the financial leasing model to the total number of commercial automobiles sold) for different types of commercial automobiles, in China is quite different. The financial leasing penetration rate of heavy duty commercial automobiles with higher prices is significantly higher than that of light duty commercial automobiles and medium duty commercial automobiles. The financial leasing penetration rate of heavy duty commercial automobiles with higher prices amounted to approximately 55.8% in 2021 and is expected to reach 67.3% in 2026.

Penetration Rate of China's Commercial Automobile Financial Leasing, by Model (2017-2026E)

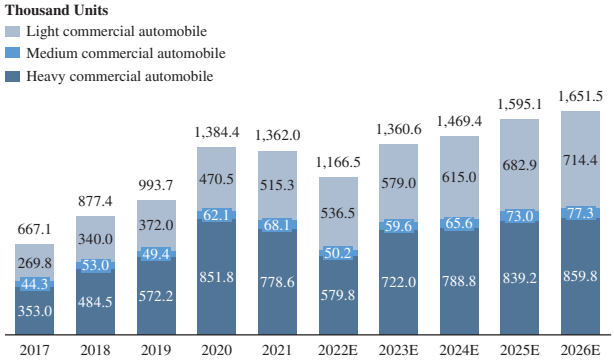


Source: Frost & Sullivan

The Number of Newly Leased Automobile for Commercial Automobile Financial Leasing

In the past five years, due to the rapid increase in the penetration rate of commercial automobile financial leasing, the number of newly leased commercial automobiles has also increased. In 2021, due to the decrease in the sales volume of heavy duty commercial automobiles, the newly leased heavy duty commercial automobiles also decreased to 778.6 thousand. Looking ahead, impacted by the COVID-19 pandemic across China in 2022 and expected quarantine measures to be taken in the coming years, it is expected that the number of newly leased commercial automobiles will see a slow growth and reach to 1,651.5 thousand units in 2026, representing a CAGR of 3.9% from 2021.

The Number of Newly Leased Automobiles for China's Commercial Automobile Financial Leasing (2017-2026E)



Source: Frost & Sullivan

Driving Force of the Commercial Automobile Financial Leasing Industry

The driving force of the commercial automobile financial leasing industry mainly involves growing demand for financial leasing by individuals and small and medium-sized enterprises, favourable policies and the improvement of financial technology: (i) With respect to the demand, the credit records of individuals and small and medium enterprise consumers are relatively incomplete, so most of China's banking and financial institutions have stricter requirements and procedures for the credit approval of individuals and SMEs. Therefore, a large number of individuals and small and medium-sized enterprise consumers needing to purchase commercial automobiles turn to financial leasing methods with low down payment, moderate interest rates and flexible instalment plans, (ii) With respect to the policies, the PRC government attaches great importance to the healthy development of the commercial automobile industry and the financial industry, and has promulgated a number of policies to promote the standardised and orderly development of the industry, and (iii) With respect to technologies, in recent years, financial technology has developed rapidly. More and more companies have deeply integrated artificial intelligence, big data, and other information technologies with financial services, to promote the efficient operation of the financial leasing business.

Development Trends of Commercial Automobile Financial Leasing Industry

The main development trends of the commercial automobile financial leasing industry include: (i) Gradual popularisation of LPR pricing mechanism. In the long run, the LPR pricing mechanism will be conducive to the standardised development of the industry, the avoidance of market risks, and the improvement of risk management capabilities. Customers will be the ultimate beneficiaries of the financial leasing business, and (ii) Greater focus on services. To stand out from the competition, some financial leasing companies have begun to shift their focus from a "financing-oriented" business model to a "service-oriented" business model, and have provided more value-added services such as insurance and second-hand automobile trading to customers such as individuals and logistics companies.

Competitive Landscape of the Commercial Automobile Financial Leasing Industry

Overall Competitive landscape of market

With the steady development of the commercial automobile financial leasing market, more and more financial leasing companies have ventured into the commercial automobile sector, which has driven the increasingly fierce competition in this market segment. Based on the number of newly leased commercial automobiles in 2021, the market share of China's top five commercial automobile financial leasing companies was 26.8%, denoting relatively low market concentration. At present, the leading companies in the competitive landscape are dominated by manufacturer-backed companies and financial institution-backed companies. Commercial automobile manufacturer-connected financing companies effectively expand their customer groups relying on dealer networks and interest subsidies, while financial institution-backed financing companies expand their business using their capital scale advantages. Most of the third-party financial leasing companies are regional and SMEs, but there are also some companies with leading business scales. These leading companies compete in market leveraging flexible leasing schemes, incentive mechanisms, and service levels.

In the commercial automobile financial leasing market, the Group had a market share of 1.5% in 2021 with 20.3 thousand newly leased commercial automobiles; the Group ranked fourth among the commercial automobile manufacturer-connected financial leasing enterprises.

Ranking of China's Financial Leasing Companies, based on the Newly Leased Commercial Automobiles (2021)

Ranking	Company name	Company Background	Number of newly leased commercial automobiles (thousand units)	Market share (%)
1	First Automobile Finance Co., Ltd.	Commercial automobile manufacturer-connected financial leasing companies, a subsidiary of FAW Group, who is the largest heavy duty commercial automobile manufacturer in China in terms of sales volume in 2021.	93.4	6.9%
2	Lionbridge Financing Leasing (China) Co., Ltd.	Headquartered in Beijing, Lionbridge is on of the largest independent third-party commercial automobile financial leasing service providers in China.	75.4	5.5%
3	Dongfeng Finance Co., Ltd.	Commercial automobile manufacturer-connected financial leasing companies, a subsidiary of Dongfeng Motor Corp., who is the largest commercial automobile manufacturer in China in terms of sales volume in 2021.	74.2	5.4%
4	Ping An International Financial Leasing Co., Ltd.	Financial institution-backed financial leasing companies, the company conducts direct leasing, leaseback, entrust leasing, leveraged leasing, joint leasing, and other businesses. The company is the subsidiary of Ping An Insurance Group, which is one of the largest insurers in China.	67.9	5.0%
5	Haitong Unitrust	Financial institution-backed financial leasing companies, their business mainly includes the provision of direct equipment leasing, sales and leaseback service businesses.	54.2	4.0%
	Other companies		997.0	73.2%
	The Group	Commercial automobile manufacturer-connected finance leasing companies	20.3	1.5%

Source: Frost & Sullivan

Ranking of China's Commercial Automobile Manufacturer-connected Financial Leasing Companies, based on the Newly Leased Commercial Automobiles (2021)

Ranking	Company name	Commercial Automobile Manufacture Background	Number of newly leased commercial automobiles (thousand units)	Market share (%)
1	First Automobile Finance Co., Ltd.	FAW Group	93.4	6.9%
2	Dongfeng Finance Co., Ltd.	Dongfeng Motor Corp.	74.2	5.4%
3	CA Sinfusi Financial Leasing Co., Ltd.	Beqi Foton Motor Co.	41.5	3.0%
4	The Group	Shaanxi Automobile Holding Group Co., Ltd.	20.3	1.5%
5	Strong Leasing Co., Ltd.	Shandong Heavy Industry Group	19.8	1.5%

Source: Frost & Sullivan

OVERVIEW OF MARKET OF COMMERCIAL FACTORING FOR COMMERCIAL AUTOMOBILES IN CHINA

Definition of Commercial Factoring

Factoring business operated by non-bank institutions is called commercial factoring. Commercial factoring is a set of financial solutions based on the factoring contract signed between factoring providers and suppliers, which integrates working capital financing, credit risk protection, accounts receivable management and collection services. Under the financing factoring contract, the factor provides financing services to the seller through the receivables from the seller at the beginning of the term. Upon maturity, the source of repayment will be determined according to the type of factoring, and the object of recourse for overdue payment will be determined according to the type of recourse.

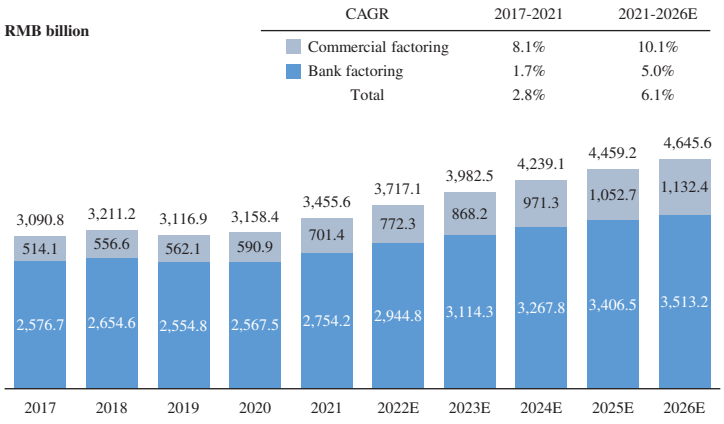
For SMEs, compared with bank loans, commercial factoring has obvious advantages in terms of qualification requirements and approval cycles. Commercial factoring is more flexible. It can professionally evaluate the buyer company, and then determines whether to provide funds to the seller company, which will ensure robust risk control, while shortening the approval cycle and quickly solving funding problems for SMEs, as well as bolstering the real economy.

Commercial Factoring Market Size

The market size of China's commercial factoring increased from RMB514.1 billion in 2017 to RMB701.4 billion in 2021 at a CAGR of 8.1%. One of the reasons for the great increase is that the Ministry of Commerce of the PRC has promoted pilot projects in some regions since 2013 and has gradually introduced supporting policies. In addition, from 2015 to 2017, the PBOC had gradually adopted a significant reduction and expansion of the balance sheet due to monetary policy and other factors, which greatly affected the business volume of bank factoring, and the growth rate of commercial factoring in 2017 was as high as 45.7%. China's economy was not as good as expected due to the impact of the epidemic in the first quarter of 2020. However, with a series of targeted stimulus policies such as the decline in loan interest rates of the PBOC and investment in infrastructure projects, China's economy and commercial factoring industry remain promising.

The commercial factoring market in China is highly competitive and fragmented with a large number of participants and no prominent leading company. As compared with other third-party commercial factoring companies, the Group is able to acquire stable customers and business resources in the commercial automobile factoring market, with its strong connection with the commercial automobile manufacturers, to maintain strong competitiveness in the market.

China's Factoring Business Volume, by Business Type (2017-2026E)



Sources: Factors Chain International (FCI), Frost & Sullivan

Driving Forces and Future Trends of Commercial Factoring Market

The driving forces and future trends of the commercial factoring market mainly include: (i) the large scale of receivables in the commercial automobile industry. Due to the relatively high prices of products of upstream, midstream, and downstream companies in the commercial automobile industry, and the large number of orders from major customers, these companies may undertake a large amount of accounts receivable. These accounts receivable not only occupy a large amount of capital resources and bring pressure on cash flow turnover, but also increase companies' business operation risks. The large amount of accounts receivable, coupled with the tightening of bank credit from time to time, have made more urgent demand for commercial factoring of enterprises in China's commercial automobile industry, and (ii) Policy encouragement and a constantly improved financing environment. As the central government vigorously promotes supply-side reforms, the government encourages the development of commercial factoring businesses so as to provide enterprises with a better financing environment.

OVERVIEW OF CHINA'S COMMERCIAL AUTOMOBILE INSURANCE BROKERAGE MARKET

Definition of Commercial Automobile Insurance Brokerage

Insurance brokerage institutions are one of the important participants in the commercial automobile insurance industry. They provide intermediary services for insurance applicants (the insured) and help them sign contracts with insurance companies. These insurance brokerage companies collect commissions from the insured and represent the interests of the insured rather than the interests of the insurance companies.

Premium Income Scale of China's Commercial Automobile Insurance Brokerage

The insurance premium income scale of China's commercial automobile insurance brokerage increased from RMB15.2 billion in 2017 to RMB23.4 billion in 2021, with a CAGR of 11.3%, mainly due to the large scale of commercial automobile existing reserve market, enhanced insurance awareness of China's consumers, more diversified automobile insurance products and an increase in the number of insurance brokerage institutions. In the future, the premium income scale of China's commercial automobile insurance brokerage is expected to increase from RMB23.4 billion in 2021 to RMB32.1 billion in 2026, with a CAGR of 6.5%. For the commercial automobile sector, insurance brokerage institutions will continue to expand market demand making use of their strong service capabilities and customised product portfolio, and their market share is expected to rise from 7.9% in 2020 to 10.7% in 2026.

Entry Barriers of Commercial Automobile Financial Leasing, Commercial Factoring and Insurance Brokerage Industry

Capital Barrier

As a capital-intensive industry, financial leasing, commercial factoring and insurance brokerage companies are required to have strong financing ability, diversified financing channels and competitive financing cost. Financial leasing and commercial factoring companies with financial licences generally have broader access to financing at a relatively lower financing cost.

Human Resource Barrier

These industries are also knowledge-intensive and require a comprehensive talents base covering investing & financing, marketing, management, tax, accounting and deep understanding of vertical industries such as commercial automobile industry. The establishment of the professional team is a significant challenge for both current players and new entrants.

Risk Management Capabilities

The mature risk management system is one of the key determinants for the sustainable development of financial leasing, commercial factoring and insurance brokerage companies. The risk control should be implemented in every step throughout the whole financial leasing, commercial factoring or insurance brokerage project, from business development, customer information management, due diligence work, project approval process.

Client Resource Barrier

The financial leasing business has the characteristics of long leasing cycle and services throughout the entire leasing cycle, so customers have very high stickiness. Compared with re-contacting a new financial leasing company, customers generally choose to continue to cooperate with the original company that has established a mutual trust relationship. It is difficult for new industry entrants to seize existing customer resources.

OVERVIEW OF CHINA'S COMMERCIAL AUTOMOBILE IOV MARKET

Definition and Classification of Commercial Automobile IoV

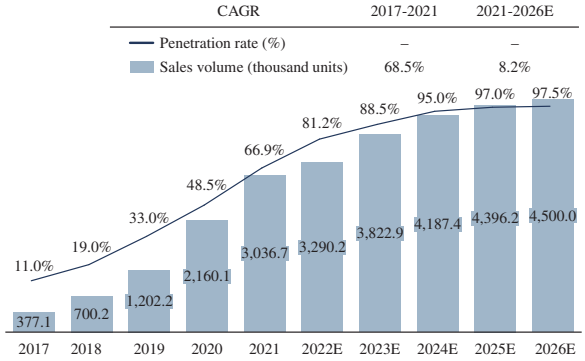
In the field of commercial automobiles, IoV is a business that collects automobile operation data, driver operating data, location data, and other data so as to ensure the compliance of automobiles sales with the applicable laws and regulations for dynamic supervision of the state and provide data information services for various market participants in the automobile ecosystem. In China, the early commercial automobile IoV was created and developed to meet the government's legal and regulatory requirements for automobile dynamic supervision. For example, the mandatory installation of the satellite positioning device (including the Beidou System) promoted its rapid increase in penetration and facilitated a large user base.

Market Size of Commercial Automobile IoV

Pre-installation penetration rate of commercial automobile IoV equipment and corresponding sales volume of new automobiles

The driving force for the development of commercial automobile IoV mainly comes from the government's regulatory requirements for transportation management. For example, since 2011, the Ministry of Transport and the Ministry of Industry and Information Technology have required the installation of a satellite positioning device with driving record functions on "chartered buses engaged in tourism, regular passenger buses of Class III or higher, and special road automobiles for transporting hazardous chemicals, fireworks, and civil explosives". In 2014, the Ministry of Transport and other ministries promulgated the Road Transportation Automobile Dynamic Supervision Management Measure* (《道路運輸車輛動態監督管理辦法》), pursuant to which from 1 July of that year, the newly sold heavy-loaded cargo-carriage automobiles or semi-trailer towing automobiles shall be connected to the public platform of road transportation automobiles and pre-installed with a satellite positioning device that meets the standard, such as Beidou System supervision terminals. Staring from 1 January 2015, if the satellite positioning device is not pre-installed, the road transport authority will not issue the Road Transport Licence* (道路運輸證). The demand for policy supervision and the technological progress have jointly promoted the rapid increase in the penetration rate of China's commercial automobile IoV.

China's Commercial Automobile IoV Pre-installation Penetration Rate and Corresponding Sales Volume of New Connected Automobiles (2017-2026E)



Source: Frost & Sullivan

Driving Factors of Commercial Automobile IoV Industry

Rapid popularisation and application of the IoV due to technological progress

With the rapid progress and commercial application of technologies such as 5G, big data, cloud services, algorithms, and image recognition, the technology foundation of IoV has become more solid, and the deployment cost and technology difficulty have been reduced. At the same time, the rapid development of new energy and other technologies has improved the electrification of commercial automobiles and provided a good carrier for the deployment of IoV.

Policy encouragement

Since 2010, the Chinese government has continuously issued a series of policies to encourage the development of the IoV industry and the application of the IoV in the commercial automobile industry. For example, since 2011, the Ministry of Transport and the Ministry of Industry and Information Technology have required the installation of a satellite positioning device with driving record functions on "chartered buses engaged in tourism, regular passenger buses of Class III or higher, and special road automobiles for transporting hazardous chemicals, fireworks, and civil explosives". In 2014, the Ministry of Transport and other ministries promulgated the Road Transportation Automobile Dynamic Supervision Management Measures (《道路運輸車輛動態監督管理辦法》), further strengthening this provision and expanding the scope of application on automobiles. In December 2018, the Ministry of Industry and Information Technology issued the "Internet of Vehicles (Intelligent Connected Vehicle) Industry Development Action Plan (《車聯網(智能網聯汽車)產業發展行動計畫》)", and in 2020, National Development and Reform Commission issued the "Intelligent Vehicle Innovation and Development Strategy (《智能汽車創新發展戰略》)", making top-level design and development planning for the future development of the IoV.

The demand of the participants in the industry chain for the IoV

The development of commercial automobile IoV is mainly driven by the needs of the government, upstream components suppliers, automobile companies, drivers, fleet managers, and downstream customers in various fields of the logistics industry. From the government's perspective, it is committed to promoting the standardised development of the transportation industry, so there is an urgent need for transportation management based on the IoV technology; from the perspective of component suppliers and automobile companies, big data of automobile driving such as parameters for engines, gearboxes, axles and other key components are valuable to automobile companies and upstream components suppliers. The big data analysis technology plays a very important role for product development and improvement; from the perspective of drivers and logistics fleet managers, the IoV can help them realise intelligent, visualised and refined automobile management or fleet management, such as intelligent automobile scheduling, automobile condition monitoring and fault diagnosis, driver behaviour monitoring, driving safety management, etc., which can greatly reduce the operating costs of the logistics industry or significant property damage caused by accidents; in terms of downstream industries, taking customers in the fresh food industry as an example, they need to rely on the IoV technology to realise the traceability of the transportation process of fresh products so as to ensure that there are no product quality problems caused by improper transportation operations.

Development Trends of Commercial Automobile IoV Industry

Downstream customers changed from self-employed businesses and small fleets to large fleets

With the transformation and integration of the logistics industry, self-employed business is becoming rare or has been integrated into the fleet due to weak market competitiveness, and the downstream customer structure will gradually be dominated by the fleet. The fleet has a strong demand for refined operation management and transportation safety, and it will become the core customer of commercial automobile IoV.

Products gradually evolving into industry-oriented integrated solutions

In terms of product form, commercial automobile IoV will gradually develop into an industry-oriented comprehensive solution. At present, the commercial automobile IoV is still in the exploration and initial stage, especially the IoV enterprises with the background of commercial automobile enterprises. Thanks to their deep understanding of automobiles, there is room for further improvement in the functional richness and technology maturity of the Internet of Vehicles, presenting broad prospects for commercial realisation. In the future, more advanced functions and clearer application scenarios driven by technological progress will support the commercial automobile IoV to develop into an industry-oriented integrated solution, and to provide customers in various industries with flexible services relying on mature technology and diverse functions.

Competitive Landscape of Commercial Automobile IoV Industry

Major domestic commercial automobile manufacturers have deployed the IoV through independent research and development or cooperative development, covering drivers, fleets, production and sales, and service stations, and providing multiple functions including location information, navigation, and itinerary analysis. Compared with third-party IoV companies focusing on aftermarket, commercial automobile manufacturer-connected IoV companies can achieve deep integration with corresponding brand models and obtain more big data of privatised automobiles. High-quality big data is of great value for the development, upgrade, and improvement of automobile models of manufacturers and the development of other financial and after-sales service products. At present, the commercial automobile manufacturer-connected IoV service industry in China is highly concentrated with the top five service providers accounting for 92.3% of the market share in 2021. Among them, the Group is the first commercial automobile manufacturer-connected IoV service provider who realised pre-installation for all commercial automobile series of a specific manufacturer. In 2021, the Group accounted for 23.3% of the market size with 944.2 thousand heavy commercial automobiles accessing IoV platform, ranking first in the industry. In addition, the Group ranked third among the commercial automobile IoV enterprises in China in terms of the number of commercial automobiles accessing IoV platform in 2021.

Ranking of China's Commercial Automobile Manufacturer-Connected IoV enterprises, based on the Number of Heavy Commercial Automobiles Accessing IoV Platform (2021)

Ranking	Company name	Connections (thousand units)	Market share (%)	Introduction
1	The Group	944.2	23.3%	The layout began in 2011, system was launched in 2011, and pre-installation for all series began in 2015.
2	FAW Jiefang	815.1	20.1%	The platform was launched in 2014, large-scale pre-installation began in 2017, and pre-installation for all series began in March 2019. The platform was launched and operated by FAW Group, who is the largest heavy duty commercial automobile manufacturer in China in terms of sales volume in 2021.
3	Foton Connectivity	809.8	20.0%	The platform was launched in December 2017, and pre-installation for all series began in the second half of 2018. Foton Connectivity was launched by Beiqi Foton Motor, who is the 2nd largest commercial automobile manufacturer in China in terms of sales volume in 2021.
4	Sinotruck Smart Connectivity	591.0	14.6%	The system was launched in 2014, focusing on the commercial automobile aftermarket service ecosystem. The platform was launched and operated by Sinotruck, one of the leading heavy duty commercial automobile manufacturers in China.
5	Dongfeng Truck Management	582.0	14.3%	The project was officially implemented in April 2018, and pre-installation for all series began in March 2019. The platform was launched and operated by Dongfeng Motor Corp., who is the largest commercial automobile manufacturer in China in terms of sales volume in 2021.
	Others	314.1	7.7%	
	Total	4056.2	100.0%	

Source: Frost & Sullivan

Ranking of China's IoV enterprises, based on the Number of Commercial Automobiles Accessing IoV Platform (2021)

Company/Platform	Type	Connections (thousand units)	Market share (%)	Introduction
G7	Third party IOV company	2600.0	32.3%	Established in 2010 in Beijing, engaging in providing IoV hardware and software solutions in aftermarket segment.
FAW Jiefang	Manufacturer-connected	1077.8	13.4%	The platform was launched in 2014, large-scale pre-installation began in 2017, and pre-installation for all series began in March 2019.
The Group	Manufacturer-connected	944.2	11.7%	The layout began in 2011, system was launched in 2011, and pre-installation for all series in 2015.
Foton Connectivity	Manufacturer-connected	887.4	11.0%	The platform was launched in December 2017, and pre-installation for all series began in the second half of 2018.
J-Connect	Manufacturer-connected	883.1	11.0%	The platform was launched in April 2016, large scale pre-installation began in 2017.
Others	–	1649.0	20.5%	–
Total	–	8041.5	100.0%	–

Source: Frost & Sullivan

Entry Barriers of Commercial Automobile IoV Industry

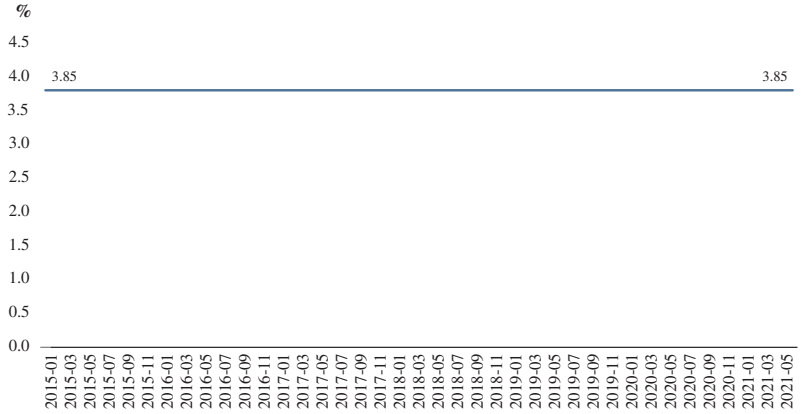
Technology accumulation and stable fleet customer base are the major barriers of commercial automobile IoV industry. IoV is knowledge-intensive industry which requires long-term and continuous investment into R&D, it may cost years for a company to realise substantial technology breakthrough. Hence market players with core technologies are usually well-positioned to further develop downstream customer especially large fleet customers in logistics industry for monetisation and then further strengthen market competitiveness.

Price trend of raw materials

The People's Bank of China's lending rates to financial institutions have maintained a very stable trend in recent years, with the 1-year lending rate at 3.85%. In 2020, China's economy was impacted by COVID-19 and currently the international political and economic environment is also uncertain.

To support the economy recovery and the sustainable development of SMEs, it is expected that the interest rate will remain stable in the coming 1 or 2 years.

One-year Loan Interest Rate of the People's Bank of China to Financial Institutions 2015-2021

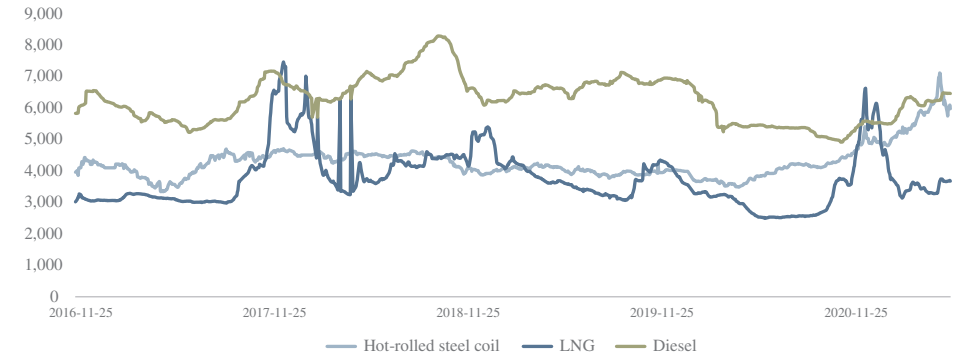


Source: People's Bank of China, Frost & Sullivan

Price of raw materials including Liquefied Natural Gas ("**LNG**") and Diesel fluctuated during the past several years mainly affected by supply and demand relationship. Among which, price of hot-rolled steel coil generally maintained an upward trend since 2016, which was mainly attributable to the reduce of excessive production capacity in steel industry promoted by the PRC government. It is expected that due to the continuous effort in reducing excessive production capacity in steel industry, the price of steel products will maintain a growth trend during the forecast period till 2025.

Price of Hot-rolled Steel Coil, LNG and Diesel in China, 2016-2021

Price	Min.	Average	Max.
Hot-rolled steel coil	3,340.0	4,282.0	7,120.0
LNG	2,497.0	3,744.5	7,472.0
Diesel	4,922.0	6,277.0	8,301.0



Source: Shanghai Futures Exchange, Shanghai Petroleum and Natural Gas Exchange, Frost & Sullivan

SOURCE OF INFORMATION

We had commissioned Frost & Sullivan to provide information on the relevant industry in the PRC. We had agreed to pay a fee of RMB580,000 to the Frost & Sullivan for the report. The Directors are of the view that the payment does not affect the fairness of the views and conclusions presented in the Frost & Sullivan Report.

In compiling and preparing the research report, Frost & Sullivan conducted primary research including interviews with industry experts and participants and secondary research which involved reviewing the statistics published by the government official statistics, annual reports and data based on its own database. Frost & Sullivan presented the figures for various market size projections from historical data analysis plotted against macroeconomic data, as well as data with respect to the related industry drivers and integration of expert opinions. Frost & Sullivan assumed that the social, economic and political environment in the PRC is expected to remain stable.

Frost & Sullivan is an independent global consulting firm founded in 1961. It offers industry research, market strategies and provides growth consulting and corporate training. Its industry coverage includes industrial and machinery, automotive and transportation, chemicals, material and food, commercial aviation, consumer products, energy and power systems, environment and building technologies, healthcare, industrial automation and electronics and technology, media and telecom. The Frost & Sullivan Report includes information on data of the relevant industry in the PRC.