

# ***Research on the Current Situation and Innovation Development of China's Automotive Aftermarket***

**Yuhe Li<sup>1,a,\*</sup>**

<sup>1</sup>*Department of Statistic, University of Warwick, Coventry, UK, CV4 7AL*

*a. Yuhe.Li.1@warwick.ac.uk*

*\*corresponding author*

**Abstract:** This paper mainly studies the current situation and development of China's automotive aftermarket in the post-COVID-19 era. It mainly elaborates from the economic environment, demand environment, technical environment, industrial environment and social environment, so as to reveal the huge growth potential of the automotive aftermarket and provide a reference for formulating the development strategy of the automotive aftermarket. This paper finds that with the increasing number of privately added cars, the market demand for car services is also increasing, and consumers have higher and higher requirements for services, high-quality services are the foundation of after-market services.

**Keywords:** Automotive Aftermarket, Development Strategy, O2O mode

## **1. Introduction**

According to the definition from the American Automotive Aftermarket Industry Association (AAIA), the so-called "automotive aftermarket" refers to the "transaction of repair and maintenance services and the required auto parts, auto supplies and materials after the car are sold. market"[1]. That is to say, after the car is sold, around the various services in the use of the car, in the consumer car purchase process, when the new car is delivered, it will enter the car aftermarket, so the car aftermarket is a very huge concept. In a broad sense, the automotive aftermarket includes all transactions and services in the life cycle of car use after the car is sold, involving car use, maintenance, repair, repurchase, etc.; its supply chain covers a process from the supplier to the final Commodity circulation structure connected by users. The state's "Twelfth Five-Year Plan for the Auto Parts Industry" pointed out that it is necessary to accelerate the realization of the autonomy of key parts of the auto industry. Therefore, in the next 5 to 10 years, the auto parts industry will be one of China's most promising industries and maintain a high growth rate. According to the specialized sub-engineering degree, the output value of auto parts accounts for about 50%~70% of the output value of the complete vehicle, and the market sales and ownership of the complete vehicle determine the market demand for auto parts. From 2018 to 2025, with the continuous growth of vehicle age, the number of ownership continues to increase, and the compound growth rate of various types of accessories is as high as 16%; Age will be between 4 and 10 years. With the growth of the average vehicle age, China's auto aftermarket has grown steadily. According to the number of vehicles, the annual maintenance costs of vehicle owners and their respective future growth rates, it is estimated that the domestic auto parts industry will maintain a stable growth rate in the next 2 to 3 years. With a compound annual growth rate of 13.61%, the maintenance business

is expected to exceed 1 trillion yuan in 2023[2]. Since the 21st century, the domestic automobile market has developed rapidly under the dual impetus of economy and policy, ranking first in global production and sales for many consecutive years. Thanks to the rapid development of the automobile sales market, the domestic automobile after-sales service market has also expanded rapidly in scale. In this context, new models such as Internet O2O service chains and door-to-door services have emerged one after another. Some pioneers are still struggling, and some are still withdrawing from the market. This is related to the fact that the participants in the industry have not carefully analyzed and studied the market, and it is also related to the imperfect guidance of relevant domestic policies. This paper studies and analyzes the traditional domestic automotive aftermarket, studies and summarizes the changing factors of the future market, and finally draws a business model that is more suitable for the needs of the future automotive aftermarket, which provides a reference for the development strategy of the automotive aftermarket.

## 2. The Status Quo of China's Automotive Aftermarket

### 2.1. Comparison of Chinese and American Automotive Aftermarket

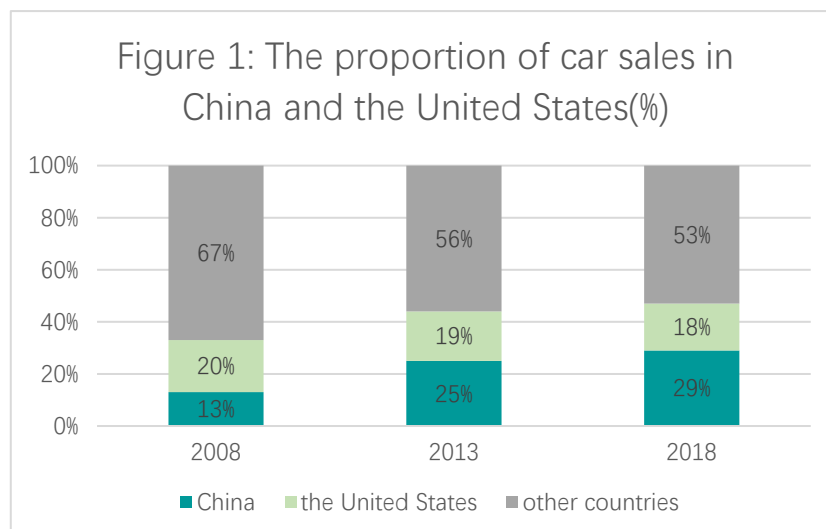


Figure 1: The proportion of car sales in China and the United States(%) [1].

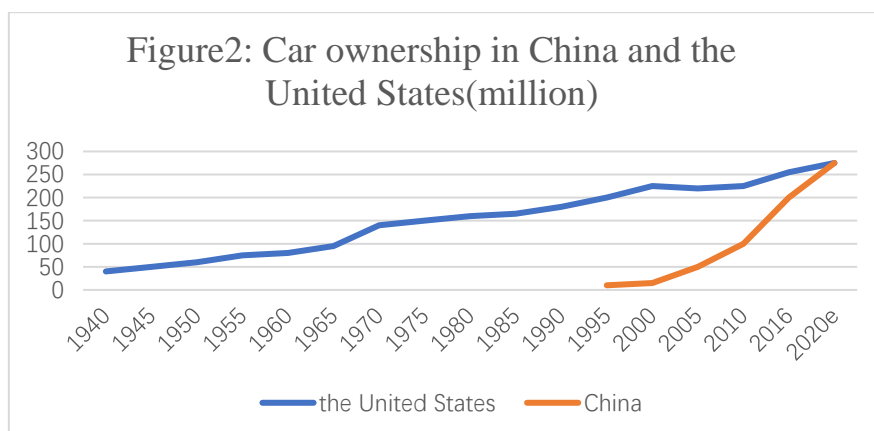


Figure 2: Car ownership in China and the United States(million) [1].

The size of the U.S. auto aftermarket continues to expand. The annual sales of new cars in the United States from 2000 to 2019 were around 17.5 million. The demand for new cars basically peaked, and the growth of new car sales was relatively sluggish. However, benefiting from the increase in car ownership and aging car age, the size of the U.S. auto aftermarket continues to expand, the aftermarket has grown steadily, and the revenue and profits of industry leading companies have grown steadily, which is directly reflected in the capital market, such as AutoZone in the past 20 years. Shares are up 36 times in 2018, O'Reilly is up 40 times, etc. According to the American Automotive Aftermarket Suppliers Association (ASSA), the size of the U.S. automotive aftermarket has grown from about \$160 billion in 2000 to \$308 billion in 2019[3].

## **2.2. Analysis of the Advantages and Disadvantages of China's Automotive Aftermarket**

The disadvantage is that my country's auto service industry started late and has a weak foundation. There are not many types of service items, and the development is slow. Secondly, the service capacity of my country's auto service entities is insufficient, which is manifested in the lack of investment capacity and capital operation strength of various service entities, and the market development capacity is also insufficient. At the same time, the overall quality is not high, which is reflected in the following aspects: the technical quality of service enterprises is not high; the quality of employees in the auto service industry is not high; there is a lack of high-quality professionals. The advantage is that China has become the world's largest auto market in terms of passenger car ownership. As of December 31, 2021, China's passenger car ownership has reached 260.4 million. However, the number of passenger cars per 1,000 people is only 184, which is lower than that of developed countries such as the United States (765 vehicles per 1,000 people) and EU member states (560 vehicles per 1,000 people), showing a huge room for growth. According to the CIC report, China has ranked first in global new car sales for more than 10 consecutive years[4]. The passenger car ownership in China is expected to continue to maintain its growth momentum, reaching a further 364.6 million by 2026.

## **2.3. Challenges in China's Automotive Aftermarket**

The new crown epidemic is raging around the world, and the auto industry is facing downward pressure. The huge impact on the auto sales market will surely be transmitted to parts companies. As the saying goes, it affects the whole body. As an important area of the automotive industry, the automotive aftermarket is affected as much as the new car market, which brings great challenges to the auto parts industry: 1) Travel restrictions during the epidemic, As a result, most of the auto parts agency companies have a low employee arrival rate, which makes it difficult to support the company's resumption of work; 2) The logistics industry is directly impacted by this epidemic. Many dealers are unable to guarantee the timely delivery of parts to the terminal through logistics. retailer. Therefore, how to better control the logistics supply chain is a new challenge for enterprises.

## **3. Development Strategy of China's Automotive Aftermarket**

### **3.1. O2O Mode**

Under the background of the continuous development of the Internet and the frequent emergence of policies and regulations, the automotive aftermarket is changing from traditional models such as 4S points and repair shops to a new after-sales model that combines online and offline (ie O2O). The "Industry + Internet" model is the future development direction of the automotive aftermarket. The repair and maintenance will ultimately be based on the offline product price, service quality and

circulation efficiency. Although online platforms are indispensable in the O2O closed loop, platform development is relatively easy. After the online drainage is over, the offline value creation process largely determines the success or failure of the entire operating model. The core of O2O is service upgrade, experience upgrade, online and offline integration. With the further development of e-commerce in the automotive aftermarket, the online penetration rate of large categories of consumables and consumables that are just in demand is expected to further increase. As the vanguard, tires have taken the lead in completing a relatively complete supply chain integration and smart retail model for the industry. Integration, according to Deloitte's calculation, in the next five years, the major categories of oil tankers are expected to achieve the goal of online penetration of more than 20%, and other core categories of consumables (air filters, brake pads, spark plugs, etc.) challenge the target of 10% online penetration rate[5].

### **3.2. Chain Operation**

From the perspective of market development trends, the mode of chain operation is attracting more and more attention, and chain operation will be the best operation mode in the future auto service industry[6]. China's relevant policies are relatively supportive of the form of chain and franchising. Tuhu Yangche was launched as an e-commerce company in 2011[7]. The platform has been established for nearly 10 years. After nearly 5 years of offline network development, it has completed more than 2,000 workshop stores (ie, chain stores with the image of Tuhu Yangche IP) with more than 13,000 cooperative stores (maintaining the original network head and name, Tuhu provides accessories supply chain services), the online and offline integration capabilities achieved by relying on the "two keys" of digitalization and standardization have been verified and recognized by the market.

### **3.3. New Energy Vehicle Aftermarket**

Compared with fuel vehicles, in addition to replacing tires, wipers and other easily worn parts, new energy vehicles also need to regularly inspect and maintain the car's battery and electronic controls. Intelligent and connected vehicles have higher technical requirements for vehicle maintenance and repair, thereby promoting the development of new businesses and opening up new markets in the automotive after-service market. And the sales of new energy vehicles are also increasing. In the medium and long term, according to the guidance of the "New Energy Automobile Industry Development Plan (2021-2035)" issued by the General Office of the State Council on November 2, 2020, with the further development of the "new four modernizations" trend of China's automobile industry, new energy vehicles are expected to achieve a target of 20% of sales by 2025[5].

### **3.4. Merger and Integration of Market Resources**

Domestic powerful companies have intervened in this field through capital and asset operation methods such as capital restructuring, corporate mergers, and equity acquisitions, such as JD.com and Tmall. Tmall's current model is similar to Tuhu's, but it started late. JD.com adopts a "light management and control" model for offline stores. Currently, Tuhu is in a leading position in terms of store network layout and O2O market share.

## **4. Conclusion**

This paper mainly discusses the status quo of China's automotive aftermarket and provides reference development strategies. In general, the great changes in the automotive industry in recent years can be described as epic. Whether it is a new car or the aftermarket, it has always given

people the impression of a traditional industry. Now it has become the vanguard of the new economy, attracting countless consumers, industry participants and investors. This changing trend has quickly ignited the enthusiasm of market participants and investors, and the emergence of participants represented by Internet companies has accelerated the iterative upgrade of the industry. In particular, with the increasing trend of digitalization, the automotive aftermarket, a land with huge treasures and potential, is showing more vigor and vitality. The author of this paper is unable to conduct sample surveys and field visits, and the data is not very in-depth. I hope that latecomers will visit the field and provide a more comprehensive analysis.

## References

- [1] AAIA is a Bethesda, Md.-based association whose more than 23,000 member and affiliates manufacture, distribute and sell motor vehicle parts, accessories, service, tool, equipment, materials and supplies. <http://www.aftermarket.org/>
- [2] He Ziyu , Yin Jianping, Discussion on innovation strategies of automotive aftermarket under the background of the COVID-19 epidemic situation, 2021: 23
- [3] AASA is recognized as one of the nation's strongest and most prominent trade organizations with more than 100 years of experience, AASA's sole mission is to help members, the aftermarket suppliers, to be more profitable, innovative and competitive on a global scale. <https://www.aftermarketsuppliers.org/>
- [4] CIC (China Insights Consultancy) is a professional consulting organization serving corporate investment, financing and strategic development. <http://www.cninsights.com>
- [5] Zhou Lingkun, Feng Li, Liang Mu, 2020 White Paper on China's Automotive Aftermarket, Deloitte Touche Tohmatsu Limited, 2020.
- [6] Dai Bibo, Research on the current situation and development trend of China's automotive aftermarket, 2010: 20
- [7] Tuhe Yangche is a professional "car maintenance e-commerce platform", mainly engaged in tires, oil, car maintenance, car beauty, car products, etc. Ten thousand stores across the country provide customers with a car maintenance method of "online reservation + offline installation". <https://www.tuhu.cn>