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38.04.01 Economics
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GRADUATION THESIS
on the topic
Global development of the Sharing economy

Master's degree student

signature, date

Mao Xin

Academic adviser

signature, date

Skvortsova V.A.

Compliance supervisor

signature, date

Vlazneva S. A.

Reviewer

Associate Professor of the Department
of Finance and Business Informatization
of Federal State Budgetary Educational
Institution of Higher Education
Penza State Agricultural University

signature, date

Fudina E. V.

The thesis was approved for defence (record of the department meeting dated _____ no.____)

Head of the Department

signature, date

Rozhkova L.V.

The thesis was defended and marked _____ (record of the State Examination Board dated
_____ no.____)

Secretary of the SEB

signature, date

Rasskazova N. V.

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FSBEI HE Penza State University
Institute of Economics and Administration
Department of Economic Theory and International Relations
Field of study 38.04.01 Economics,
Master's degree programme International Economics and Business

APPROVED BY:
Head of the Department
Doctor of Social Sciences,
Professor
Rozhkova L.V.

«_____» _____ 20__

ASSIGNMENT
FOR THE GRADUATION THESIS OF

Master's degree student Mao Xin, group 22ЭЭБма1, full-time mode of study

1 The topic of the graduation thesis: "Global development of the Sharing economy"
was approved by the university order
dated «___» _____ 20__ no. _____

2 The deadline for the Master's degree student to complete the graduation thesis is
11.06.2024.

3 The input data for the graduation thesis is the regulatory and legal framework,
scientific literature and reference books, and Internet data.

4 The list of issues to be studied includes: overview of the development of China's
sharing economy; disadvantages and risks in the development of sharing economy; sharing
economy development status and model analysis.

5 The list of visuals contains tables and figures.

6 The date of setting the assignment is 28.11.2023.

Academic adviser _____ / Skvortsova V.A. /
(signature) (full name)

The assignment was accepted by Master's degree student _____ / Mao Xin /
(signature) (full name)

Schedule for completing the graduation thesis

№ п/п	Content of the thesis	Deadline for completion	Due date, signature of the academic adviser
First year of study			
1	Substantiating of the research topic and methodology, subject and object of research	1.09.2022 – 31.10.2022	
2	Framing the scientific concept of research	1.11.2022 – 18.12.2022	
3	Collection of scientific literature for the thesis	19.12.2022 – 15.01.2023	
4	Substantiating the relevance, concept, and novelty of the research	16.01.2023 – 19.02.2023	
5	Framing of a detailed plan and layout of the research	20.02.2023 – 12.03.2023	
6	Studying new literature sources within the topic of the thesis	13.03.2023 – 26.03.2023	
7	Conducting theoretical research within the first chapter of the thesis	27.03.2023 – 30.04.2023	
8	Preparing the first chapter of the thesis	1.05.2023 – 30.06.2023	
Second year of study			
9	Conducting analytical research within the second chapter of the thesis	1.09.2023 – 22.10.2023	
10	Preparing the second chapter of the thesis	23.10.2023 – 24.12.2023	
11	Conducting analytical research within the third chapter of the thesis	25.12.2023 – 25.02.2024	
12	Preparing the third chapter of the thesis	26.02.2024 – 21.04.2024	
13	Preparing the introduction and conclusion	22.04.2024 – 12.05.2024	
14	Completing the graduation thesis	13.05.2024 – 26.05.2024	
15	Handing in the thesis for compliance control and antiplagiat	27.05.2024 – 9.06.2024	
16	Getting acquainted with the feedback and review	10.06.2024	
17	Presenting the written thesis	11.06.2024	

Academic adviser _____ / Skvortsova V.A./
(signature) (full name)

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(signature) (full name)

Summary

The graduation thesis comprises 61 pages, 3 chapters, 16 figures, 70 sources.

KEY WORDS: SHARING ECONOMY, CONSUMPTION, TRANSACTION, RESOURCES, OWNERSHIP, DIGITAL TECHNOLOGY, LENDING, EXCHANGING, POSSESSION

The target of research is to focus mainly on the impact of the global development process of sharing economy.

The goal of work is to study the nature and true content of the global development process of sharing economy; the development trend or direction of the sharing economy in the global process; issues and prospects of the current global development of the sharing economy.

The methodological framework of the paper is formed by the complex of theoretical and practical methods such as literature research methods, systemic and functional-structural research method, statistical methods of data analysis, method of logical, economic analysis, method of groupings.

The results of research include: studying of sharing economy as the global development process of a dynamic change, reflected in welfare effect, economic stability, security conditions.

The recommendations on disseminating and applying the results are as follows: the theoretical and practical significance of work involves the possibility of using thesis's materials in scientific, pedagogical and practical work.

The theoretical relevance of the thesis is established by processing and analysing a large amount of theoretical works, normative and legal documents governing the processes under study.

The target of research can be further explored through the analysis of issues and prospects of the current global development of the sharing economy.

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Introduction

In the context of global over-consumption, environmental pollution, and economic transformation, the current international business market urgently seeks transformation. In this trend, the Sharing economy, a new economic form, has gradually become a trend. The essence of sharing economy is to maximize the use of idle assets, relying on the digital technology platform to achieve the right to trade on the basis of not transferring the ownership of goods. Specifically, in the field of consumption, the main difference between the sharing economy and the traditional economy lies in the fact that the ownership of goods does not transfer. Consumers obtain the temporary right to use products by paying the price of right to use, and return the products to the owner after use. Based on the characteristics of transaction right, the sharing economy can reduce the traditional consumption and production centered on the transaction of ownership of goods to a certain extent. Therefore, it is undoubtedly one of the most appropriate ways to promote sustainable consumption and production. The purpose of this paper is to investigate the global development process of sharing economy and determine: the nature and true content of the global development process of sharing economy; The development trend or direction of the sharing economy in the global process; Issues and prospects of the current global development of the sharing economy.

At the beginning of its birth, the sharing economy emphasized the circulation of a large number of idle resources. When this concept evolved into a real business model, it emphasized the use of resources rather than ownership, and fully improved the utilization rate of resources. The development of the sharing economy was proposed in the 13th Five-Year Plan, and the sharing economy and the business form it represents have officially become the strategic planning at the national level. Through analyzing the advantages and characteristics of the development of China's sharing economy, it analyzes the development prospects of the sharing economy in the future.

In recent years, sustainable economic development has become a hot topic. First, in the previous literature, both energy efficiency and the role of the sharing economy in sustainable economic development were studied. This study complements the previous

literature on energy efficiency and the sharing economy while analyzing sustainable economic development. Secondly, previous studies have analyzed the role of sharing economy on sustainable economic development as a whole. There are almost no literature articles discussing the dimensions of the sharing economy, such as sharing economy users or sharing economy value, to determine the sustainable development of the economy. This study fills this literary gap. Third, China has long been the largest emitter of greenhouse gases, but studies have only identified it as an obstacle to achieving sustainable economic development.

The development of sharing economy has promoted the exchange between different industries, strengthened the communication between different staff, and then promoted the constant change of economic system, caused a certain impact on the traditional economic system of our country, and brought severe challenges and opportunities for the development of enterprises. The main content of the sharing economy is the exchange of various items between enterprises and individuals, and the formation of a professional economic system related to human resources materials through the establishment of corresponding platforms. The development of sharing economy can make the limited resources more efficient use, make the allocation of resources more reasonable, and promote the development of related economies.

The research object set in this paper is the type mode of sharing economy. Through the study of the development process of the two modes of sharing economy, constructive suggestions are put forward for the corresponding management decisions. Making management decisions is the analysis and evaluation of the global development process of the sharing economy to determine the state of the economic system, Forecast the development trend of the sharing economy in the world; Planning strategies for the global development of the sharing economy; The organization that regulates the development of the sharing economy around the world.

Research methods

(1) Literature research methods

Through various economics-related websites and other ways to consult the literature on the global development of sharing economy, to understand the development of this

field in recent years, and to lay the theoretical foundation for the paper by summarizing and sorting out the literature.

(2) Theory and practice

In order to truly understand the development situation of sharing economy, we can query and statistics all kinds of relevant data, sort out the data, and obtain the data Pass the experience material. Read a variety of relevant literature, use theory to analyze specific practical problems, analyze the reasons, Put forward the corresponding problems to solve the countermeasure. The research is carried out by combining theory with practice.

(3) Analysis and synthesis

Based on the sorting out of the status quo, characteristics and problems of the development of sharing economy, this paper decomposes the development of sharing economy into a series of specific problems from point to point, analyzes the causes of each, and puts forward corresponding solutions from the overall perspective based on the analysis conclusions, so as to preliminarily complete the research tasks.

This paper combines the theory of economic development with the development of sharing economy, and probes into the influence of the development of sharing economy on economic development from the Angle of literature. Sharing economy in the global development process is a dynamic change, reflected in its welfare effect, economic stability, security conditions. This paper studies the two basic modes of sharing economy, highlighting the research object of sharing economy. The development of sharing economy is a topic that keeps pace with The Times. The research on it should not be limited to a certain period, but should be devoted to its long-term development.

Chapter 1: Overview of the development of China's sharing economy

1.1 Sharing Economy Overview

1. The concept of the sharing economy

The sharing economy is a business model in which individuals or enterprises share resources, including financial, material, technological, information and human resources. The main benefits of this sharing are reduced costs, access to resources, equal rights to benefit from resources, and coping with financial distress. Appropriate implementation of the sharing economy in China is conducive to improving domestic energy efficiency and sustainable economic development. When the number of users of the sharing economy or the value of the sharing economy increases, energy consumption can be reduced through optimal use of energy or large-scale sharing of renewable energy technologies. This constitutes an increase in energy efficiency. In addition, the optimal use of resources, reduction of energy, easy access to resources, cost reduction and effective financial management can lead the economy towards sustainable development.

The sharing economy is another focus of the world's attention as it relates to the economy and sustainable development. It is usually defined as: 1) economic opportunity; 2) Better and more sustainable forms of consumption; 3) The path to an equitable and sustainable economy. A clear definition of the sharing economy is lacking in the literature, but over time, many authors have begun to focus on the topic, turning it into an umbrella term for organizational models. The sharing economy is defined as an economic system in which a company's assets or services are shared among internal and external stakeholders to facilitate collaboration. It is usually based on three pillars: 1) an accessible economy, working together to maximize the use of underutilized assets; 2) Platform economy, which mediates decentralized peer-to-peer transactions through digital platforms; 3) A community-based economy, coordinated through non-contractual, non-hierarchical, and non-monetized contacts. The sharing economy facilitates the use of resources within a community without having to consume or buy every time [7].

2. History of China's sharing economy

From the perspective of development practice, China's sharing economy has experienced four important stages of development from the embryonic stage to the initial stage and then to the present stage of stable development. In the 1990s, Craigslist, Zipcar and other sharing economic platforms emerged in the United States. Under the influence of the Internet tide, a number of sea turtles returned to China to start their own businesses, and the domestic Internet industry began to develop. And gradually emerged some crowdsourcing platforms, sharing economy sprouted development. Entering 2019, while the growth rate of transaction scale in China's sharing economy market has declined sharply, the direct financing scale in the sharing economy field has also declined significantly.

In 2019, the transaction scale of China's sharing economy market was about 3.28 trillion yuan, an increase of 11.6% compared with 2018, and the growth rate decreased significantly from 41.6% in 2018. The reasons are many, including the downward pressure of the macro economy, the serious lack of investment and market confidence in the Internet field, the reduction of the Internet demographic dividend, and the internal adjustment of the sharing economy industry. The sharp decline in growth rate means that the development model of the sharing economy is transforming from an extensive model of pursuing scale and speed to an intensive model that pays more attention to development quality and efficiency, and it also means that the sharing economy will shift from the past ultra-high-speed growth to medium-high growth, and the development of the entire sharing economy will enter a new normal.

In 2019, China actively promoted the development of the sharing economy and broadened the layout of sharing business in seven major areas: transportation, shared accommodation, knowledge and skills, life services, shared medical care, shared office and production capacity. Among them, the transaction scale of life services, production capacity, knowledge and skills ranked the top three, with 1,730 billion yuan, 920.5 billion yuan and 306.3 billion yuan, accounting for 52.70%, 28.04% and 9.33% respectively.

In 2020, there are 486 unicorns, and in the field of sharing economy, there are 33 unicorns, of which 21 are valued at 10 billion yuan and above. From a regional

perspective, China alone has 14, with a total valuation of 558 billion yuan; China has become a major player in the sharing economy market.

Didi Chuxing ranked first with a valuation of 370 billion yuan, and ranked first among other companies, comfortable ranked second with a valuation of 40 billion yuan, Hello Travel ranked third with a valuation of 30 billion yuan, and Shenzhou Youcar and Youke Factory tied for fourth.

After nearly two years of chaos, the sharing economy is gradually slowing down and ushering in a stage of diversified development. The winds of the sharing economy are calming down. The fields involved in the sharing economy have included catering, accommodation, logistics, finance, travel, door-to-door service, second-hand sharing platforms, medical care, skills and so on. According to a preliminary estimate by the State Information Center, direct financing in the sharing economy field was about 71.4 billion yuan in 2019, down 52.1% year-on-year, and the negative growth rate was further expanded. The three areas with the largest decrease in financing volume were shared accommodation, transportation and production capacity, which fell by 95.6%, 81.2% and 76.2% respectively. One of the reasons for this phenomenon is that there are still many obstacles to the development of the sharing economy, which need to be solved urgently.

At the beginning of its birth, the sharing economy emphasized the circulation of a large number of idle resources. When this concept evolved into a real business model, it emphasized the use of resources rather than ownership, and fully improved the utilization rate of resources. The development of the sharing economy was proposed in the 13th Five-Year Plan, and the sharing economy and the business form it represents have officially become the strategic planning at the national level. Through analyzing the advantages and characteristics of the development of China's sharing economy, it analyzes the development prospects of the sharing economy in the future.

The sharing economy enables businesses to access information, resources and technology and ensures the trustworthiness of relationships. Corporate social responsibility refers to a company's sense of responsibility to stakeholders and its awareness of self-regulation, meeting the requirements of stakeholders, and taking care of their welfare. When a sharing economy exists between partner businesses in the downstream and

upstream chains, they become more aware of the needs of stakeholders and regulate their operations in various fields, which means that sustainable development goals regarding social and environmental development can be achieved. Study the achievements of the sharing economy, corporate social responsibility and Sustainable Development Goals. The study, a comprehensive systematic review, found that when corporate social responsibility practices are effectively implemented through the sharing economy, companies see a high degree of social and environmental development, which contributes to the achievement of the organization's economic goals [8].

3. Analysis of advantages of sharing economy

(1) China's economy has entered a critical period of transformation, and residents' consumption has become a service-oriented transformation. In 2016, China's GDP growth rate was 6.7%, of which the contribution rate of the service economy was 58.2%, up 4.5 percentage points year-on-year. In 2016, the scale of China's sharing economy market reached 3,948 billion yuan, with a growth rate of 78.2%, and there is great room for development of the sharing economy market in the future.

(2) The infrastructure built by the Internet is gradually improving, and the arrival of the era of big data provides soil for the development of the sharing economy. With the entry of Internet giants, the sharing economy market is getting bigger and bigger.

(3) The development of the sharing economy promotes the increase of consumers' actual purchasing power and consumer demand. The marginal cost of sharing the stock of resources is close to zero, so the service and commodity prices provided by the sharing economy are low, which promotes the increase of the overall purchasing power and promotes economic development [11].

(4) Expand market share, provide employment opportunities, and solve the unemployed population. In the context of the "13th Five-Year Plan", a large number of job opportunities have been created and a large number of unemployed people have been solved. In 2016, the "sharing economy" provided about 60 million new jobs, which strongly promoted the development of the market economy.

1.2 Analysis of characteristics of sharing economy

(1) The popularity of the Internet is high, and the major capitals are competing for the sharing mode. Sharing economy enterprises develop fast, the Internet and big data are like the soil of the sharing economy, and the continuous investment of major capital is the nourishment for the development of the sharing economy, taking the yellow car as an example, in less than two years after its establishment, it has obtained more than \$4 billion in financing.

(2) The sharing economy has a broad market and many potential customers. In 2016, the number of mobile phone users in the world reached 7.38 billion, and the number of network names reached 99.7%, laying a material foundation for the popularization of the sharing economy. In this context, the cooperation model of the Internet and the sharing economy has also become clear in recent years, such as sunflower seed used cars, salted fish, Didi private car and so on. The "new economy", which is different from other traditional economic models, will certainly change our way of life in the future, due to the huge user population and potential customer resources.

(3) The standardization, mass, large scale of production and large market demand of products under the background of sharing economy. Taking shared charging treasure as an example, a single product can meet the needs of the market, and sharing economy enterprises can fully develop standardized products and mass production, which is also the advantage of enterprises participating in the sharing economy.

Prospects of development of sharing economy

(1) Integrated development of the sharing economy and the Internet. Uber, Didi Dache and Yellow taxis, representatives of the sharing economy, have topped U.S. valuations of global startups in recent years. They are all soaring with the help of the vigorous development of Internet big data, and the sharing of goods and services based on network social networking is endless. This is undoubtedly the great opportunity of the Internet for our time. Although the concept of "sharing" has existed since ancient times, the sharing economy is a new concept in recent years. The sharing economy cannot survive without the Internet, and big data is the soil for the survival of the sharing economy. This is the trend of The Times and the combination of strong and powerful,

sharing economy and "Internet +" model convenient, efficient, resource integration will be the mainstream direction of future development.

(2) The sharing economy has penetrated into the industry. The initial development speed of sharing economy enterprises is very rapid, and it has penetrated into many industries in just a few years. According to the statistics of relevant departments, in 2016 alone, the transaction volume of the sharing economy market in China was about 3,542.2 billion yuan, and the yellow car alone raised more than 4 billion US dollars in less than two years [42].

① Manufacturing industry. In China, the importance of supply-side reform has been elevated to the level of national development strategy, transforming made in China into made in China. It's all about upgrading some and releasing some. This requires overall planning and high-quality integration. So, the "cloud industry" will slowly begin to take hold. Take the Internet as the platform and the sharing economy model as the method to integrate the remaining productivity and resources of enterprises.

② Logistics industry. Online shopping is no longer a fashionable thing, and the influence of China's major e-commerce platforms cannot be underestimated. Take "Taobao Double 11" as an example, its influence has reached the world's scope, the rapid development of e-commerce is to rely on the continuous improvement of logistics. However, the logistics industry needs strong transportation to guarantee, and in 2016, there were nearly 2.5 after the "Double 11". Hundreds of millions of express deliveries need to be delivered, but the number of "express brothers" in China is just over 2 million, how to solve the problem of "the last mile" in these special circumstances. The emergence of the sharing economy has given us a new way to mobilize people to use the rest of their time to temporarily join the express industry. The logistics industry and the sharing economy model of cooperation will not be long.

③ Tourism. In China, for example, tourism is becoming an important growth point for the economic development of various provinces and cities. According to the data released by the National Tourism Administration, the number of domestic tourists reached 4 billion in 2015, earning 3.42 trillion yuan. The direct contribution of the national tourism industry to GDP reached 3.32 trillion yuan, accounting for 4.9% of the total GDP. Why

does the sharing economy have a link to travel? It's the increasing rate of overnight stays. The accommodation problem has become the ceiling of tourism development, and shared housing can undoubtedly alleviate the problem of tourist accommodation, reduce the cost of tourism, and improve the accommodation conditions and tourism feelings of consumers.

China's sharing economy sector has boomed in the past few years, attracting a lot of investment. An analysis of the investment characteristics of China's sharing economy industry can help investors and policymakers better understand the development trends and investment opportunities in this sector. Here are some possible aspects of investment analysis:

(1) Industry growth potential: The sharing economy has huge growth potential in the Chinese market, covering many fields such as shared bicycles, shared cars, and shared accommodation. Investors can analyze the growth rate of the industry, the size of the market, and future development trends to identify investment opportunities.

(2) Competitive landscape: China's sharing economy industry is highly competitive, and investors need to understand the competitive landscape, market share and competitive advantages among different enterprises. This helps to assess the risk and return of the investment.

(3) Regulatory environment: The sharing economy industry is affected by government regulation, and investors need to understand the impact of relevant policies and regulations on investment. Changes in the regulatory environment can have a significant impact on investment decisions.

(4) Business model and profitability: Investors need to analyze the business model, profit model and profitability of different sharing economy enterprises. Some companies may focus on market share expansion, while others may focus more on profitability.

(5) Technological innovation: The sharing economy industry is closely related to technology, and investors need to pay attention to technological innovation and development trends in the industry. Technological innovation can have a significant impact on the competitiveness and future development of enterprises.

Through the comprehensive analysis of the above factors, investors can more comprehensively assess the investment characteristics of China's sharing economy industry, formulate appropriate investment strategies and carry out risk management. This analysis helps investors make informed investment decisions in this rapidly changing and highly competitive industry.

Factors affecting the development of sharing economy

The development of the sharing economy is influenced by a variety of factors, which involve multiple aspects such as technology, society, economy and policy. The following is an analysis of the development factors of the sharing economy:

(1) Technological progress: The development of technology is one of the main factors promoting the rapid growth of the sharing economy. Advances in mobile Internet technology, big data analysis, artificial intelligence and other technologies have provided support for the sharing economy, making sharing platforms more convenient, efficient and intelligent [18].

(2) Consumer demand: With the increase in consumer demand for personalization, convenience and savings, the sharing economy has been widely accepted. Consumers pay more attention to experience and sharing, which promotes the development of the sharing economy model.

(3) Economic environment: Changes in the economic environment will also have an impact on the sharing economy. For example, in times of economic downturn, consumers tend to seek more economical ways to consume, which may promote the development of the sharing economy.

(4) Policy support: The government's policy support plays an important role in the development of the sharing economy. The government's regulatory policies, tax policies and industrial policies will affect the operation and development of the sharing economy platform.

(5) Social and cultural factors: Social and cultural factors will also have an impact on the development of sharing economy. The extent to which people identify with values such as sharing, socializing and environmental protection, as well as social trends

such as urbanization and younger generations, will influence the rise of the sharing economy.

(6) Capital markets: Capital markets play a key role in financing and development of the sharing economy. Investors' investment confidence in the sharing economy, financing environment and capital liquidity will affect the development speed and scale of sharing economy enterprises.

In summary, the development of the sharing economy is a comprehensive process, which is affected by a variety of factors. Understanding and analyzing these factors can help the government, enterprises and investors to better grasp the development trend of the sharing economy and formulate corresponding strategies and policies to promote the healthy development of the sharing economy.

The sharing economy has been introduced in several sectors, bringing significant benefits to asset owners and customers. The rapid growth of the sharing economy has been reflected in the traditional economic system, but it also affects the consumption patterns of consumers and has a significant impact on the manufacturing of products. Implement the concept of sharing economy in the traditional economic system and make it move towards people's consumption pattern. As digital communications interventions have the potential to change consumption patterns, alternative ownership and use of services and products can affect customers and influence customer intent. Changes in people's consumption patterns have led to the development of global communities, and the idea of the sharing economy has had a broad impact on the development of communities through alternative ownership, services and products. The idea of a sharing economy is emerging in China.

Chapter 2 Disadvantages and risks in the development of sharing economy

2.1 Risks and problems in the development of the sharing economy

The sharing economy industry has developed rapidly in recent years, but it also comes with a series of risks. The following is a detailed analysis of the risks of the sharing economy industry:

Risk of incomplete law

- Sharing economy is an emerging industry, and its relevant laws and regulations are not yet sound. As a result, many shared services lack a clear access mechanism in the operation process, and there is a crisis of "legitimacy". For example, some short-term rental businesses may not need to obtain a license from the relevant authorities, while the traditional hotel industry needs to follow a series of legal norms.

- Changes in labor relations have also brought legal challenges. Under the sharing economy, the employment pattern is becoming more and more flexible, and the increase of temporary work, short-term contracts, freelance work and self-employment has led to the decrease of traditional permanent employment and full-time employment, which has led to many labor relations disputes.

Tax loss risk

- The trading mode of the sharing economy relies on Internet technology, which breaks through the limitations of time and space and improves the efficiency of transactions, but at the same time, it also has an impact on the existing tax system. A large number of transactions may be outside the traditional tax regulation, resulting in the loss of tax revenue, which brings great challenges to the tax administration.

Risks of monopoly and unfair competition

The rapid growth of the sharing economy is mainly driven by network effects, which may cause certain platforms or enterprises to rapidly accumulate market share and form a monopoly. Monopoly may lead to a decline in service quality, a rise in prices and harm the rights and interests of consumers [34].

At the same time, unfair competition is also one of the risks faced by the sharing economy. Some enterprises may gain market share through low-price competition and illegal subsidies, which not only damages the interests of other enterprises, but also disrupts the market order.

Security risks

- The increase in the use of shared economic vehicles such as shared bicycles and shared cars has increased the probability of traffic accidents. In addition, criminals may use the sharing platform to carry out criminal acts, posing a threat to the safety of users' lives and property.
- In the sharing industry, users need to provide personal information, such as mobile phone number, ID number, etc. The disclosure of these information will bring serious personal privacy problems to users. Sharing enterprises should strengthen the protection of user privacy and reduce the risk of information disclosure.

Market risk

- The sharing economy industry is facing fierce market competition. In order to attract users, some enterprises may adopt low-price strategies, resulting in a decline in corporate profits and posing a serious threat to the capital chain. If the enterprise cannot obtain financial support from investors, loans and other channels in a timely manner, the capital chain may be broken.

Regulatory risks

- The rapid development of the sharing economy also poses new regulatory challenges. Inadequate regulation can lead to violations by companies in the sharing industry, adversely affecting consumers and markets. At the same time, the lack of effective regulation may also lead to a less healthy environment for the development of the sharing industry.

To sum up, the sharing economy industry is faced with multiple risks in the development process, and it is necessary for the government, enterprises and users to work together to strengthen supervision, improve laws, and improve safety awareness to promote the healthy development of the sharing economy.

The sharing economy industry has developed rapidly in recent years, but there are also some problems, mainly including the following aspects:

Imperfect laws and regulations

The sharing economy is an emerging business form, and the relevant laws and regulations are not perfect enough, resulting in a legitimacy crisis of some sharing economy activities. For example, some shared service platforms lack the necessary qualifications and licenses in the operation process, which may cause legal disputes and security risks.

Inadequate supervision

Due to the rapid development of the sharing economy industry, government supervision departments lag behind in terms of supervision methods and supervision models, resulting in the lack of effective supervision of some sharing economy activities. This could lead to market chaos and harm consumers' rights.

Data security and privacy protection issues

The sharing economy platform needs to collect and process a large amount of personal information and transaction data in the operation process, and if the data security protection measures are not in place, it may cause risks such as data leakage and abuse. This would not only harm consumers, but could also affect national security.

Disorderly competition

The sharing economy industry is highly competitive, and some platforms may adopt unfair competition methods in order to seize market share, such as price fraud and false publicity. This will not only disturb the market order, but also may harm the rights and interests of consumers.

Unstable service quality

Due to the operating model and personnel composition of sharing economy platforms, some platforms may have unstable problems in terms of service quality and user experience. For example, some shared bicycle platforms have problems such as vehicle damage and disorderly parking, which affect the user's travel experience.

In response to these problems, the government, enterprises and consumers need to work together to strengthen supervision, improve laws and regulations, improve data

security protection awareness, promote orderly competition and improve service quality, and promote the healthy and sustainable development of the sharing economy industry.

The benefits of the sharing economy

The essential connotation of the sharing economy model is to improve the information symmetry of both sides of the sharing economy transaction through software engineering and big data, thus increasing the degree of trust between the two sides of the transaction, and realizing the decentralization and disintermediation of the sharing economy. This process changes the operating environment of traditional industries, improves the organization degree of scattered consumer groups, and increases the effective supply of social economy. It has changed the traditional labor relations, realized flexible working hours and working places, created additional income for people participating in the sharing economy services in addition to their own work, and will form a combination of full-time and part-time organization; Its objective effect is to alleviate social governance problems and alleviate social contradictions caused by resource shortage and traffic congestion.

(1) The state promotes the development of the sharing economy

At present, China's economy has gone through a period of rapid development, and the economy has entered the new normal, and our country has been advocating the construction of an environment-friendly and resource-saving society, and the sharing economy is just to concentrate social resources and provide them with low-rent, which makes each sharing economy item relative to the marginal cost of the sharing economy before the emergence of smaller and smaller. The social resources used will be within a general range, so that we will save more unnecessary resources, so that the country and the earth bear less burden, and it is also very beneficial to the future development of mankind. At the same time, due to the criticism brought by China's rapid economic development in the early stage, the whole country now attaches great importance to environmental protection, and shared bicycles provide the public with a more green travel possibility, and coupled with the government's advocacy, the people will be more active in choosing this low-carbon travel mode, which also has a positive effect on China's environmental pollution control. From this, we can see that from the perspective of the overall national

policy, the emergence of the sharing economy is inevitable, and it is fully in line with the public model that China will advocate next.

(2) The improvement of public quality and affordability accelerates the sharing economy for the public, the emergence of the sharing economy provides a possibility to save public resources and their own resources. Sharing economy is more like renting, which can maximize the use of existing goods resources, break the time limit, and effectively improve the efficiency of social idle resources. With the development of economy and the popularization of education, people pay more and more attention to their own quality and cultivation, and the awareness of problems is becoming more and more common. For the continuation of human beings and the realization of their own moral norms, more and more people have the idea of saving resources, and sharing economy is an important way to realize this idea. In addition, due to the low cost of the sharing economy, it also saves a fortune for the public itself, which is a huge benefit for some ant tribes working in cities, as they can enjoy the fruits of economic and social development at a relatively low cost [26].

(3) The sharing economy actively promotes industrial development

Another benefit of the sharing economy is that it provides investment companies with more investment models. When ofo and Mobike appeared in the streets of the city not long after, small blue car, Xiaoming and other shared bicycles have also carved up the market share of shared bicycles, the sense of capital is keen, and now not only shared bicycles, but also shared umbrellas, shared cars, and even shared girlfriends and a series of sharing families. When investment companies have these latest investment models, they can optimize their investment structure, better maximize profits, and better realize the company's role in promoting economic development and its contribution to society. In addition, with the development of the sharing economy, a sharing industry chain will be formed for the society. For example, after the implementation of shared bicycles for a period of time, began to recruit some employees for professional bicycle repair training. Since the base of shared bicycles is very large, there are naturally not a few employees recruited. If all aspects of the upstream and downstream industry chain of bicycles are

opened, and then extended to every sharing economy in this way, then the promotion of social employment is undoubtedly huge.

The drawbacks of the sharing economy

The rapid development of the sharing economy has brought challenges to China's current social governance. The main challenge for governments in managing the sharing economy is how to navigate the line between effective regulation and encouraging development. On the one hand, transportation infrastructure and land resources are limited, and the specific laws and regulations in various fields have not been perfected, so the government has to restrict and effectively supervise the sharing economy to a certain extent according to the carrying capacity of the existing resources and environment and the government's ability to solve problems. On the other hand, as a new economic model that meets the needs of economic and social development, sharing economy needs both a social environment suitable for its development and government encouragement and support. At the same time, the threat of the sharing economy to traditional industries also affects employment and social stability. Specifically, the problems and challenges faced by the sharing economy mainly have the following four points.

(1) Policies and regulations are difficult to adapt to new business formats. The degree of tightness of policy norms directly affects the survival of sharing economy model. For example, strict vehicle and driver access location standards, while ensuring as much as possible the safety of consumers and pedestrians, actually improve the status of organized ride-hailing enterprises, exclude a few individual drivers occasionally need to work, and easily pull the emerging sharing economy back to the old Internet rental way.

(2) Regulatory costs have risen sharply. The sharing economy has infiltrated the private sector, creating regulatory difficulties. The cost of sifting through large amounts of information on the Internet is very high, so there is an urgent need to improve statistical monitoring systems.

(3) Low level of social moral ethics. Taking shared bicycles as an example, the phenomenon of disorderly parking of bicycles is more serious, and the behavior of destroying bicycles is also common. While bike-sharing is convenient for users, it poses a

greater safety hazard for pedestrians and motor vehicles. This lag in social morality and integrity has challenged the healthy development of the sharing economy.

(4) Governance needs to change. Excessive administrative intervention and lack of supervision coexist, and it is urgent for governments at all levels to improve their progress in the upgrading of services, optimization of public infrastructure, in-depth development of public resources, and construction of information platforms.

2.2 Development status and existing problems of China's sharing economy

Development status

The rapid development and application of mobile Internet technology, the popularity of smart phones, the popularity of third-party payment, the support of national policies, the inflow of venture capital, and the improvement of consumption concepts have enabled China's sharing economy to profoundly influence consumers and promote economic development from scratch and from small to large.

(1) The sharing economy has penetrated a wide range of fields and had a huge impact. As the forerunner of China's sharing economy model, shared transportation is the best, fastest and most accepted field at present. Through the competition and merger in recent years, the shared transportation enterprises continue to grow and expand their business scope, and have developed from the earliest single shared private cars to include taxis, agent drivers, buses, rental cars and so on. Recently, shared bicycles represented by Mobike and ofo have stolen the limelight, and shared bicycles have solved the problem of the "last kilometer".

Inspired by the rapid development of shared transportation, the sharing economy has also mushroomed in other industries.

The development momentum of "piglet short-term rent" in the accommodation industry cannot be ignored, and the model is the same as Airbnb in the United States, the company is just a platform, connecting the supply of homeowners with idle houses and those who need short-term accommodation. The landlord can inform the customers of

local living customs, and the customers will also share their own experiences with the landlord.

The new star of the express delivery industry "Jingdong Home" is the "crowdsourcing logistics" that has developed rapidly based on "Internet +" technology with the help of the east wind of the sharing economy. On this platform, people can become part-time couriers and make full use of their free time to create value. "Renren Express" is focused on crowdsourcing logistics, advocating "free couriers", and giving people with free time the opportunity to create value.

Financial sharing is represented by "Lufax" and "Renren Loan". Based on its own resources and capabilities, the platform seeks suppliers and demanders, helps lenders and borrowers establish lending relationships, complete relevant transaction procedures and reasonable supervision. The "peer-to-peer lending" model itself is synonymous with the "sharing economy". P2P finance is a transaction mode of small and frequent lending between individual and individual with the help of the Internet platform.

(2) The sharing economy is rapidly extending to other industries

According to the China Sharing Economy Development Report 2016, China's sharingeconomy is mainly distributed in the fields of finance, life services, transportation, production, knowledge and skills, and short-term housing rental.

Driven by the domestic economic and financial situation, the continuous innovationof Internet technology, and the encouragement of government policies, sharing finance has developed rapidly, among which Internet finance, P2P credit and online crowdfunding are the representatives. Internet finance is an early development in China. Under this model, the supply and demand of funds transact directly through financial intermediaries in the past, reducing costs and reflecting the concept of shared finance, which has well alleviatedthe financing difficulties of the real economy. Different from the disintermediation of Internet finance, P2P credit "intentionally" realizes reintermediation based on the Internet platform. P2P credit creates a trading platform for both the supply and demand of funds based on the Internet, and actively promotes and regulates both lenders and borrowers. P2P since the emergence of rapid development, data show: in 2015, the national net loan turnover exceeded one trillion yuan, an increase of 258.62%, a

total transaction of 1,631.215 billion yuan. However, due to the lack of a clear legislative supervision system for P2P credit, some P2P companies have "run away" phenomenon.

In essence, the shared logistics mode is to optimize the resources of the logistics system to improve the efficiency of logistics operation, reduce costs, and promote the reform of the logistics system. At present, the more popular shared logistics model is to participate in logistics distribution, which not only passes the idle time, but also obtains certain benefits.

In the field of high-end equipment, due to the contradiction between the high value and low efficiency of high-end equipment, sharing can solve this problem well, and organizations or individuals who cannot afford to buy high-end equipment can also use it. The representative enterprise is Shenyang Machine Tool (000410, Stock bar) factory, and the "i5 intelligent numerical control system" developed by it realizes the sharing of idle time of machine tools.

Why is the sharing economy growing so fast? From a horizontal point of view, the sharing economy has gradually extended from the sharing of bulk hardware commodities such as travel and accommodation to the cooperation and sharing of information and intelligence. From a vertical point of view, the sharing economy has gradually expanded from simple goods to services, logistics, manufacturing equipment, and deeply penetrated the upstream and downstream of the industrial chain [60].

Existing problems

(1) Sharing economy impacts traditional economy

Based on a certain sharing platform, the sharing economy can conveniently link the supply side with the demand side, greatly enhance the competitive advantage compared with traditional enterprises, and can quickly touch the vested interests, resulting in the redistribution of social wealth and interests again, and inevitably encounter obstacles from the vested interests. The most obvious is the traditional taxi industry's irrational attack on "Uber" and "Didi".

(2) Lack of perfect credit system

If the sharing economy wants to develop rapidly and healthily, one obstacle that cannot be avoided is the perfection of the credit system, and the lack of the credit system

has become a roadblock to the development of the sharing economy to a large extent. To a certain extent, the perfection of the credit system determines the success and failure of the sharing economy.

In terms of Internet finance, the phenomenon of P2P companies "running away" often occurs due to the lack of customer credit in the external financing of financing platforms, which seriously affects the development of Internet finance. According to the China Enterprise Confederation, the lack of integrity causes economic losses of more than 500 billion yuan every year.

(3) Lagging laws and lack of supervision

China's current economic and social management system and relevant laws were formulated earlier, still based on the requirements of traditional industrial economy and industrial large-scale production, and the sharing economy based on the Internet platform has the characteristics of networking, cross-region, cross-industry and other different from traditional industries, so the current social management system and relevant laws can hardly meet the development of the sharing economy. Due to the lag of legal provisions, many sharing economy models are currently wandering in the gray area of legal supervision. For example, the sharing economy employees social security, pension issues, tax issues, the existing laws are not defined and requirements, cannot continue to play an effective role in supervision and guidance, which is easy to lead to unfair competition, tax evasion, labor conflicts and many other social problems, not conducive to social stability.

(4) The sharing economy is heavily subsidized

At present, sharing economy enterprises have a common model: obtain users through a large number of subsidies in the early stage, cultivate user habits, and gradually reduce subsidies. But as subsidies have dwindled, so have users. Taking Internet private cars as an example, in the first two years of sharing private cars, due to the intensity of subsidies, there were many private car drivers who rented cars to run private cars in order to obtain subsidies, which seriously deviated from the original intention of the sharing economy. Now, "Didi" generally only subsidizes drivers in the morning and evening peak traffic, coupled with "Didi" pricing is not high (lower than taxi pricing), many chauffeurs are dissatisfied with their income and work effort, so that many chauffeurs choose to leave.

In order to seize the market, occupy the share and expand the visibility, the sharing enterprises adopt a variety of subsidies to attract the addition of resources and increase the supply side; Attract users downward, bringing higher frequency of consumption. This kind of pseudo-sharing economy pulled up by subsidies is deformed and not long-term, once the subsidies stop, the original business increment will fall off a cliff, and the enterprise will be difficult.

Sharing economy industry development

The sharing economy represented by shared bicycles is an innovative model that uses market-oriented means to promote the green development of China's economy and improve the service level of people's livelihood. However, in the actual development, there are still some problems: first, the access standards of the sharing economy industry are not clear and the standardization is not high. The second is the lack of unified supervision of the deposit and custody of the sharing economy. Third, policy support for the development of the sharing economy is insufficient. To this end, the recommendations are as follows.

First, clarify the access criteria for sharing economy model innovation. In accordance with the current national laws and regulations, industry standards and the specific reality of the development of Beijing, for the innovation of the sharing economy model, in full consideration of the essential characteristics of the sharing economy and the characteristics of industry operation, formulate and adjust the industry access standards.

Second, further standardize the safety, health and other regulatory standards of the existing sharing economy model. Formulate and adjust the safety maintenance, hygiene and cleaning standards of shared bicycles, shared cars, shared charging banks and other public service products, clearly define the safety responsibility of sharing economy service products, and strengthen the publicity of sharing economy enterprises and relevant consumers, ensure the implementation of relevant safety maintenance, hygiene and cleaning standards, and improve the quality of sharing economy development. Maintain public safety and public health.

Third, introduce the regulatory policy of sharing economy deposit management as soon as possible. Strengthen the supervision of the capital pool formed by the sharing economy deposit, enhance the transparency of the flow of funds, and avoid the

sharing economy becoming a channel for illegal fundraising and economic fraud. We will improve the procedures for the disposal of enterprises with operational problems, safeguard the legitimate rights and interests of consumers, and avoid centralized bank runs.

Fourth, strengthen the construction and maintenance of sharing economy infrastructure. Maintain and build the infrastructure required for shared bicycles, shared charging banks and other service products, and promptly punish the occupation, unauthorized reconstruction, and intentional destruction of relevant infrastructure.

Fifth, strengthen publicity, enhance the public's awareness of sharing norms, and promptly punish illegal phenomena such as theft and intentional damage. Strengthen publicity and education on the correct use of sharing economy service products, enhance public awareness of sharing, at the same time, strictly crack down on theft and intentional damage to sharing economy products, give play to the role of public supervision and reporting, and create a civilized environment conducive to the development of sharing economy [52].

Sixth, strengthen the government's regulation of market stock and increase. According to the development of the market, the relevant regulatory authorities should strengthen the communication with the relevant enterprises, understand the market demand and commodity supply, and, if necessary, regulate the market stock and increment to avoid the waste caused by excessive concentration of resources.

Chapter 3 Sharing economy development status and model analysis

3.1 Market development analysis of sharing economy

Shared travel, the Internet buzzword, refers to a new mode of transportation in which people do not need to own vehicles, share vehicles with others in the way of sharing and riding, and pay corresponding fees according to their own travel requirements. Including a large number of innovative models represented by taxi software and shared bicycles.

The market size of China's sharing economy shows a fluctuating growth trend, and the market size in 2020 will be 3.38 trillion yuan, of which the market size of shared travel will be 227.6 billion yuan, accounting for 6.73% of the market size of the sharing economy. The scale of car-hailing users in China shows a fluctuating growth trend, and as of December 31, 2020, the scale of car-hailing users is 365 million.

In 2020, China's sharing type per capita consumption expenditure is 261.7 yuan, accounting for 11.3% of per capita travel consumption expenditure, and the proportion of network taxi passenger traffic in taxi passenger traffic fluctuates.

The overall market size of China's sharing economy shows a fluctuating growth trend, and the market size will be 3.38 trillion yuan in 2020.

According to the data of the State Information Center, the overall market size of China's sharing economy showed a fluctuating growth trend during 2015-2020, and the industry returned to rationality after reaching its peak in 2016, and the industry growth rate slowed down in the past two years. In 2020, the market size of China's sharing economy will reach 3.38 trillion yuan, an increase of 3.0%.

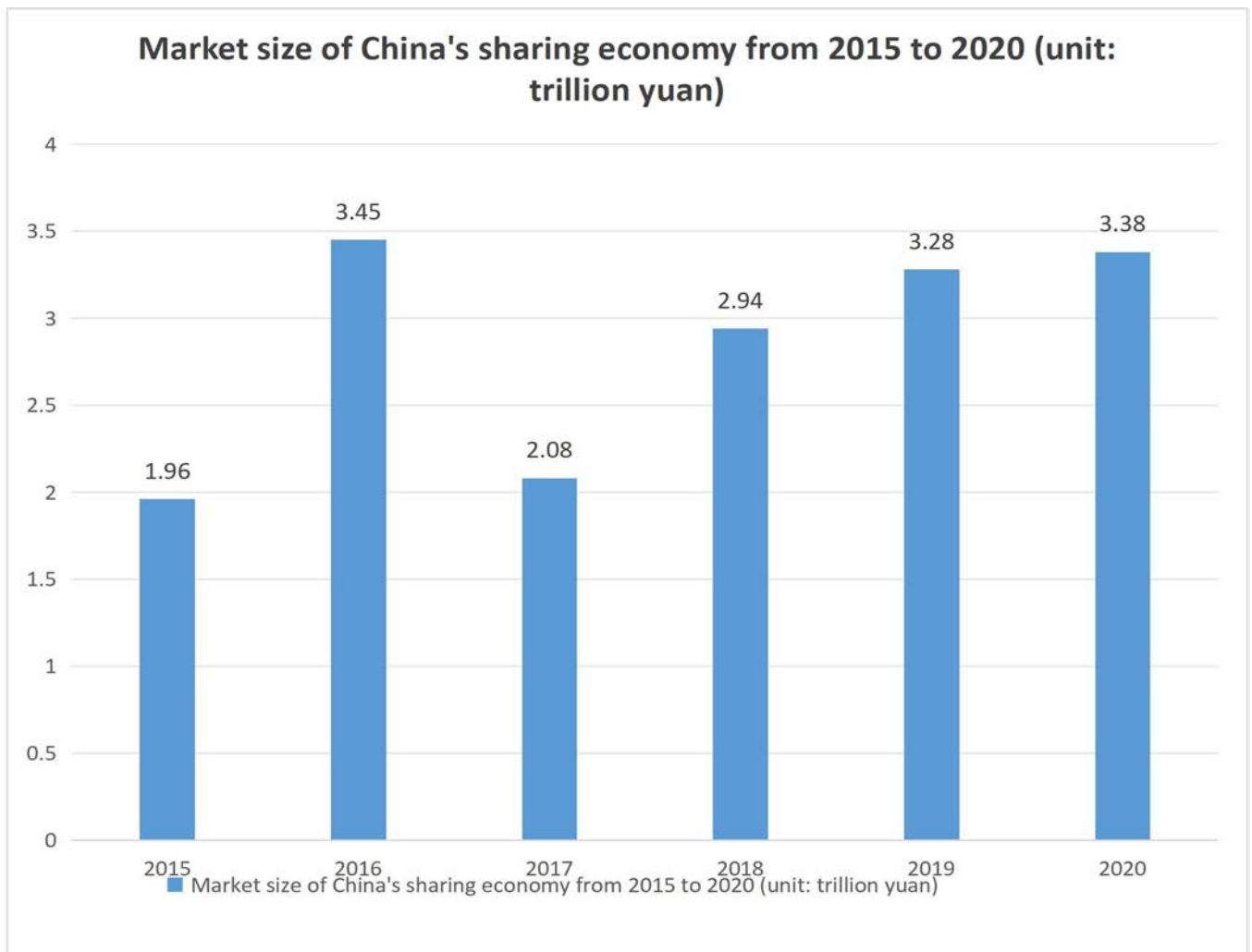


Figure 3.1 – Market size of China's sharing economy in 2015-2020 [47]

In 2020, China's shared travel market size will be 227.6 billion yuan, accounting for 6.73% of the sharing economy market size.

According to the data of the State Information Center, the scale of China's shared travel market showed an overall growth trend during 2017-2019. In 2020, the scale of the shared travel market was 227.6 billion yuan, down 15.70% year-on-year, mainly due to the impact of the novel coronavirus pneumonia epidemic, people's travel activities decreased, resulting in the first decline in the scale of the shared travel market.

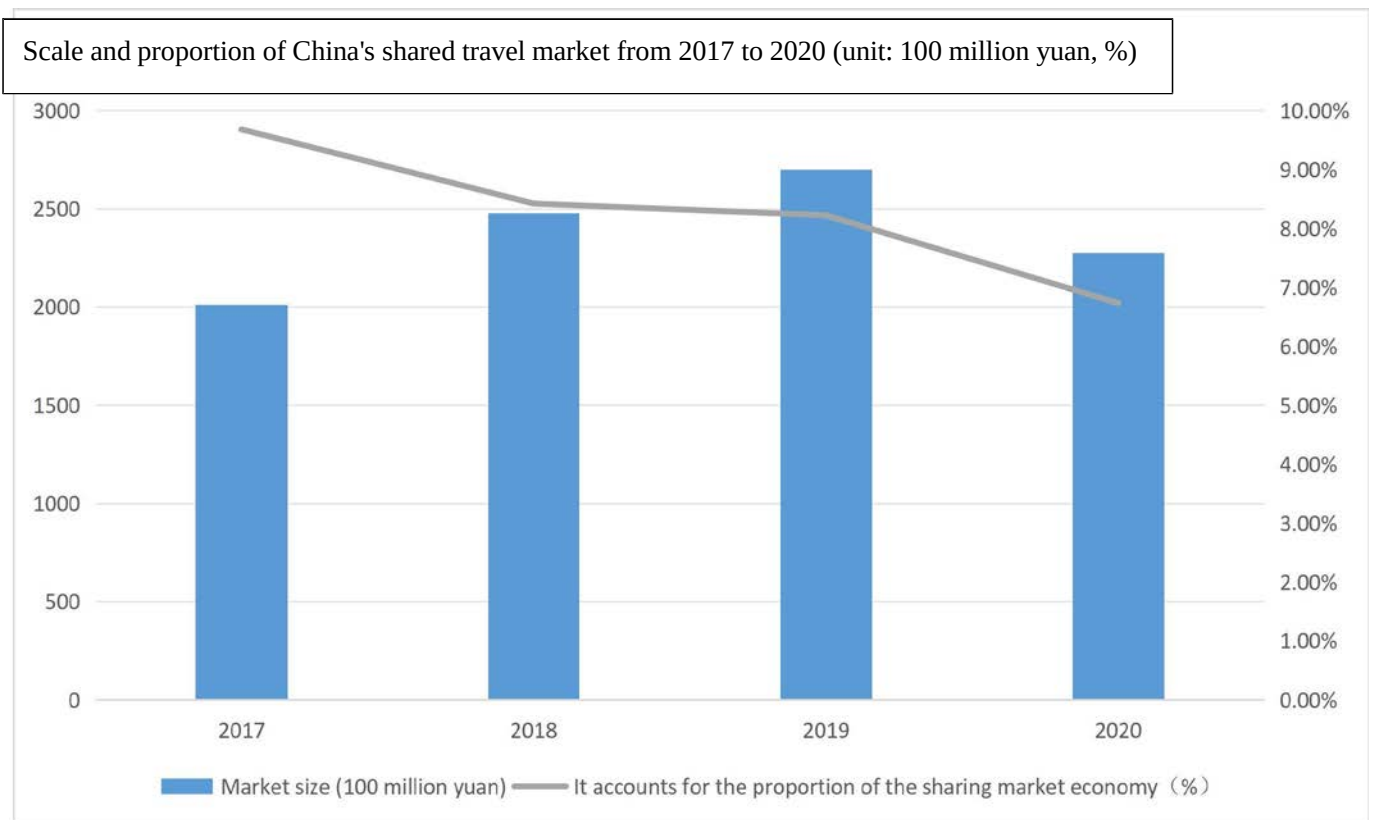


Figure 3.2 – Scale and proportion of China’s shared travel market in 2017-2020 [41]

The scale of car-hailing users in China shows a fluctuating growth trend, and as of December 31, 2020, the scale of car-hailing users is 365 million

According to CNNI data, the scale of car-hailing users in China during 2016-2020 showed a fluctuating growth trend, reaching a peak in 2018 and declining in the past two years. As of December 31, 2020, the number of car-hailing users in China was 365 million.

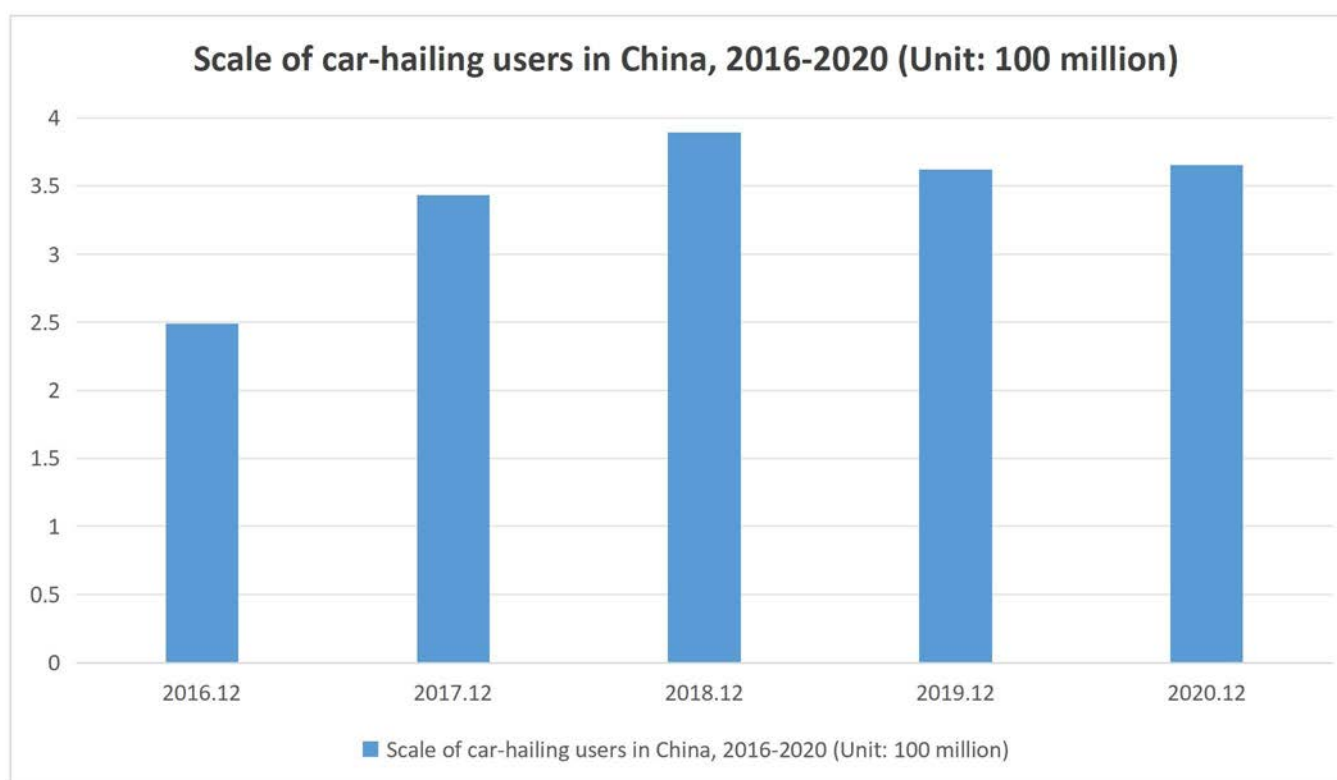


Figure 3.3 – Scale of car-hailing users in China, 2026-2020 [41]

In 2020, the per capita consumption expenditure of sharing type in China will be 261.7 yuan, accounting for 11.3% of the per capita travel consumption expenditure.

According to the data of the State Information Center, China's per capita travel consumption expenditure in 2020 will be 2,311 yuan, of which the per capita sharing consumption expenditure will be 261.7 yuan, accounting for 11.3% of the per capita travel consumption expenditure.

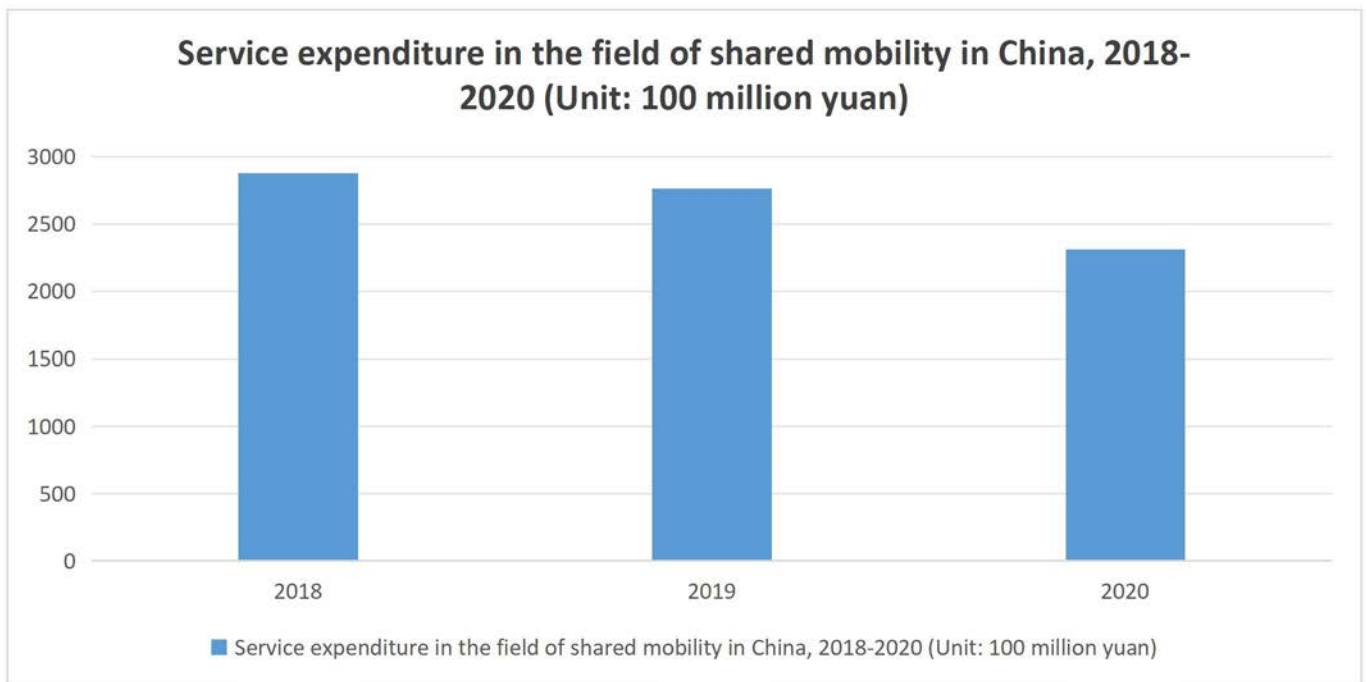


Figure 3.4 – Service expenditure in the field of shared mobility in China, 2018-2020 [12]

The proportion of online taxi passenger traffic in taxi passenger traffic fluctuated and increased. According to the data of the State Information Center, from 2016 to 2020, the proportion of online taxi passenger traffic in taxi passenger traffic fluctuated and increased, accounting for 36.2% in 2020, which decreased slightly from 2019.

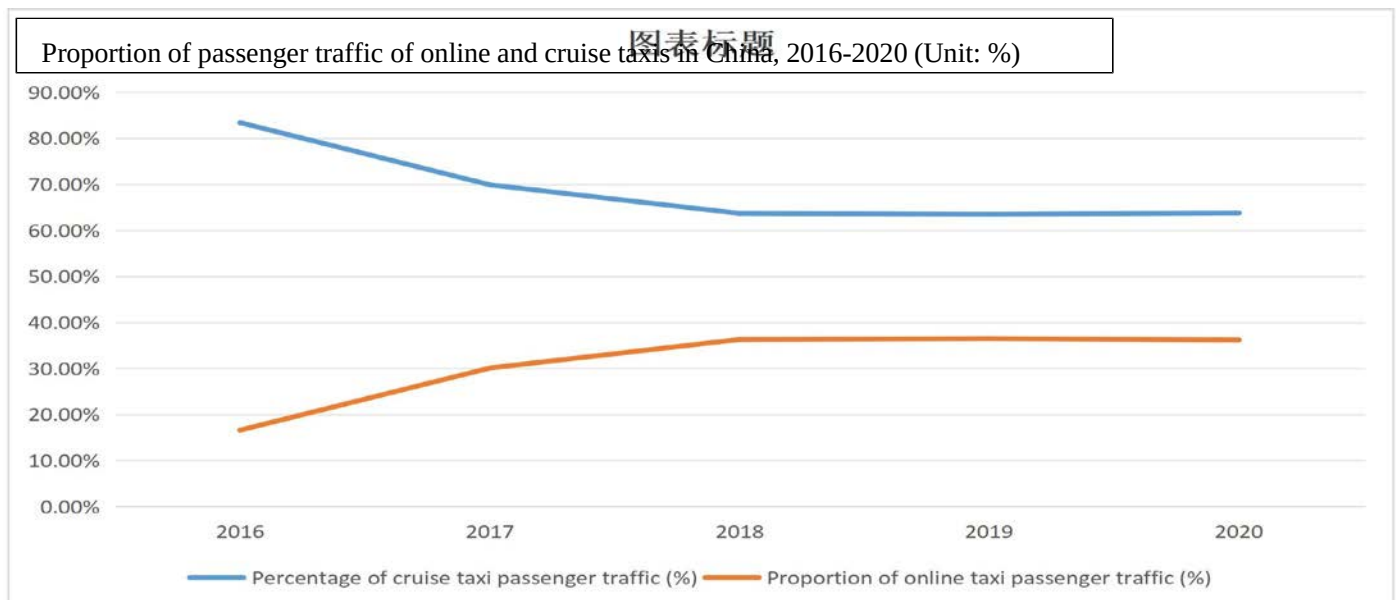


Figure 3.5 – Proportion of passenger traffic, 2016-2020 [28]

With the rapid development of new technologies such as the Internet, the upgrading of urban and rural tourism consumption and services, and the popularity of personalized consumption concepts, shared accommodation has become the choice of more and more people. The outbreak of the epidemic in 2020 has greatly impacted the shared accommodation market. Although the state has introduced various policies to encourage the development of the shared accommodation market, the scale of the shared accommodation market in China has still declined significantly.

(1) The market scale has declined significantly

According to the "China Sharing Economy Development Report 2021" released by the State Information Center, the market transaction scale of China's shared housing accommodation industry dropped to 15.8 billion yuan in 2020, which is a large decline compared with 2019.



Figure 3.6 – Transaction size of China's shared housing accommodation, 2017-2020 [47]

Specifically, in 2020, the market transaction scale in the four fields of shared accommodation, shared office, transportation and life services all declined to varying

degrees, among which the decline in the transaction scale of shared accommodation was the most significant, and the growth rate declined to -29.78% in 2020.

From the perspective of reasons, shared accommodation must complete the closed loop of transactions through offline activities, so the market size has declined most significantly under the impact of the epidemic.

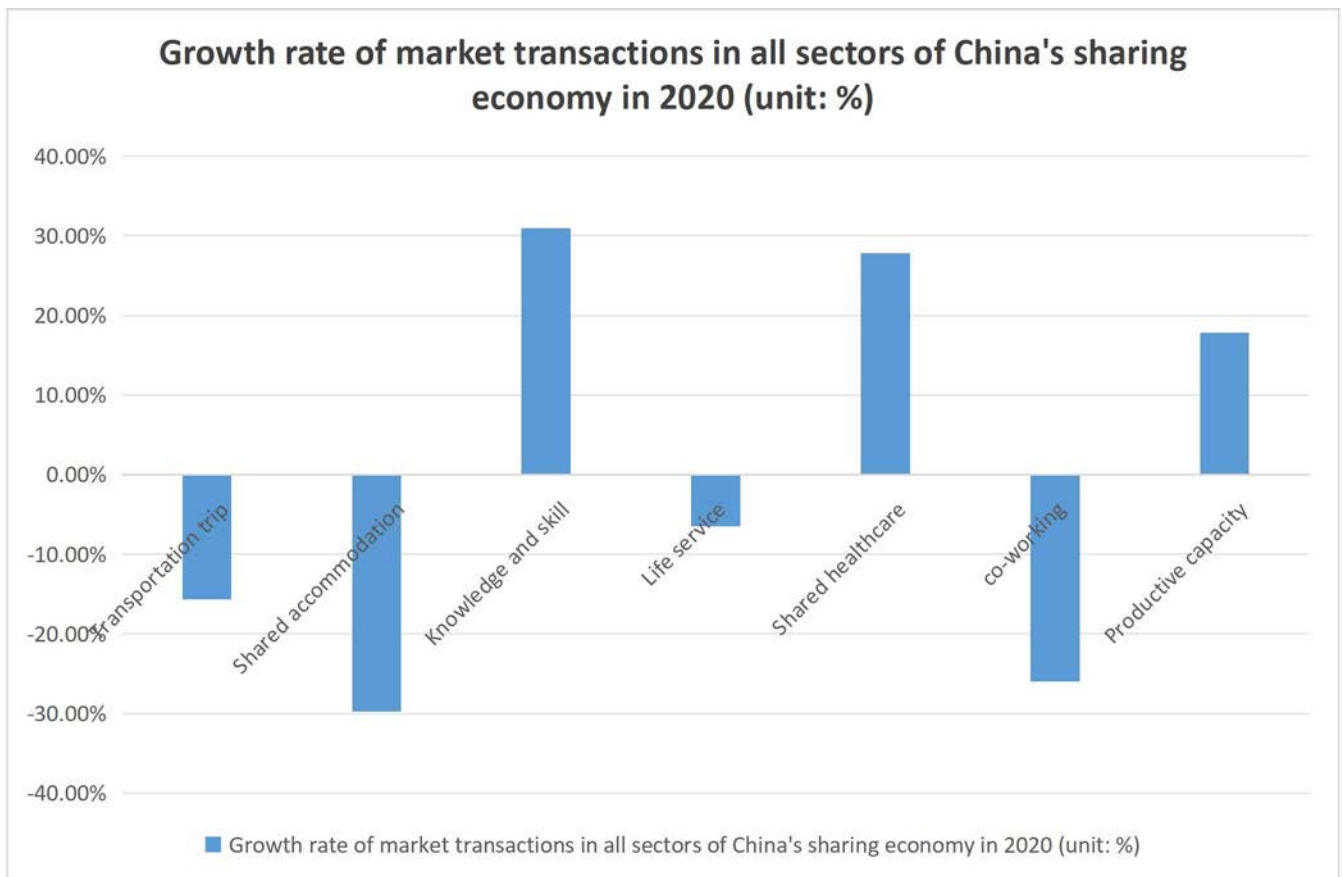


Figure 3.7 – Growth rate of market transactions, 2020 [47]

(2) The epidemic has stimulated the rise of a new model of "live +" accommodation. During the epidemic, operators introduce accommodation facilities, related services, local customs and natural features to consumers through live broadcasting and video platforms. For consumers, live broadcasting creates a "what you see is what you get" consumption scene, avoids the problem that graphic propaganda is inconsistent with reality, and enhances the sense of trust in consumption. The form of live broadcasting broadens the business radius in time and space, broadens the source of income, and alleviates the problem of capital chain.

For the shared accommodation platform, the young users of the live broadcast platform are also the main consumer groups of shared accommodation, so the live broadcast platform has a huge content distribution channel. It can accurately improve the exposure of live content, and further improve the single rate, pull new rate and re-purchase rate of the platform.

Although under the influence of the epidemic, the development indicators of China's shared accommodation industry have declined to varying degrees, but also derived new development formats. Driven by the boom of "live + short video", some enterprises in the shared accommodation industry began to use live broadcasting to publicize the accommodation environment and scenic spots, which strengthened the trust of consumers and brought new development opportunities for the development of the industry.

(3) The platform helps merchants overcome difficulties together

Platform enterprises are not only the mediums providing channels and intermediaries providing opportunities, but all stakeholders on the platform are fundamentally collaborative and symbiotic. The support of major platforms for small and medium-sized merchants is not only the embodiment of the social responsibility of platform enterprises, but also the strategic need of enterprises to continuously optimize and enrich the platform ecology. During the epidemic, the sharing accommodation platform has three main empowering effects on merchants:

First, to provide financial resources support, such as Airbnb platform set up a special fund, launched the "heart plan" to compensate operators economically and return the operator service fee in Hubei.

The second is to help merchants transform and expand income channels. During the epidemic period, Xiaozhu and Flying Pig cooperated to launch the homestay live broadcast alliance, invested millions of traffic to support the homestay industry to resume operation, and strengthened cooperation with social e-commerce platforms to assist operators in housing pre-sale and peripheral product sales, so as to help relevant practitioners stop losses and increase income.

The third is to strengthen training and improve the business service ability of merchants, such as Tujia and Hebei Fengning County cooperation to carry out "lecture

hall" activities, online and offline training for local B&B operators to improve their service professionalism.

(4) The introduction of multi-faceted support policies under the epidemic was accelerated. During the epidemic, the National Development and Reform Commission, the Ministry of Finance, the Ministry of Culture and Tourism and other departments have introduced a series of supportive policies to help enterprises rescue. In July 2020, the Opinions on Supporting the Healthy Development of New Business Forms and New Models to Activate the Consumer Market and Promote the Expansion of Employment issued by 13 departments including the National Development and Reform Commission clearly proposed to encourage the intelligent upgrading of products and business model innovation in shared accommodation, cultural tourism and other fields, develop new ways of living consumption, and cultivate online high-end brands. Encouraging the development of "shared accommodation" has been written into Chinese government documents for the first time.

Shared manufacturing, also known as manufacturing sharing, or manufacturing resource sharing, is a manifestation of the penetration of the sharing economy into the manufacturing field, including three aspects: manufacturing capacity sharing, innovation capacity sharing and service capacity sharing.

During the "13th Five-Year Plan" period, driven by policies, the scale of manufacturing capacity sharing continues to expand and shows an accelerated development trend, but the financing heat has declined. During the 14th Five-Year Plan period, under the guidance of the Guiding Opinions on Further Promoting the Development of Service-oriented Manufacturing, shared manufacturing will focus on the development of four major tasks.

1.1 Shared manufacturing = "manufacturing + innovation + service" capacity sharing. Shared manufacturing, also known as manufacturing sharing, or manufacturing resource sharing, is the application innovation of the sharing economy in the field of production and manufacturing. It is a new model and new form of business that focuses on all aspects of production and manufacturing, uses the sharing concept to gather dispersed

and idle production resources, and flexibly matches and dynamically shares them to the demand side.

Shared manufacturing is a manifestation of the penetration of the sharing economy into the manufacturing sector, including three aspects: manufacturing capacity sharing, innovation capacity sharing and service capacity sharing:

1.2 Development status: Transaction scale expanded and financing heat decreased

In the Guiding Opinions on Deepening the Integrated Development of Manufacturing and the Internet, The State Council stressed that it is necessary to "promote the full docking of manufacturing resources of small and medium-sized enterprises with Internet platforms, achieve online publishing, collaboration and trading of manufacturing capabilities, and actively develop a sharing economy for manufacturing links."

In this context, China's manufacturing capacity sharing scale continues to expand and shows an accelerated development trend. According to the statistics of the State Information Center, from 2016 to 2019, the transaction scale of capacity sharing in China's shared manufacturing market has been growing; In 2019, the transaction scale reached 920.5 billion yuan, an increase of 11.8% year-on-year.

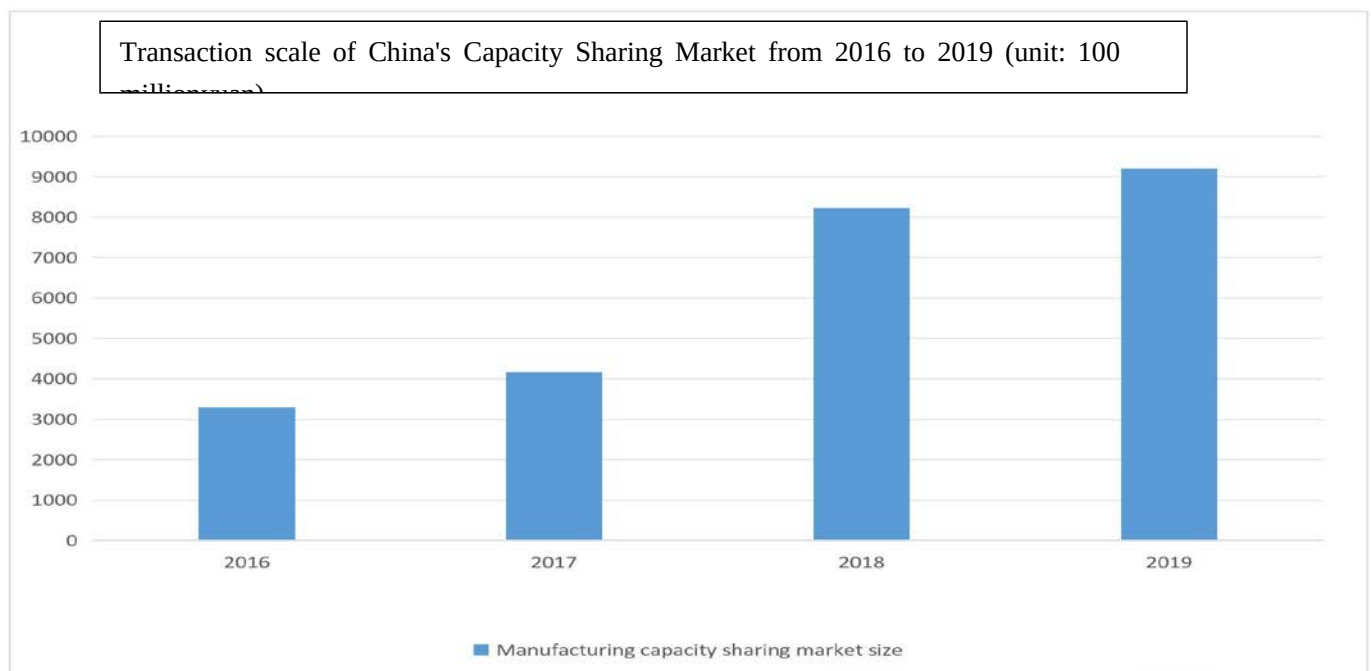


Figure 3.8 – Transaction scale of China's Capacity Sharing Market, 2016-2020 [47]

At the same time, as a component of the sharing economy, the proportion of the transaction scale of China's capacity sharing in the sharing economy market scale has also been generally increased. Between 2018 and 2019, the proportion was maintained at 28%, and shareable manufacturing has become an indispensable part of China's sharing economy market.



Figure 3.9 – Share of China's Capacity Sharing Market, 2016-2019 [47]

From the perspective of financing, the financing scale in the field of annual capacity sharing in 2018 was 20.3 billion yuan, about 6 times that of the previous year; In 2019, the financing scale dropped significantly to 4.82 billion yuan, mainly due to the influence of factors such as large downward pressure on the macro economy and the downturn in the manufacturing industry.

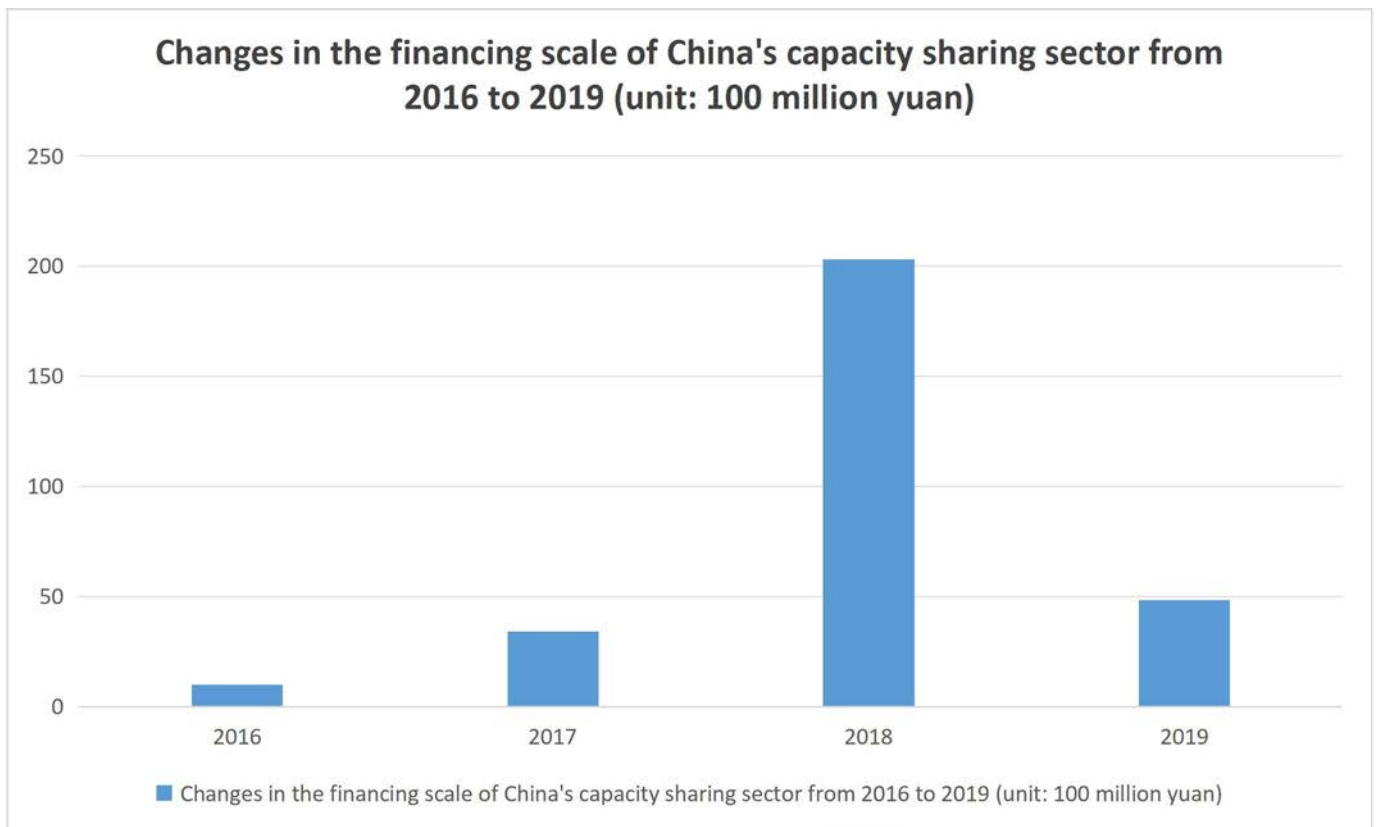


Figure 3.10 – scale of China’s Capacity Sharing Market, 2016-2020 [47]

Shared manufacturing is an important part of service-oriented manufacturing, is a new mode of manufacturing resource allocation, is a new business format to adapt to the development of the sharing economy era, and is also a new manufacturing development concept. In June 2020, 15 departments including the Ministry of Industry and Information Technology jointly issued the "Guiding Opinions on Further Promoting the Development of Service-oriented Manufacturing", aiming to quickly cultivate and develop new forms and models of service-oriented manufacturing, and promote the quality and efficiency of manufacturing and transformation and upgrading.

According to the development characteristics and main problems of China's shared manufacturing at the present stage, the key tasks of shared manufacturing are concentrated in four aspects: platform, cluster, ecology and foundation:

3.2 Market development analysis of shared knowledge and skills

(1) Development status of knowledge sharing platform

At present, knowledge sharing platforms are mainly divided into two modes:

A sharing platform that pursues knowledge breadth, which covers a wide range, usually has a large information flow, and involves a wide area, covering all aspects of learning and life. Such platforms are represented by Wikipedia and Zhihu.

Another kind of sharing platform that pursues knowledge depth. For professional learning, users need more accurate and reliable information. Such users are no longer satisfied with the current information flow, but pay more attention to the depth of information. Such knowledge-sharing platforms often require a certain fee as a reward for knowledge sharers, so as to motivate knowledge contributors. We see the payment problem on "Fenda" and "Zhihu", which is a typical sharing platform for pursuing knowledge depth.

However, whether it is the Weibo question and answer platform or the score answer APP, or the MOOCs, the most popular at the beginning of the launch, but after a period of time cannot escape the user reduction, heat decline and other problems. This survey takes virtual academic community as the background. Virtual academic community is a type of virtual community, the core is the network space of knowledge sharing under the support of information technology. Currently, the internationally renowned virtual academic community Research Gate has more than 13 million registered members, and Academia.edu has more than 53 million registered members. Effective information flow and adequate knowledge sharing are key factors in keeping communities vibrant and achieving sustainable development. However, like all kinds of knowledge-sharing platforms, virtual academic communities are also faced with low membership activity and low willingness to share knowledge, leading to the existence of a virtual community, and even called "zombie groups".

(2) Influencing factors

The "quality" of knowledge sharing quality refers to the authenticity and accuracy of knowledge, and the "quantity" is the frequency and quantity of community users

participating in knowledge sharing activities. Knowledge quality is related to the satisfaction of users' knowledge needs and their willingness to share knowledge continuously. If the users of a knowledge-sharing platform have a deep understanding and insight in a certain aspect, the quality of the content they share tends to be higher. When the knowledge quality has a certain scientific control, it will drive a large number of users to participate in knowledge sharing and transmission, and also determine the vitality and level of knowledge sharing in virtual communities.

This paper summarizes four factors that affect the user activity of knowledge sharing platform: others' identification, cognitive learning and individual factors.

If users gain pleasure in the process of sharing knowledge, the willingness of users to continue to share knowledge will be stronger. From the perspective of motivation, the positive emotional experience obtained by users in the process of knowledge sharing is the intrinsic motivation of users to continue to share knowledge. This pleasure often comes from two sources: the recognition of community members and the good atmosphere of knowledge sharing. Based on social interaction, community members agree with and encourage the recognition psychology brought by knowledge sharers, and have confidence and positive expectations of their sharing behavior, so that they are willing to repeat this process and enjoy the feeling of recognition again. The similarity between community members will also make the knowledge sharing process proceed efficiently. Similar interests, knowledge background and education level will enhance the platform members' sense of identity and belonging to the platform, dilute or eliminate the gap between others, and enhance the platform members' awareness of knowledge exchange and participation in sharing.

Learning is one of the motivations for college students to use social networks to share knowledge, and it can produce positive learning performance. The exchange and discussion of knowledge, the sharing of ideas and ideas in the knowledge sharing platform requires the sharers to think, to maintain and deepen their understanding of knowledge, and to promote learning; Knowledge-sharers may also actively participate in social networking activities in order to obtain the latest perspectives and innovative ideas. Social network users may also want to learn from others by exchanging knowledge with each

other, in the hope of gaining access to content that interests them. Self-determination theory holds that learning is an external motivation that can be internalized, transforming external forces into an individual's internal needs.

Helping others has a positive impact on community members' willingness to contribute knowledge. Individuals with helpful traits are more inclined to share contributing knowledge. Helping others is a kind of altruistic psychology, which is the social responsibility and mission of an individual when improving the welfare of others. It is a self-actualization attitude that promotes individual participation in behavioral activities.

Relevant studies have shown that people with altruistic ideas are more willing to use the Internet to share knowledge. People with altruistic ideas believe that it is right to voluntarily help others, and have a positive attitude toward sharing their knowledge with others. Novak T P et al. proposed that clear goals would promote the generation of knowledge sharing behavior. In the Q&A community, the user's goal is clear, so that the task of knowledge sharing can be better completed. In addition, interest is also an important factor affecting users' willingness to share knowledge. People tend to pay more attention and put more effort into the things they are interested in, and get a higher sense of pleasure in the process.

(1) The overall scale of China's sharing economy reached 3.69 trillion yuan

According to the "China Sharing Economy Development Report 2022" released by the State Information Center, the overall size of China's sharing economy market in 2021 will reach 3.69 trillion yuan, an increase of about 9.2% over 2020.

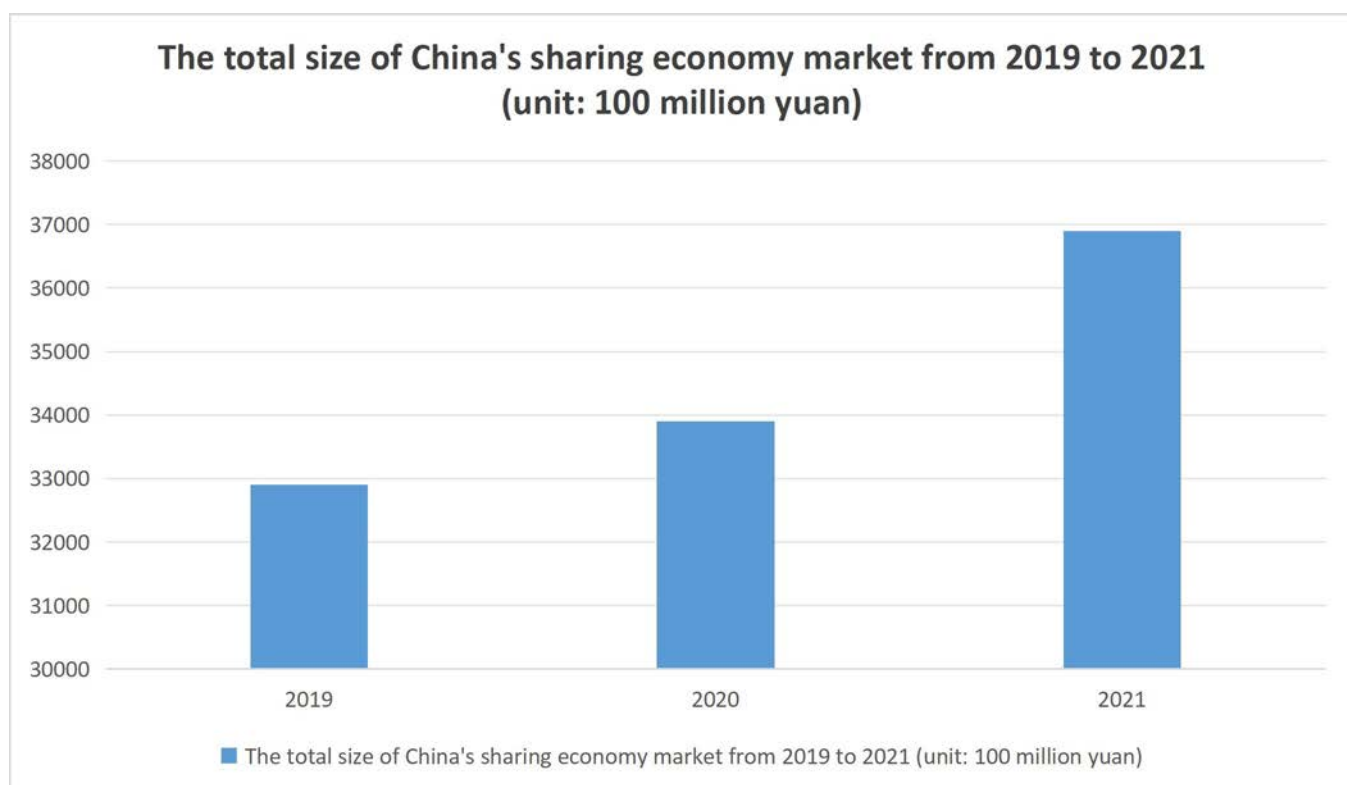


Figure 3.11 – Total size of China’s sharing economy market, 2019-2020

(2) The sharing economy scale of the three market segments of life service, production capacity and knowledge and skills accounts for the largest proportion

In terms of the proportion of the market size of the sharing economy segments in 2021, the scale of the sharing economy in the fields of life services, production capacity and knowledge and skills ranked the top three, accounting for 46.4%, 33.5% and 12.3% r.

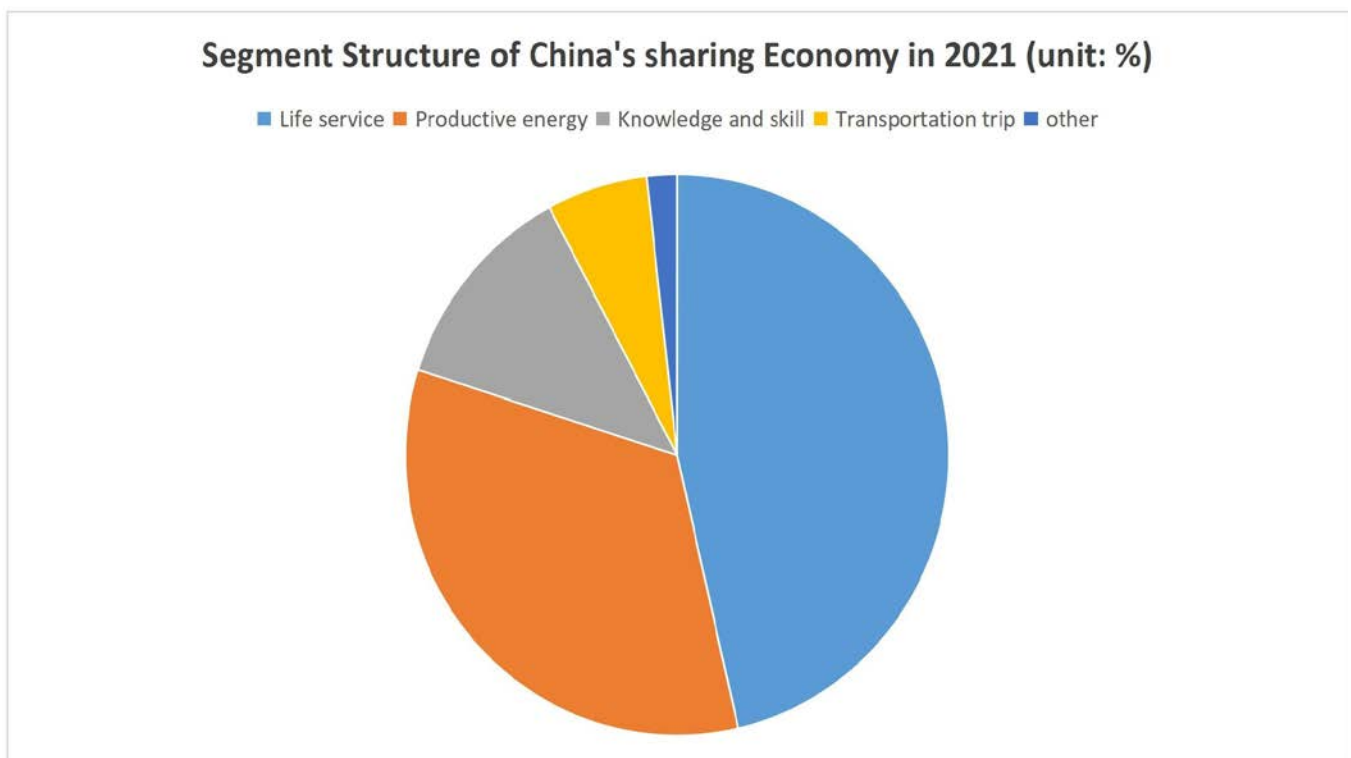


Figure 3.12 – Segment structure of China’s Sharing Economy, 2021

(3) The user scale of the main segments of the shared life service industry

According to the 49th Statistical Report on the Development of China's Internet released by CNNIC, as of December 2021, the number of users of online food delivery and online car hailing in China has reached 544 million and 453 million, respectively. According to the State Information Center, the number of shared accommodation users is 81 million.

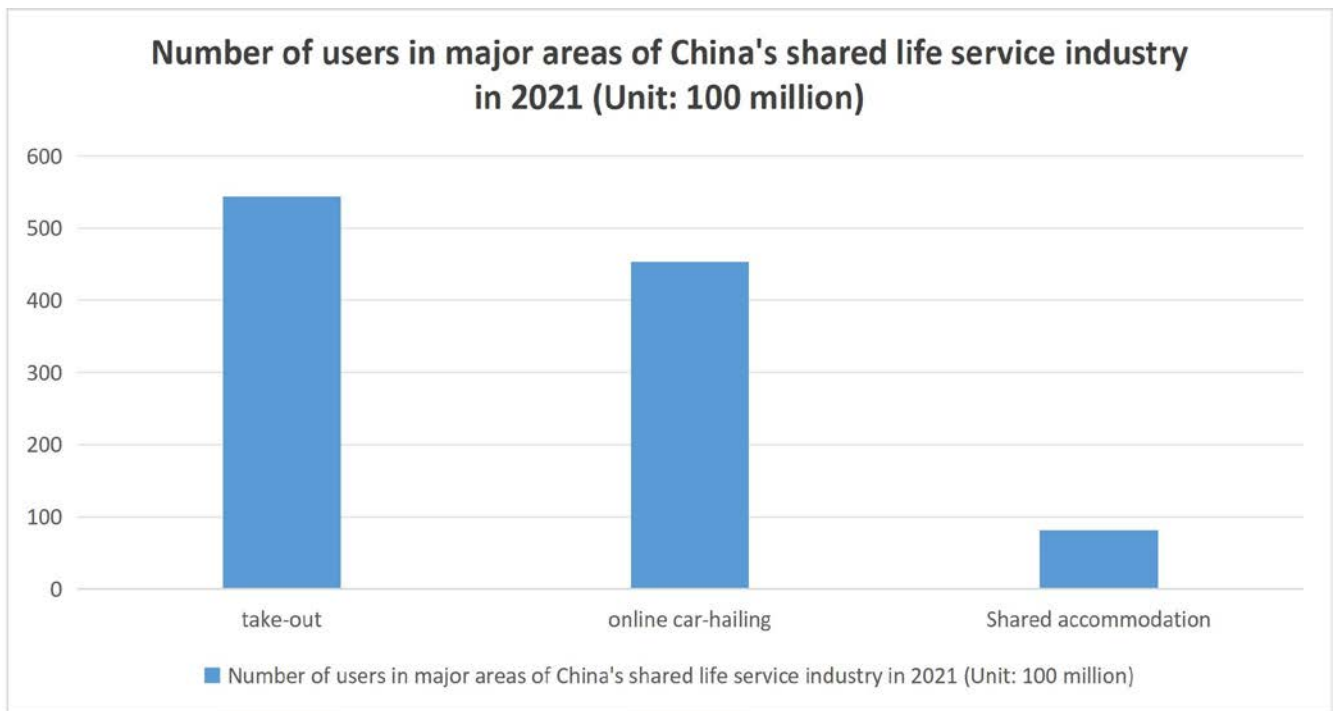


Figure 3.13 – Number of users of China’s sharing economy, 2021

(4) The sharing economy in the field of life services reached 1.7 trillion yuan

After experiencing a large decline in 2020, the sharing economy in the field of life services recovered in 2021, with the market size reaching 1.7 trillion yuan, an increase of 5.8% from 2020.

(5) The proportion of expenditure in major areas of shared living services

In 2021, the penetration rate of shared services in the catering industry is the highest, and the spending on shared services accounted for 21.4% of the total expenditure on catering. Spending on travel sharing services accounted for more than 8% of total spending on travel services, still less than 10%. The proportion of expenditure on accommodation sharing services accounted for 5.9% of the total expenditure on accommodation services, and there is still room for greater growth.

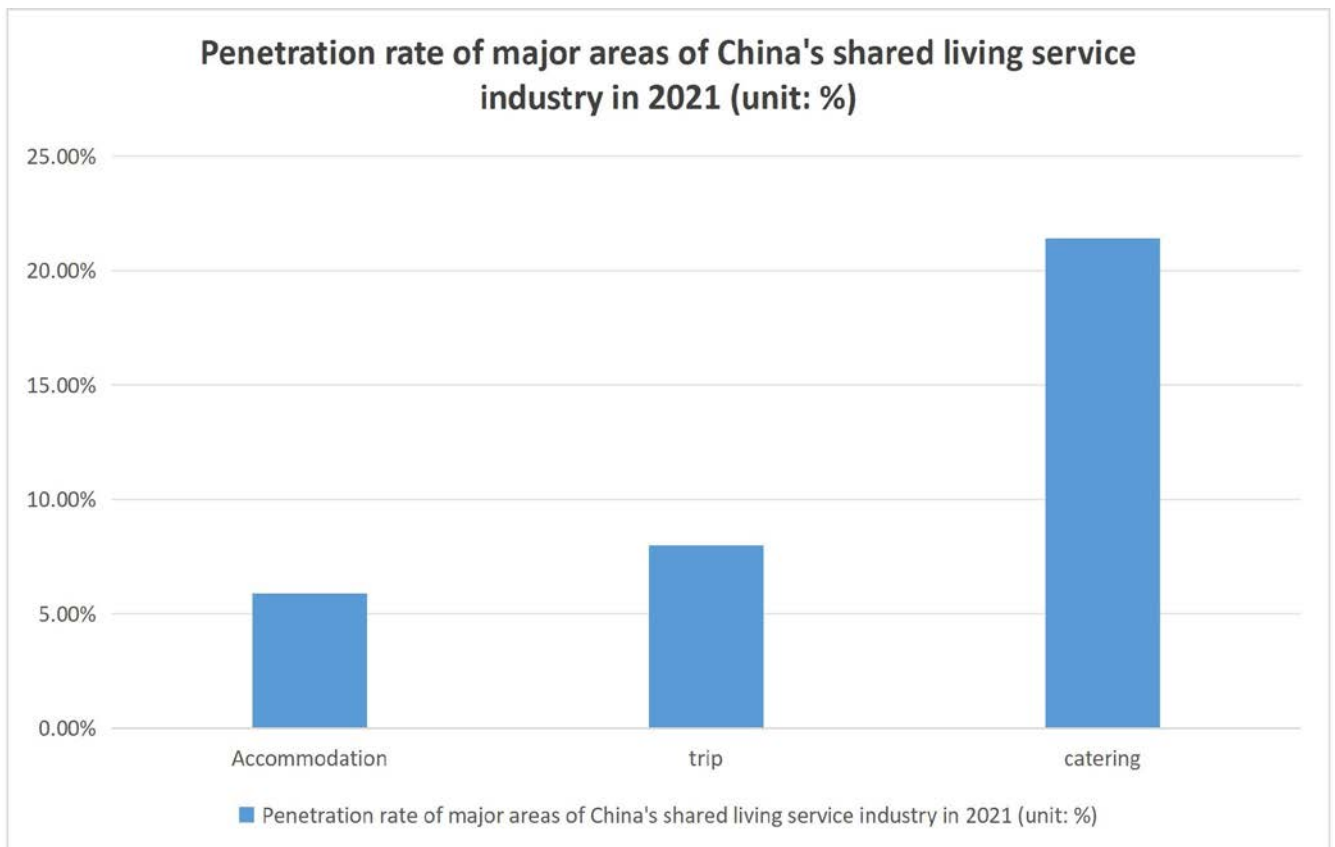


Figure 3.14 – Penetration rate of China’s sharing economy market, 2021

To sum up, the overall scale of China's sharing economy has reached 3.69 trillion yuan, of which the scale of life service sharing economy accounts for the largest proportion. The user scale of food delivery and online car hailing in the field of life services has reached 544 million and 453 million, respectively, promoting the scale of life service sharing economy to 1.7 trillion. From the perspective of penetration rate, the penetration rate of shared services in the catering industry has exceeded 21%, while the penetration rate of travel and accommodation still has a large room for improvement.

The outbreak of the epidemic in early 2020 has affected the development of all fields to a certain extent, and the growth rate of some fields has been further reduced, and the shared medical field has achieved contrarian growth.

(1) The total volume of market transactions increased year by year, and the growth rate gradually slowed down

In February 2021, the State Information Center released the Annual Report on the Development of China's Sharing Economy (2021), and the data released in the report showed that the transaction scale of China's sharing economy market in 2020 was about

3,377.3 billion yuan, an increase of 2.88% over 2019. On the whole, although the transaction volume of China's sharing economy market still maintains the growth trend year by year, the growth rate continues to slow down significantly compared with the previous year.

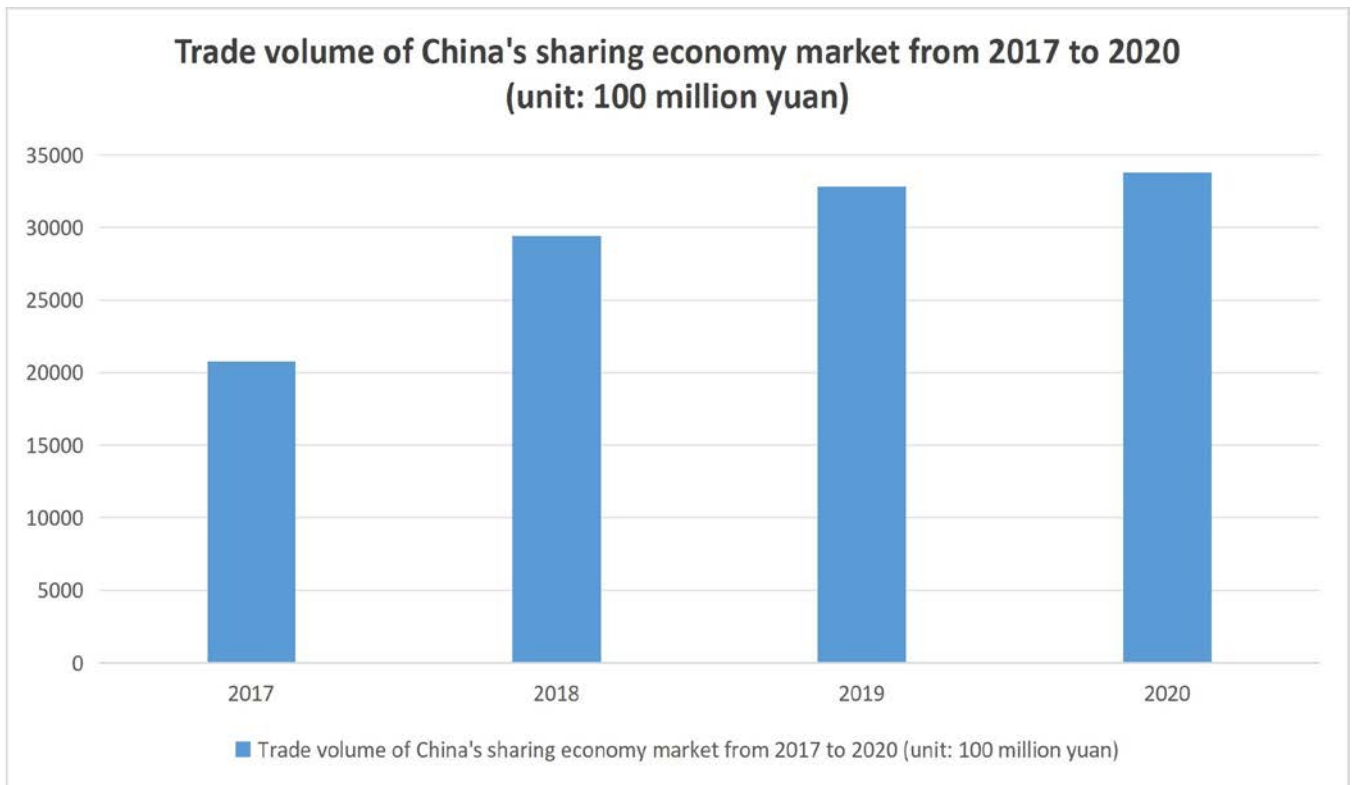


Figure 3.15 – Total volume of China’s sharing economy market, 2017-2020

(2) The life service sector has a large market size, accounting for nearly 48% of the marketshare

According to the classification of the National Information Center, the sharing economy can be divided into transportation, housing and accommodation, knowledge and skills, life services, shared medical care, shared office and production capacity. From the perspective of the changing trend of market turnover in various fields, from 2017 to 2020, the market turnover of shared medical care, knowledge and skills, and production capacity increased year by year, while the turnover of other fields showed an upward trend from 2017 to 2019, and a decline in 2020.

Specifically, in 2020, the field of life services will occupy a large market share, accounting for 47.89% of the market share⁶ Production capacity, knowledge and skills,

transportation field followed, the market share accounted for 32.12%, 11.87%, 6.74%; The market share of shared office, shared accommodation and shared medical care is relatively small, accounting for less than 1%.

(3) The epidemic affected the development of different fields, and shared medical care bucked the trend

In recent years, the development model of the sharing economy is transforming from an extensive model that pursues scale and speed to an intensive model that pays more attention to development quality and efficiency, which also means that the sharing economy will shift from the past ultra-high-speed growth to medium-high growth. Therefore, from the point of view of the development speed, from 2018 to 2020, the growth rate of market turnover in various fields has generally maintained a downward trend, which is an inevitable manifestation of the internal adjustment of the sharing economy.

However, the outbreak of the epidemic in 2020 has affected the development of all fields to a certain extent, and the growth rate of some fields has been further decreased, while some fields, shared medical care and production capacity fields have achieved contrarian growth.

Specifically, this is mainly because different types of sharing platforms play different roles in industrial activities, and the impact of the epidemic on the sharing economy in different fields is also significantly different. In those areas where closed loop transactions must be completed through offline activities, the market size has declined significantly under the impact of the epidemic.

The three areas with the largest decline in transaction size were shared accommodation, shared office and shared travel, which fell 29.8 per cent, 26 per cent and 15.7 per cent, respectively. In addition, the transaction scale in the field of life services decreased by 6.5% year-on-year, mainly because the entire catering industry, domestic service, offline leisure and entertainment have been severely impacted after the outbreak of the epidemic, and the consumption of life services has declined sharply.

Since there are fewer knowledge and skills fields, offline activities form a closed loop of transactions, so the range of changes is small. In 2020, the growth rate of market

transactions in the field of shared production capacity reached 17.85%, an increase compared with 2019.

Sharing production capacity refers to the integration of idle production capacity of enterprises. The impact of the epidemic has had a certain impact on the development of enterprises, and some small and medium-sized enterprises are faced with the risk of bankruptcy, which brings opportunities for the development of the shared production capacity market.

It is worth noting that the share of shared medical care in China's sharing economy market is not high, but it will perform well in 2020, with a growth rate of 27.78%, an increase of 5.05 percentage points compared with 2019. During the epidemic, some shared medical platforms, such as Wedoctor, Haodu and Ping An Good Doctor, have set up online consultation services, uniting doctors from medical institutions across the country to provide free services to the public. These platforms have played an important role in helping people understand the dynamics of the epidemic, popularizing relevant knowledge and easing anxiety, and have also driven the development of the shared medical market.

(1) The development background of shared finance

Sharing finance is developed under the application of sharing economy. Sharing economy, also known as sharing economy, is an economic development model that reuses social idle resources in exchange for economic benefits. The Fifth Plenary Session of the 18th CPC Central Committee explicitly supported the sharing economy and included the sharing economy as one of the "13th Five-Year Plan". With the widespread application of shared economic models such as shared bicycles, short-term housing rentals, taxi pooling, and takeout ordering, the sharing of social resources has become a daily routine for ordinary people. With the rapid development of the Internet, resource sharing in the financial field has become increasingly common.

The development of sharing finance can be divided into three stages: the first is the sharing economy stage to solve the problem of profit distribution, the second is the transition stage of integrating Internet technology, and the third is the sharing finance stage to alleviate the drawbacks of traditional financial models. As early as in the era of Marx abroad, it has been proposed that the surplus value of social production should be shared

by the working people and capitalists, which is the sharing economy prototype of the profit distribution problem. With the rise and deepening of Internet technology, people put idle goods, time, knowledge, skills and other resources on the network platform to realize sharing, and the Internet sharing economy was born. Finance is a part of the economy, and the sharing economy permeates all areas of life, and the financial sector is no exception. Shared finance is the efficient realization of capital financing and equal allocation of financial resources under the support of big data technology.

(2) Comparison between shared finance and traditional finance The fund supplier, the fund demander and the financial institution constitute the main body of financial participation. The following three parties to compare the differences between shared finance and traditional finance.

On the demand side. Factors such as personnel, time and transaction costs in traditional finance will lead to insufficient and unequal allocation of financial resources on the capital demand side. Small and micro enterprises, farmers and low-income people in urban areas have limited access to financial services. In 2015, China's small and micro enterprises still had a capital gap of about 22 trillion yuan that could not be solved through effective financing channels. The People's Bank of China and listed companies showed in their annual reports from 2010 to 2015 that farmers' loan needs were not met. The emergence of shared finance can solve the financing needs of these niche customers.

The financial provider. Traditional finance is mainly in the form of debt financing of commercial banks, which will cause the cost of corporate debt to be too high and it is difficult to meet the diversified investment needs of capital providers. According to a Reuters survey of 1,400 companies in 2015, China's debt is 1.6 times its gross domestic product (GDP), which is twice the ratio of the United States, showing that Chinese companies generally have excessive debt costs. The "2016 Internet financial Asset Allocation Report" shows that the current distribution of domestic resident assets is from more to less real estate, bank deposits, bonds and stocks, and the allocation ratio of stock assets in China is only 1/2 of Japan, 1/3 of Germany, and 1/10 of the United States. Sharing finance can increase the proportion of equity financing of enterprises and residents, reduce the proportion of debt financing, and reduce the cost of debt.

Financial institutions. Traditional financial institutions play the role of intermediary between the supply side and the demand side, and make reasonable allocation of funds, so as to solve the problem of information asymmetry between the supply side and the demand side. Sharing finance in the Internet era no longer relies solely on traditional commercial banks, but on sharing financial platforms to achieve more diversified and freer supply and demand for funds. Modern technologies such as big data, cloud computing and mobile payment have become the guarantee for the direct allocation of funds between the supply and demand sides of shared finance.

(3) Development issues and suggestions of shared finance

Crowdfunding funds are not transparent, and the supervision of funds and the transparency of fund operations should be strengthened.

Online crowdfunding is one of the typical forms of shared finance, which means that investors can invest in their favorite projects through the form of "appointment + group purchase" on the online platform, so as to solve the financing problems of some enterprises. Crowdfunding was established abroad in 2009 and began to appear in China in 2011. The barrier to entry for online crowdfunding is low, making it easy for anyone with innovative ability to enter the project. Roll Time is one of the earliest crowdfunding platforms in China, with about 700 projects online in less than two years, and the project success rate can reach 50%. In 2015, e-commerce represented by Jingdong, Taobao and Chaser dominated nearly 70% of the Internet finance market and launched many innovative models of crowdfunding. As crowdfunding enters the public eye and is widely used, the use of crowdfunding funds is also highlighted. The incident revealed the unclear flow of crowdfunding funds. The crowdfunder did not receive dividends or principal in the end, because he did not present bank transfer proof. The incident violated the credit commitment and caused bad public opinion. At the same time, illegal fundraising in the name of Internet finance is also numerous, the People's Bank of China issued the "China payment System Development Report" pointed out that in 2016, Internet finance illegal fundraising more than 2,300 cases, many of which involved more than 100 million yuan. In order to solve the problem of the flow and use of funds in crowdfunding, the supervision of funds and the transparency of fund operation should be strengthened. First,

the government directly manages the crowdfunding market and establishes relevant crowdfunding regulatory agencies. As the "visible hand" of the market, government intervention can directly reduce the cost of social crowdfunding management, effectively maintain market order, and put an end to the severe punishment of illegal crowdfunding. The relevant departments shall establish a crowdfunding regulatory body, which may require crowdfunding enterprises to submit pre-budget and post-financial statements on a regular basis, establish a special financial reporting system, and determine various expenditures and incomes. Second, crowdfunding needs to find the right partners and stipulate the rights and obligations of all parties. The partners of crowdfunding not only need to complement each other's abilities, but also need to have the same values, otherwise it is easy to make mistakes before the end of the project, and the contradiction will intensify, leading to the failure of the project. Third, establish a risk response mechanism for the information asymmetry between crowdfunding parties. In order to control the occurrence of vicious events, crowdfunding can use third-party regulators for supervision and management, or let insurance institutions intervene to reduce the risk.

Conclusion

As an emerging business model, the sharing economy has developed rapidly worldwide in recent years. Its essence is to use Internet technology to match idle resources with people in need, so as to achieve efficient use of resources. As a cutting-edge technology, artificial intelligence (AI), with its powerful data processing capabilities and intelligent matching algorithms, has provided new impetus for the development of the sharing economy. As a new economic model, sharing economy is becoming a hot topic worldwide with its characteristics of high efficiency, convenience and environmental protection. The development of science and technology has provided technical support for the sharing economy, enabling it to expand and popularize rapidly on a global scale. This paper aims to explore the status quo, influencing factors, typical cases and future trend of global sharing economy to provide reference and reference for China's development of sharing economy.

The rapid development and application of mobile Internet technology, the popularity of smart phones, the popularity of third-party payment, the support of national policies, the inflow of venture capital, and the improvement of consumption concepts have enabled China's sharing economy to profoundly influence consumers and promote economic development from scratch and from small to large.

In short, the rise of the sharing economy is based on three cornerstones: information symmetry, rules of the game, and collaboration. Information symmetry refers to the reduction of information asymmetry, which will have a positive impact on resource aggregation, resource allocation, supply and demand connection, user experience and main body coordination; Rules of the game refers to the design of rules that have an important impact on calling for the public to participate in the sharing economy. Fair, transparent and mutually beneficial rules are the basis for the development of sharing economy. Collaboration refers to the establishment of information platforms, which should be considered more from the perspective of participants, giving participants more dependence and participation, collaborative information sharing and collaborative innovation.

The sharing economy is a relatively new phenomenon designed to promote environmentally friendly practices. The sharing economy is characterized by the convergence of information, marketing, and technology, creating a new paradigm in which customers value access over ownership, enabling them to make better use of resources. It provides a modern business strategy that can pave the way for energy efficiency and sustainable economic development. However, the economic and environmental impacts of the sharing economy are still controversial and more research is needed. In fact, the sharing economy upends current economic standards, raising concerns about the pros and cons of new behaviors.

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