

The Chinese Automobile Industry: An Overview

Li Gang

要 旨

2002 年度における中国の自動車生産台数は 3,262,947 台になった。中でも、セダン生産台数は、1,103,258 台になった。当時では驚異的な数字とする見方が強かった。2002 年度に発表された予想値に基づいて考えれば、近い将来、中国は日米に次ぐ自動車生産大国になるに違いない。本稿の目的は、1958 年からはじまった中国自動車産業の動態を捉えつつ、日本、韓国との国際比較によって中国自動車産業の成長及び展望を明らかにすることである。本稿では、関連する先行研究の理論に基づき、中国自動車産業の足取りを把握し、実証分析を行う、という研究方法をとった。その結果、中国自動車産業に対する一層深い理解ができた。

Keywords: The Chinese automobile industry, Multinational corporations (MNCs)

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I. Introduction

China's rise in world economy is perhaps the most striking development in recent world history. Over the last twenty years, China has become one of the fast growing countries. Like other fast growing countries, China has been credited with a remarkable statistical record, especially in terms of GDP growth rate, income, and exports. "In 2003, China's GDP grew by a reported 9.1%, its fastest rate since 1997 - driven by the material-intensive construction and automotive sectors".¹

In particular, the Chinese automobile industry has demonstrated dramatic growth during this period. The growth of the Chinese automobile industry from a production level of 4,030 vehicles in 1982 to over 1,103,258 vehicles in 2002 provides one of the most remarkable success stories in the history. Nor have the huge volumes attained in the past involved such dramatic growth in automobile production as is commonly believed.² In 1992, the production value of the motor vehicles totaled RMB Yuan 55.52 billion in China. Ten years later, the production value of the motor vehicles came to RMB Yuan 389.26 billion, an increase of 285.81 billion.³ Since the initial shipment to foreign country in 1958, the exports of the Chinese motor vehicles have increased substantially.⁴ For China during 2002, the exports of the motor vehicles totaled 28,645 vehicles.⁵

This remarkable story did not occur in a vacuum. It was linked organically to at least a half century of formation, growth, and great leap forward. To illuminate this process a new kind of scholarship on the Chinese automobile industry is needed: historical analysis in the perspective of the interrelations among the automobile firms, the automobile consumers, the suppliers of automobile parts and components, the governmental institutions, and other stakeholders. More important, a number of problems arose in the development of the Chinese automobile industry. A case in point is that how the Chinese automobile industry will evolve in the near future. The right answers to the problems in the development of the Chinese automobile industry also compelled such historical analysis. The Chinese automobile industry is the product of an evolutionary past that has shaped its present structure and operations. Prevailing operations and policies in the Chinese automobile industry that appear in the present to be difficult to understand take on a new meaning when viewed in the light of the industry's history. A historical interpretation of the Chinese automobile industry and the circumstances surrounding its development explains much of its present pattern and makes that pattern appear more logical and economically justifiable.

Pioneering literature shrew light on the historical interpretation of the development of the Chinese

automobile industry. Taku Iwahara, for instance, identified four stages in the development of the Chinese automobile industry during the period of 1950 to 1995.⁶ Chunli Lee provided a general description of the process for the period 1953-1993 when analyzing the manufacturing system and technological strategy of the Chinese automobile industry.⁷ Most pioneering literature, however, primarily focused on certain aspects of the development of the Chinese automobile industry. Consequently, a clear panorama of the development of the Chinese automobile industry has not been presented. In addition, current research is nascent in exploring the process historically in a network perspective that identifies the main determinant of the development of the Chinese automobile industry. Current research, for instance, did not put much effort into the analysis of the particular role that the Chinese government has played in the development of the Chinese automobile industry. Furthermore, current research did not put the analysis of the Chinese automobile industry within a framework that includes a comparative study of the development of the automobile industry in other countries, such as the United States, Japan, South Korea, and so forth. It would be difficult to recognize the distinctive characteristics of the development of the Chinese automobile industry without such comparative study.

This paper is an attempt to present a description of the development of the Chinese automobile industry during the period of 1958 to the present more palatable and more useful. The explicit objectives are to define the problems arose in the development of the Chinese automobile industry specifically; introduce a theoretical framework for exploring the development of the Chinese automobile industry; present a clear panorama of the development of the Chinese automobile industry; forecast the future of the Chinese automobile industry.

II. Theoretical Framework for Exploring the Chinese Automobile Industry

The Chinese automobile industry seems to be on the tips of everyone's tongues. But few stops to think seriously what this term exactly means. A similar concept is the Chinese automotive industry. The Chinese automotive industry, in its broadest aspect, embraces the manufacture of passenger cars, trucks, buses, motorcycles, and automotive parts and components. The analysis of this paper, however, is confined to the manufacture of passenger cars.

China is potentially the world's largest growth market for automobile. The demand for automobile in China is accelerating at a remarkable rate and appears to have no ceiling. Unfortunately, however, not all the automobile firms have realized what they have been dreaming about China. The Chinese automobile industry,

once dominated by one firm, is now a highly competitive industry utilizing new technologies and expanding in new locations. Competition in the Chinese automobile industry has developed to a point where some automobile firms chronically over-produce and then cut prices until little or no profits remain. It is not difficult to find, for instance, some automobile multinational corporations (MNCs) came to China, made losses, and even left at last. Consequently, the following questions are of vital concern to the firms in the Chinese automobile industry:

What are the fundamental factors that determine the development of the Chinese automobile industry?

How did the Chinese automobile industry attain its present position of importance in China as well as in the global economy?

What forces drive competition in the Chinese automobile industry?

How will the Chinese automobile industry evolve?

How can a firm be best positioned to compete in the Chinese automobile industry in the long run?

In analyzing the Chinese automobile industry, a new kind of theoretical framework is needed. Economists have erected many impressive theoretical structures to explain and evaluate an industry. Michael E. Porter (Porter), for instance, has provided a comprehensive set of analytical techniques for understanding an industry. According to Porter, "The state of competition in an industry depends on five basic competitive forces. The collective strength of these forces determines the ultimate profit potential in the industry, where profit potential is measured in terms of long run return on invested capital."⁸ The five basic competitive forces are industry competitors, buyers, substitutes, suppliers, and potential entrants. Takashi Yanagawa identified five categories of important factors within an analytical framework of industrial organization. The five categories of important factors are fundamental conditions, public policies, structure, conduct, and performance.⁹ In addition, Takahiro Fujimoto and Akira Takeishi recognized the following key factors in analyzing the automobile industry: automaker, market (customer), local society, general society, employer, supplier, and stockholder.¹⁰

Based on these findings, this paper introduces a revised theoretical framework for exploring the Chinese automobile industry, as shown in Figure 1.



Figure 1. The Theoretical Framework for Exploring the Chinese Automobile Industry

The following pages will examine thoroughly the development of the Chinese automobile industry within this theoretical framework. The analysis is centered on the growth of the automobile firms in China, while some efforts are put into the analysis of the manufacture of trucks, especially at the early development of the Chinese automobile industry, because China developed a relatively large automobile industry by first manufacturing trucks for military and productive use and then increasing automobile production rapidly. In addition, this paper will also discuss the functions of the government officials, the automobile consumers, the suppliers of automobile parts and components, and other stakeholders including the automobile MNCs, automobile research institutes, and so forth, so as to explain the changes of the circumstances surrounding the Chinese automobile industry.

Before delving into a specific aspect, this paper surveys the field of the Chinese automobile industry as a whole and outline the development of the Chinese automobile industry during the period of 1958 to 2002, so as to avoid the propensity for looking at trees rather than forests. This paper will examine the origins of the Chinese automobile industry during the 1950s, its growth after 1977, and its great leap forward after 2001. The detailed discussion begins in the 1950s and runs through the early 21st century. In the case of China, the most conspicuous historical event that is regarded as a dividing point between two stages in the development of the Chinese automobile industry took place in the political arena. Consequently, this paper, for a heuristic

and analytic purpose, recognizes three stages in the development of the Chinese automobile industry as following:

1. The formation of the Chinese automobile industry (1958 - 1977)
2. The growth of the Chinese automobile industry (1978 - 2000)
3. The great leap forward of the Chinese automobile industry (2001 - Present)

Several subjects readers might expect to find in an account of the Chinese automobile industry are absent or covered only in passing. The treatment of automobile manufacturing technology, for instance, is omitted, since this appears to be a topic in itself. In addition, although the traffic jam has created a social problem in China, a complete appraisal of the economic, political, and social effects of the Chinese automobile industry is beyond the scope of this paper.

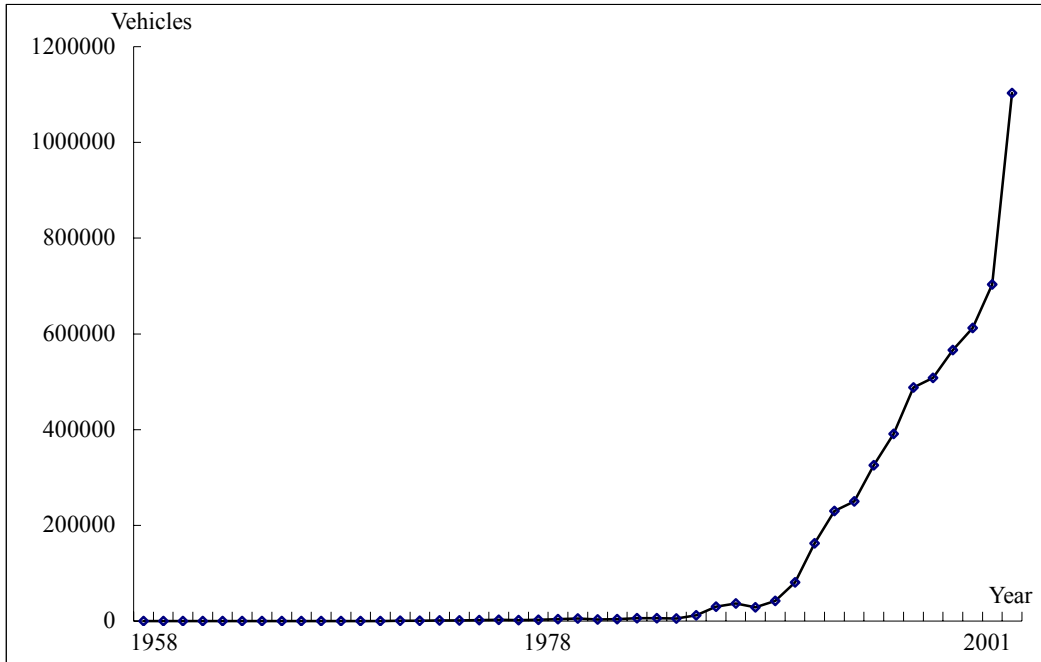
The utilization of documents plays an important role in conducting this study. Material is collected from various secondary sources that include existing academic literature, professional journals, automotive industry yearbooks, newspapers, reliable websites, and so forth. This paper employed clear methodological criteria and procedures to gather, examine and select the data; otherwise it would be impossible even to find the valuable data in the sea of raw materials relating to this research. The data pertinent to the subject of this paper are identified according to two criteria. The first criterion is of theoretical considerations. Specifically, those have to do with the discussion of industrial organization, competition, and so forth. The second criterion is of concrete facts that are needed to demonstrate the business reality and support the theoretical arguments. Among other things, the following secondary sources are thought very pertinent to this research: China Automotive Industry Yearbook, Economist, and Business Week. Selecting the data is not the end of the data processing. The data is useless without passing through the process of interpretation for the research. By connecting the scattered parts, the data is reasonably interpreted and fitted into the proper place. Much of the material on the Chinese automobile industry is verbal description, but whenever possible statistics on automobile output, tariff against foreign automobiles, and the like are introduced. Most of this statistical material is presented in diagrams and tables.

III. A Half Century of Formation, Growth, and Great Leap Forward

The automobile industry is a young giant in the Chinese economy. The huge size of the Chinese automobile industry is especially noteworthy in view of its comparative youth. In 2002, the production value of the motor

vehicles reached RMB Yuan 389.26 billion in China.¹¹ Perhaps the best way to portray the development of the Chinese automobile industry is in terms of the annual output during the period 1958-2002, as shown in Figure 2.

Figure 2. The Annual Output of the Chinese Automobile Industry (1958-2002)



Source: “The Chinese Automobile Industry Annual 2003”, p.23.¹²

The development of the Chinese automobile industry follows no well-defined pattern, as may be seen by reference to Figure 2, which shows the annual automobile output in China over a half century ending with 2002. There are interruptions to the generally rising trend occurred in the 1960s resulting from continuous political movements and in the 1980s when the development of the Chinese economy slowed. During the half century portrayed, there was a fundamental transition in the development of the Chinese automobile industry. One of the most important is the change from a command economic system in which the Chinese automobile industry is controlled directly by the Chinese government to a mixed economic system in which both private and public institutions determine the development of the Chinese automobile industry. Even now, the transition has not been finished completely.

The remarkable story of the Chinese automobile industry did not occur in a vacuum. It was linked

organically to a half century of formation, growth and great leap forward. The survey covers a time span from 1958 to the present. As seen in the previous discussion, this paper recognized the following three stages in the development of the Chinese automobile industry.

1. The Formation of the Chinese Automobile Industry (1958 - 1977)

The emerging development of the Chinese automobile industry may have its origin in the early 1920s. Shenyang Military Factory, for instance, tried to manufacture trucks in 1927.¹³ However, it was in 1958 that China produced its first passenger car – Dongfeng 71.¹⁴

Before 1949, China had no recorded mass motor-vehicle output, although individuals and small firms had began learning how to reform foreign motor vehicles imported into the country. These individuals and small firms were concentrated in major cities in China, and could not manufacture motor vehicles including automobile.¹⁵ The continuous war retarded the growth of these emerging motor-vehicle firms and damaged the facilities in China such as roads, rail, harbor, and so forth. Consequently, the national infrastructure for the development of the Chinese automobile industry was heavily undermined. China had no complete domestic industry to speak of and no apparent capability even to produce the suitable materials that the manufacture of automobile required. There were only 12 small firms that repaired or reformed vehicles for military use as well as civilian use in China in 1949. Among them were 3 motor-vehicle firms and 9 motor-vehicle accessory firms.¹⁶ These small firms remained as small-scale workshops assembling imported parts and components until 1953. No modern manufacturing system of automobile was established in China at the time.

The immediate stimulus to the development of the Chinese automobile industry was the foundation of the People's Republic of China. The initiation of the establishment of the Chinese automobile industry dates back to March 1950, when the national meeting was held in order to set up the automobile industry in China.¹⁷ During the primitive period, the youthful Chinese automobile industry was beset with technical and economic difficulties. The qualified technicians and well-trained working forces, for instance, were scarce at the time. Infrastructure barriers, too, exerted a retarding influence on the early development of the Chinese automobile industry. Another barrier to the early development of the Chinese automobile industry was the insufficiency of capital. In such a situation in which the Chinese automobile industry could hardly find a way of self-development, foreign aid from the Soviet Union played an important role in establishing the automobile industry in China. The Soviet Union also helped China established a number of large-scale modern firms and

trained plenty of young technicians.

Besides the foreign aid underlying the huge economic supports of the Soviet Union, the Chinese government launched a nation-wide campaign to encourage the early development of the automobile industry. The Chinese government also undertook a series of measures to encourage the early development of the automobile industry as a part of its First Five-Year Plan from 1953 to 1957. More important is that Chinese automobile workers devoted all their efforts to their tasks in establishing the automobile industry. They endured low wages, hard working surroundings, and so forth. This fact indicates a clue to explain why the Chinese automobile industry was brought into being rapidly.

It is commonplace that in the development of capitalism of the West automobile industry has initially been generated in the market evolution as well as that of the economy, not by the government planning. The decisive distinction between the two forms can be drawn from the manner in which capital is accumulated in either profit-seeking private investment or political resource allocation. This is based on the fact that capital plays a dominant role in the formation of the automobile industry and capital can be accumulated through different ways. From this formula, the difference now becomes clear between the formation of the Chinese automobile industry and that in the West. While the latter accumulated capital through the free market competition, the former did so by allocating the social resources with political power. For China during the 1950s, the dominant characteristics of the formation of the Chinese automobile industry were direct government investment and control. More specifically, the Chinese government invested RMB Yuan 6,600 million in establishing the automobile industry during this period.¹⁸

On July 15th, 1953, China started to build its first modern automobile factory -- The First Automotive Works (FAW) in Changchun City, Jilin Province. Three years later, the construction of FAW was completed.¹⁹ The FAW was established with a planned productivity of 300,000 vehicles.²⁰ On July 13th, 1954, the FAW manufactured the first 4-ton truck in China -- Jiefang Truck.²¹ It was also the first motor vehicle manufactured in China. Since the first motor vehicle was introduced in 1885, 68 years had passed.²² The Jiefang Truck was noted for its rugged qualities and ease of operation. In July 1958, FAW manufactured the first luxury passenger car in China - Hongqi CA72.²³ For the beginning years of its existence FAW principally manufactured narrow range of motor vehicle. After 1958, however, FAW introduced other motor vehicles and became a dominant power in the Chinese automobile industry. The Chinese automobile production rose from 57 vehicles in 1958 to a peak of 101 vehicles in 1960.²⁴

In the earliest years the manufacture of automobiles were principally located in Changchun City, where

considerable inflows of the technicians from the whole country provided a skilled labor forces. The rapid development of relating industries such as steel in the nearby areas and the fact that there are plenty of natural resources in the region was another circumstance favoring location in that city. The Chinese automobile industry was highly concentrated and Changchun City was the center of the Chinese automobile industry at the time. FAW, the most highly integrated of the Chinese automobile firms at the time, was in the best position to obtain the economies of integrated operation. After its successful launching of Jiefang truck and Hongqi sedan, FAW also introduced other product lines including jeep and increased its annual output from the planned 300,000 vehicles to 600,000 vehicles.²⁵ FAW also set up a large number of subsidiary institutes at the time. In April 1954, for instance, FAW was approved to set up a training school in order to educate the workers.²⁶

Under the direct control of the Machinery & Industry Ministry of the Chinese government at the time, however, small-scale automotive firms proliferated, especially when the “One Province One Factory” policy was adopted in the late 1950s. In the years after 1958, small-scale automotive firms were set up continuously. Even the automotive repair factories began to manufacture motor vehicles. Among them were Shanghai Automotive Factory, Beijing Automotive Manufacturing Factory, Nanjing Automotive Manufacturing Factory, and Jinan Automotive Manufacturing Factory.²⁷ The “One Province One Factory” policy was criticized in the recent literature because of the obvious shortcomings.²⁸ Since the tension between China and the Soviet Union was increased, the Chinese government began to move its major industries including the automobile industry to the mountain areas in order to cope with the severe situation.²⁹ Since 1964, a large number of automotive firms were set up in inland areas. Among them are the Second Automotive Manufacturing Factory, Sichuan Automotive Manufacturing Factory, and Shanxi Automotive Manufacturing Factory.³⁰

The following political movement left China in a state of chaos. Consequently, the economical and social base for the development of the Chinese automobile industry was heavily undermined. As may be seen by the reference to Figure 2, the greatest interruption to the generally rising trend occurred at the beginning of the 1960s, which followed by a lasting slump of the Chinese automobile industry in the 1970s. On the other side of the Yellow Sea, however, the manufacture of automobile flourished. The growth of the South Korean automobile industry from a production level of 3,117 vehicles in 1966 to over 43,981 vehicles in 1977, for instance, provided one of the success stories at the time.³¹

The Chinese automobile industry was obviously interrupted by the political movements, but this does not explain its lasting slump in the 1970s. The basic explanation is that private automobile consumption was

contained in China at the time. Automobile was regarded as a product instead of a commodity at the time. There was no domestic market for automobile, because all the automobiles manufactured were allocated by the central government instead of being sold on the market. Since the Chinese economy was a typical command economy at the time, the Chinese government officials, instead of the automobile firms and consumers, dominated the development of the Chinese automobile industry. In particular, the manufacture of automobile and automobile consumption were separated in China at the time. All the automobile firms were state-owned economic entities, they were only responsible for the manufacture of automobile and had no interest to satisfy the needs and wants of the automobile consumers.

Before 1961, the Transportation Ministry of the Chinese government controlled the allocation of automobile. It changed in 1961 when the Material Bureau took control of the automobile industry. The Material Bureau allocated automobile through regional material-supplying centers with large capacity. Automobiles were supplied instead of being sold as an item of machine and electronic appliance through these material-supplying centers at the time. These regional material-supplying centers were located in North China (centered around Tianjin), North-East China (centered around Shenyang), East China (centered around Shanghai), Middle-South China (centered around Guangzhou), South-West China (centered around Chongqing), and North-West China (centered around Xian).³² The Chinese government also controlled directly the manufacture of automobile accessory at the time. In the years after 1961, for instance, it was the Transportation Ministry that controlled the manufacture and allocation of automotive accessories. The Transportation Ministry set up 158 outlets in order to supply automotive accessories around the country at the time.³³

As for the formation of the Chinese automobile industry at this stage, the whole series of events was not possible without the state's direct control from the utilization of the economic aid of the Soviet Union, to the nation-wide campaign to encourage the development of the automobile industry. The Chinese automobile industry was confined almost exclusively to internal development at the time. China's isolated position at the time made the circumstances surrounding the development of the automobile industry even worse. In contrast, the manufacture of automobile flourished in other Asian countries at the same time. Besides the South Korean automobile industry, the Japanese automobile manufacturing profited not only by the early shift to the economical car production but also by the well-trained employees, the continuous technical innovation, and the global vision. In 1965, cars occupied only 37.1% of the total motor-vehicle output in Japan while trucks occupied 61.9%. Ten years later, cars occupied 65.8% of the total motor-vehicle output in Japan while trucks

declined to 33.7%.³⁴

2. The Growth of the Chinese Automobile Industry (1978 - 2000)

This stage is characterized by a noticeable growth of the Chinese automobile industry, except for the time of economic adjustment conducted by the Chinese government at the beginning of the 1990s, and the ascendancy of the Chinese Big Three as the leading automobile firms in China. The explanation lies partly in what happened in China and partly in what occurred abroad. The year 1978 is set down as the beginning of a new stage because it was in that year that the Chinese government officially announced the Reform & Open policy. After continuous political movements, the Chinese government recognized the necessity of economic growth as an urgent alternative for political legitimacy. The Reform & Open policy left tremendous consequences on the Chinese society from economy to ideology.

In the years after 1981, transition and development were related questions for the development of the Chinese automobile industry. Along with the introduction of market mechanism into the Chinese economy, automobile firms in China realized that they could no longer manufacture standard products for the Chinese government. If they were to continue as automobile firms in a market-oriented economy they would have to manufacture well-designed products for private firms and individuals. The Chinese government reorganized the automobile industry as an attempt to reform. As a result, China Automotive Industry Company was established in May 1982. China Automotive Industry Company had 7 subsidiaries that stretched out in China. The 7 subsidiaries were Jingjinji Automotive Industry Cooperation Company, Jiefang Automotive Industry Cooperation Company, Shanghai Automobile & Tractor Industry Cooperation Company, Nanjing Automotive Industry Cooperation Company, Heavy Automotive Industry Cooperation Company, Dongfeng Automotive Industry Cooperation Company, and China Automotive Parts & Components Industry Cooperation Company.³⁵ These reforms featuring the change from central control to local decision lowered the entry barrier, encouraged the manufacture of automobile in local areas, and stimulate automobile consumption in China. Consequently, a large number of automobile firms were set up rapidly in China. In addition, the Chinese government listed the automobile industry as one of the crucial industries in its Seventh Five-Year Plan with hope to encourage the development of the Chinese automobile industry.

The motor vehicle output in China reached 1,000,000 vehicles in 1992. It took the Chinese automobile industry 12 years to increase from a production level of 200,000 vehicles in 1980 to that point. Whereas the

Japanese automobile industry had a similar process from 1955 to 1963, it seems that there is a 25-year-lag between the development of the Chinese automobile industry and that of Japan.³⁶ The quantity of the Chinese automotive companies also increased rapidly. Encouraged by the increasing automobile demand in domestic market and favorable policies adopted by the Chinese government, large investments were made by automobile firms to expand their capacity. As a result, the annual automobile output reached 36,798 vehicles by 1988.³⁷ However, this was not followed up with a further growth because of the economic adjustment conducted by the Chinese government in the late 1980s. As may be seen by reference to Figure 2, there is an interruption to the generally rising trend occurred in this period. In addition, the rapid increase of the automobile companies was accompanied by several problems. As a result, the Chinese government stipulated a regulation to retard the development of passenger car and light vehicle project on February 12th, 1993.³⁸ Despite these unfavorable conditions, the Chinese automobile industry kept on increasing. China manufactured 325,461 vehicles in 1995. Five years later, the automobile output came to 612,376 vehicles, an increase of 286,915 vehicles.

The production and sales of automotive accessory also developed rapidly at this stage. In 1978, there were 1,870 automotive accessory firms in China. In 1982, the quantity of the automobile firms increased to 2,136.³⁹ As an attempt to strengthen the automotive accessory supply and technical service, the Automobile Accessory Company was reformed in 1982. In addition, the China Automotive Industry Sales Service Company was established. In 1983, there were 532 automobile accessory outlets around the country and the sales of automobile accessory reached RMB Yuan 1.89 billion.⁴⁰ According to the Automotive Accessory Industry Investigation, there were 6 firms whose sales were over RMB Yuan 1 billion in 1999.⁴¹ A large number of automobile institutes were also established in China at this stage. At the beginning of the 1980s, there were four kinds of automobile research institutes in China: comprehensive research institutes belonging to China Automotive Industry Company at the time; automotive research institutes belonging to automotive factories; local automobile research institutes; and automotive research institutes at universities.⁴²

The private motor vehicle consumption increased substantially in China at this stage. In 1985, for instance, there were 284,181 private trucks and passenger vehicles in China. Five years later, it increased to 815,441 vehicles.⁴³ In 1995, the quantity of private trucks and passenger vehicles was 2,459,778 vehicles.⁴⁴ Five years later, it increased to 6,222,145 vehicles.⁴⁵ In responding the increase of private motor vehicle consumption, the controlling system by which automobiles were allocated instead of being sold on the market was reformed. Since the middle 1970s, the automotive firms in China began to gain the right to sell the

surplus products directly when they fulfilled the production plan stipulated by the Chinese government. In April 1984, the automobile firms in China gained the right to sell directly a certain portion of the vehicles they manufactured. The truck manufacturers, for instance, gained right to sell directly 10% of the vehicles they manufactured. Along with these reforms, the first automotive transaction market in China was established in Guangzhou in January 1985. Up till 1987, 70% of the motor vehicles manufactured in China were sold on the automobile markets.⁴⁶ The direct control of the Chinese government, however, still existed in certain fields. The Chinese government, for instance, stipulated a fixed ex-works and selling price of the cars manufactured in China in January 1989 so as to strengthen its direct control of sales of the cars manufactured in China. According to this regulation, only 56 firms had the right to sell passenger cars in China after February 1st, 1989.⁴⁷ The automobile firms sold their products mainly through five channels at the time: the cooperative dealing company that is established by the automobile manufacturer and the specialized automobile dealing company, the wholly-owned sales company that was established completely by the automobile manufacturer, the franchised automobile dealing company that was chosen by the automobile manufacturer, other automobile dealing companies, and the sales departments of the automobile manufacturers.⁴⁸ In 1992, the quantity of motor vehicles allocated directly by the Chinese government declined to 15%. In February 1994, the Chinese government stipulated the Automobile Industry Industrial Policy. According to this policy, the automotive firms were required to set up their own sale and after-sale service system. In 1995, over 95% of the motor vehicles manufactured in China were sold on the market.⁴⁹ Since the late 1990s, “Four in One” franchise sale service system has drawn much attention in the Chinese automobile industry. It is Guangzhou Honda that introduced such kind of sale service system to China. Unlike the others, it is a franchise sale service system developed by Guangzhou Honda directly and integrates four business functions into one organization. The four business functions are sale of cars, after-sale service, parts supply, and communications with customers.⁵⁰

There was a gigantic struggle for the Chinese automobile market at this stage, in which a great many foreign automobile firms participated at various times. But the prize has gone to the fortunate few, such as FAW-Volkswagen, Guangzhou Honda, and so forth. It is not difficult to understand that “through the 1980s and 1990s, China disappointed. Carmakers came, made losses, argued with their Chinese partners, lamented the leakage of their technologies and often left again”.⁵¹

Table 1 shows that Japan, the United States, W. Germany, and France were clearly the world leaders in automobile technology and sales during the 1980s while China had no mature automobile industry to speak of.

Automobile MNCs such as General Motors, Ford, and Toyota, virtually dominated the world automobile industry.

Table 1. China and the Major Automobile Manufacturing Countries, 1978-1983
(1,000,000 vehicles)

Country	1978	1979	1980	1981	1982	1983
China	0.0026	0.0042	0.0054	0.0034	0.004	0.006
Japan	9.3	9.6	11.0	11.2	10.7	11.1
U.S.A	12.9	11.5	8.0	7.9	7.0	9.2
W.Germany	4.2	4.2	3.9	3.9	4.1	4.2
France	3.5	3.6	3.4	3.0	3.1	3.3
World	42.3	41.5	38.4	37.5	36.3	39.7

Source: The Japanese Automobile Industry; China Automotive Industry Yearbook 2003.⁵²

In the development of the Chinese automobile industry, the inducement of foreign technology and capital mainly through establishing joint venture provided a very important opportunity that made the noticeable growth possible. Foreign automobile firms entered the Chinese automobile industry with hope to grasp the opportunities in the development of the Chinese automobile industry. Among them are European automobile firms.⁵³ Volkswagen was obviously the first-comer. Volkswagen established joint ventures in China in partnership with FAW and the Shanghai Automotive Industry Corporation (SAIC) respectively. On October 10th, 1984, Volkswagen, Shanghai Tractor & Automobile Company, China Automotive Industry Company, Shanghai Trust Consulting Company of Bank of China concluded a contract for establishing the joint venture -- Shanghai Volkswagen Automobile Limited Company (Shanghai Volkswagen). Volkswagen had 50% shares of the joint venture, and the duration of the contract was 25 years. Shanghai Volkswagen was established for manufacturing Santana in China with a planned annual output of 300,000 vehicles.⁵⁴ The American automobile firms also moved quickly into the Chinese automobile market. On January 15th, 1984, Beijing Jeep Automobile Limited Company held its opening ceremony.⁵⁵ On April 25th, 1997, the contract for establishing Shanghai GM was concluded in Beijing. It was the largest joint venture project between China and the United States up till the time. Shanghai GM was established for the manufacture of luxury passenger car -- Buick with a planned annual production of 100,000 vehicles.⁵⁶

In the case of Japanese automobile firms, some Japanese automobile firms entered the Chinese market quickly in the 1980s. These Japanese firms entered the Chinese automobile market by combining trade with technology transfer. Daihatsu was the first Japanese automobile firm that entered the Chinese market by using such kind of combination of technology and commerce.⁵⁷ On March 1st, 1984, Daihatsu Industry Limited Company, Toyota Tsusyo Limited Company, China Automotive Import & Export Company, Tianjin Municipal Automobile Industry Company signed the licensing contract for providing the 850 Series Mini Automobile Technology in Beijing.⁵⁸ Upon closer inspection, it will be observed that the primary purpose of these Japanese automobile firms was to export instead of manufacturing automobile in China. There seems to be three plausible interpretations. Firstly, exporting automobiles to China is much easier than manufacturing that in China; Secondly, the Japanese automobile firms had little interests in establishing manufacturing facilities in China for their profit making because the Chinese automobile market was extremely limited in absolute size and relatively to that of other Asian countries where Japanese automobile firms already invested enormous capitals; Thirdly, the reason may be found in the unfavorable conditions preventing foreign direct investment in manufacturing automobile in China. As a result, Japanese automobile firms stopped making further efforts in establishing themselves in Chinese automobile industry.

When the Japanese automobile firms including Toyota and Honda turned their attention to the North American market, Volkswagen extended its business vigorously in the Chinese automobile market.⁵⁹ In partnership with the well-established Chinese automobile firms including FAW and SAIC, Volkswagen set up a large sales network covering the whole country. Volkswagen introduced a wide range of products varying from sedans to ordinary cars and its market share was over 50% at the time.⁶⁰

The Japanese automobile firms turned their attention to the Chinese automobile market in the 1990s, when their business in North America has been well established. Fuji, for instance, extended its business in China in partnership with Guizhou Airline Industrial Group at that time.⁶¹ On 14th, 1993, Isuzu and Jiangxi Automobile Manufacturing Factory concluded the contract in Tokyo for establishing the joint venture -- Jiangling Automobile Limited Company.⁶² In addition, the French automobile firms also enlarged their involvement in the Chinese automobile industry at the time. On February 26th, 1993, for instance, Dongfeng Peugeot Citroen Automobile Company Ltd., a Sino-French joint venture, held its opening ceremony in Wuhan.⁶³

Through the 1980s and 1990s, the Chinese automobile industry witnessed the rise and fall of the foreign automobile firms in China. Some made good profits while some came, made losses, and left again. A case in

point is Guangzhou Honda which is a 50/50 joint venture between Honda Motor Co., Ltd and Guangzhou Automobile Group. Guangzhou Honda took over the money-losing operation of Guangzhou Peugeot, a Sino-French joint venture that is established on July 22nd, 1985. Guangzhou Honda began production of the Accord (Generation Six) in 1998. The Accord manufactured in Guangzhou turned out to be a hit in the Chinese automobile market. Riding a wave of growing automobile consumption, Guangzhou Honda keeps on launching new models of Accord. Guangzhou Honda has been credited with a remarkable statistical record, especially in terms of productivity and profitability.

3. The Great Leap Forward of the Chinese Automobile Industry (2001 - Present)

The next crucial change in the development of the Chinese automobile industry occurred in 2001 when China joined the WTO.⁶⁴ Contrary to the negative forecast, the Chinese automobile industry developed faster when China joined the WTO. One of the distinguishing characteristics of the Chinese automobile industry at this stage is its great leap forward. The Chinese automobile industry began to enter a stage of mass production.

In 2001, the 2,340,209 vehicles record was marked for the first time in China. This was followed up with a record of 3,262,947 vehicles in 2002. The automobile production kept its momentum in the early 2000s. As the automobile demand matched the strength of demand of the domestic economy, stimulated by the falls in the price of automobile and maintaining cost, the automobile production has exhibited a characteristically high rate of development. This was aided by the practicality and attractiveness of the new models introduced into the Chinese automobile market at this stage, such as Guangzhou Honda's Accord, Shanghai GM's Buick, and so forth. The annual automobile output reached 703,521 vehicles in 2001. One year later, it increased to 1,103,258 vehicles, an increase of 399,737 vehicles. Nor have the huge volumes attained in the 1990s involved such dramatic increases in automobile production, as is commonly believed.⁶⁵ "Almost nobody, not even the giant western carmakers that have been dreaming about China for two decades, was prepared for today's boom." "Now, suddenly, demand seems to have no ceiling."⁶⁶

The Chinese Big Three rose quickly at this stage. The Chinese Big Three are FAW, Dongfeng Automotive Corporation (Dongfeng), and SAIC. The Chinese Big Three occupied more than 50% share of the automotive production and sales in China in 2002. The Chinese automobile industry became highly concentrated at this stage. The top 8 firms occupied 80% of the total automotive production in China in 2002.⁶⁷ Automobile

MNCs also changed their strategies in China. One of the most important changes is that automobile MNCs intended to enlarge their shares of the joint ventures established in China. Honda, for instance, gained 65% shares of the new joint venture established in Guangzhou City, Guangdong Province. Another important change is that automobile MNCs tried to do business in China in partnership with the Chinese Big Three so as to take the advantage of the resources that the Chinese Big Three have.⁶⁸ Table 2 shows the joint ventures that were established by automobile MNCs and the Chinese Big Three. In addition, automobile firms from the newly industrialized countries also entered the Chinese automobile market at this stage. Hyundai, for instance, established a joint venture with Beijing Automobile Group in February 2002. The joint venture is established for manufacturing Sonata in China.⁶⁹

Table 2. Joint Ventures Established by the Automobile MNCs and the Chinese Big Three

Company	Location	Shareholders	Main Products
FAW-Volkswagen Automobile Co., Ltd.	Changchun City.	FAW, Volkswagen.	Audi, Jetta.
Tianjin Toyota Motor Co., Ltd.	Tianjin City.	FAW-Shali, Toyota.	Vios.
Dongfeng Peugeot Citroen Automobile Company Ltd.	Wuhan City	DFM, PSA France.	Fukang, Picasso.
Shanghai Volkswagen Automotive Co., Ltd.	Shanghai City.	SAIC, Volkswagen.	Polo, Passat
Shanghai General Motors Corp., Ltd.	Shanghai City.	SAIC, GM.	Buick, Sail SRV.

Source: China Automotive Industry Yearbook 2003.⁷⁰

The Chinese automobile market developed rapidly at this stage. The automobile market, for instance, increased 37% in 2002, the highest level that have been achieved since the 1990s. At same time, plenty of new products were introduced into the Chinese automobile market. There were more than 200 new models of different brands available on the Chinese automobile market in 2002. In particular, private automobile consumption increased substantially at this stage. The private automobile purchase, for instance, was less than 40% in 2001. One year later, it accounted for more than 50% of the Chinese automobile market.⁷¹ The early 2000s witnessed the increase of the automobile parts and components production in China. The exports of

automobile parts and components totaled US Dollar 1.661 billion in 2002. In particular, the exports of automobile parts and components were much higher than that of motor vehicles. Although most of the automobile parts and components exported were labor-intensive products, the portion of the high-tech products increased.⁷²

Many elements contributed to the great leap forward of the Chinese automobile industry at this stage, although a first-hand view made it possible to identify several factors that appeared to be the most significant. The Chinese automobile market, for instance, undertook great changes at this stage. Recent research revealed four characteristics of the Chinese automobile market. The four characteristics of the Chinese automobile market are the improved automobile market environment in China, the strengthened sale capability and after-sale services of automobile firms, the new trend of environment emphasis on the automobile market, and the increasing sales of luxury cars.⁷³ In addition, the following two characteristics of the Chinese automobile market are of importance. One is the sharp increase of personal automobile consumption, and the other is the continuous quality improvement and technical upgrading of the automobile.

The circumstances surrounding the development of the Chinese automobile industry was improved at this stage. The Chinese government raised tariff barriers against the imported motor vehicles step by step in the recent years so as to fulfill its obligations as a member of the WTO, which is shown in Table 3. In 2002, the automobile imports totaled 70,000 vehicles in China. Compared with that of the previous year, it increased 52%. The sharp increase of the imported automobiles, however, did not shake the automobile market in China because the market share of the imported automobiles was less than 4%.⁷⁴ In addition, the automobile research institutes also developed rapidly in China at this stage. A case in point is that a large number of famous universities in China have the automobile departments. The automobile department of Tsinghua University, for instance, has a teaching staff of 77 including 10 professors and 22 assistant professors in 2001.⁷⁵ One year later, it increased to 88 including 11 professors and 27 assistant professors.⁷⁶

Table 3. Raising Tariff Barriers against the Imported Automobiles

	2001	2002	2003
Passenger Car	70%-80%	43.8%-50.7%	38.2-43.0%
Bus	45%-65%	37.5%-47.5%	33.3%-40.0%
Truck	24%-50%	21.0%-37.5%	18.0%-33.3%
Parts, Components (Average)	22.3%	16.3%	14.4%

Source: "China Automotive Industry Yearbook 2003".⁷⁷

IV. The Future of the Chinese Automobile Industry

Any comments about the future of the Chinese automobile industry are obviously speculative, but it is evident that the Chinese automobile industry still displays the characteristics of youth.

At first glance, the figure of the Chinese automobile industry creates an impression of bright prospect. The output of the Chinese automobile industry is increasing at a sharp rate. The leading companies in the Chinese automobile industry are either expanding or making plans to expand their manufacturing facilities. Meanwhile, automobile MNCs are enlarging their investment in China. According to the forecast by the Comprehensive Technology & Research Corporation, the automobile production will develop rapidly in China in the coming years. As Table 4 shows, the automobile production will increase to 1,280,000 vehicles in 2005, and 2,750,000 vehicles in 2010, while the real GDP per capita in China will increase to US \$1,095 in 2005, and US \$1,570 in 2010. Automobile production will develop faster than that of business vehicles, as shown in Table 4. In the case of automobile, 100 people will have 1.10 vehicles in 2005 and 1.9 vehicles in 2010 in China.⁷⁸

Table 4. The Forecast (2005 and 2010)

		2005	2010
The Real GDP Per Capita (US Dollars)		1,095	1,570
Automobile Production in China (Vehicles)	Passenger Cars	1,280,000	2,750,000
	Business Vehicles	1,920,000	2,250,000
	Total	3,200,000	5,000,000
Automobile (Vehicles) / 100 people in China	Passenger Cars	1.10	1.90
	Business Vehicles	0.70	0.80
	Total	1.80	2.70

Source: "The Chinese Automobile Industry: Now and the Future".⁷⁹

Another evidence of vigor of the Chinese automobile industry is the frequency with which automobile firms announce the new models or new applications of state-of-the-art technology. A case in point is the IT applications. While it may be overoptimistic to expect the Chinese automobile industry to continue to grow at a sharp rate, it is a fact that the Chinese automobile will keep on increasing. Accordingly, China will be one of the leading countries in the world automobile industry in the future.

Upon closer inspection, however, it will be observed that the apparent bright future is accompanied by potential threats. The rapid development of the Chinese automobile industry reminds of what the Japanese automobile industry had in the 1960s. In the case of Japan, there was a stagnating automobile industry after its previous rapid development.⁸⁰ Consequently, it is not difficult to understand why there is anxiety whether there will be the similar process in the development of the Chinese automobile industry.

Therefore, an appraisal of the future of the Chinese automobile industry should take into account the following aspects.

Firstly, the automobile is virtually indestructible and is used broadly both in business purpose and personal life. Along with the increase of income, automobile may have a high priority in the Chinese standard of living in the future. Unlike that in some developed countries such the United States, Japan, and so forth, the automobile industry is among the so-called "growth industries" that give promise of attractive investment opportunities in China.

Secondly, the automobile industry is highly susceptible to politics because the automobile industry is

regarded as a crucial industry in China. Of particular importance to the Chinese automobile industry is the fact that the automobile industry plays so dominant a role in the Chinese economy. To a certain extreme, automobile is a strategic product in time of war. Consequently, the Chinese government will no doubt have an interest in fostering a vigorous automobile industry in China. It seems a safe prediction that the Chinese government will take an active role in the development of the Chinese automobile industry.

Thirdly, the most distinctive picture in the development of the Chinese automobile industry may be best described as a challenging process to reorganize. In the increasingly competitive and rapidly changing world economy, the state-owned automobile firms are likely to have a difficulty time. This is certainly related to their bureaucratic and inflexible organizational structure. More important is the complicated relationship between the automobile firms and the Chinese government, which make the government intervention possible.

Finally, it is true that the world automobile industry has made a great impact on the Chinese automobile industry. It is also true that the Chinese automobile industry is getting to make impact on that of the world automobile industry. Despite the fact that the Chinese automobile industry is still young, even the leading firms are quite small; it is difficult to deny any possibility of the global automobile industry's dependency on the Chinese influences.

V. Conclusions

It has been observed that the Chinese automobile industry has demonstrated a generally rising trend in the period of 1958 to present.

What can be drawn out from the preceding analysis firstly is that the development of the Chinese automobile industry is different from that in other Asian countries as well as that in the West. Another distinctive picture of the Chinese automobile industry is that the Chinese government has played a dominant role in the development of the Chinese automobile industry. The Chinese government has intervened in one way or another in the development of the Chinese automobile industry. The strong government involvement in the development of the Chinese automobile industry is not a unique story. There are numerous studies on the issue in other Asian countries. In the case of China, the nature and process of the government involvement in the development of the Chinese automobile industry has changed dramatically. While the government involvement featured direct control at the beginning stage, it then changed to guiding intervention. As seen in the previous discussion, the development of the Chinese automobile industry used to be handled by the

centralized decisions of the Chinese government at the beginning stage. Then these decisions were left to automobile customers and manufacturers coordinated primarily at the market place. Although the direct control has been abandoned, the Chinese government involvement still plays a very important role in influencing the development of the Chinese automobile industry. The automobile firms would have difficulties in doing business in China without taking into account the political factors.

This paper serves well as a preparation for the study of how to create competitive advantage in the Chinese automobile industry. It was felt that this paper would be found useful in other fields of economics and management where it might serve as a helpful adjunct. As discussed in the introduction part, the purpose of this paper is to present a clear description of the Chinese automobile industry. A paper of this character is actually never finished. The following research will better this study by introducing new elements in analysis, while expand into new fields. Based on this study, for instance, the future research will focus on the detailed analysis of how to create competitive advantage in the Chinese automobile industry. It is true that the demand for automobile in China is accelerating at a remarkable rate and seems to have no ceiling. It is also true, however, that not every one will win. To be best positioned in the Chinese automobile industry in the long run, automobile firms need a comprehensive set of analytical techniques for competing in the Chinese automobile industry. The most important, perhaps, is “to learn from the local competitors the experienced value, way of thinking, and culture”.⁸¹

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主指導教員（高津斌彰教授） 副指導教員（永山庸男教授・佐藤 正教授）