

RAPID DEVELOPMENT OF CHINA AUTOMOTIVE INDUSTRY

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Abstract

As commonly known, since the 1980s Chinese automotive industry has maintained rapid development. Entering the new century, the development accelerated even more, keeping an increasing growth rate of two digits in four consecutive years. Based on its outstanding contribution to the high-speed growth of the national economy, Chinese automotive industry has become the third largest industry in China. China ranks fourth among the largest automobile manufacturing countries and third among the largest automobile markets in the world. The auto industry has become the driving engine of Chinese economy and the propeller for the escalation of the industrial structures.

Current Status of the Chinese Automotive Industry

The Chinese automotive industry has become an important part of the world automotive market. Its annual automotive production volume in 2004 was 5, 070, 500 with an increasing rate of 14.11 percent, among which, production volume of cars was 2, 316, 300 with an increasing rate of 11.99 percent, production volume of trucks was 1, 514, 700 with an increasing rate of 23.21 percent and production volume of buses was 739, 500 with an increasing rate of 11.36 percent. Sales volume was 5, 071, 100 for new vehicles and over 1 million for second-hand vehicles. Up to the end of 2004, there were almost 30 million civil vehicles in use in China, half of which were privately used, namely, 1.5 million. In China, there are over 100 million people who hold driving licenses. Table I shows the increasing situation of automobile sales in China (1995-2004).

Table I. Increasing situation of automobile sales in China (1994-2004).

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Sales volume (10 Thousand units)	142.3	145.8	156.7	160.3	183.2	208.9	236.4	324.8	439.1	507.1
Increasing rate (%)	7.1	1.17	7.8	2.44	14.2	13.7	13.3	36.6	34.2	14.1

Entering into the new century, with China's entry into the WTO, the Chinese automotive industry is having a much deeper with the international automotive industry. Multi-national

companies have entered into every sector of the Chinese automotive industrial chain. Currently, the top 15 car manufacturers in the world have all entered into China. In the truck-manufacturing field, where only a few joint ventures could be seen in the past, Chinese enterprises have also begun to cooperate with multi-national companies. Up to 2004, almost all-worldwide famous vehicle makers have set up their joint ventures manufacturing whole vehicles established between worldly famous enterprises and Chinese companies.

Capital in the Chinese automotive industry has also become an important part in the world automotive industry capital. Over the past 20 years, worldly famous automotive companies have all established joint ventures in China. Over 600 joint ventures are manufacturing whole vehicle and components in China, accumulating total capital of over 2 billion US Dollars, accounting for over 50 percent of total capital of Chinese automotive industry. Most of those joint ventures have achieved good economic benefits. In the near future, this proportion tends to become even larger with expanding cooperation and the lifting of restrictions in the service trade and financial areas. This has absorbed great attention from the world automotive industry. An open competition has entered into its new growing stage in China.

Meanwhile, foreign companies have begun to enter such fields as automobile manufacturing equipment, sales, maintenance and service, and consultation, etc. Components manufactured in China have entered the global purchasing system of multi-national companies. Chinese enterprises have begun to increase their strategic positions in the global purchase of multi-national companies from both whole vehicle manufacturing and component production. Many of them are shifting from just assembling plants to manufacturing bases and important suppliers of components. In recent years, more and more multi-national automotive companies have set up their territorial headquarters in China, which symbolizes that China is increasingly improving its strategic position in the global automotive industry.

Forecast of Chinese Automotive Industry

The Chinese automotive industry will develop at a definite speed over quite a long period of time. At present the per capita GDP in China has reached US\$1000, and the car has become one of the most important choices for residents in escalating their consuming structures. Table I shows the forecast of Chinese automobile market in the near future; Table II shows the forecast of Chinese automobile market demand from 2005 to 2020; Table III shows the forecast of automobiles in use in China from 2005 to 2020.

Table II. Forecast of Chinese Automobile Market Demand (2005 –2020) in 10⁴ units.

Year	Total Output	Car	Bus	Truck
2005	525~546	221~230	141~147	163~169
2010	755~814	397~424	174~187	184~203
2015	1020~1128	660~723	185~206	174~200
2020	1254~1381	881~968	220~218	171~195

Currently, the Chinese automotive market occupies 5 percent of the world automotive market share. Counting on an average annual increase rate of 10 percent, the annual production in 2010 will reach 6 million and China will occupy 10 percent of the world market share. Counting on an average annual increase rate of 5 percent, the annual production in 2020 will reach 10 million

and China will occupy one sixth of the world market share. With the rapid increase of both automotive production and automobiles in use, China has become an important member in the world automotive market.

Table III. Forecast of Automobile in Use in China (2005 –2020) in 10⁴ units.

	Total Quantity	Car in Use	Family Car Demand rate	Family Car In Use
2005	3356	1210	21.02 %	784
2010	5669	2712	13.41 %	2172
2015	8905	5178	11.17 %	4511
2020	13103	9021	10.55 %	8233

Challenges Faced by the Chinese Automotive Industry

Of course, the Chinese automotive industry also will have to face many different challenges during its development into an automobile society, originating from energy, environmental protection and traffic aspects. The general development object of the Chinese automotive industry is to fully enhance the self-developing capacity, especially tackling technological problems concerning safety, environmental protection and energy saving in 5 to 15 years. The approach is to form technology and products with Chinese characteristics in the course of using new energy, establish talented teams, which can meet the demand of automotive industry development and settle a sound foundation for the sustainable development of Chinese automotive industry. At present, China has already been provided with many advantages and latent capacities to become an emerging automotive production base for the whole world.

Advantage of the automotive market

According to the forecast results of many research institutions at home and abroad, the annual Chinese automotive production volume will reach at least 10 million in 2020. The purchasing power in China will easily afford such a market even if one calculates the GDP according to an annual increasing rate of 5 percent. Besides, as a developing country, China possesses many advantages such as low-cost labor force and low investment cost, and preferential taxation policies will help the multi-national companies to reduce their costs.

Advantage of automotive industrial groups

The rapid development in the past 20 years has helped China to form sound industrial bases and supplying systems, and automotive industrial groups with definite competitive capabilities have come into being in some areas. In recent years, world famous automotive component groups have set up purchasing bases and increased the purchasing volume in China one after another. In 2004, American companies purchased 2.5 billion US Dollars worthy of automotive components, among them, the sales income of only the Delphi Company reached 650 million US Dollars, increasing by 50 percent.

Diversity in technological development

China's entry into the WTO and the more and more open market has provided many possibilities for the automotive industry to integrate and innovate the technology. There are more channels to

get technology than establishing joint ventures. Advanced technologies are able enter into the Chinese automotive industry through many kinds of channels such as entrustment design, joint design, cooperative development and self-innovation, etc. Concurrently, the further open policy implemented by Chinese government will provide guarantees for those manufacturers who would like to come into China.

Sound bases for related industries

Regarding related industries, many world famous enterprises have cooperated more widely and more deeply with Chinese companies in fields such as steel and iron, rubber, glass, plastics, electronics and new materials, etc. The general Chinese industry is now in a stage of technological innovation and escalation, which will ensure China's successful transformation into an emerging automotive industrial base for the whole world.

Increasingly perfect policies, laws and regulations

In order to maintain a harmonious relationship between the automotive development and the social development, the Chinese government pays great attention to this aspect during its efforts to speed up the development of the automotive industry. A great deal has been done to protect the environment, improve the traffic facilities and save energy. According to policies concerning emission control, China plans to implement the second phase emission standard, which are equivalent to Euro II during 2004 to 2005 and the third phase equivalent to Euro III. Regarding to the improvement of traffic facilities, the governments of every level pay great attention to optimize urban structures. Public traffic will be developed with priority in urban areas, and advanced transferring systems and smart management systems will be established. Urban strips and multi-center cities will be planned, traffic management systems will be established and perfected, thus to improve the urban transportation efficiency and allow the city to exert its functions fully and finally promote harmonious development relationship between the automotive industry and the whole society.

Conclusion

The increasingly rigorous laws and regulations concerning environmental protection, security and energy saving and the customers' much higher requirements upon cars become the driving forces for the technological progress of automobile products. Now the Chinese automotive industry is in an important era, many new and high technologies such as information technology and electronic technology are improving rapidly. To keep up with the pace of world automotive development, China has to be very open, cooperate in much wider fields and deepen the merger with the whole world. It is believed that the world will benefit from a much healthier, more sustainable Chinese automotive industry. All the parties in the Chinese automotive industry would like to make their greatest efforts together with the international colleagues to contribute to the sustainable development of the global automotive industry.