

Chapter1. China's Automotive Industry: Heading for the 21st Century

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Chapter 1

China's Automotive Industry: Heading for the 21st Century

by Tomoo Marukawa

Introduction

The eyes of the world's automotive manufacturers are now on China, where they expect a huge potential market to develop. Despite its 1.2 billion population, there were only 8,176,000 vehicles in China at the end of 1993. With just seven vehicles for every 1,000 people, China has one of the lowest figures for per capita vehicle ownership in the world, along with India. Even to reach Indonesia's level of ownership, China would need another 12 million more vehicles. The remarkable development of the Chinese economy in recent times makes it seem certain that the latent demand for vehicles will be realized in the future. Competing with each other for future market share in China are not only Japanese companies but also U.S., European and Korean vehicle manufacturers.

When the Chinese government officially announced its "Industrial Policy for the Automotive Industry" ("Industrial Policy" hereafter) in July 1994, however, it showed its intention of exercising strong leadership and fostering China's own automotive industry as a "pillar industry" by the beginning of the twenty-first century.

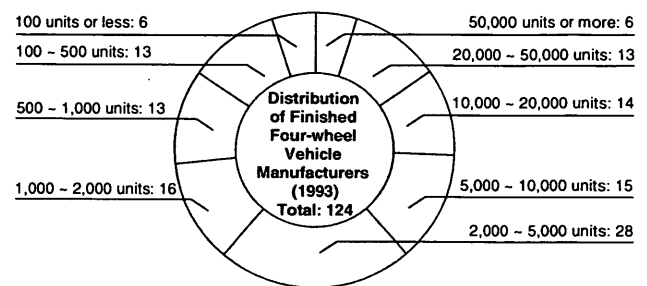
In this report, the outlook for China's automotive industry in the first years of the twenty-first century will be described by referring to the present realities of the industry, "Industrial Policy", and the plans of foreign capital for expansion into the Chinese market.

I. The Realities of the Automotive Industry

1. Proliferation in the Automotive Industry

China's automotive industry is plagued by the proliferation of small manufacturers, few of whom are internationally competitive. The most important policy objective of "Industrial Policy" is to reorganise the industry and foster three or four internationally competitive enterprise groups by the year 2010.

Fig 1. Distribution of Finished Four-wheel Vehicle Manufacturers by Production Scale (1993)



Source: *China Automotive Industry Yearbook*, 1994

The inefficiency caused by the proliferation of small manufacturers has been pointed out since the beginning of 1980s, and under government direction efforts have been made to establish a more efficient structure: Aeolus Automotive Corporation (Aeolus) and China First Automobile Group Corporation (FAW) have formed enterprise groups and restructured the industry to a certain extent. There has not yet, however, been a fundamental change in the inefficient structure. This is because local governments, using their increased financial autonomy, have established new vehicle manufacturers one after another from the 1980s. Moreover, companies in the military sector, looking for a chance to diversify their production into civilian goods due to the reduction in demand for munitions, also started producing automobiles and motorcycles. According to 1993 data, there were 124 manufacturers producing finished four-wheel vehicles in China, with an average annual production per company of about 10,000 units and 32 companies, 24 percent of the total, produced less than 1,000 units per year (Figure 1).

The dispersed structure of production can be observed from the proportion of production concentrated in the top manufacturers. Figure 2 shows from the top one company concentration ratio (CR1) to the top twenty company concentration ratio (CR20) of four periods between 1985 and 1992. The concentration ratio represents the share in terms of value of the top companies in the industry's total value of production, including not only the production of four-wheel ve-

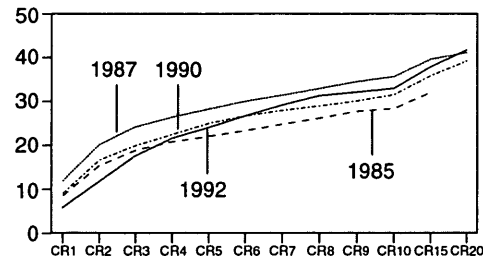
hicles but also that of special-purpose vehicles, motorcycles, car engines, and car and motorcycle components (excluding tires, glass, and others). In 1992, CR3 was 18.6 percent, CR5 was 24.5 percent, and even CR10 was only 33.0 percent. It is clear that the structure of the Chinese automotive industry is extremely dispersed. Even when we calculate concentration ratio in terms of four-wheel vehicles, CR3 was 32.1 percent, CR5 was 41.3 percent, and CR20 was 72.8 percent in 1992. The figures are still very low compared to those of Japan, where, in 1991, CR3 was 59.0 percent and CR5, 79.8 percent.

Figure 2 also shows how the structure of concentration changed during this period. There was little change in the shape of the concentration curve between 1985 and 1990. On the whole, the rate of concentration increased from 1985 to 1987, and then decreased until 1990. In 1992, the concentration curve became steeper. Before 1990, there were two relatively large-scale manufacturers, namely Aeolus Corp. and FAW, and many other smaller ones. In 1992, however, the two big manufacturers were joined by Shanghai Volkswagen, a joint venture between the city of Shanghai and Volkswagen of Germany, and some medium-sized manufacturers also increased their share.

2. From Trucks to Private Cars

The second objective of "Industrial Policy" is to change the structure of production, which is presently focussed on trucks, and by the year 2000 to increase the production of passenger cars to a level where over half the total vehicles produced are passenger cars. Although the policy of shifting priority from trucks to passenger cars was decided in 1987, "Industrial Policy" is unique because it advocates the populariza-

Figure 2 Rate of Production Concentration to the Top Manufacturers



Source: Prepared from the *China Automotive Industry Yearbook*, 1993, 1991, and 1988 editions, *National Industry Census*, and other sources.

tion of private cars and a switch away from the structure where official cars are the majority. The popularization of private cars is considered indispensable in the promotion of the automotive industry's long-term development. This is because demand for official cars will sooner or later reach a dead end.

The results of a large-scale survey on the future of private cars conducted by the Institute of Techno-Economics of the State Planning Commission were recently made public. According to the survey, those purchasing passenger cars for private use between now and the year 2000 will be a small number of rich people, such as the self-employed and actors. Since they often use cars for business activities, these people will demand automobiles of the middle and above classes with engines of a large displacement. The total number of passenger cars owned is expected to rise from 1.4 million in 1993 to 6 million by the year 2000, when the annual demand for passenger cars is expected to be between 1.3 million and 1.6 million (Table 2). After the year 2000, the popularization of private

Table 1 Major Company Sales Ranking

Unit: 10,000 yuan

1993 Rank	Company	1993 Sales	1992 Sales
1	China First Automobile Group Corporation	1,678,623	1,019,551
2	Aeolus Automotive Corporation	1,545,209	730,623
3	Shanghai Volkswagen Automotive Company Ltd.	1,052,886	710,801
4	Tianjin Light Passenger Car Works	334,742	207,663
5	Beijing Jeep Corporation	330,619	348,989
6	Jinbei Automobile Company, Ltd.	310,100	341,501
7	Qingling Motors Ltd.	282,700	155,843
8	Nanjing Automobile Works	281,027	283,203
9	Jianshe Industrial Group Corporation	257,862	132,625
10	Guangzhou Peugeot Automobile Corporation	255,832	244,438
11	China Jialing Corporation, Ltd.	238,260	120,881
12	Aeolus Group Liuzhou Automotive Works	238,100	114,182
13	Jiangling Automotive Group Corporation	209,854	131,948
14	China Qingqi Motorcycle Group Corporation	202,303	67,412
15	Changan Machinery Works	192,503	114,149

Source: *China Automotive Industry Yearbook*, 1993, 1994 editions

Table 2 Passenger Vehicle Demand Forecast

(Unit: 10,000 units)

Number of passenger vehicle units owned (Number of family cars)		Annual demand (Demand for family cars)	
1978	15 (0)		
1993	140 (5)		
2000	600 (120)	130 - 160	(40 - 60)
2005	1,200 (480)	220 - 270	(120 - 160)
2010	2,200 (1,320)	350 - 440	(230 - 300)

Source: *Jingji Ribao (Economic Daily)*, 24 October, 1994.

cars will begin among high-income, white-collar workers in the coastal areas, and the expansion of the passenger car market will accelerate. Because white-collar workers have a sense of economy, they are expected to purchase small-sized automobiles with engines of around 1.0 to 1.3 litres at this stage.

As Table 3 shows, passenger cars are only 17.7 percent of the present production structure. Although "Industrial Policy" does not clearly state a target for vehicle production, the Ministry of Machine Industry has set an annual production figure of 2.7 million to 3 million vehicles for the year 2000, of which 1.35 million will be passenger cars. To achieve this goal, passenger car production needs to increase 8.4 times in the eight years between 1992 and the year 2000 (an average annual increase of 30 percent) and commercial vehicle production by 1.5 times (an average annual increase of 5 percent). This is the reason why the world's automobile manufacturers are keeping an eye on China's passenger car market.

Table 3 Automobile Production Breakdown (1993)

Total number of units produced	1,296,541	%
Trucks	774,667	59.7
Heavy	33,782	2.6
Medium-sized	334,656	25.8
Light	330,484	25.5
Light wagons	75,745	5.8
Buses, Delivery vans	292,213	22.5
Passenger vehicles	229,661	17.7

Source: *China Automotive Industry Yearbook*, 1994

III. The Realities and Outlook of Passenger Car Production: Promoting Concentration

1. "Big Three, Little Three, Two Lights"

In regard to passenger cars, the Chinese government has enforced a policy called "Big Three, Little Three" (Table 4: the list was later extended to include two companies producing light passenger cars, the "Two Lights") and since 1989 production permission has been limited to these six companies. Partly due to this policy, the top three company concentration rates of 1992 and 1993 were relatively high: 70.1 percent and 73.5 percent respectively. This, however, reflected the fact that the main manufacturers, with the exception of Shanghai Volkswagen, were still in the establishment phase.

In addition to Shanghai Volkswagen, three other companies are planning to complete the construction of a plant that will have an annual production capacity of 150,000 cars by 1996. They are: Tianjin Light Passenger Car Works (which produces the Charade in a technical tie-up with Daihatsu); FAW-Volkswagen (a joint

Table 4 Production and Share of Passenger Vehicle Manufacturers

(Units)

Company name (Model name)	1993	Share (%)	1992	Share (%)
○ Shanghai Volkswagen Automotive Company Ltd. (Santana)	100,001	44.4	65,000	39.9
△ Tianjin Light Passenger Car Works (Charade)	47,850	21.3	30,150	18.5
△ Beijing Jeep Corporation (Cherokee)	13,809	6.1	20,001	12.3
△ Guangzhou Peugeot Automobile Corporation (Peugeot 505)	16,763	7.4	15,410	9.5
China First Automobile Group Corporation (Audi 100)	17,807	7.9	15,127	9.3
○ FAW-Volkswagen Automotive Company Ltd. (Jetta)	12,117	5.4	8,062	5.0
+ Changan Machinery Works (Alto)	10,463	4.6	5,565	3.4
○ Shenlong Automobile Ltd. (Citroën ZX)	5,062	2.2	801	0.5
Liuzhou Machinery Works	...	...	510	0.3
Jiangbei Machinery Works	...	...	177	0.1
Jiangnan Machinery Works	...	...	161	0.1
Shuangyang Airplane Works	...	...	93	0.1
Qinchuan Machinery Works	...	...	84	0.1
Total	225,150	100.0	162,725	100.0

Source: Prepared from *China Automotive News*, 30 March, 1994 and *China Automotive Industry Yearbook*, 1993.

Note: ... = unknown. Total production for 1993 is major manufacturers only.

○ = Big Three, △ = Little Three, and + = Two Lights projects.

venture between FAW and Volkswagen of Germany); and Shenlong Automobile Ltd. (a joint venture between Aeolus and Citroën of France). Changan-Suzuki Automobile Corporation Ltd., a joint venture between Changan Machinery Works and Suzuki of Japan, is also aiming to achieve annual production of 150,000 units before the end of the twentieth century. Moreover, FAW as a group, which includes FAW-Volkswagen and FAW itself, is planning to have an annual production capacity of 400,000 passenger cars or more by the year 2000.

Assuming the scheduled investment plans of each company are carried out smoothly, the production of passenger cars will be more than 1.35 million in the year 2000. This would mean that the production target set by the Ministry of Machine Industry can be achieved by the existing passenger car manufacturers. In addition, there is a plan by Guizhou Aero-Industry Corporation, which has been approved as one of the "Two Lights", to produce light passenger cars with technical assistance from Fuji Heavy Industries Ltd. of Japan. At present, however, the plant still remains at the stage of small-scale knocked-down production. Also, as Table 4 indicates, companies other than the "Big Three, Little Three, Two Lights" are beginning to manufacture passenger cars, although only on a tiny scale. The products of these manufacturers are inferior in quality and safety but sell due to their low prices. It seems difficult to eradicate these cars without stronger car safety standards.

2. Foreign Manufacturers Struggle to Enter the Market

According to "Industrial Policy", no passenger car projects apart the above will be approved until the end of 1995. There is, however, a possibility that new entries may be permitted from 1996. Toyota has already declared its intention of establishing a joint venture to produce passenger cars with the city of Tianjin, which already has ties with Daihatsu. Honda was negotiating with Aeolus to establish a joint venture for passenger cars in Guangdong province. Obtaining approval proved impossible, however, and for the present it has instead established a joint venture to produce car components. Daewoo Auto of Korea has established an enterprise in Shandong Province to produce engines and transmissions in cooperation with FAW group. All the components produced will be exported to Korea and the assembly of the automobiles completed there. These projects by Honda and Dae-

woo are considered footholds for their future entry into the passenger car industry in China. In addition, GM is reported to be negotiating to start joint production of passenger cars.

However, since the objective to achieve an annual 1.35 million units production by the year 2000 can be realized if the scheduled plans of the existing manufacturers are carried out smoothly, it is thought that only a small number of manufacturers will be allowed to enter the industry in 1996. Besides, according to "Industrial Policy", neither completely knocked-down (CKD) or semi knocked-down (SKD) automobile production will be approved, and import tariff reductions on components will not be granted if local content is under 40 percent. Manufacturers must therefore establish a system that makes it possible for them to procure components within China if they wish to produce passenger cars from 1996. As long as the Chinese government keeps to "Industrial Policy", it will not be easy to enter the industry in this century.

III. The Present Condition and Outlook for Truck Production

1. Oligopoly in the Medium-sized Truck Market

Trucks were the main pillar of the automotive industry in China until the middle of the 1980s. Medium-sized trucks with load capacities of four to five tons were the main product. According to 1980



FAW 2- and 5-ton trucks

data, 136,000 out of the 220,000 units of that year's total vehicle production were trucks, of which 113,000 units were medium-sized trucks. This was because FAW and Aeolus Corp., the two biggest vehicle manufacturers in China, are manufacturers of medium-sized trucks. In addition to the two big manufacturers, many of the companies established by local governments around 1970 produced products that imitated FAW's Jiefang truck. From that time onwards, the production rate of medium-sized trucks was very high while that of light trucks and heavy trucks was low.

Table 5 Production of Medium-sized Trucks (Units)

Company	1993	Share(%)
Aeolus Automotive Corporation	84,278	39.8
China First Automobile Group Corporation	78,630	37.2
Aeolus Group Liuzhou Automotive Works	17,672	8.3
Nanjing Aeolus Special-purpose Vehicle Works	7,552	3.6
Aeolus Yunnan Automotive Works	7,552	3.6
Aeolus Hangzhou Automobile Corporation	6,340	3.0
Hubei Special Purpose Vehicle Works	3,342	1.6
Linghe Automobile Works	2,920	1.4
FAW Qingdao Automobile Works	1,700	0.8
Total	211,652	100.0

Source: *China Automotive Industry Yearbook*, 1994

During the 1980s, Aeolus Corp. began bringing under its control enterprises producing Jiefang-type trucks on a small scale such as those in Liuzhou, Yunnan, Xinjiang, and Guizhou, and restructuring them so that they specialized in the production of other types of products. At the same time, FAW formed a similar corporate group. Thus, the present market for medium-sized trucks is an oligopoly between the two companies and manufacturers affiliated to them (Table 5). Although production of medium-sized trucks grew relatively slowly compared to that of other types of vehicles, it has increased from 113,000 in 1980 to 214,000 in 1990, 248,000 in 1992, and 317,000 in 1993: an annual growth rate of around eight percent.

One cannot expect a big expansion in the domestic demand for medium-sized trucks, and there seems to be little demand from abroad for Chinese trucks with gasoline engines and bonnets. No large growth in the production of medium-sized trucks seems likely unless there is a change to diesel fuel and body improvements are carried out. "Industrial Policy" requires manufacturers of buses and trucks with total weight of over five tons (i.e., trucks of medium size and above) to change to diesel after the year 2000. At present, most medium-sized trucks have gasoline engines (91 percent in 1987). Manufacturers have made plans to invest in the production of diesel engines. FAW has already merged its diesel engine plants in Dalian and Wuxi in order to promote dieselization, and has been procuring diesel engines from there. Moreover, FAW has made an agreement with the German company KHD to establish a joint venture in Changchun to produce diesel engines at an annual production level of 100,000 units. Aeolus Corp. is also proceeding with a plan to produce 60,000 diesel engines annually in collaboration with the American company Cummins.

2. Competition in the Light Truck Market

In contrast to the oligopolistic structure of the market for medium-sized trucks, the market for light trucks with a load capacity of one to three tons is highly competitive. In addition to the major manufacturers, whose production quantities are shown in Table 6, there are many other companies producing light trucks. The total number of manufacturers is reported to be between 40 and 60. The demand for light trucks increased rapidly from the beginning of the 1980s, and local companies vigorously entered the industry because entry barriers to the industry were low and prominent manufacturers like FAW and Aeolus Corp. were absent. The concentration rate of the top six companies was 83.1 percent in 1987, 66.4 percent in 1988, 72.0 percent in 1990, and 64.0 percent in 1992. Except in 1990, when there was a sharp fall in production, the concentration rate has been decreasing.

Although the above figures might suggest intense competition in the light truck market, the reality seems to be a little different. When one travels around China, the vehicles seen on the streets vary greatly from place to place. This localization is most apparent in light trucks. For example, the majority of light trucks in the city of Shenyang are the Jinbei and Shenqi models, both manufactured by a local company, Jinbei

Table 6 Production of Light Trucks (Units)

Company	1993	Share(%)
Nanjing Automobile Works	65,589	25.1
Beijing Light Automobile Co., Ltd.	32,649	12.5
Jiangling Automotive Group Corporation	20,051	7.7
Qingling Motors Ltd.	19,000	7.3
Tianjin Automobile Works	17,713	6.8
Jinbei Automobile Company Ltd.	16,150	6.2
China First Automobile Group Corporation	14,260	5.5
Beijing Car and Motorcycle Manufacturing Corporation	12,977	5.0
Yunnan Lanjian Automobile Works	9,944	3.8
Aeolus Group Zhengzhou Light Automobile Works	7,981	3.1
Hefei Jianghuai Automobile Works	6,821	2.6
Chengdu Automobile Works	4,563	1.7
Wujiang Machinery Works	4,230	1.6
Guangzhou Peugeot Automobile Corporation	4,052	1.5
Total	261,546	100.0

Source: *China Automotive Industry Yearbook*, 1994

Auto. On the other hand, the Peking 130 is the major light truck in the city of Peking, while most light trucks in Chongqing are "Yuzhou" produced by the Yuzhou Automobile Works. Many light trucks such as the Yuzhou have a lion's share of their local market but are rarely found in other areas, in the same way that spirits are made by local distilleries. In other words, although the concentration rate in the light truck market seems low at a national level, the individual local markets are either oligopolistic or monopolistic. The existence of these regional monopolies can be attributed to the vehicle distribution system.

The light truck industry is plagued by a proliferation of small manufacturers that can only survive under the protection of local governments. None of the manufacturers are overwhelmingly competitive in price or quality. "Industrial Policy" signals a strong intention of improving the structure of the light truck industry. According to its policy, light truck production projects with an annual production capacity of less than 100,000 will not be approved. Moreover, no new production projects for light trucks will be permitted until the end of 1995.

As well as the problem of dispersed market structure, the light truck industry also faces the necessity of adjusting the composition of its production.

Firstly, the majority of vehicles produced by the major manufacturers listed in Table 6 are trucks with load capacities of two to three tons, and the amount of one-ton trucks produced by finished vehicle manufacturers is small. The gap is filled by low-quality products, such as the Beijing 121 produced by the Beijing Car and Motorcycle Manufacturing Corp., using the chassis of old-fashioned jeeps and pick-up trucks and assembled in small-scale body plants producing only several hundred vehicles annually (examples are the Dadi and the Kaite). The finished vehicle manufacturers are expected to enter the one-ton truck industry in the future. FAW is supposed to start producing a one-ton truck, the CA 120, using a 2.2 litre engine manufactured in a plant bought from Chrysler and the body of the Nissan Capster, at a 50,000 scale of production. At the same time, Jinbei Auto is planning to produce 50,000 one-ton pick-up trucks annually in Jinbei Tongyong Automobile Company Ltd., a joint venture with GM. Mazda also has plans for the production of one-ton pick-up trucks in Fujian Province from 1996. These large-scale projects will certainly change the market to a great extent.

Secondly, there is a need to renew light-truck models which are too old. Most of the manufacturers

listed in Table 6 still produce light trucks based on Beijing Light Automobile Co.'s Beijing 130, which was developed in the 1960s, and use the 492 gasoline engine which was also developed 30 years ago. Top manufacturers, however, are already moving to renew models by introducing technology from abroad. In November 1994, Nanjing Auto constructed a new plant for light trucks and engines with an annual production capacity of around 60,000 by introducing technology from IVECO Corp. of Fiat Italy. Beijing Light Auto is also expanding its assemblers and paint shops in order to achieve an annual production capacity of 100,000 by 1997. It has, moreover, remodeled the body of its trucks with technology from Isuzu of Japan. In addition, FAW has already started the production of trucks with a load capacity of two tons. The company has also started producing the 488 gasoline engine which may replace the old 492 engine in a plant introduced from Chrysler with an annual production capacity of 150,000 units.

Thirdly, although "Industrial Policy" does not include any provisions for light truck engine types, there is a need to increase light diesel trucks. The demand for diesel vehicles has been increasing recently in southern China because light oil is easier to obtain than gasoline in rural provinces. Until now, it has been difficult to develop the market for light diesel trucks because the price of the trucks was high with the only diesel engine appropriate for loading into light trucks being an expensive one produced using imported components from Isuzu. In the near future, however, large-scale production of diesel engines will start. Qingling Motors Ltd. has recently built a modern engine plant which has the capacity to produce 70,000 units annually. In addition, Jiangling Automotive Group Corp., a joint venture with Isuzu, already has the ability to produce 60,000 units a year. The demand for diesel vehicles is expected to spread from southern China through the whole country once these plants are fully operational and the price of diesel vehicles goes down.

As outlined above, the light truck industry will experience substantial structural changes including increased production of one-ton trucks, the introduction of new bodies and engines, and dieselization. We are not, however, so optimistic about the restructuring of the industry. It is possible that the old Beijing 130-type trucks may retain a certain share of the market by utilizing their price competitiveness, thereby preventing the manufacturers of new models from expanding their scale of production and lowering their costs. The

price of Beijing 130 trucks is strikingly low (just 30,000 to 50,000 yuan) due to the fact that their engines and bodies are produced in facilities that have long passed the depreciation period. In addition, it is easy to obtain spare parts for these trucks since manufacturers in various areas copy the products.

IV. The Outlook for Automotive Components Production

1. Dispersed Production

Like the finished vehicles industry, the vehicle components industry in China is highly dispersed. For example, although the total production of pistons for vehicles engines was 13.53 million units in 1992, there were 43 manufacturers, with average production per company only 310,000 units. The largest manufacturer produced 1.68 million, a long way behind manufacturers in developed countries which normally produce an average of 3 to 4 million units a year. Moreover, although the total production of bearing metals for both agricultural machines and automobiles was 93 million units in 1988, there were 56 manufacturers, the largest of which produced 7 million units. The concentration ratio of the top 5 manufacturers was only 30.1 percent. Compared to manufacturers abroad, which generally produce over 100 million units per year, the capacity of the industry in China is extremely small. This small capacity leads to low productivity and quality.

2. Policy for the Components Industry: The Promotion of "Small Giants"

The Chinese government has adopted a policy of fostering "small giants" to cope with the dispersed situation in the components industry. The aim of the policy is to nurture companies that can achieve economies of scale through large-scale production of components, even if their relative size as firms is small. They are also expected to have high technological standards. A model would be a company like Shanghai Koito Automobile Lamp Co. Ltd., a joint venture producing automotive lamps established by Koito Manufacturing Co., Ltd. of Japan in the city of Shanghai. Although the company's main business is supplying lamps to Shanghai Volkswagen to be fitted on the Santana passenger car, it also takes orders from all over the country and supplies lamps to manufacturers such as FAW, Tianjin Light Passenger Cars, and Nanjing Auto. In

short, companies are needed that can realize economies of scale by supplying many manufacturers and which also have the technology to respond to requests from various manufacturers. In reality, however, despite the "small giants" policy the dispersed situation in the components industry seems likely to get worse in the future. For example, corporate groups formed by major companies such as Aeolus and FAW have a tendency to set up complete sets of components manufacturers inside their groups. Moreover, local governments are establishing components manufacturers so that local vehicle manufacturers can procure components locally. They are also putting pressure on local vehicle manufacturers to procure components locally.

3. A Complicated Outlook

As the world's leading automobile manufacturers declare their plans for extending their businesses into China, the outlook for the components industry has become more complicated. According to "Industrial Policy", there will be no tariff reductions on imported components unless the local content is higher than 40 percent in passenger cars and buses, and over 50 percent for trucks. Thus, if the local content is less than these percentages, manufacturers will lose price competitiveness. Consequently, companies planning to set up factories in China need to secure a production base for components inside the country in order to overcome this obstacle.

Toyota has encouraged its affiliated components companies to invest in China to prepare for its scheduled passenger cars joint venture in the city of Tianjin. Aisin Seiki Co., Ltd., Nippon Denso Co., Ltd., and others are already negotiating to set up factories in China. Unisia Jecs Corp. and Zexel Corp., both affiliated to Nissan, are also planning investments while Isuzu has urged 48 affiliated companies to invest in China by organizing an inspection party to the country. Moreover, GM and Ford are establishing component joint ventures.

It is hard to judge whether the activities of foreign manufacturers will speed up the trend towards dispersion in the components industry or give birth to "small giants". There is no doubt, however, that they will contribute to the modernization of the components industry. Yet this may worsen the dispersed situation in the industry as there are no restrictions regarding investment in the components industry in "Industrial Policy".

V. *A View of the Industry in the 21st Century*

1. The Expansion of Enterprise Groups

Let us consider the prospects projected in "Industrial Policy" for the reorganization of the automotive industry. It will be probably the case that the enterprise groups led by Aeolus and FAW will play leading roles. By the end of 1992, Aeolus and FAW had already formed enterprise groups by organizing 320 companies and 147 companies respectively. However, since there are institutional restrictions against takeovers and mergers, it is only the few dozen companies at the core of their groups that Aeolus and FAW control. But, as more and more state-owned enterprises are transformed into joint-stock companies, enterprise groups may expand in size and collaboration between member companies may deepen. This is because it becomes possible to create control relationships among companies through mergers or the acquisition of stock. Moreover, as China moves to a market economy, competition will intensify and it will therefore become more difficult for local governments to protect weak companies. These will either go bankrupt, change their type of business, or join enterprise groups.

Moreover, since "Industrial Policy" advocates special favors to enlarge big companies and enterprise groups, companies may set up nominal groups in order to obtain special treatment. Specifically, the government promises to assist companies (enterprise groups) whose vehicle production capacity is over 300,000 units and sales over 200,000 units, and whose R&D costs are over 3 percent of total turnover by the end of 1995, to achieve annual production capacity of 600,000. The Aeolus and FAW groups seem to meet these conditions. The former, namely Aeolus and its affiliated companies, produced 227,000 automobiles in 1993. It was expected that this would reach the 300,000 units level in 1994. Aeolus plans to produce 700,000 units by the end of this century and 1 million units at the beginning of the twenty-first century. FAW as a group produced 217,000 automobiles and 43,000 of buses and special vehicles in 1992. It plans to produce 700,000 units by the end of this century and one million units in 2005.

2. Policy Supporting the Expansion of Business Scale

In addition to the above provisions, "Industrial Policy" prescribes national support for a further expansion in the scale of various companies: those whose production is now more than 150,000 units, to increase it over 300,000 units; those whose production is more than 100,000 units, to increase it to over 200,000 units; those whose annual production of large-sized trucks is 20,000 units; those with an annual production of large and medium-sized buses and bus chassis of 1500 units; those with a share of over 25 percent in main vehicle components; and those whose share of the motorcycle market is more than 10 percent. Through supporting an expansion of business scale, the policy aims to nurture two to three companies (groups) to be powerful large enterprises and six to seven companies (groups) to be "domestic mainstay enterprises", and to raise the concentration ratio of the top 3 companies to over 70 percent in each sector of the automotive market by the end of this century. Moreover, the policy prescribes the merging of these companies into three to four large enterprise groups by 2010.

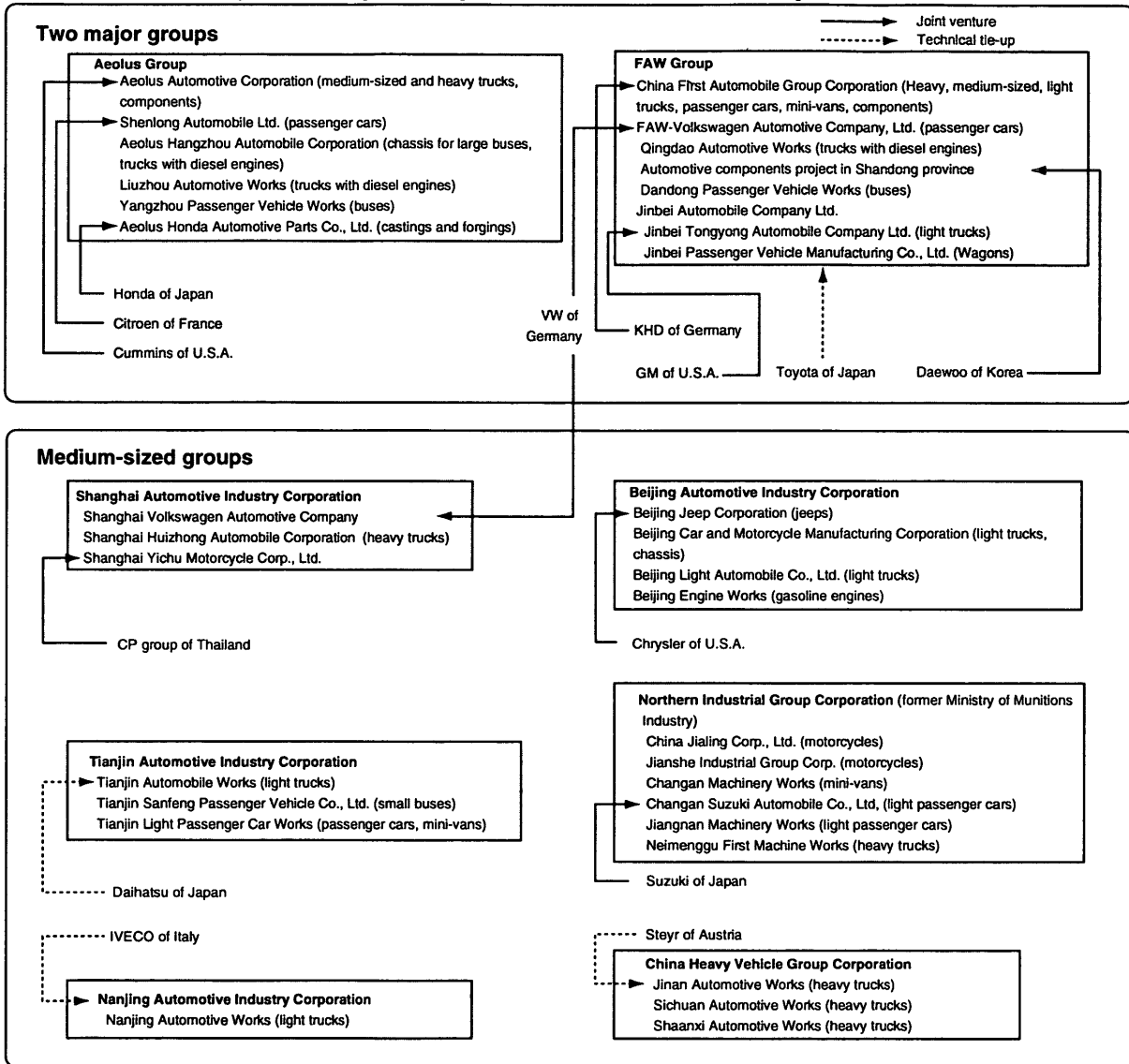
There is no doubt that FAW and Aeolus are candidates to be among the two or three companies becoming large enterprises by the end of this century.

Although FAW fell into very serious financial difficulties a few years back after extending its business into too many fields — two kinds of passenger cars (Audi at FAW and Jetta at FAW-Volkswagen), medium-sized trucks, light trucks, and even the 488 gasoline engine — it seems to have escaped from the crisis thanks to its increased production of passenger cars. It is expected that it will extend its share in both the passenger car and light truck markets.

In the case of Aeolus, although the Shenlong Auto project, a joint venture with French Citroën, was delayed for several years when French technicians returned to France after the "Tiananmen incident" of 1989, it plans to start full operation by 1996. Shenlong Auto may win a new market since it is going to produce 1.3 to 1.6 litre passenger cars which have not been produced before in China.

Since the Shanghai Automotive Industry Corporation (including Shanghai Volkswagen as an affiliate) is expected to have a production capacity of 200,000 units in 1995, it will qualify for the promotion policy one rank below that of Aeolus and FAW. In addition, companies that may exceed annual production of 100,000 units in 1995 and are strongly expected to be

Figure 3 Major Groups in the Automotive Industry in China



promoted as "domestic mainstay enterprises" are Beijing Automotive Industry Corporation, Tianjin Automotive Industry Corporation, Nanjing Automotive Industry Corporation, and Changan Machinery Works. In the field of heavy trucks, China Heavy Vehicle Group Corporation is powerful (Figure 3). Yangzhou Passenger Vehicle Works and Dandong Passenger Vehicle Works have also already met the conditions to become objects of promotion in the field of heavy and medium-sized buses. Yangzhou belongs to the Aeolus group, while Dandong belongs to the FAW group.

From the above, it seems that the automotive

industry in China will develop with two major large enterprise groups and six or seven middle groups as nucleus. It is doubtful, however, whether the remaining small and medium-sized manufacturers will be totally weeded out. Moreover, there are no clues about how each group will be reorganized in the twenty-first century. This will probably depend on which foreign manufacturers each group decides to team up with.

Note:

1. In February 1995, FAW obtained a 51 percent share of Jinbei Automotive Company Ltd. Reorganization of the industry seems to be advancing faster than expected.