

Different Strategies of Localization in the Chinese Auto Industry:
The Cases of Shanghai Volkswagen and Tianjin Daihatsu

(Draft)

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1. Introduction

1.1. Theme

Localization in the process of economic development is a topic that has been long discussed. Along with the process of economic reform and policy of opening to the outside world, China's auto industry, which has been trying to realize substitution for imports, has come to a point of new development.

In terms of its production technology, the Chinese auto industry at the stage of switching from commercial vehicle (esp. truck) production to car manufacturing. After 1984 China's major auto makers began to form technical tie-ups or establish joint ventures with foreign auto companies, accumulated and digested the production and management technologies, and promoted localization gradually. This eventually led to the establishment of the "Big 3, Small 3, and Mini 2" system toward late '80s and '90s. Generally speaking, the manufacturing technology of cars is much more complicated than that of commercial vehicles. Therefore China has adopted a different strategy to develop its car industry-- incremental localization by introducing foreign capital and technology, a strategy often seen in other developing countries, but deviating from the "self-reliance" approach in its commercial vehicle production.

Although some research has been conducted on the overall industrial organization of Chinese auto industry and the "Big 3, Small 3" system, no one has attempted to examine the localization strategy in China's car production and compare the production systems between typical companies.¹ Although remarkable research has been done on the overall auto industries and localization in developing countries, China has been excluded from the research because of its different economic system.²

Since China is a culturally and economically diversified nation, its industries and companies are unique in their own way. When conducting research on China or formulating an entry strategy in China, it is dangerous to reach a hasty conclusion without looking deeply into its diversification. In the Chinese auto market, there is surplus demand and shortage of supply. The companies, with little pressure of competition, have discretion to choose different strategies. Meanwhile, being restricted

¹New researches on China's car includes Takayama, Y. (1991), Chen, C. (1994).

² For example, researches on overall auto industries in the developing countries and localization include Baranson (1969), (1971), and Mitsubishi Research Institute (1979), Odaka, K. (1983), Odaka, K. et al. (1988).

by central, local governments and foreign capital, the Chinese auto companies are faced with a competitive environment that is more complicated than for American, Japanese and European counterparts. Therefore, while general discussions are necessary in examining China's auto industry, more specific approach should be taken in researching each region and company.

Since it is impossible to discuss the diversity of Chinese economy and draw the overall picture of Chinese auto industry, this paper will focus on the character of China's car market, system of car manufacturing, and outline of localization policies. Based on the field surveys, the paper will compare and examine the differences in their localization strategies and production systems between Shanghai-VW and Tianjin Daihatsu. By doing so, we intend to establish a base for further research and survey on the future Chinese auto industry.

1.2 Research Method

This paper is the result of field surveys conducted on Shanghai-VW, Tianjin Daihatsu, relevant parts makers, administrative organizations in August 1995 and March, April 1996. The surveys included interviews and plant tours. Efforts have been made to fully use the existing data. The data, otherwise noted, are all based on the writers' interview.

2. The System of "Big Three, Small Three & Mini Two" and the Passenger Car Market

The system of "Big Three, Small Three & Mini Two" reflects the current policy of the Chinese government, which restricts entries into the passenger car market and allocates car production to 8 manufacturers. This policy aims to substitute foreign cars by protecting domestic car makers--a measure taken by the government after reflecting upon the disperse industrial organization of commercial vehicle production due to heavy entries. In reality, there were 124 auto makers in China in 1993.

Among the car makers, First Auto Works (FAW)-VW and Shenlong (with Citroen) are directly under the auspices of central government. Shanghai-VW and the Small Three--Beijing Jeep (with Chrysler), Tianjin Daihatsu and Guangzhou Peugeot are controlled by the local governments. And the Mini Two--Chang'an Suzuki and Guizhou Air (with Fuji Heavy Industries) are under the administration of Ministry of Aviation and Spaceflight. In terms of the time of entry, the 2 big makers of the central government and the Mini two were late in entering the passenger car market (in the '90s) compared to the 4 makers (in the mid '80s) is very important in understanding the market structure of passenger car in China.

In terms of technical cooperators and pattern of cooperation, the European auto makers dominate the market. Especially Volkswagen has

established joint ventures with two companies of the Big Three and manufactured locally three different brands: Santana, Golf/Jetta and Audi. Its market shares were 36.1% (90,000 units of the three brands out of a total of 249,000) in 1992 and 58% (145,500 units out of a total of 250,000) in 1994. On the other hand, the Japanese makers have tied up with the relatively lower ranked companies--one of the Small Three and the Mini Two. Except for Chang'an Suzuki, Daihatsu and Fuji Heavy Industries only provide technical licenses to the Chinese Counterparts. The Japanese are late in entering the passenger car market and reluctant to invest heavily in the industry.

The most conspicuous characteristics of China's car market are rapid growth of the market because of shortage of supply, seller's market, and high price due to the high import tariffs imposed by the government. In a market that is secluded from the competition of the world market, priority is given to the "amount" of supply over competitiveness and product performance. The domestic auto makers have been able to meet customer needs, which are not highly specific, in a non-diversified market. In the meantime, the high price and the government's policy of restricting entries brought monopolistic profits to the car manufacturers. This vicious cycle of car manufacturing is important in understanding the production system of China's auto industry.

3. Local Content Policy

3.1. Definition of Local Content Rate

China's local content policy is intended to increase local content rate on the basis of restricting import of complete cars. According to the State Planning Commission, the local content rate is calculated as bellow:³

$$\text{Local content rate (\%)} = \frac{\text{manufacturer's price} - [\text{CKD price (CIF)} + \text{tariffs}] *}{\text{manufacturer's price}} \times 100\%$$

* The price in 1985 is used as the basis price.

Each auto maker calculated its own local content rate using the above formula. The China Research Center for Automobile Technology (in Tianjin), an affiliate research institute of Ministry of Machinery Industry, will assembled a group of technicians to examine the self-reported result. The local content rate is thus determined by the government's technological department.

³ Chen, C. (1994), p.126.

3.2. Policies Concerning Local Content

(1) Import Tax of Complete Cars

China Imports complete cars to supplement the shortage of domestic supply and therefore imposes high tax on them. As of January 1, 1994 new tariff rates went into effect--110 to 150% on passenger cars, which are lower than the former 180 to 220% but still very high compared to other countries.⁴

(2) Import License

The central government uses import license and import quota to regulate and restrict the import volume of cars.

(3) Local Content Rate and "Classified Tariff" on CKD Parts

The government links tariff on imported CKD parts with local content rate, and calls this "Classified Tariff". By doing this, the government intends to reward the auto makers that increase their local content rate and penalize those that make little efforts. The tariffs on imported CKD parts are:⁵

- (a) First 3 years -- 50%
- (b) Local content rate after the 4th year
 - 40% -- 60% = 48% tariff
 - 60% -- 80% = 32% tariff
 - under 40% = 80% tariff

If the auto maker achieves 40% of local content rate after the 4th year, it can avoid the penalty of high tariffs--a life-and-death choice for a company. By achieving 60% local content rate and capitalizing on preferential tariff rate, Shanghai-VW succeeded in reducing the costs of supplying CKD parts.

4. The Production System of Auto Markers: the Shanghai-VW Model

Shanghai-VW indicates the direction of local content strategy for the Chinese auto industry. Shanghai-VW boasts the highest production volume and local content rate in the whole industry. Meanwhile since 1990, its total sales and revenues are among the top in the upper ranked 300 foreign-owned companies.⁶ Since Shanghai-VW occupies a pioneering position in China's car industry, we would refer to its production system as "Shanghai-VW Model" in this paper. The characteristics of this system will be analyzed while examining the contributing factors to the system.

⁴ According to the report in *Ming Po Daily* (Hongkong) on December 31, 1993.

⁵ According to the public information provided by Shanghai-VW.

⁶ According to the reports in *People's Daily* on June 22 and in *China Daily* on October 29, 1993.

(1) Choice of Car Model

The choice of car model and volume explicitly indicates the production information obtained by three sides--the foreign multinational corporation, local government, and local maker. Once the car brand is decided, the overall production plan can be formulated--from plant design, parts supply and volume to purchasing schedule and marketing.⁷ In 1985 Shanghai-VW started to produce "Santana", a luxury (by Chinese standard) small car, as a domestic car model. From 1992 it introduced Passat (the wagon version of Santana), consolidating its models on a company level. By adopting the OEM production system characterized by a single introduced model, Shanghai-VW can be viewed as an orthodox KD production example functioning as a transplant of a multinational corporation in a developing country.

(2) Management Organization

Shanghai-VW has a functional management organization, with board directors responsible for different divisions. Unlike working under Japan's pyramidal management organization, each board director in Shanghai-VW has tremendous discretion on his own business. German board directors and middle management control such important management activities as sales, purchasing, finance, as well as the R&D, production control, and quality control departments. In general the management of Shanghai-VW is dominated by the Germans.

(3) Parts Supply System

Because Shanghai-VW is purely a KD assembly maker, its in-house rate is low. In 1992 the local content rate of its in-house made parts was 18.35%. It mostly relies on parts supply from outside. In 1988 it introduced the Japanese-style cooperation scheme. It formed the "Shanghai Santana Local Content Cooperative" by bringing together the parts makers, banks, universities, and research institutes. A supplier network was formed under the umbrella of Shanghai Auto Industry Corporation (SAIC). In 1991 133 companies (organizations) joined the cooperative. The "Shanghai Santana Local Content Coordination Office", which is directly under the Shanghai Municipal Government, gives general guidance on management to the auto maker and parts makers, especially plays a leading role in coordinating finances and material supply for the auto maker. The municipal government built a "local content foundation" by adding 28,000 yuan (16% of total price) to the retail price of each car, provided special low-interest loans to the parts makers in Shanghai area. To foster parts makers, the government needs huge sums of money, which is covered by raising the product cost. Other

⁷ Mitsubishi Research Institute (1979), p.49.

passenger car manufacturers imitate this method, resulting in high prices of cars.

(4) Product Development System

Generally speaking, the right to develop new models lies in the hands of the Germans. The new model of Santana (Santana 2000) was jointly developed by VW in Germany, Shanghai-VW and Autolatina-Group (Brazil-Argentina VW), and put into the market by the end of 1994. The new Santana has two styles: sedan and wagon. In addition to use of EFI, there was changed in styling and interior finish. improvements in fashion and amenity. The wheel base was extended to 108mm, leaving bigger space inside the car. Since it was a semi model change, there were only 377 newly developed parts. Thirteen Chinese parts makers participated in the preliminary development as "design-in " partners.⁸ For the Chinese this was the first model change of passenger car in a real sense, and was the learning period for the product development technology.

(5) Marketing System

Shanghai-VW turns over almost all of its manufactured cars to the Shanghai Auto Industry Corporation, its authorized supervising department. The Shanghai Auto Industry Supply and Sales Company is responsible for selling the cars. Until 1988 all the cars had been turned over the Ministry of Commodities. The turn-over rate to the central government has decreased to 20%, leaving 80% of the cars to be sold by SAIC itself. Shanghai-VW is selling its own cars within the tax-exempt amount. Along with the establishment of after-service networks, the manufacturer will enlarge its own sales in the future.

All these accomplishments of Shanghai-VW have been achieved with the support of the Chinese central government, which determined its pioneer status.⁹ The government not only gave Shanghai-VW preferential treatment in taxes, but also provided convenience in foreign currency and material supply. In the meantime, the Shanghai government has positioned the auto industry as the city's "first leading industry", and has supported Shanghai-VW. The coordination of central, local governments and company in their efforts of achieving localization is an important factor for the success of Shanghai-VW.

⁸ According to the report in *China Automobile News*, August 2, 1993.

⁹ Pioneer status--the government provides preferential tax treatments and other protections for the companies that certain requirements for a certain period of time. For details please refer to Adachi, Ono & Odaka (1980).

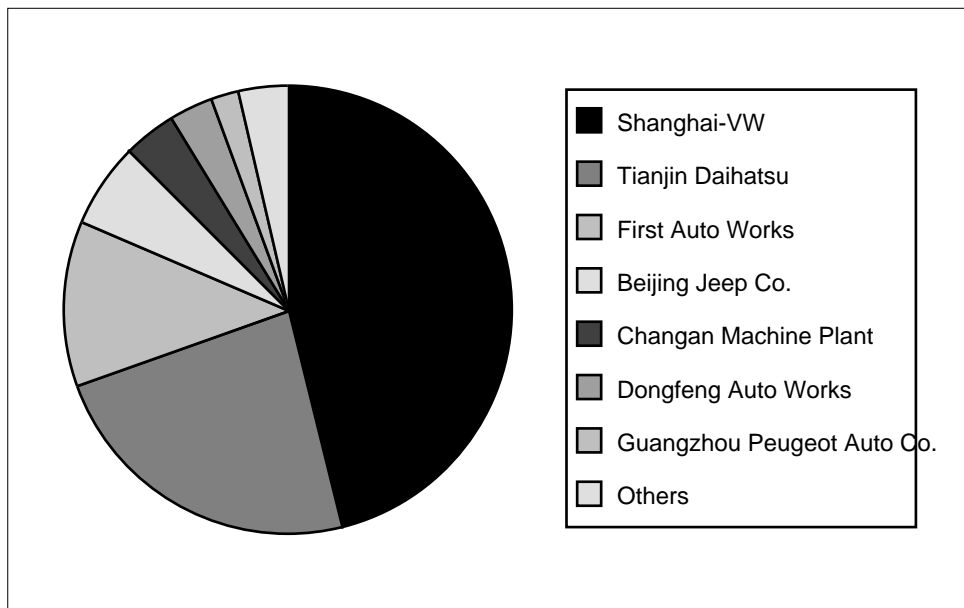
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Figure 1-1 China's Passenger Car Production in 1994

Volume: unit
Share: %

	A	B	C
1	Car makers	Units produced	Market share
2	Shanghai-VW	115328	46
3	Tianjin Daihatsu	58500	23
4	First Auto Works	30196	12
5	Beijing Jeep Co.	14703	6
6	Changan Maching Plant	10020	4
7	Dongfeng Auto Works	8010	3
8	Guangzhou Peugeot Auto Co.	4485	2
9	Others	9093	4
10	Total	250333	100



According to [The Chinese Automotive Industry Yearbook 1995]