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# The Impact of Multinational Auto Manufacturers on the Market Structural of Chinese Saloon Car Industry

### L'IMPACT DES FABRICANTS MULTINATIONAUX D'AUTOMOBILE SUR LA STRUCTURE DU MARCHÉ DE L'INDUSTRIE DE BERLINE CHINOISE

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**Abstract:**The paper studies the structural characteristics of Chinese Saloon Car market of 1993-2002 by three market structural indexes: rate of market concentration, HHI index and logarithm variance of manufacturer scale. We prove that the Saloon Car market that once was largely occupied by several monopolies has gradually developed into a multivariate competitive market.

Although the multinational auto manufacturers still have a strong control of national auto market, the violent reaction of oligopoly with the continuing opening of the market is emerging. After WTO accession, the recombining situations of Chinese auto industry, which are participated by multinational auto manufacturers, have been fixed on the whole, but it is not the result of sufficient market competition. The Chinese auto market will still face danger of being shuffled after the transitional period of WTO. It is possible to create a more stable and mature market structure only after Chinese Saloon Car industry carries through a reconstruction which based on a more fairness and orderly competition.

**Keywords:** Multinational Enterprise, Market Structure, Rate of Market Concentration, Saloon Car Industry

**Résumé:** Ce texte étudie les caractéristiques structurales du marché chinois de berline entre 1993 et 2002 à l'aide de trios index structuraux : vitesse de concentration du marché , index HHI , et la variance logarithmique de l'échelle de fabricant . On constate que le marché de berline , occupé aurapavant largement par plusieurs monopoles , est devenu graduellement un marché concurrentiel multivariant .

Bien que les fabricants multinationaux d'automobile aient encore un contrôle fort sur le marché national de voiture , la réaction forte d'oligopole avec l'ouverture continuelle du marché est en train de s'émerger . Après l'accession à l'OMC , la fusion de l'industrie chinoise d'automobile , participée par les fabricants multinationaux d'automobile a été déterminée dans l'ensemble , mais ce n'est pas le résultat de la concurrence du marché . Le marché chinois d'automobile fera face à la recomposition après la période de transition de l'OMC . Il est possible de créer une structure plus

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stable et mûr du marché après la traversée de reconstruction de l'industrie chinoise de berline . Cette reconstruction doit se baser sur la concurrence plus juste et plus ordonnée .

**Mots-clés:** enterprise multinationale , structure du marché , vitesse de concentration du marché , industrie de berline

After accession to the WTO, multinational automobile corporations increase their investment in China. In the long run, whether it will cause the further rising of multinational automobile corporations' market share and the failure of market function, and they dominate the whole market, or not. Eventually, the domestic corporations will attach to multinational corporations (MNCs) and stay at the end of the value chain, even worse which will affect the safety of china's industry. This issue is always the people's current concern.

From 1990s to nowadays, more and more MNCS come into china's market. The structure of the market that monopolized by only a few MNCS has changed. China's manufacture industries including the automobile industry already become the structure of competitive market. Meanwhile, on account of the demanding capacity of china's market is very huge, and the differences of demanding levels are also very great. Those also provide a great space for internal and external enterprises to co-develop in competition.

The paper analyzes the competition condition of China's automobile market according to the competition behavior of multinational automobile manufacturer in different periods in china's market. We utilize market structure indexes to analyze the impact of the entry of multinational automobile corporations on the structure of china's saloon car market, such as the rate of market concentration, HHI index and logarithm variance of manufacture scale, and so on.

### 1. THE ANALYSIS OF STRUCTURE OF THE SALOON CAR MARKET

### 1.1 The contrast of share of the saloon car market

In period of 1993-1996, Shanghai Volkswagen's share

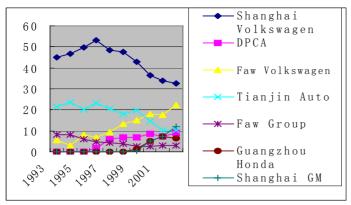
Tab.1 the contrast of the share of the saloon car market of China between the year 1993 and 2002

Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Shanghai Volkswagen	44.85	46.52	49.75	53.03	48.54	47.61	42.72	36.3	33.78	32.49
Dongfeng Peugeot Citroen Automobile (DPCA)	0	0	0	1.89	5.91	6.79	7.03	8.49	7.33	9.17
Faw Volkswagen	5.65	3.08	8.07	7	9.38	13.12	14.83	18.16	17.39	22.43
Tianjin Automobile	21.44	23.41	20.32	23.01	20.39	18.19	19.88	14.69	10.12	10.29
Faw Group	7.94	8.17	6.04	4.64	4.18	3.95	2.75	2.49	2.86	2.87
Guangzhou Honda	0	0	0	0	0	0	1.1	5.26	7.11	6.38
Shanghai GM	0	0	0	0	0	0	0.51	4.98	7.49	11.95

of the market always keeps a way high level and appears the trend of rising, and the corporation almost monopolizes china's saloon car market. Its share is close to half of the whole saloon car market of china, and the market share of Tianjin Automobile is about 20 percent. After 1996, the market share of Shanghai Volkswagen and Tianjin Automobile are gradually beginning to decrease. But the market share of the newly entered corporations is gradually increasing, such as Guangzhou Honda and Shanghai GM. The whole saloon car market that only has a few enterprises now has developed into a market consisting of many enterprises that are as competitive as the early entrants.

#### 1.2 The analysis of the market structure

The market structure mainly refers to the scale distribution of the enterprises that compete with each other. The competition capabilities of an enterprise are closely relative to its scale. Therefore, when we analyze the marker structure, we also should analyze the change of the scale differences of enterprises in the market except for analyzing the rate of market concentration. We calculate the rates of market concentration CR4 and CR3 as a base, then introducing HHI index and logarithm variance of manufacturer scale to analyze the saloon car manufacture scale. See table2, contrasting through the cross that can show the change of enterprises position in the market; and contrasting through cross that can reflect the impact of market environment in different periods to the market structure of china's saloon car industry. Utilizing the three indexes can relatively comprehensively and directly estimate the whole change of the structure of china's saloon car market.



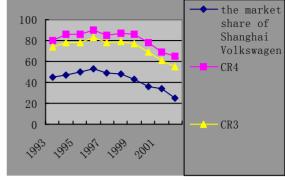


Fig.1 The contrast of the share of the saloon car market of China between the year 1993 and 2002.

Fig. 2 CR4、CR3 and the changing trend of market share of Shanghai Volkswagen

In the table 2, the figure is the market possessing rates of Shanghai Volkswagen from year 1993 to 2002 and the trend of the changing rates of market concentration CR4 and CR3 in the china's saloon car market.

In the table 2, it indicates that form year 1993 to 1998 the CR4 index of china's saloon car market is always above 80. But after year 1998, it begins

decreasing. Meanwhile, Shanghai Volkswagen presents the trend of declining of the rates of market concentration, and the decreasing of the market share of the single leader of the saloon car manufacture. Those imply that the competition of china's saloon car market is intensified.

Tab.2 Some Relative Indexes on the Rates of Concentration of China's saloon Car Market between Year 1993 and 2002

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
CR4	80.2	85.69	86.21	89.86	85.25	87.48	86.47	77.64	68.78	77.16
HHI	2623	2877	3075	3469	2977	2908	2584	2053	1752	1940
V	0.606	0.474	0.164	0.395	0.415	0.429	0.451	0.118	0.089	0.103

Material sources: Yearbook of China's Automobile Industry and some relative references

With the declining of the rate of market concentration, the HHI and logarithm variance of manufacture scale that used to measure the rate of market concentration also have changed. The HHI sensitively reflects the impact that enterprise scale distribution to the rate of market concentration. However, the logarithm variance reflects that more even the scale distribution among the enterprises is, and more intensive the competition is. Then the value is less. Figure. 3 .

According to the market structure based on HHI to categorize, HHI is above 3000, we call it the Highest Level Monopoly. If HHI is between 3000 and 1800 we call it Higher Level Monopoly. If HHI is between 1400-1800, we call it low Level monopoly. We can easily get out the result from the graph three that HHI is above 3000 in the period of 1995-1997. China's saloon car market belongs to the Highest Level Monopoly. After 1997, with the mature of other car manufacturers the scale differences tend to reduce. After 1999 the value of HHI and V also begin to decline. The scale differences among the enterprises begin further to reduce.

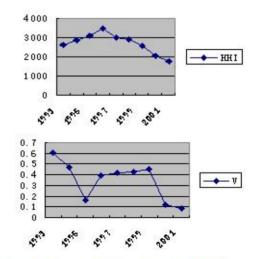


Fig. 3 The changing tend of the value of HHI and V in China's saloon car market over the years

From the whole trend of change to see, in the period of 1993-1996 the scale differences among china's saloon car manufacturer have changed greatly. The scale levels of the manufacturers are very close. After the balance adjustment of enterprise scale from 1996 to 1998, in 1999 the enterprise's scale differences reduce further

more. This indicates that the competition capabilities are very close among the enterprises, and it is very difficult for one enterprise to monopolize the whole market. All those imply that the structure of china's saloon car market tends to be proper in the rate of market concentration and scale. The efficient competition is intensified. The structure of china's saloon car market is orientated towards a structure of competitive market.

### 2. THE IMPACT THAT MNCS ON TREND OF THE STRUCTURE CHANGE OF CHINA'S SALOON MARKET

That the MNCs enter China's saloon car market can be divided into two stages. The first stage is in the middle of 1993s, this period Volkswagen AG can be regarded as the represent for the few MNS. At that time, China's government insists that this industry policy that can only introduce a few MNCS in one industry, in order to leave enough development space for domestic enterprises. The second period is in the middle of 1990s. The government gives up of the direction of policy, and allows more MNCS to enter china's market. Then the global big automobile enterprises begin to invent in the market.

### 2.1 The whole trend of change the structure of China's saloon car market

Before the middle of 1990s the rate of the market concentration of china's saloon market is much higher, and presents a structure of highly monopolized market. Although the developed country's saloon car markets also monopolized highly in general, the market structure of our country is very difference from the general model. It is not the result of fully competition market, but caused by the entry barriers of the policy. It not only limits the entry of new enterprises, but also limits the categories of the current products of the enterprises. Then the rate of market concentration saloon car industry is much higher than the average levels of the whole automobile industry.

At the end of 1990s, it is a period of transition that china's saloon car industry begins to change from a close

market to an open market. After 1996, China's saloon car industry is more open to the foreign capital than before. multinational automobile corporations uninterruptedly choose to enter China's market. The early-entered MNCs also increase their investment all the time, and that intensifies the competition. But seeing from the whole trend of the development of world automobile market, all the mature markets always possess a characteristic of structure of monopolized market. No matter analyzing from the theory or from the development experiences of foreign countries, China' saloon car market appears the changing process of U mold. Although the rate of current market concentration is declining, the concentration rate of China's saloon car market finally will raise after the intensive competition and survival of the fittest. But before that happened, it will undergo a period of fully competition. The MNCs will play a key role in the process.

# 2.2 The impact of the multinational automobile corporations on the future development of the structure of China's saloon car market.

After accession to the WTO, a vigorous strategic adjustment is underway in China's saloon car market. The multinational automobile corporations in a strategic position direct this play. After the gradually reducing of the limiting measures, MNCs will reorganize the organization form and management models of their enterprises and weak the management of Chinese side through increasing investment, merging, purchasing the stocks of Chinese side. They will readjust the function and transaction model of their enterprises, and perform the centralized marketing and management in the specialization and scale in order to reduce the cost.

In 2002, as China realize the relative promises when accession to the WTO, the few oligopolies of the word automobile industry enter to China more rapidly. The biggest 15 car producers of the world automobile industry all have found their cooperators in China. See table 3.

the 3 greatest groups hold hands respectively with 2 or 3

Tab. 3 The catalogue of (MNCs) and part of the reorganization of automobile corporations in China

The automobile production enterprises of China	The cooperative cross-national automobile corporations				
FAW annexing Tianjin Automobile Co. LTD	Toyota				
Beijing Automobile Holding Corporation	Daimler Chrysler				
Beijing Automobile Holding Corporation	Hyundai Motor. Co. LTD				
Dongfeng Motor Co. LTD	KIA Motor Co. LTD				
Dongfeng Motor Co. LTD	Nissan				
Dongfeng Motor Co. LTD	France Peugeot				
Shanghai Automobile industry Corporation annexing Shangdong Yantai Cab CO.LTD	GM				
Shanghai Automobile industry Corporation annexing Liuzhou Wuling	GM				

mobile, multinationals automobile companies, and initially from Chinese automobile industry the new "3+9" structure.

Nowadays, Faw, Dongfeng, Shanghai Automobile,

Namely, Faw, Dongfeng, Shanghai Automobile, the 3 top groups plus Guangzhou Honda, Chongqing Changan, Anhui Qirui, Shenyang Huachen, Nanjing Fiat, Zhejiang jili, Hafei, Changhe and Jiangling, are the 9 backbone of the automobile enterprises. The output of the 3 big automobile groups is close to 50% of the total national automobile output, and the concentration degree of automobile production attains 44%, meanwhile, the concentration degree of the saloon car production is over 70%. Moreover, the total output of another 9 automobile producers aggregated about 40% of the whole output of the country.

Since 2002, whether the annex and reorganization that conducted mainly by the MNCS and the domestic groups will make the organization of Chinese car industry more reasonable, and bring up the international comparativeness, and become just the workshop or complement of the MNCS or not. In the recent condition the policy disallow holding by the foreign companies. By thinking of their global strategy and occupying China's car market, they intend to weaken our ability of independently developing new products in the joint ventures, and control the key links of the technique development, in order to obtain actual controlling power of the joint ventures. Once the policy loosens, almost of the foreign corporations will seek to holding or individual proprietorships. Under the condition that have not basic whole car development ability we will be placed in the passive position in the automobile joint ventures. Currently the domestic automobile market is just a playground only for the few big multinational enterprises, and this also become the significant potential troubles of our country automobile industry development.

The entrance of the MNCS strengthens the competition of the Chinese car market. That makes of China's car industry transaction from the planning oligopoly to the market competition oligopoly. The intensifying of the competition in the car market is beneficial to the increment of welfare of Chinese car producers and Chinese consumer. But we also must keep a clear head, the entrance of the multinational automobile enterprises distinctly also make the Chinese automobile factory place themselves on the ground of dancing with the wolf. According to already-signed WTO bilateral agreements, China's heavily-protected auto market will face significant changes once it attains full WTO membership. Tariffs will be reduced from current 80-100% levels to 25% by 2006, import quotas will be phased out by 2005, and prevailing technology transfer and local content requirements imposed upon foreign automakers will be eliminated.

Foreign companies will also be allowed greater flexibility in deciding which types of vehicles they build; and, three years after WTO accession, will be able to distribute virtually any product they choose. Joint-venture restrictions for engine production will be eliminated upon accession.

After the end of transitional periods that WTO permits, the competition situation must be changed greatly and the new entrant will increase. The market concentration degree will appear the variety again. The price competition will be more complicated, and the domestic car industry may face to the situation of re-shuffle the cards.

## 3. SOME SUGGESTIONS ON THE STRUCTURE ADJUSTMENT OF CHINESE SALOON CAR MARKET

## 3.1 The saloon car market should carry on a industry reorganization in the fully competition

In the present Chinese saloon car industry is already initial to become a monopolized market, which occupied by only a few corporations. The degree of the market concentration is staved at the high level oligopoly, but this kind of the high level degree of the market concentration is still a strike to the traditional market characteristic. In the high and middle product level the competition is still the structure of oligopoly, in fact the reorganization of the automobile industry still is the extend of the three big groups. It is not the result of fully market competition. If we emphasize the high level concentration too early, it is unhelpful towards Chinese saloon car market that still stayed in the period of the childhood. Therefore, Chinese market should continue to accept and support other independent car production enterprises, and let them launch the competition with three greatest groups, and force the three groups to cut their cost and make the price reach to a reasonable level. Carry on the integration in the full competition and construct an entry barrier of the industry, can only that optimize the automobile industrial structure fundamentally.

# 3.2 Valuing on the special role that the emergent enterprises and particularly the private enterprises play at optimizing the structure of automobile industrial.

Namely, Jili, Huachen, Qirui, they are the represents of the emergent enterprises, and play an accelerating role for the perfection of the structure economical saloon car market, This subdivided market has already had the types car from 3 in several years ago to now more than 20. The full competition of the market has already made the price of car approach to the bottom line of cost.

The private enterprises get involved that not only can make the supply of the development funds more abundant but also the growth more rapidly, and can promote competition, urge the entrants cut cost, the exaltation price compare, promoting the industry reorganization, promoting the development of the national brand.

## 3.3 Should avoid the internal unfair competition in cooperation with the multinational enterprises.

Because of the acquaintance that the multinational enterprises with the competition characteristics of Chinese market, they are more and more good at swimming from one place to another place, making use of the opportunity that local governments eager to

contend for the automobile items, pressing the price mutually, lowering the negotiation threshold, thus acquiring to active power in the new organized enterprises. The development of the automobile industry not only needs to have the superb capital operation means, and the more important is that needs to control the core production techniques from far-sight. Though many regions think that the automobile industry can play the pillar role in their future economic development, but should follow the regulations of the industry development, avoiding the unfair competition of the inner part, covering up a long-term potential troubles.

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