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## The Chinese Automobile Market and the Strategies of European, American, Japanese, Korean and Chinese Auto Makers\*

### Jin Chen

Ritsumeikan University, Ibaraki, Osaka, Japan

This paper compares and analyzes the changes in the Chinese automobile market in recent years as well as the competition strategy of top makers of European, American, Japanese, Korean, and Chinese automobiles. In particular, analysis is carried out on the cause of the rapid growth of European, American, and Korean makers in the passenger vehicle market and the slow growth of Japanese makers, especially, Toyota, Honda, and Chinese makers. In order to adapt to the environmental change in the Chinese automobile market, European and American makers like Volkwagen (VW) and General Motors (GM) have developed full model line-up strategies focusing on compact cars while utilizing the advantages of the annual production of their full model line-up and giving priority to local part procurement. What's more, Korea's Hyundai has converted its car model strategy from mid-sized cars into compact cars in accordance with the changes in the Chinese market. Through successful product development adjusting to local needs, Hyundai has firmly entrenched its brand name. For Honda and Toyota, the slow conversion from mid-sized cars to compact cars and the inability to decrease costs due to the slow development of local part procurement are the causes of their delayed development in the Chinese market.

Keywords: middle class, inland market, local part procurement, research and development of local product

### Introduction

This paper compares and analyzes the changes in the Chinese automobile market in recent years as well as the competition strategies of the top makers of European, American, Japanese, Korean, and Chinese automobiles. In particular, analysis is carried out on the cause of rapid growth for European, American, and Korean makers in the passenger vehicle market and the slow growth of Japanese makers, especially, Toyota and Honda as well as Chinese makers<sup>1</sup>.

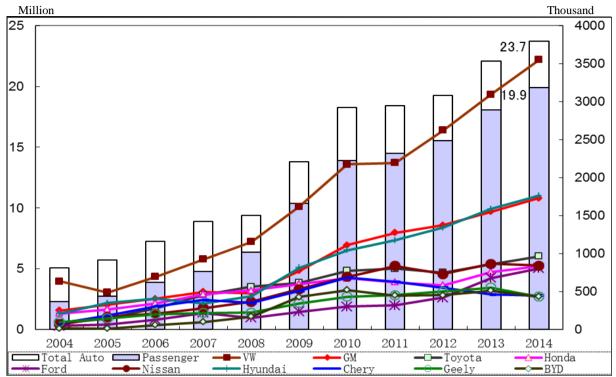
The Chinese automobile market is growing at an especially rapid rate after the 2008 financial crisis in contrast to the decline and reduction of the markets of developed countries such as those in Europe, America, and Japan. Production volume of the Chinese automobile market increased to No. 1 in the world in 2009 from eighth place in 2000, and sales volume has also occupied the top spot globally. In particular, the growth of passenger vehicle production is most significant. The percentage of passenger vehicles

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Jin Chen, Professor, College of Business Administration, Ritsumeikan University; Affiliate Researcher of International Motor Vehicle Program (IMVP) of MIT (1994-2013) and Program on Vehicle & Mobility Innovations (PVMI from 2013).

<sup>&</sup>lt;sup>1</sup> The deterioration of recent political relation between Japan and China has influenced the market performance of Japanese makers in the Chinese market in some degree. This paper focuses on their market trend and corporative strategy.

which accounts for automobile gross production has almost tripled from less than 30 % in 2000 to 84% in 2014 (see Figure 1).



*Figure 1.* Automobile and passenger vehicles gross production and passenger vehicle production volume of each top maker in the Chinese market (2004-2014).

Resource: made by Jin Chen, based on the data from (2004-2015) Chinese Automobile Industry Yearbook and FOUIN's Monthly Report on the Chinese Automotive Industry.

*Notes*. The left axis indicates the total gross production volume of automobile and passenger vehicles (bars), and the right axis indicates the passenger vehicle production volume of each top maker (lines).

Considering the data<sup>2</sup> of passenger vehicle production volume and growth rate of each maker especially after the 2008 financial crisis, these makers are clearly divided into rapid-growing and slow-growing groups. Based on the average growth rate from 2009 to 2014<sup>3</sup>, the growth rate for GM is at 17%, Ford is at 28%, VW is at 17% and Hyundai is at 17%. Meanwhile, Nissan has made strenuous efforts to maintain a 10% growth rate, while Toyota is at nine percent and Honda is at seven percent, which is far behind the above mentioned top makers. Moreover, the growth rate of Geely (five percent), BYD (three percent) and Chery (two percent) are even lower.

Observing the changes to the top 10 models of sedans by sales volume in the recent Chinese market, models from VW, GM and Hyundai from European, American, and Korean makers respectively occupy the top positions. Moreover, the ranking of Japanese products excluding Nissan along with all Chinese makers have declined and disappeared from dominance in recent years (see Table 1). The question raises of what were the reasons that caused the different results.

<sup>&</sup>lt;sup>2</sup> Relating to the passenger vehicle production data of each maker, VW refers to Shanghai VW and FAW VW, GM refers to Shanghai GM and SAIC-GM-Wuling, Toyota refers to FAW Toyota and Guangzhou Toyota, Honda refers to Guangzhou Honda and Dongfeng Honda, Hyundai refers to Beijing Hyundai and Dongfeng Yueda Kia Motor.

<sup>&</sup>lt;sup>3</sup> The average growth rate within these 6 years is calculated based on CAGR (Compound Annual Growth Rate).

		0 0						*			
	TOP 10	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
2008	Model	Jetta	Santana	Excelle	Accord	Corolla	Camry	QQ	F3	Xiali	Elantra
	Displacement	VW 1.6L	VW 1.8L	GM 1.6L	Honda 2.0L	Toyota1.8L	Toyota2.0	Chery 1.0L	BYD 1.5L	FAW 1.0L	Hyundai1.6
2009	Model	F3	Excelle	HDC	Jetta	Santana	Accord	ElantrA	QQ	Corolla	Camry
	Displacement	BYD 1.5L	GM 1.6L	Hyundai1.6	VW 1.6L	VW 1.8L	Honda2.0	Hyundai1.6	Chery1.0L	Toyota1.8L	Toyota2.0
2010	Model	F3	Lavida	HDC	Jetta	Excelle	Santana	Xiali	Cruze	Flagcloud	Bora
	Displacement	BYD 1.5L	VW 1.6L	Hyundai1.6	VW 1.6L	GM 1.6L	VW 1.8L	FAW 1.0L	GM 1.5L	Chery1.5L	VW 1.6L
2011	Model	Excelle	Lavida	Cruze	Jetta	Bora	Santana	Sail	Xiali	HDC	Focus
	Displacement	GM 1.6L	VW 1.6L	GM 1.5L	VW 1.6L	VW 1.6L	VW 1.8L	GM 1.4L	FAW 1.0L	Hyundai1.6	Ford 1.6L
2012	Model	Focus	Sail	Excelle	Lavida	Jetta	Passat	Cruze	Bora	HDC	Verna
	Displacement	Ford 1.6L	GM 1.4L	GM 1.6L	VW 1.6L	VW 1.6L	VW 1.8L	GM 1.5L	VW 1.6L	Hyundai1.6	Hyundai1.4
2013	Model	Focus	LAVIDA	Excelle	Sail	Sagitar	Jetta	Sylphy	Cruze	Santana	New Bora
	Displacement	Ford 1.6L	VW 1.6L	GM 1.6L	GM 1.4L	VW 1.6L	VW 1.6L	Nissan 1.6	GM 1.5L	VW 1.6L	VW 1.6L
2014	Model	Focus	Lavida	Santana	Sagitar	Sylphy	Jetta	Excelle	Cruze	Sail	Elantra3
	Volume	391,800	372,000	307,300	300,100	300,100	297,000	293,100	266,000	253,300	252,300
	Price (CNY)	100-170K	110-170K	80-120K	130-190K	100-170K	80-120K	100-120K	110-160K	60-80K	100-150K
	Displacement	Ford 1.6L	VW 1.6L	VW 1.6L	VW 1.6L	Nissan 1.6	VW 1.6L	GM 1.5L	GM 1.5L	GM 1.4L	Hyundai1.6

Table 1

Top 10 Model Ranking of Sedans by Sales Volume in the Chinese Market (2008-2014)

Resource: made by Jin Chen, based on the date of statistic information net (www.auto-stats.org.cn) of Chinese Automobile Industry Association and Automobile Home.

Notes. L refers to liter of displacement. Price identification comes from Automobile Home, network access on March 25, 2015.

Based on the above research, this paper theoretically observes the latest trends of the Chinese automobile market, changes in each maker's model policy and foundation factors of vehicle parts. This paper also offers a new viewpoint on the Chinese automobile market and each maker's strategy analysis.

## Rapid Growth of the Middle Class and the Inland Market in China

In addition to the wealthy class, the middle class consumers are increasing in the Chinese economy due to long term advanced growth. These increases have led to an expansion from larger cities on the coast to medium and smaller sized cities along with rural villages in inland areas in the automobile consumer market. In particular, sales of compact and low cost automobiles which the middle class can afford have seen an explosive increase.

A reason for the rapid increase in automobile sales is the increase in the income level of the Chinese people. Passenger vehicles produced in China are mainly sold to the so-called middle class<sup>4</sup>, and not the wealthy class.

Sales volume in the Chinese luxury automobile market such as Mercedes Benz and BMW for the wealthy class in China has been increasing every year but most of these luxury automobiles are imported, and not produced in China. For example, looking at sales of BMW worldwide in 2012, China occupied the top spot at a relatively high percentage of 28% followed by Germany and America at 16%, England at seven percent along with Italy and France at three percent. However, production of BMW in Germany accounted for 64% of the

<sup>&</sup>lt;sup>4</sup> The middle class is positioned between the wealthy class and poor class. There are methods for measuring the middle class such as household income and consumption but these are not clearly defined like with the poor class. There are studies which make classification standards in each country and investigations that measure world trends with definite figures.

world's production while China was only at four percent.

However, many of the new wealthy among the middle class consumers have little knowledge of purchasing automobiles and their demand of the price range of the automobiles is quite less than the wealthy class.

Meanwhile, since the beginning of the 21st century, the Chinese government has spent a massive amount of money to create various inland promotion policies for the expansion of the inland market. Therefore, the income per person living inland has continued to show more advanced growth than that of the coastal areas since the mid 2000s. For example, the income per person in eastern urban areas increased 2.4 times from 13,375 CNY in 2005 to 32,472 CNY in 2013, 2.6 times in the central area from 8,809 CNY to 22,736 CNY, 2.6 times in the western area from 8,783 CNY to 22,710 CNY and 2.6 times in the northeast area from 8,730 CNY to 22,875 CNY. Meanwhile, the restriction of car purchase becomes more strict by traffic jam and air pollution in eastern metropolitan like Beijing and Shanghai in recent years.

In addition, the government's tax reduction policies and subsidy system are providing support for consumers living inland purchasing automobiles. From the world financial crisis until the end of 2010, the government lowered the acquisition tax on compact automobiles with displacement of 1.6L<sup>6</sup> or less (from 10% to five percent) and introduced a subsidiary system for purchasing automobiles in rural areas. Since 2012, systems such as those reducing taxes for owning energy saving automobiles and subsidiary systems for compact automobiles with a displacement of 1.6L or less have been introduced with the purpose of providing economic support. The expansion of the inland market has led to an increase in demand for compact automobiles at low prices. There are a lot of consumers who will purchase their first automobile in inland areas so there is a large demand for low-cost entry models.

Import tariffs for passenger vehicles five years after China originally joined the World Trade Organization (WTO) (2001) decreased from 70%-80% in 2001 to 25% in 2006 at an average decrease of 10% annually which led to companies one after another in China and overseas starting production of automobiles before and after China joining the WTO (see Figure 3). At the same time, completely build-up (CBU) makers established a sales network at a rapid pace in inland areas and actively introduced low-cost compact automobiles to the market making price competition more intense. This resulted in a continuous decrease in the average price of automobiles compared to the previous year with a 13.1% decrease in 2004, three percent in 2005, 6.5% in 2006 and 7.2% in 2007. According to the China Association of Automobile Manufacturers, the Shanghai VW Santana which was an exemplary automobile of 1995 was sold for 160,000 CNY per unit. This is 12 times the average annual household income at the time. The price of the 2007 Santana decreased to 70,000 CNY which is 1.7 times the average annual household income. After that, according to reports focusing on price observations by the National Development and Reform Commission of China, the average sales price of automobiles continuously decreased from 114,083 CNY in 2007 to 103,175 CNY in 2012. The annual average rate of decrease over the five year period was two percent (SEKI, 2014).

During this period, sales of compact automobiles with a displacement of 1.6L or less increased rapidly and the percentage of these automobiles among total passenger vehicle sales rose from below 50% in the first half of the 2000s to over 60% in the latter half of the 2000s (see Figure 2). Among these trends, the increase in

<sup>&</sup>lt;sup>5</sup> 2014 China Statistical Yearbook, pp160.

<sup>&</sup>lt;sup>6</sup> L refers to liter of displacement.

automobiles with a displacement of 1.4L-1.6L especially following the decrease in prices was prominent with this percentage doubling. Meanwhile, automobiles with a displacement over 1.6L and low prices of around 100,000 CNY focusing on the VW Santana<sup>7</sup> and Ford Focus have become mainstream, and sales of Sport Utility Vehicle (SUV) have also been favorable in recent years.

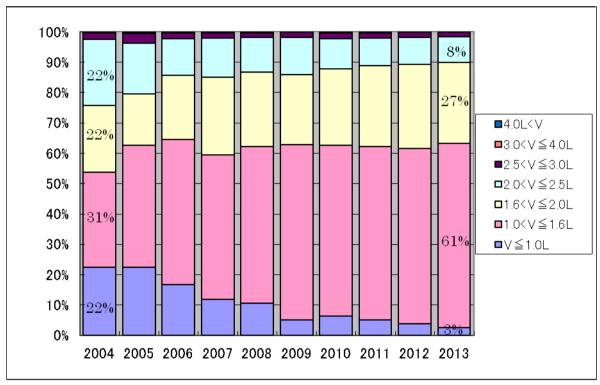


Figure 2. Percentage changes in sales volume of different displacement of passenger cars.

Source: made by Jin Chen based on "structure of automobile different productivity and sales volume", *Chinese Automotive Yearbook* 2005-2014.

Notes. L refers to liter of displacement.

Nevertheless, the demand for those buying their first car still accounts for a majority of the Chinese passenger vehicle market but there has also been a definite increase in those replacing their cars which was at 13.4% in 2009 and 20.4% in 2013. In addition, the average selling price of automobiles rose for the first time by 1.4% compared to the previous year in 2013 (SEKI, 2014).

The increase in those replacing their current automobiles signifies a shift from the consumer's preference of low-priced automobiles to "better automobiles" which emphasize the intrinsic features of the automobile such as its performance. Generally, those who replace their current automobiles have had a lot of experience owning automobiles so they place importance on the intrinsic features of the automobile in areas. In China, the consumers are gaining more and more experience owning automobiles so the advancement and diversification of the demand for automobiles is continuing.

# Localization of Part Procurement and Middle Class Strategies of European, American, and Chinese Companies

<sup>&</sup>lt;sup>7</sup> The displacement of the Santana was changed from 1.8L to 1.6L from 2012.

European and American makers which expanded into the Chinese market early on are promoting the localization of parts procurement as soon as possible and converting their business plan from strategies involving all vehicle models focusing on former models to increases in compact models. Meanwhile, indigenous Chinese makers are imitating foreign compact models and pursuing an expansion of their production scale at a low cost.

## **Expansion Period and Parts Supply Industry Base of Companies**

At the end of the 1980s, the Chinese government laid out policies limiting the production of passenger vehicles to the so-called "big 3" passenger vehicle makers including First Automobile Works (FAW), Dongfeng and Shanghai Automotive Industry Corporation (SAIC) along with the "small 3" passenger vehicle makers of Beijing Automotive Industry Corporation (BAIC), Tianjin Automotive Industry Corporation (TAIC) and Guangzhou Automotive Industry Corporation (GAIC) which already have technology introduced. Moreover, the munitions company Guizhou Aviation along with Chang'an joined this group in 1992 to form an eight company system of the "big 3, small 3, and micro 2" passenger vehicle makers in China which continued until the late 1990s<sup>8</sup> (see Figure 3). At the same time, the Chinese government placed restrictions on passenger vehicle imports with import licenses and an import quota system from the late 1980s in order to promote the domestic production of passenger vehicles. In addition, external measures included import tariffs being raised to around 200% to protect the domestic passenger vehicle makers with a completely knock down (CKD) parts "graded tariff".

At that time, Chinese makers such as FAW and SAIC actively selected joint venture partners and started negotiations with Japanese, American, and European makers for the introduction of passenger vehicle technology. There were various responses from foreign companies. The 1980s witnessed fierce competition in both domestic and overseas markets for Japanese makers such as Toyota, Honda, and Nissan, and also a time when these makers started seeing success. There were prospects for entering markets such as the Chinese market at any time as they were not able to make a serious response to the requests for cooperation. European makers, especially VW were active in expanding into China. The most distinctive example is when FAW purchased an old factory of VW Golf and Jetta passenger vehicles which produced 300,000 units annually in Westmoreland, USA, acquiring the used equipment in the welding, coating and assembly lines in 1989. This factory started production in 1978 and was completely renovated in 1984. From 1983, the factory produced Golf and Jetta A2 passenger vehicles developed by VW. After that, the Golf became inferior to Japanese automobiles in both cost and performance so production was forced to stop in August of 1988. FAW made a bid on this factory at five percent of the 240 million USD in original construction costs. The Jetta produced by FAW-VW (FVW) after that along with the Shanghai VW (SVW) Santana were protected from the high tariffs for a long time and accounted for over half the market share of Chinese passenger vehicles (Chen, 2000).

Looking at Figure 3, passenger vehicle makers which participated in the Chinese market up until the 1990s

<sup>&</sup>lt;sup>8</sup> When looking at the joint venture history with foreign makers of the "big 3, small 3 and micro 2" up until the mid 1990s, FAW formed a joint venture with VW, Dongfeng with Citroen, SAIC with VW and GM, BAIC with Chrysler, GAIC with Peugeot, Chang'an with Suzuki and Guizhou Aviation with Fuji Heavy Industries. TAIC introduced technology from Daihatsu but they did not form a joint venture. In addition, Guizhou Aviation and Fuji Heavy Industries canceled their contract before production started.

<sup>&</sup>lt;sup>9</sup> The tariff rate of imported CBU passenger vehicles was around 110%-150% from January 1, 1994 but it reached 180%-220% before that.

were mainly European and American makers such as VW, GM, Peugeot, and Citreon and the passenger vehicles produced were mainly for government or business use. Meanwhile, indigenous Chinese makers focusing on light and compact automobiles also entered the market around the time China entered the WTO (2001) producing low cost taxis for public use. Some of the indigenous Chinese makers who entered the market from early on were financed by the presently higher ranking indigenous Chinese makers which followed later Geely Automobile and BYD Auto and became production factories.

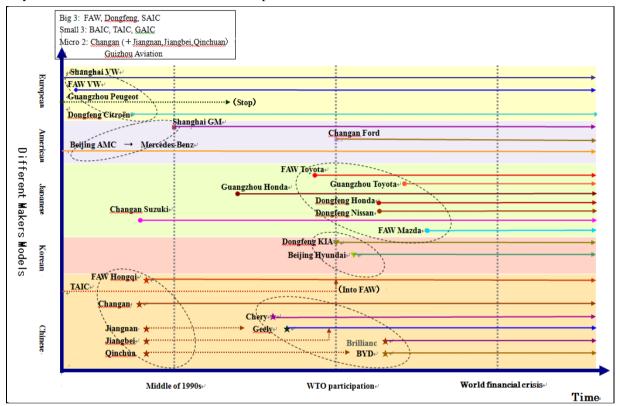


Figure 3. Entry times of primary car markets in China.

Source: made by Jin Chen based on Chinese Automotive Yearbook of each year.

*Notes*. Chang'an Automobile, Jiangnan Automobile, Jiangbei Automobile and Qinchuan Automobile now belong to China North Industries Group Corporation and all have introduced Alto license from Suzuki through North Industries Group Corporation.

The European and American makers who entered the market from early on created a full-fledged part supply system corresponding to the policies on the transition to domestic part production by the Chinese government from the 1990s. Among these, SVW created the Shanghai Santana Domestic Production Community which included parts makers, banks, universities and research laboratories from 1988 and started to form a supplier network focusing on the Yangtze River Delta under the leadership of SAIC (Lee, 1997). This supplier network was further expanded by the participation of GM and is being used by the indigenous Chinese makers (Chery Automobile and Geely Automobile) who entered afterwards.

The number of primary parts companies for Chinese automobiles was 1,612 in 2001 (Wang, 2004). The regional distribution of these parts companies shows a concentration in about five areas: The first is the Jilin Province and Liaoning Province which have 196 companies and is the region where the joint venture company between the major automobile makers FAW and VW is located; The second area is Beijing and Tianjin where there are 111 companies with Chrysler and Hyundai advancing into Beijing and Toyota into Tianjin; The third

region is the Hubei Province and Chongqing City which have 196 companies and are the location for Nissan, the Dongfeng Group, and Suzuki (Ford also expanded here later); The fourth one is the Guangdong Province which only has 57 companies but Honda (and later Toyota) has expanded here; and the fifth area in the Yangtze Delta with 327 companies and is the location for SAIC, SVW, and Shanghai GM. The Yangtze Delta holds about a 20% share of the number of companies as well as a 40% share in sales in the Chinese automobile parts production industry along with accounting for 70%-80% of the nationwide share in electronic parts and air conditioner parts.

Before and after China joined the WTO in 2001, Honda, Toyota, and Nissan from Japan along with Hyundai from South Korea, which had entered the passenger vehicle market, and some primary parts makers, all advanced to local areas in China. However, secondary and lower level parts were procured from their own countries. According to research by Marukawa (2006) (see Table 2), except for Suzuki, it was clear that a lot more Japanese makers procured parts from other Japanese parts makers, especially parts makers in the same series than European and American makers did with parts makers in their home countries.

Table 2
Percentage of Chinese Suppliers and Suppliers From Same Country With Automaker Among All Suppliers

Automaker	Percentage of Suppliers						
Automaker	Which are subsidiaries of the automaker						
SVW	_	13.4	53.9				
FAW-VW	_	13.3	54.2				
DCAC	_	7.5	59.4				
SGM	_	16.6	42.1				
CFord	_	31.8	27.3				
BJC	_	15.0	57.1				
CSuzuki	_	12.6	59.5				
DF Nissan	27.3	43.4	34.0				
GHonda	15.1	54.8	24.7				
T Toyota	48.9	78.7	14.9				
DFKia	_	28.6	26.2				
BHyundai	_	81.3	6.3				

Source: Marukawa, 2006, p. 99.

# Preference of Localization for Parts Procurement of European and American Makers Along With Strategies Focused on Former Models

As stated earlier, European and American makers, especially VW and GM were foreign pioneering makers entering the Chinese market early on and they made significant advances in the localization of parts procurement. Ford which followed later made use of the supplier network created by Chang'an and Suzuki in the growth inland market and expanded the localization of parts procurement. And Chang'an Ford had established its second factory in the Yangtze Delta (Nanjing) in 2004. In other words, these companies procured low cost parts and materials from Chinese makers as well as makers outside of China and their home country more than from parts makers in Europe and America<sup>10</sup>. This method of procurement was a major factor

<sup>&</sup>lt;sup>10</sup> The home countries include local joint venture companies consisting of European and American part suppliers and Chinese companies. Major automobile parts makers in the world are increasing activity with the aim of taking command over management rights through providing a majority of the financing and creating wholly owned subsidiaries by buying existing Chinese parts companies and increasing financing to joint venture bases in their expansion to China after it joined the WTO. Meanwhile,

in European and American makers meeting the needs of the middle class and realizing cost performance.

Another feature of European and American makers is that they continue to expand sales of former models in the Chinese market which had been sold for a long time while procuring parts locally in China. For example, the Santana (1.8L) from SVW (see Figure 4) and the Jetta from FVW both entered the market in the 1980s and they are both mass produced even today in the Chinese market while going under renovations. In addition, the SVW Polo and Passat along with the FVW Bora and Golf have been produced for a long time. These former models, combined with the Santana and Jetta, account for 50%-60% of the total production from both companies since the world financial crisis. As shown in Table 1, the SVW Santana with a displacement of 1.8L (70,000-80,000 CNY in 2010) is less than half of the price of the Japanese models with the same displacement (Toyota Corolla at 1.8L and 170,000 CNY and the Honda Accord at 2.0L and 180,000 CNY) so the Santana has a major presence in the middle class market. In recent years, VW has diversified their products by expanding the production of the luxury vehicle Audi as well as large sized automobiles with a displacement of 1.8L or more.

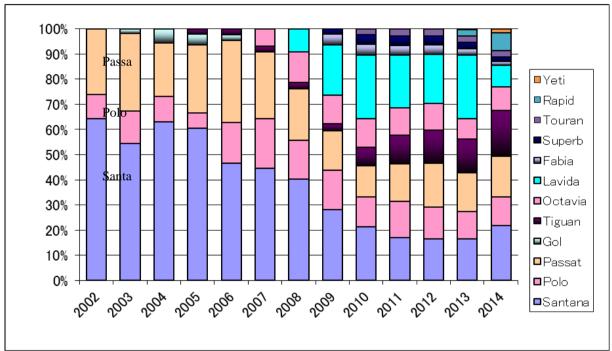


Figure 4. Changes in production models of Shanghai VW (2002-2014).

Source: made by Jin Chen based on the data of FOURIN Monthly Research Reports on Chinese Automotive Industry.

Shanghai GM also offers compact automobiles with a displacement of 1.6L or less with the Excelle and Chevrolet Sail which account for over 60% of production models. The Excelle (100,000-120,000 CNY in 2015) is a former model which was introduced in 2003. The displacement of the Excelle was changed from mainly 1.8L to 1.5-1.6L in order to receive preferential treatment policies from the government. In addition to this, innovations are being carried out on compact automobiles such as the Chevrolet Sail (1.2-1.6L, 50,000-80,000).

according to Fourin's Chinese Automobile Parts Industry Report 2007, the distribution ratio of indigenous Chinese capital in the Chinese automobile parts industry decreased from around 100% in 1980 to 86% in 1996 and further decreased to 73% in 2005.

CNY) while introducing these models into the market and Shanghai GM Wuling Automobiles has expanded the production of 1L compact automobiles as well as mini vans distributing them to the rural and urban middle class. Meanwhile, Chang'an Ford has also accelerated the release of new models while promoting the localization of parts procurement in recent years. As the above mentioned cases show, higher ranking European and American makers have increased the number of compact automobiles released to the market and responded to the changes in the market while maintaining the strategies for all sizes of models by utilizing cost superiority of local parts as well as former models.

## Strategies Focusing on Compact Automobiles and Capacity Limitations of Chinese Makers

Chery, BYD and Geely which are called the "new big 3" of indigenous Chinese makers have a shorter history as well as insufficient capital and technology when compared to the Chinese and foreign makers who came before them. This "new big 3" started producing automobiles around 2000. These local Chinese companies traced the structure, functions and underlying technology of products using a method called reverse engineering which involves observing the operation of existing products (mainly compact automobiles) from foreign makers and analysis through dismantling the products. Then these companies investigated non-disclosed information such as production methods, operation principles, and blueprints (Li, 2009). When Chinese makers imitate foreign automobiles, they investigate the intellectual property registration conditions of foreign automobiles beforehand to avoid legal action from foreign companies. They copy the parts which have not applied for a patent as they are and make alterations by carrying out minor adjustments to parts which have applied for a patent. For example, as shown in Figure 5, Chery's QQ is said to be an imitation of GM Daewoo's MATIZ and BYD's F3 is said to be an imitation of the Toyota Corolla (see Figure 5). Incidentally, these "imitations" are sold at around half the price of the "original models".



Figure 5. MATIZ of GM Daewoo and Chery QQ and Composite Photograph of Corolla (left) and F3 (right). Source: From the site of (http://www.che168.com/) of Car 168.

These companies make up for a lack of technology with reverse engineering but they also needed to accumulate parts procurement abilities, ensure quality of parts and reduce costs so they created an original supplier system. In order to ensure quality at the production site, they broke down complicated parts into simple parts, assigned easy work to employees with low wages and made use of jigs which enabled the production of parts with the same quality as machine production at low costs. Moreover, they are putting out the finished vehicles on the market at prices significantly lower than foreign products, selling a large amount of vehicles through the sales network constructed from the mid-sized and smaller cities to rural areas and pursuing the

expansion of their production scale.

For example, looking at the average growth rates of 2009 and 2010, the indigenous Chinese BYD and Geely showed significant growth at 74% and 37% respectively which compared favorably with the growth of European and American makers of GM (50%), Ford (42%), VW (33%), and the Korean Hyundai (47%). Moreover, they were higher than the growth of the Japanese makers Nissan (27%), Toyota (10%), and Honda (13%). However, sales of Chinese makers started slumping after foreign makers such as GM and Hyundai entered the competition for low cost automobiles. In addition, consumer preferences started shifting from low cost automobiles to intrinsic features such as performance.

Moreover, indigenous Chinese makers like Geely, BYD, and Chery are called the "new big 3" but the results of giving preference to the expansion of production scale through constant price lowering low cost strategies have clarified a significantly lower amount of operating profit per unit when compared to foreign makers as seen in Figure 6.

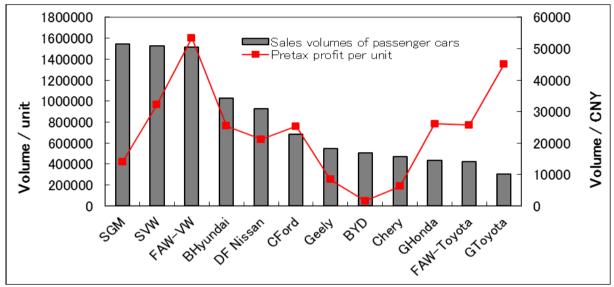


Figure 6. Sales volumes and pretax profit per unit of top ranking car makers in 2013.

Source: made by Jin Chen based on relevant data of 2014 Chinese Automotive Yearbook

Notes. As joint venture corporations, GM has SGMW besides SGM, Honda has DF Honda besides GHonda, Hyundai has DF Kia besides BHyundai, whose data are not included in this figure.

## Differences in Strategies of Japanese and Korean Companies in Response to Changes in the Market

The Korean Hyundai and the Japanese Honda, Toyota, and Nissan entered the Chinese market with strategies focusing on introducing mid-sized automobiles targeting the Chinese wealthy class as well as government and corporate consumers and aiming for large profits. Differences in strategies are starting to manifest from the differences in responses to the expansion of the middle class in the Chinese market.

## Shift From Focusing on Mid-sized Automobiles to Focusing on Compact Automobiles

Beijing Hyundai and the Dongfeng Nissan have started a quick shift from policies based on conventional mid-sized automobiles to those based on compact automobiles in response to the changes in the Chinese automobile market from the mid 2000s. Meanwhile, Kia, a Hyundai affiliated company had established a joint

venture with Dongfeng (Dongfeng Kia) focusing on compact automobiles in the Yangtze Delta (Yancheng) in 2002.

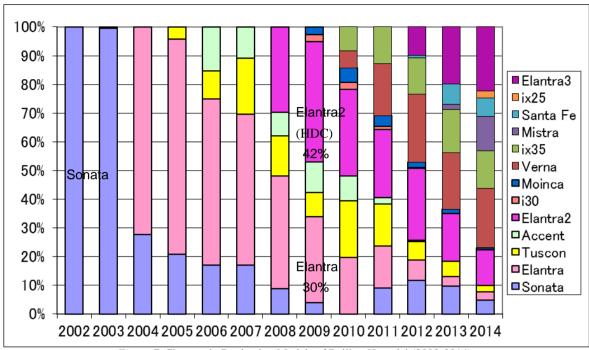


Figure 7. Changes in Production Models of Beijing Hyundai (2002-2014).

Source: made by Jin Chen based on the data of FOURIN Monthly Research Reports on Chinese Automotive Industry.

As shown in Figure 7, the strategies of Beijing Hyundai involve decreasing the number of models and focusing on releasing and mass producing these models. In 2002 and 2003, the main model for Beijing Hyundai was the mid-sized Sonata (2.0L, 130,000-155,000 CNY). However, the compact Elantra (1.6-1.8L) was released to meet the demands of the middle class from 2003 and this model instantly expanded Beijing Hyundai's market share in 2004. After that, the overall sales ranking of Beijing Hyundai decreased in the Chinese market from 2005 to 2007. In particular, the number of units sold in 2007 was less than that of the previous year. Amidst these conditions, Beijing Hyundai concentrated efforts on developing new models for the Chinese market. The Elantra 2 (Hill Descent Control (HDC), 1.6L) which was announced in April of 2008 was designed to meet the preferences of Chinese consumers with a somewhat expanded wheel base, a larger body and renewed body type. The price was set at 99,800 CNY which was significantly less than the same models of Japanese makers making it popular due to its high cost performance and shooting it up to No. 3 on the list of number of sedans sold in the Chinese market in 2009 and 2010. Compact models such as the Elantra series, i30, and Accent accounted for about 85% of Beijing Hyundai's compact automobile sales in 2009. Beijing Hyundai newly introduced the mid-sized SUV ix35 (2.0-2.4L) and compact Verna (1.4-1.6L) in 2010, a new Sonata model (2.0-2.4L) in 2011 and a new Elantra 3 (1.6-1.8L)<sup>11</sup> in 2012 to the Chinese market to provide a more diversified line of products all the while entrenching their brand name.

Beijing Hyundai procured 70% of its parts from the Beijing area and 30% from South Korea in 2006 (Yingshan, 2009). Over half of the parts procured in the Beijing area are from Korean makers and the rest are

<sup>&</sup>lt;sup>11</sup> The Elantra, Elantra 2, and Elantra 3 are written this way to represent the order they were introduced into the Chinese market.

from Chinese and other makers. There are many Korean secondary parts makers in addition to primary parts makers expanding into the Beijing area. Moreover, the rate of local parts procurement by Beijing Hyundai reached over 90% in 2010 (Tomiya, 2010). Their sales system was also strengthened with an expansion from 440 locations in 2008 to 500 locations in 2009 and 600 locations in 2010 (Oh, 2010). This sales network is spreading out to small and mid-sized cities along with rural towns in inland areas.

Meanwhile, Nissan was late in entering Chinese automobile production and established Dongfeng Nissan in June of 2003 much later than other Japanese makers as shown on Figure 3. Regardless of this late entry, Dongfeng Nissan showed rapid growth in the Chinese market with the number of units sold in China exceeding that of the number of units sold in Japan in only five and a half years. This growth rate is the fastest among Japanese makers. Dongfeng Nissan started with mainly the mid-sized models of Sunny, Bluebird, and Teana (2.0L or more, 200,000 CNY or more). Later, they put efforts into designing wider back seats and a more luxurious feeling in response to the changes of the Chinese market needs and introduced a number of compact cars such as the Tiida, Sylphy (1.6-2.0L, mainly 1.6L, 120,000-170,000 CNY), and Livina (1.6L, 80,000-100,000 CNY). This resulted in compact automobiles with a displacement of 1.6L or less accounting for over 60% of total sales in 2009 (Nakamura, 2010). In recent years, they released the New Sunny (1.5L, 80,000-110,000 CNY) in 2010, the New Tiida (1.6L) in 2011, the Venucia (1.6L) in 2012, the New Teana (2.0L) and New Livina (1.6L) in 2013, and the Venucia (1.2L, 40,000-50,000 CNY) in 2014 to diversify their product lineup while making this product lineup mainly consist of compact automobiles.

Dongfeng Nissan is also constructing a sales network in inland areas and opening around 300 locations in over 75% of all second and third tier cities. Moreover, they are actively increasing the amount of local Chinese parts procurement.

## Mid-sized Automobile Competition and Issues With Compact Automobiles for Honda and Toyota

Guangzhuo Honda was established in 1998 and made back its initial investment two years after start of production. Operating profits were also top in the Chinese industry from 2001 to 2008. Their success may have been due to the strategy of initially releasing the latest models of the mid-sized Accord (2.0-2.4L) which is known as the "face of Honda" and Odyssey (2.4L) into the Chinese market targeting users of public and company automobiles such as the government, companies and corporate entities along with the new rich group which had a high level of income (Figure 8). This strategy became a model for foreign automobile makers, especially Japanese automobile makers which may have had an impact on the later expansion of Toyota and Nissan Guangzhou. Toyota established Guangzhuo Toyota in 2004 and started production of the mid-sized Camry (2.0-2.4L) in 2005 targeting the wealthy class with considerable success. Guangzhuo Toyota introduced the SUV Highlander (2.7L and 3.5L) in 2009 which along with the Camry have been the top products for them up until now (Figure 9). Incidentally, Guangzhuo Honda also introduced the SUV Crosstour (2.4L and 3.5L) in 2010. During this time, mid-sized automobiles such as the Camry produced by Guangzhuo Toyota and the Accord produced by Guangzhuo Honda underwent fierce competition changing places in the rankings over and over again.

Honda and Toyota have promoted strategies focusing on mid-sized automobiles targeting mainly the wealthy class with the aim of large profits but strategies in the compact automobile market have not been very favorable. The Honda Fit (1.5L) and the Toyota Vitz (Chinese name: Yaris, 1.6L) which sold well in Japan are thought to be excessively expensive for hatchbacks in the Chinese market and the exterior design did not meet

the preferences of Chinese consumers so they did not sell well as expected.

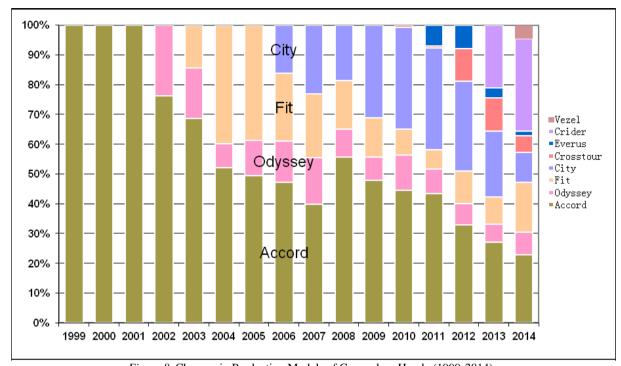


Figure 8. Changes in Production Models of Guangzhou Honda (1999-2014).

Source: made by Jin Chen based on the data of FOURIN Monthly Research Reports on Chinese Automotive Industry

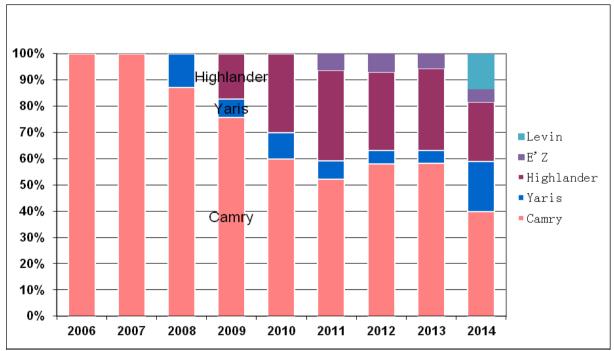


Figure 9. Changes in production models of Guangzhou Toyota (1999-2014).

Source: made by Jin Chen based on the data of FOURIN Monthly Research Reports on Chinese Automotive Industry.

The prices of compact automobiles such as the Toyota Corolla and the Honda Civic and City are higher than the same models of European, America, Korean, and Chinese makers. For example, the FAW Toyota Corolla which was introduced in 2007 was mainly produced with a displacement of 1.8L. However, with the policies promoting compact automobiles with displacement of 1.6L or less by the Chinese government in 2009, production of Corollas with 1.6L engines increased. Nevertheless, these still did not sell well at a price of 120,000-140,000 CNY (the similar BYD F3 sold at 60,000 CNY). In order to reverse these trends, in the same manner as Beijing Hyundai changed the Elantra model in April of 2008, FAW Toyota set the price of the new Corolla model with a displacement of 1.6L to the same price at the Hyundai Elantra 2 at 99,800 CNY in August of 2009. Still, this new model was not a complete model change like the Elantra and basically involved simplifying the interior so it wasn't regarded as highly in the market as the new Hyundai Elantra model (Elantra 2).

One important factor for Toyota and Honda not being able to lower prices even when changing to compact models is their low rates of local procurement of parts as stated earlier (see Table 2). The market for buying automobiles in China up until the mid 2000s was mainly the government, corporations, and the wealthy class. These consumers placed most importance on performance when buying automobiles and were not excessively sensitive to prices. However, prices became an extremely significant factor in addition to performance for the middle class which grew rapidly after the world financial crisis. Japanese automobile makers which had relied on Japanese parts makers to procure parts had to deal with the important issue of how to increase local procurement of parts and lower costs in order to respond to these changes. Naturally, expansion of local production from Japanese small and mid-sized makers of secondary and lower level parts in China will become a future issue.

In order to overcome this issue, Toyota put forth a 100% investment in November of 2010 and completed Toyota Motor Engineering and Manufacturing (China) Co., Ltd. (TMEC) in the southeastern economic development zone in Changshu City of the Jiangsu Province in the Yangtze Delta which has a lot of Chinese parts makers in November of 2013. TMEC is coordinating with the research and development center in Japan, investigating the automobile usage environment, customer needs, and local parts suppliers in China and will reflect the results in product plans. In comparison to the number of employees at around 50 in each the Tianjin and Guangzhuo development departments, the number of employees at TMEC was 320 at startup time in November of 2013 with an expected future increase aimed at around 1000 employees. Meanwhile, Honda is strengthening development functions locally and promoting further expansion of parts procurement in addition to increasing production capacity according to plan in order to further increase sales in China.

In addition, the opening ceremony for the industrial park Japanese Auto Parts Integration in China (JAPIC) where small and mid-sized Japanese automobile parts makers are planned to gather was held in July of 2012 in Danyang City of the Jiangsu Province. This industrial park convenes Japanese automobile parts makers which have advanced technology despite being small and mid-sized with the aim of taking on the demand in the Chinese automobile market which is growing at a remarkable rate. The industrial park created by Danyang City is located about one hour from Shanghai by train with the goal of 400 companies taking up occupancy at the end of 2015 when construction finishes. The features of this Japanese automobile parts industrial park include an integration of small and mid-sized makers of secondary and lower level parts regardless of the parts being from the same company.

Meanwhile, conventional Japanese companies have focused on the production of high end products which utilize their technology and knowledge targeting developed nations based on Japanese standards and put efforts into a research, development, production and sales system in order to realize these products. However, Japanese companies require a shift from management based on developed country standards to a new global

management in regards to gaining power in the Chinese market and changes in management environment in order to meet the needs of emerging country markets. Specifically, automobile makers are required to provide low cost compact automobiles which fulfill the new needs of the Chinese market while incorporating improved traffic safety features and a balanced interior. Therefore, it is necessary to establish a sales network including inland areas while further reducing costs and accelerating local product research and development, localization of parts and materials procurement as well as the rationalization of distribution.

In order to respond to these conditions, FAW Toyota released the New Vios (1.3-1.5L) in 2013 and Guangzhuo Toyota released the new Yaris (1.3-1.5L, 70,000-110,000 CNY) along with the Levin (1.6-1.8L, 110,000-160,000 CNY) in 2014. Meanwhile, Guangzhuo Honda released the Crider (1.8L, 120,000-150,000 CNY) in 2013 and Dongfeng Honda released the Ciimo (1.8L, 100,000-120,000 CNY) in 2012.

At the same time, Japanese companies are putting efforts into SUV production in light of the increasing sales of SUV and multi-purpose vehicles (MPV) in the Chinese market recently. The price range of the top 10 SUV models is around 200,000 CNY which is significantly more than that of passenger vehicles. Looking at the 2013 sales rankings, the only sedan in the top 10 is the Dongfeng Nissan's Bluebird Sylphy while there were four SUVs in the top 10 including the Dongfeng Honda CR-V at No. 3, the Dongfeng Nissan Qashqai at No. 5, the FAW Toyota RAV4 at No. 6, and the Guangzhuo Toyota Kluger (Highlander) at No. 9. In addition to this, FAW Toyota released the New RAV4 (SUV 2.0-2.5L) in 2013 and Guangzhuo Honda released the Vezel (SUV 1.5L & 1.8L) in 2014.

## Conclusion

According to traditional multinational corporative theory, competition advantage is expected to be effective if advantages like management resources are transformed from those for developed countries into those for overseas markets and there are less discussions focusing on the differences between market and material conditions reeled from economic differences of emerging countries. This paper analyzes the developing differences of domestic and overseas makers in the Chinese automobile market in recent years and the strategies of multinational corporations from the view point of emerging markets.

In order to adapt to the environmental changes in the Chinese automobile market, European and American makers like VW and GM have developed full model line-up strategies focusing on compact cars while utilizing the advantages of the annual production of their full model line-up and giving priority to local parts procurement.

Chinese local makers imitate small models of foreign makers and temporarily increase their production with low prices by local procurement of parts. However, their dominance disappears later due to a decrease of their product research and development, productivity and earning capacity.

Moreover, Korea's Hyundai has converted its car model strategy from mid-sized cars into compact cars in accordance with the changes in the Chinese market. Through successful product development adjustments to local needs, Hyundai has firmly entrenched its brand name.

For Honda and Toyota, the slow conversion from mid-sized cars to compact cars and the inability to decrease costs due to the slow development of local parts procurement are the causes of their delayed development in the Chinese market.

Therefore, Japanese makers are increasing their research and development of local product, local procurement of parts/materials and rationalization of parts/materials procurement by focusing on new

developing models like eco-friendly cars or SUVs in accordance with the trends of Chinese environmental regulations and market product diversification in recent years. They are making an effort in the Chinese market by the further reduction of costs and the establishment of a sales network which includes inland areas.

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