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The Rise of the Chinese Indigenous Brands: The Strategic Relationships between Local Governments and the Private Sector in the Automobile Industry (Regulation, Private Sector Authority and Market Building in Asia)

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The Rise of the Chinese Indigenous Brands: The Strategic Relationships between Local Governments and the Private Sector in the Automobile Industry (Regulation, Private Sector Authority and Market Building in Asia)

Katsuhiro Sasuga¹

ABSTRACT: The primary purpose of this study is to clarify the characteristics of market building in the Chinese automobile industry, specifically the segment referred to as the "indigenous brands". Chinese automobile industries have shown remarkable growth in the last decade, and China has emerged as the fastest growing automobile country, becoming the largest producer and market. China's continued economic growth and the rise in domestic demand have further stimulated many foreign and Chinese automobile companies to enter the potentially huge and growing market, and take advantage of beneficial production sites. The outcome for China's automobile industry has been remarkable; to remake a once backward auto industry into a stage of modern large-scale assembly and local supplier networks is commendable. As a result of increasing sophistication and product quality, the Chinese indigenous brand, Chery (independent entrepreneurial Chinese maker) had successfully sold 3miilion units to domestic and international markets by 2010.

The question of how such a self-reliant, or indigenous, model has gained a market is debatable. The automobile industry's policies have undoubtedly been the most critical factor in leading the market building effort, and the Chinese government has been able to attract foreign automakers to transfer massive amounts of investment and technologies to China. Intense economic globalisation has drastically transformed production and service activities in the automobile industry in recent decades. However, the central policy alone cannot explain the huge regional variations in the sector. The local governments have been the critical authorities to allocate resources and grant permissions to business sectors. Thus, the automobile industry provides a particularly illustrative case study of the processes of market building in China, as each of China's core projects takes the form of a joint venture (JV) with foreign automakers.

The tendency in analyses to concentrate on formal institutions and state-market dichotomous analyses does not, however, provide in-depth insights into how the Chinese automobile market is evolving. Closer examination at the production and sales levels reveal that, in addition to central governments, local (state, provincial, and city) governments have played an indispensable role in governance and institutional changes in order to support their own regions' move to a higher level of industrial development. This paper focuses on the factors that have built the Chinese automobile market and its industrial development process, and is based on observations of the development of "indigenous brands" through

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strategic relationships between local governments and private sectors, including foreign automakers at the subnational level. The rise of the Chinese automobile industries cannot be understood independently of the global shifts in the automobile industry—involving the production, distribution, and marketing of complete vehicles and components— and the strategic relationships at the subnational level can be seen as the most significant developments in the industrialising economy represented by China's automobile modernisation.

Keywords: automobile industrial policy, foreign investment, indigenous brands, production networks, local governments, competitiveness

The Chinese automobile market and indigenous brands

China had consistently recorded approximately a 10% annual growth rate of real GDP between 2000 and 2010. In automobile manufacturing, China has seen the fastest growth in production, which surpassed Germany in 2006, the United States (US) in 2008, and Japan in 2009. In 2010, China produced 18.26 million units (23.5% of the world total production). Against this, the figure for the US and Japan together, which accounted for more than 40% of world production in 1997, fell to 22.4% in 2010 (Ferrazzi and Goldstein, 2011:2).

The nature of the automobile market in China has strongly affected the pattern of industrial development. With a population of over 1.3 billion, China's domestic sales reached 18.06 million units in 2010, which were well beyond the total units of the US and Japan (11.58 million in the US and 4.95 million in Japan). From January to August 2011, automobile sales in China recorded a rise of 3.33% from a year earlier (CAAM, 2011). Thanks to the support of government policies, the increasing purchasing power of individuals, and the reduction of car prices due to competition, in particular since World Trade Organization (WTO) accession in 2001, Chinese automobile sales have grown at an average annual rate of 24.5% until 2010 (Zhou, 2011:23). There remain some unpredictable factors for the future market, such as the decline of the productive population in China due to its one-child policy, environmental restriction, overheating economies, etc. However, even though the car ownership rates in China had grown rapidly from 1.3% in 2000 to 4.7% in 2009, it was still very low and is far behind the advanced countries (US at 80% and Japan at 60%) (Fourin, 2010:88-9).

As vehicle sales matched the units of production, Chinese vehicle production has been almost completely targeted to sell in its domestic market. The main category of sales is passenger cars, which accounted for 76% of the total vehicle sales in 2010 (13.75 million). The coastal area has been the major automobile market, reflecting the regional differentiation of economic development. Some coastal cities have already achieved more than USD 10,000 (per capita GDP pa) such as Beijing (USD 10,378), Shanghai (USD 10,828), Guangzhou (USD 12,334) and Shenzhen(USD 13,564).¹ While these large cities (so called first-tier cities) represent 11.2% of the total population ratio, they account for more than 30% of the demand for passenger cars. On the other hand, the third-tier cities in China have 62.9% of the total population but their market share in passenger cars is 29.3% (Fourin, 2011:10-11).

Before 2000, owing to entry restrictions in the automobile industry, the main players were limited to a few state-owned enterprises (SOE) such as First Auto Works (FAW) and China National Automotive Industry Corporation (CNAIC), and the JVs with foreign automakers such as FAW-VW (FVW) and Shanghai VW (SVW), and these together represented a large share of the auto market. Since China's accession to the WTO, the deregulation in the automobile industries has allowed new entrants from both foreign and domestic automakers.

There is intensifying competition among both leading foreign automakers and local makers in China. According to the data of CAAM (China Association of Automobile Manufactures) in 2009, there were 258 brands of passenger cars in China and, of these, the number of Chinese brands was 145 (Fourin, 2010:7). One fact that stands out in 2010 sales figures for China is that three of the top 10 companies are independent entrepreneurial Chinese automakers- BYD (based in Shenzhen), Chery (based in Anhui) and Geely (based in Zhejiang), while the rest are JVs allied with European, American, Japanese, and Korean automobile manufactures. For foreign automakers, China has already become a very critical market. For example, in 2010, VW, GM, Hyundai, Honda, and Nissan's sales in China surpassed those in their home countries (Fourin, 2011). In the rapid growth of the domestic car market, foreign automakers have been successful and account for almost 70% of new car sales in China.

Considering the figures for the Chinese automobile industry, it is worth noting that the production units by JV automakers are often double counted in the Chinese figures. For example, the number of vehicles produced by SAIC (Shanghai Automotive Industrial Corporation), the leading automaker in China, was reported as 3.62 million in 2010. However, 63.3% of this production was undertaken by the JV with General Motors (GM) and 28.1% of the total was produced by those with VW (Marukawa, 2011). Thus, in the case of the largest Chinese automobile joint company, GM and VW are the actual central auto manufacturers whilst sharing the name of SAIC. In passenger cars actually, VW has had the top sales and, if the sales of commercial vehicles are added, GM has been the largest automaker in the Chinese market. GM, for example, sold 2.35 million vehicles in China while its figure for sales in the US was 2.21 million (Fourin, 2011). The double counted figures from the JVs cloud the real picture but do raise the question of what "indigenous brands" are in the Chinese automobile industry and how they have emerged.

		Units sold
		2010
Rank	Company	(thousand)
1	Shanghai General Motors	959.9
2	Shanghai Volkswagen	908.9
3	FAW-Volkswagen	837.5
4	Beijing Hyundai	583.2

5	Dongfeng Nissan	563.1
6	BYD	517.1
7	Chery	502.1
8	Geely	416.2
9	Changan Ford	406.4
10	FAW Toyota	386.4

Table 1. Top passenger-car companies in China by units sold Source: Compiled from *Ashu Chugoku Sangyo Deta* No.63, 2011.

In order to gain entry into China, foreign automobile makers are obliged to establish JVs with Chinese SOEs, but the proportion of ownership is restricted to less than 50%. In the 1980s, the Chinese leaders realised the importance of the automobile sector for the future growth of China but did not wish it to be controlled by foreign firms. On the other hand, this entry restriction has made it possible to allow the monopoly of SOEs in automobile production, whilst depending on foreign automakers. The joint relationship has become complex due to the restriction on foreign makers to have a maximum of two ventures in China. Then, for example, FAW has JVs with the world's leading foreign automakers, VW, GM, Toyota, and Mazda. This regulation has functioned to protect SOEs from severe domestic competition whilst simultaneously receiving great support from local governments.

Although foreign automakers continue to dominate the core functional and more sophisticated technology, local independent players such as BYD, Geely, and Chery have emerged as strong competitors. They are new entrants into automobile production, having started to produce vehicles only in the late 1990s, or in the beginning of the 2000s. These companies were not part of the automobile groups receiving central government support. However, they have sought self-reliance and self-improvement, and have finally developed their own "indigenous brands". Initially, they started to copy foreign models. as copying designs was not seen as morally wrong in China. However, owing to lack of technological and management know-how, the product quality was low and could sell only in small numbers. With an increasing demand and the government subsidy for small and low-cost cars, by 2010, accumulated sales of Chery brands had reached 3 million in China and abroad, and the company has become the leading exporter of passenger cars from China.

However, how the Chinese independent automakers developed these "indigenous brands" is a matter of debate (Chin, 2010: 183). The evolution of the production system to reduce costs has been critical. It can be explained as follows; the individual components that previously had been delivered to the final assembly line one by one were instead sub-assembled on a separate line and then delivered to the main assembly line, to be installed in the car body as modules (Lin, Zhou, Shi and Ma, 2009: 323). Such technologies were originally developed in the electronics and IT industry but have widely been used in the Chinese automobile industry, partly deriving from the pre-reform fragmented production sites. This product architecture in the Chinese automobile industry has two types, fully integrated or partly integrated (Lin, Zhou, Shi and Ma, 2009:

337), or the so-called "a quasi-open modular production" (Wang and Kimble, 2010), which composed of multiple parts to integrate into single components, leading to a decrease in the number of parts at the final assembly. This modular logic has greatly helped Chinese independent automakers to produce more quickly and at a much lower price than foreign counterparts.²

Chery, in reality, owes its production capability to the active procuring of auto parts from foreign suppliers such as Delphi, Federal-Mogul, GKN and TRW Automotive as well as Mitsubishi. Chery was a beneficiary of the Chinese automobile development that made it possible to acquire more modern local parts and components. Geely also used mixing and matching of components, the first model being based on a Japanese brand (Charade) which was produced by FWA-Xiali and which was a result of technology transfer from Toyota's affiliate. Geely procured around 60% of components directly from FAW Xiali, with copied components accounting for another 10% (Wang and Kimble, 2010). Foreign makers also contributed to the development of local supplier networks. For example, when Mitsubishi had not been able to get approval for complete vehicle production in China in the 1990s, it had instead produced engines to supply at least 21 local independent automakers in China (Wang and Kimble, 2010). With the development of such quasi-open architecture in production, the Chinese companies were able to build up car production capacity quickly by utilising local supplier networks, including foreign key components.

State intervention and indigenous brands

It is clearly noted that the central governments in East Asia have played a critical role in establishing many export processing zones (EPZs) to build industrial clusters where manufacturers have been concentrated geographically. Theoretically, the global commodity chains approach highlights the role of producer-driven and buyer-driven chains increasing an overlapping and, at times, conflicting regional division of labour (Gereffi, 1996). In East Asia, economic development through export-led industrialisation in Japan, the NIEs, the ASEAN, and China is seen as a part of the broader processes of globalisation. Borrus et al (2000) points out the significance of cross-border production networks as an engine of industrial integration in the Asia-Pacific region. In particular, since the Asian financial crisis in 1997, competitive success has become more dependent on the dynamics and flexibility of cross-border production networks, especially in the case of the electronics industry. Such networks are linked with locally developed technological capabilities. This highlights the spatial changes through the development of industrial agglomeration, which is seen as one of the key characteristics in economic development in East Asia.

In China, specific policy measures including the decentralisation of economic management, regional development policies, establishment of special economic zones (SEZs), and open cities were introduced after the Open Door Policy in 1979. Since then, the Chinese government has intervened heavily in the processes of automobile development through direct and indirect policy instruments and regulatory measures

(Harwit, 1995, Thun, 2006, Gallagher 2006, Chin 2010). During the period of the "centrally planned economy" in China, production, distribution, and consumption of automobiles was under the control of the central government. The fragmentation of production sites and the small scale of production failed to create efficiency of production. Furthermore, there was no competition or market, and thus China's technological level was very low until the introduction of economic reform. Chinese leaders recognised the backwardness of the dispersed production and low quality, and after the introduction of economic reform in the late 1970s, China started to pursue the acquisition of advanced technology from foreign automakers by offering the exchange of the potential Chinese market for foreign technology, and the first JV between VW and SAIC was finally established in 1984 after several years negotiation.

The central government carefully selected the industry that was able to lead the country's economic development. The 7th Five-Year Plan (1986-1990) announced the automobile industry as 'a pillar industry'. The central government then adopted an import substituting strategy based on regulating the import of complete vehicles and requiring foreign investment to form JVs with Chinese state firms. This plan emphasised the development of passenger cars as a core of the auto industry, and it aimed to upgrade technological capabilities through collaboration with foreign partners. The shift to introducing inward automobile FDI was clearly a critical turning point for the Chinese automobile industry.

However, the acquisition of technology did not mean only the arrival of foreign auto firms. The manufacture of automobiles is a very complex process requiring a great number of parts and sophisticated assembly with an achievement of safety and environment standards. The foreign automakers do not just assemble parts, but possess the capability of designing and producing engines and platforms using high technology. Absorbing technology transfer inevitably depends upon the capability of local recipients, including local components makers. The Chinese government then required the foreign firms to achieve agreed local content rates to support the technological grade up of local suppliers.

The central government proposed the "Big Three, Little Three" scheme in 1988. As a "big three", FVW, Dongfeng Peugeot Citroën Automobile, and SVW were selected, directly under the control of the central government. As the "little three" Beijing Jeep, Guangzhou Peugeot, and Tianjin Automotive Industrial Corp-Daihatsu were designated under the control of local governments. With regard to the industrial locations, Beijing, Tianjin, and Guangzhou were selected as major automobile production sites with political approval by the central government. This reflected the shadow of the central planning system but local governments successfully supported the selected firms to exploit the Chinese automobile market.

The central government has actively intervened by implementing various policy tools to support automobile industries. The introduction of the *1994 Automotive Industrial Policy* (1994 AIP) aimed to transform the industry into a modern one and make it the engine of growth for the entire economy. It showed the will of the Chinese authorities to pursue "national indigenous brands" as a long-term goal. Thus, new foreign

auto ventures had to include a localisation plan from the beginning, such that they would start automobile production with more than 40% local content. It set out to create economies of scale by consolidating the fragmented automobile industry, regulation of domestic content, deregulation of inward investment, and regulation of imports. It sought to protect the domestic automobile market with high trade tariffs and tight entry controls. For example, as of 1996, the import tax rates on passenger cars were between 100% and 220% and on commercial vehicles it was between 15% and 230%, which effectively prevented competition from imports of foreign automakers. In the 10th Five-Year Plan (2001-2005), which commenced at the time of China's entry into the WTO in 2001, the central government announced a reduction of tariffs, relaxation of import restrictions, and deregulation of types and models of car products that could be produced in China. The import tax rate was then gradually reduced, reaching 25% on passenger cars by 2006.

In 2004, the central government announced the *New Automobile Industrial Development Policy*, which emphasised the importance of developing "indigenous brands", with intellectual property rights (IPR) held by Chinese companies. It opened up the distribution and retail sectors, and made it possible for foreign automakers to build a vertically integrated distribution system in China. In 2006, the central government announced the 11th Five-Year Plan (2006-2011), which aimed to achieve more than 50% of market share by indigenous production. The central government, however, has also taken steps to restructure the automobile industry to encourage the creation of larger automobile groups beyond the provincial borders. Furthermore, the government shifted the emphasis from the domestic market to export and guided the foreign companies to develop "indigenous brands" in China.

In 2009, the centre announced guidelines for the rearrangement and integration of the Chinese automobile industry in order to promote a strong national automotive sector. This guideline clearly shows the center's interest in restructuring the large SOEs, the "Four Big" (First Auto Works, Shanghai, Dongfeng, and Changan) and "Four Little" (Beijing, Guangzhou, Chery in Anhui, and Sinotruk in Shandong) as core companies. Chery, as an innovative independent player, has succeeded in gaining the attention of leaders of China such as Hu Jintao (President) and Wen Jiabao (Premier), who have visited the firm. It also announced that the local governments should purchase "indigenous brands" more than 50% for the public procurement.³

In the case of China, the governments have decisive authority in granting permissions. According to Chin (2010: 45-7), the Chinese policy model has similarities with the Japanese statist model in giving less causal primacy to mass preferences on priority issues than the Anglo-American or the West European models. China is still in the transitional process toward a market economy and strong leadership is often required. The highly centralised authority is expected to adjust the vested interests, the establishment of infrastructures, and enhancement of the market. The automobile industrial policies, however, have often vacillated, giving priority to political strategy rather than economic considerations. Such economic decisions affected by political concerns are likely to bring about an inefficient use of resources.

Local governments and indigenous brands

As a result of the expansion of global production and service activities, the role of local governments is becoming increasingly important. Local governments have more responsibility for direct linkages with external economic actors. In globalisation, the traditional distinction between domestic and foreign policy is blurred at a subnational level. This is also related to domestic transformation in political and economic relationships between the central and local governments. Since economic reform, China has promoted the devolution of economic management authority to the local governments. China is a highly decentralised country in terms of fiscal policies, leading to an increase in the autonomous economic power of local governments who are the key actors in implementing the policy at a local level. Through devolution, the local governments have increasingly gained regulatory authority over taxation, planning, and other consents. The central government's policy targets are often manifested in different management decisions undertaken by the local governments. The latter cooperate with the central policy, but at the same time they have their own incentives to support local companies to achieve local development and revenue.

There are two good examples to be studied, namely Shanghai and Guangzhou, where the automobile industry has developed. At the initial stage in the 1980s, VW entered China and established two JVs, FAW-VW and SAIC-VW. It aimed to expand business in the potentially growing market and was actively engaged in China's initial development by bringing radical technological changes. In terms of the JV agreement, VW was not obligated to build the local supplier networks, but the central authorities pressed VW to contribute to the localisation of modern parts supply, and to increase the local content rate as required by the Chinese authorities (Chin, 2010: 79-80). In the case of the JV between SAIC-VW, called Shanghai VW, Chinese local parts companies also played a key role in building up the local suppliers, and the bureaucratic apparatus of the Shanghai municipal government provided coordination and institutional support (Thun, 2006). For example, the Shanghai municipal government formed the Santana Localization Small Group under the leadership of the Shanghai Economic Commission, and the established the Automobile Industry Leading Small Group directly under the mayor's office. The Commission was composed of top local government officials, the President of SAIC, and the General Manager of SVW. Under such conditions, VW enjoyed full support from both the central and municipal governments offering tax advantages, preferential treatment in foreign currency, and the supply of materials for production.

VW contributed to building the foundation of modern local supply networks that resulted in a steady rise in local content rates. In fact, as a result of this close cooperation, Santana's local content ratio increased from 2.7% in 1987 to 92.9% in 1997. In addition, by 1997, almost 90% by value of that local content was produced within the municipality of Shanghai (Thun, 2006: 105). Furthermore, with the strong support of the Mayor Zhu Rongji, who supported the project from its start and later became the premier, the Shanghai city taxi market was reserved for SVW with a request to purchase SVW's

Santana model (Sun, Mellahi and Thun, 2010). VW's share of the auto market in China exceeded 50% by 1996. Shanghai VW has been a market leader and its remarkable success is a result of various factors including favourable treatment, such as purchase, tax, currency, materials, communication, networks with local firms, and so on, leading to close linkages between local suppliers and final assemblers through production networks.

The recent development of Guangzhou as a new automobile competitor for Shanghai demonstrates the importance of local governments. Traditionally, automobile industry agglomeration in China has been focused in the cities of Shanghai and Tianjin, as well as in Hubei Province, but none existed in the southern part of China until the late 1990s. In the 1980s, at almost the same time as the start of the Shanghai VW operation, the JV Guangzhou Peugeot Automobile Corporation was established. The French automaker's share was 22%, which meant that it did not have enough authority to control. The municipal government did not play a large role to channel investment into local supply firms in order to increase local content rates, and Peugeot finally decided to withdraw completely in 1997. In the same year, the Guangdong provincial government finally made the decision that the automobile sector was no longer a target industry for government support. Thun (2006) asserts that in comparison with the automotive industry in the other areas in China, Guangzhou did not know how to build an organisational structure that was conducive to developing the manufacturing capability of local supply networks.

After Peugeot's withdrawal, Honda came as a new pioneer of the automobile industry in Guangzhou. While the Guangdong and Guangzhou governments had once given up the development of an automobile industry, they now obtained a second opportunity. The JV between Guangzhou Automobile Group and Honda, called Guangzhou Honda started production in 1998. In order not to repeat past mistakes, the Guangzhou municipal government repeatedly announced its strong support for Honda. The Guangzhou government then made a great effort to work with Honda by investing heavily in roads, railways, electrical power, and other infrastructures. For example, the Guangzhou government constructed a railway system that enabled Honda to ship its completed vehicles by rail. Honda, in turn, required Japanese parts suppliers to move into Guangzhou in order to maintain quality and increase the local content rates. With the support of the Guangzhou municipal government, from 2001 to 2005 most of Honda's first-, second-, and third-tier suppliers moved into Guangzhou. As a result, more than 160 components suppliers located around Guangzhou Honda now provide the parts for production, including the first transmission manufacturing base in China (Zhao, 2009).

Guangzhou's industrial policies were focused to aggressively develop automobile industrial agglomeration including (1) the establishment and management of six industrial zones in Guangzhou and surrounding cities; (2) support for the Guangzhou Automobile Group, established in 2000 through a merger of the Guangzhou Automobile Group and the Guangzhou Motors Group, which operates 14 JVs including Guangzhou Honda, Guangzhou Toyota, and Guangzhou Automobile Group Component; and (3) the active promotion of JVs between SOEs and foreign companies by giving foreign investors preferential tax treatment and efficient one-stop service at government offices (Kuchiki, 2007: 23-7). Honda was the first foreign automaker to be allowed to establish production sites exclusively for export with 65% ownership and this has made it the leading foreign automobile company in car export from China.

Thus, local governments are not just the regulatory authority, but they are involved directly in local businesses as participating partners for foreign firms. The central government considers the entire national economy, whereas local governments only focus on their own jurisdiction. In reality, as of 2009, 27 provinces, autonomous regions, and cities directly under the central government undertake and encourage the production of complete vehicles. It is reported that 146 Chinese local makers producing complete vehicles still existed in 2009 (Marukawa, 2011:3). This is likely to cause the inefficient use of resources owing to conflicts between different goals of the government. The political centralisation over personnel management within the party-state system encourages the local technocratic cadres to pursue the development of the automobile industry, as the power to appoint many local authority personnel is concentrated in upper levels of government. If local development is achieved, it is likely to contribute to leaders' promotions.

In the automobile industries, commitment of government is important, as the intervention of these governments is accepted as normalcy. As seen in the cases of Shanghai VW and Guangzhou Honda, the close relationship between the automobile industry and the government made it possible to promote industrial agglomeration on a large scale. For foreign firms, understanding political embeddedness at the institutional level is crucial to a firm's strategy and performance (Sun, Mellahi and Thun: 2010). Supportive measures by local governments can be seen in their purchasing cars from the local automakers. This is thought to have created a quasi-public market under local protectionism in China. However, such actions taken by local governments has raised competition among regions and subsequently contributed to China's economic growth, though being accompanied by hugely uneven regional development. Structural problems in the Chinese automobile industry often make it difficult to use the overall national resources efficiently. The average production units per company is estimated at only about 80,000, and fragmented production locations inevitably lead to low efficiency in which the technological standard has likely to have lagged (Fourin 2010). Most local automakers have not yet fully acquired the core technologies, such as engine and electronics control systems. From the perspective of technological competence, Chinese manufacturers have not been able to enter the global supply chains without the technological co-operation with foreign automakers.

Market building and indigenous brands

The establishment of JVs has not automatically transferred foreign technologies to China. The firms' competitiveness derives from the smooth transactions between the automobile makers and parts and material suppliers as well as service sectors (Fujiwara, 2007:4). Location strategies of the foreign automobile assemblers have inevitably affected the consolidation of the parts and components suppliers, as adequate local supply chains are indispensable to the firms' resourcing capabilities.

For foreign firms, in the internationalisation processes, their activities are inevitably engaged in politics, cultural practices, and social interactions. Thus, political regimes at national and subnational levels directly, or indirectly, influence the firms' performance through regulatory power. These movements increasingly promote interconnectedness across state borders and are likely to have created industrial agglomeration in specific areas. The market building now supported by the government regulations has various potential advantages including rationalising investment in infrastructure, financial support, supply of skilled labour, and engineering skills, and encouraging suitable labour conditions, further leading to an influx of related firms including second-tier and third-tier firms.

Despite the growth of the Chinese automobile industry, China still lacks research and development (R&D) capabilities. We have not yet seen a global Chinese automaker with "indigenous brands" based on independent innovation. SAIC, the largest domestic automaker, has cooperated with GM to develop indigenous auto design and engineering capacity, especially through the Pan-Asia Technical Automotive Center (PATAC), established in 1997. However, most of PATAC's work has been concentrated on Shanghai GM and, as a result, SAIC has not yet produced any domestically self-developed brand. Their "indigenous brands" are still taken from the old Rover design. The domestic industry has thus continued to rely on foreign manufacturers, including the supply of parts and components. "Indigenous brands" by the independent automakers have also relied on foreign technology. Thus, the strategy of the government to encourage technology transfer from leading foreign automakers has not achieved its goal. Foreign investment did not necessarily improve the capabilities of local manufacturers. There has been public criticism of the technological lack of SOEs in that they enjoyed huge profits only from the joint projects. A former head of FAW stated that the parent SOE was short-sighted and the JV structure led the SOE to ignore indigenous national capacity building and instead sought easy profits (Chin, 2010:209). According to Li and Xie (2010), there is a big gap in R&D capabilities between Chinese automobile companies and JVs, with the latter being stronger; and among Chinese automakers, the independent automakers are better than traditional big automotive SOEs.

The foreign automakers have also tried to produce "indigenous brands" in accordance with the state industrial policy. In 2011, Guangzhou-Honda started to sell its first "indigenous brands" by a JV, called "Linan S1", which was based on the Honda City small car (Wall Street Journal, 15 September 2011). If the foreign automakers have undertaken R&D in China, these cars are regarded as China's "indigenous brands" in so far as the JV owns the IPR. Thus, in China, "indigenous brands" are now produced by SOEs, JVs, and independent automakers. This trend might help to upgrade the technologies of local suppliers. For example, in the case of Dongfeng's, (JV with Nissan) "indigenous brands" called "Vanucia", the local parts makers have been engaged in the total process (Mainichi Chugoku Keizai News, 24 June 2011).

Furthermore, the development of indigenous brands has recently required more advanced electrical technology for eco-friendly vehicles. Because of the increased pressures to reduce emissions and fuel consumption, the government began to force automakers to introduce eco-friendly innovation such as the hybrid electric vehicle (HEV), electric vehicle (EV) and fuel cell electric vehicle (FCEV). The 12th Five-Year Plan (2011-2015) clearly announced the promotion of efficient products and of innovation in the automobile industry. In 2010, the government started to give a subsidy of 3000 Yuan to purchase models such as the efficient vehicles, HEV, PHEV, EV, and FCEV. For the local governments, energy-efficient models can gain more incentives from the central government, and they added further subsidy to support their local automakers. However, hasty attempts might often create a false product that violates IPR. The company BYD, which originally started as a battery maker, has the ability to produce electric and hybrid cars at a lower cost than foreign makers, but its car design "F0" is seen as almost a copy of Toyota's Aygo (Wall Street Journal, 15 September 2011). The awareness that they were violating IPR was lacking in the Chinese automobile industry and remained a problem even in the latter half of the 2000s.

Chinese "indigenous brands" have cultivated mainly low-end domestic and overseas underdeveloped markets. In the domestic automobile market, the second and third-tier cities and inland area are to be the next target for further growth. In terms of the overseas market, in 2010, China exported 544,900 vehicles, which accounted for only 3% of its total domestic production. Compared with figures for domestic sales and production, China's exports and imports are still relatively small, but the scale of exports of vehicles from China has grown rapidly since 2005. The majority of exported vehicles are light trucks and commercial vehicles, and the destinations are mainly developing countries in Asia, the Middle East, Africa, and Russia. The Chinese automobile exports target low cost vehicles at emerging economies where the automobile industry has not yet matured. This shows that the competitiveness of the Chinese automobile industry is not at a high level. The government encourages vehicle exports from China, and 44 companies were selected as "national vehicle export base enterprises" with each of them being given various support mechanisms. Among them, Chery, Changan, and FAW have played a major role in the expansion of China's exports. Chery has adopted a "going out" strategy and has been the top Chinese exporter shipping to more than 60 countries. It had already established 9 overseas assembly plants by 2009 (Fourin, 2010). Among foreign automakers, some like Honda, have begun to pursue opportunities to manufacture automobiles in China aimed specifically for export. Shanghai-GM started to export its small cars in 2010 and today almost 10% of vehicle exports from China are carried out by the foreign automobile makers. On the other hand, China's imports have also grown rapidly due to the strong domestic demand. From 42,703 units in 2000, it increased to 813,600 in 2010. These vehicles were mostly higher-quality passenger cars like SUVs and sedan from Japan, Germany, South Korea, and the US, and reflected a growing high-end market in China.

Conclusion

The paper examines the processes of market building in the Chinese automobile industry focusing on "indigenous brands". The nature of the Chinese automobile market strongly affects the pattern of industrial development and market building. The major automobile market has been the coastal area, thereby reflecting the regional pattern of China's economic development. The domestic market has grown to a huge size, whilst remaining an immature and low-end market, especially in the inland areas. Since the first half of the 2000s, the Chinese indigenous brands have grown by successfully utilising assembling and processing technologies of the products with support from the industrial policy and expanding production networks including foreign makers. The competitiveness of such indigenous brands is mainly owed to their low-cost production, and it is natural for them to have targeted the low-end domestic and overseas markets.

First, the role of the government as a regulator has been most crucial for market building especially in technological transfers from foreign automakers through economic deregulation coupled with the regulation of foreign investment in the automobile industry. The central government has pursued building internationally competitive SOEs, and carefully regulating and controlling foreign dominance of the market. It realises the problems of the industry and sets the framework for the future along with incentives. Now, the alternative fuel-efficient vehicle is becoming more important for the automobile industry. Other macroeconomic measures such as the construction of roads and ports, and the provision of energy supplies, and various favorable trading and fiscal treatments have also greatly facilitated the automobile market. Thus, the central government has been able to respond to the trend of global expansion of production networks by setting up frameworks and regulating the direction of the industry.

Secondly, the local governments have been direct stakeholders utilising foreign investment to leverage regional industrial development. The central policy alone cannot explain the pattern of the automobile market's development of the "indigenous brand". Through the decentralisation of economic management, local governments have played vital roles as mediators to create local institutional environments through industrial policies and, in key regulations, through quasi-governmental organisations. They have often created a public automobile market by dominant purchase from their local companies. So far, the pattern of market building clearly associates with the pattern of economic development. The local governments in the less developed areas of China are becoming more active in pursuing automobile industrial development in their own territories.

Thirdly, the foreign automakers have played a vital role in providing advanced technology and supplier networks. At the initial stage, VW and GM contributed to create the foundation of local supplier networks which became opportunities for local firms to upgrade technologies through the formation of partnerships with foreign firms in production and sales, resulting in an expansion in the supply of parts. Production networks within China are, however, unevenly developed reflecting the pattern of industrial development, but they have become increasingly interconnected and

interdependent across the state borders. The world's leading companies have pursued their own strategies focusing on China's domestic market, and in particular VW and GM have successfully cultivated the Chinese automobile market. Some foreign automakers have already begun to use the competitiveness of industrial agglomerations in China as hubs to supply products to not only the growing domestic markets but also to the international markets beyond China. For foreign makers, the direction of industrial policy at both national and subnational levels, and institutional environment, has inevitably affected their business strategies, but the local policies have varied between the regions. Considering the industrial policies at both the central and local levels is essential for understanding the pattern of market building in China.

Fourthly, a few local Chinese independent automakers have been able to utilise the modern and sophisticated parts and components in China, available as a result of the two decades of development of local supplier networks including foreign component makers. Despite the lack of technological comprehensiveness of the independent automakers, the sharp growth of the market and the expansion of quasi-open production activities in China have made it possible for new local automakers to cultivate a low-end market in China and other developing countries. With a continued growth to second- or third-tier cities in China, they will find more demand for low-end products. Yet, their dependence on policy support and foreign technology might constrain their growth. In particular, the shift towards innovative technology such as EVs will impose more pressures on independent makers if their capability is limited to low-cost production.

Finally, the open-quasi architecture and complex outsourcing networks emerging in the supplier networks has increasingly made it more difficult to identify Chinese "indigenous brands", as clearly they can no longer be distinguished from foreign technologies. The competitiveness of the "indigenous brands" had been strengthened through the development of innovative production networks. However, aside of the national aim for domestically self-reliant development, the "indigenous brands" market has been, and will be, developed by not only the SOEs and independent Chinese makers but also foreign JVs. Although the market building for "indigenous brands" is so far limited to domestic low-end and underdeveloped overseas markets, the entry of foreign and local competitors into "indigenous brands" will find more customers in the secondand third-tier cities in China and overseas developing markets. Advanced eco-friendly technologies have become the key to survival for future "indigenous brands", but this again is heavily dependent on the support of foreign automakers.

The pattern of market building shows the existing strategic considerations among participant actors at subnational levels, which have transformed government-business relations through semi-governmental institutions. The processes of market building of "indigenous brand" are not unitary at the subnational level. This suggests that as the automobile industry will continue to be global and the production system will evolve, such "indigenous brands" might be seen as preliminary models towards more globally collaborative products that make the meaning of nationally identifiable brands such as "made in" or "made by" China less significant.

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² According to Wang, and Kimble (2010), the quasi open architecture represent around 30% of total production in China.

¹ The figures are taken from 21 Seiki Chugoku Soken (2011).

³ Shinhua News (21 February 2011).