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Balancing Development and State in the "Developmental State": The Case of China’s Auto Industry
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Japan’s and Korea’s auto industries both, in a short period of time, quickly caught up with the advanced world level. Both of their governments attached great importance [to development of their auto industries].... China’s government should learn from the experiences and lessons of other countries.

China’s Ministry of Science and Technology
2009

Introduction

In the late-1980s into the early-1990s, it became fashionable to refer to a number of East Asian countries as “miracle” economies due to sustained bursts of rapid economic growth each had enjoyed during the second half of the twentieth century. Japan was, of course, the pioneer East Asian modernizer with robust post-war growth lasting into the 1970s. Following on Japan’s tail were the four “little dragons,” a collective reference to South Korea, Taiwan, Hong Kong and Singapore, and eventually, the big dragon itself, China. There were also numerous attempts to classify these states and to distill the common essence of their successful development. One of the more prominent was Chalmers Johnson’s “developmental state” model as first described in his seminal 1982 book, *MITI and the Japanese Miracle*.

This was followed by similar efforts by Alice Amsden, Meredith Woo-Cumings, Robert Wade and Peter Evans, among others. [[1](http://www.jpri.org/publications/occasionalpapers/op43.html#notes)] While none of these studies claimed that all of the East Asian states followed precisely the same path, they nevertheless seemed to agree that there was something uniquely (at least so far) East Asian about each of these countries’ development paths.

The peak of the “miracle” talk was probably the publication in 1993 of the World Bank report *The East Asian Miracle*. [[2](http://www.jpri.org/publications/occasionalpapers/op43.html#notes)] By the following year, economist and eventual Nobel laureate, Paul Krugman began to throw cold water on the notion that the growth being experienced was either a miracle or state-led. Instead he argued it was to be expected of countries that suddenly decided to open their economies and more efficiently deploy idle resources. [[3](http://www.jpri.org/publications/occasionalpapers/op43.html#notes)]

It was both the similarities among these East Asian developers, as well as their differences, that led me to include in my recent book a chapter comparing the respective development paths of the auto industries of China, Japan, and Korea. I thought perhaps a comparison of this key industrial sector, auto manufacturing, might shed light on whether China’s auto sector could eventually achieve global success similar to Japan’s and Korea’s. The key question is whether it is China’s inclusion as a “developmental state” or its more unique classification among “state capitalist” economies that will affect its eventual future path among world economies.

The short answer is that so far it is the latter—China’s state capitalism—that has exerted the most influence over China’s industrial development. While China certainly maintains many similar characteristics of its “developmental state” neighbors, one key factor, state ownership of the largest and most important industrial enterprises, sets China apart and explains why China’s auto sector has not developed as successfully as have Japan’s and Korea’s. However, the answer is not as simple as mere state ownership; it is in *how* state ownership (or the lack thereof) has affected all other decisions made in the ways these three respective auto industries were allowed to develop.

Before comparing these three countries, it is important to recognize that each launched its respective auto industry at a different time. Japan’s auto industry took off around 1950; Korea’s, around 1962; and China’s, around 1984. Prior to each of these dates, auto production in these countries was limited to commercial vehicles and only insignificant numbers of passenger vehicles. Though the timing of auto development in each of these economies did not occur simultaneously, their frequent comparison as East Asian late developers nonetheless raises the question of how each of these countries managed the development of its auto sector.

While all three governments experienced resistance in their attempts to shape the structures of their respective auto industries, the key difference lay in the source of that resistance. In Japan and Korea, the greatest resistance came from the private sector, but in China the greatest resistance has come from local governments. Though all three countries initially acquired technology from the foreign multinational automakers, Japan’s and Korea’s restrictions of foreign brands in their markets allowed their local brands to blossom. On the other hand, the continued dominance of China's auto market by foreign brands has made it difficult for Chinese brands to grow. In 2011, foreign brands collectively occupied 71 percent of China’s domestic market for passenger cars.

The following sections compare important aspects of the development of these three countries’ auto industries: ownership, key institutions, technology acquisition, foreign involvement, industry support, and industry structure. In this article I will compare not the current arrangements in these three countries but their respective development periods.

Ownership

As China’s reforms began in the 1980s, all existing automobile producers were state-owned, but over time a few nominally private automakers were still able to work their way into the top 20, and eventually, the top 10 (see Table 1). This was thanks in large part to determined entrepreneurs who were supported by their local governments in various ways. While the central government has only recently begun to appreciate the role of the private automakers, even approving loans for some of the larger private players, the backbone of China’s auto industry remains the larger state-owned enterprises along with their foreign joint venture (JV) partners. (Greely and BYD, both privately-owned automakers have received loans from state-owned banks in recent years. See Anderson, Chapter 5.)

Table 1 – Top Chinese Auto Manufacturing Groups, 2011 \*\*

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| --- | --- | --- | --- |
| Company | Ownership | Vehicle Sales 2011 (thousands) | Market Share |
| 1. Shanghai Auto (SAIC) | LSOE | 4,010 | 21.7% |
| 2. Dongfeng | CSOE | 3,060 | 16.5% |
| 3. First Auto (FAW) | CSOE | 2,601 | 14.1% |
| 4.Chang'an | CSOE | 2,009 | 10.9% |
| 5. Beijing Auto (BAIC) | LSOE | 1,542 | 8.3% |
| 6. Guangzhou Auto (GAIG) | LSOE | 740 | 4.0% |
| 7. Chery | LSOE | 643 | 3.5% |
| 8. Brilliance | LSOE | 567 | 3.1% |
| 9. Jianghuai (JAC) | LSOE | 495 | 2.7% |
| 10. Great Wall | Private | 487 | 2.6% |
| 11. Geely | Private | 473 | 2.6% |
| 12. BYD | Private | 449 | 2.4% |

LSOE = Local State-owned Enterprise
CSOE = Central State-owned Enterprise

\*\* Sources: Automakers, China Association of Automobile Manufacturers

In the early, pre-war days of Japan’s auto industry (the 1930s), the government first tried to create a national automaker called Isuzu, but this effort was a failure. The state then threw its support behind the efforts of two private firms, Toyota and Nissan, to build trucks for the domestic market. From this point forward, production of vehicles in Japan would remain in private hands, although the state would exert significant influence on the development of the industry.

In the post-War period, the American military administration that oversaw the transition to a civilian government in Japan (known as GHQ or “General Headquarters”) broke up the family-dominated *zaibatsu* conglomerates of which Toyota and Nissan were part. As the Cold War began to take shape, however, the Americans reversed their policy and began to support a rapid re-industrialization of Japan. Some of the *zaibatsu* re-established themselves as *keiretsu* industrial groups, each grouped around a large commercial bank. Nissan, as part of the Fuyo *keiretsu*, and Toyota, as part of the Mitsui *keiretsu*, both prospered in the early 1950s as the American military placed orders for vehicles to support the Korean War (1950-1953).

Korea’s initial foray into automobiles was similar to that of Japan. In the 1950s Korea’s economy was essentially under American control, but that control was gradually ceded back to the Korean government during the decade. In 1961 a military coup installed General Park Chung Hee as the leader of Korea, and Park (father of current Korean President, Park Geun-Hye) embarked on a major program of industrialization. In 1962 the government provided seed capital to build a vehicle assembly plant that assembled CKD (complete knock-down) kits imported from Nissan of Japan. Within three years, however, the state transferred ownership of the plant to private hands. Similar to Japan, the automakers that would subsequently be formed in Korea would remain in private hands, but the state would take a vital role in development of the industry over the next several decades.

Also similar to Japan, Korea’s automakers were part of industrial conglomerates, in this case known as *chaebol*. But in a major difference from Japan’s *keiretsu*, the *chaebol* were centered around general trading firms instead of banks because the banks in Korea remained state-owned. Since the chaebol were highly leveraged and remained heavily dependent on bank loans, this ensured that, although privately owned, they would never be completely free from influence of the state.

The key point about ownership is that, while China’s auto industry has always been state-dominated, the auto industries of Japan and Korea, after brief early experiments with state ownership, have always been privately held.

Key Institutions

The key institutions responsible for China’s auto industry have shifted over the years. For much of the 1980s and 1990s, China’s central government was both owner and regulator of auto firms. China reestablished its China National Automotive Industrial Corporation (CNAIC) in 1982, initially as the nominal owner of most of the existing auto factories. [[4](http://www.jpri.org/publications/occasionalpapers/op43.html#notes)] As local governments began to establish their own auto firms, the central government only exercised regulatory oversight. Several central government ministries, including the Ministry of Defense and the Ministry of Machine Building, were also owners of auto firms. By the 2000s, the ministries were required to divest themselves of businesses, and the auto firms owned by the central government were consolidated under the State-owned Assets Supervision and Administration Commission (SASAC).

In the early 1990s, CNAIC was converted into an association and its former regulatory oversight was housed within China’s economic planning body, the State Planning Commission. This body would go through several name changes throughout the 1990s, eventually becoming the National Development and Reform Commission (NDRC) that exists today. The regulatory responsibility over the auto industry remained within the Auto Industry Department of the NDRC until 2008 when the Ministry of Industry and Information Technology (MIIT) took over the NDRC’s Auto Industry Department.

I found it interesting that most of my interviewees in China answered either “NDRC” or “MIIT,” (but usually not both) when I asked them which central government organization is responsible for regulating the auto industry. When I pressed them further, asking why they did not name the other organization, the answer generally came down to something like this: “NDRC is responsible for macro policy, and MIIT is responsible for micro policy.” When I pressed even further, the majority of my interviewees would allow that the NDRC was *dagai* (probably) the ultimate authority over the auto industry.

The analysis of policy and case studies contained in my book support this conclusion (Chapters 3-6). MIIT manages the details, but, as primary enforcer of China’s five-year economic plans, the NDRC exercises a veto over nearly every decision that affects industry in China. Other ministries, of course, oversee various other details. For example, the Ministry of Commerce makes decisions regarding foreign investment in China by multinational automakers, the Ministry of Environmental Protection regulates vehicle emissions, and the Ministry of Science and Technology regulates the introduction of new energy and vehicle technology. But, in the end, it is NDRC’s responsibility to ensure that the auto industry’s actions fit within China’s overall five-year plans. Accordingly, all policy made by these other ministries must also be approved by NDRC, even if on an informal basis.

The institutions that oversaw the development of Japan’s and Korea’s auto industries are much easier to describe than China’s. Without question, the single most influential government organization in the development of Japan’s auto industry was the Ministry of International Trade and Industry (MITI). During the formative years of Japan’s auto industry, MITI was responsible for the planning that supported the industry, protected it from foreign competition, and influenced the industry’s structure. According to Chalmers Johnson, MITI “kept Japan’s economy on a war footing” throughout the 1950s, and “shifted Japan’s industrial structure from light, labor-intensive industries to steel, ships and automobiles.”

In Korea the Ministry of Trade and Industry (MTI) performed a function similar to that of Japan’s MITI. Korea’s MTI made decisions on tariffs and credit policies to support various industries. It also decided which firms were able to enter the industry, and attempted to impose its will on the structure of the industry through mergers and reorganization. But as was the case with Japan’s MITI, the ability to formulate such plans did not always ensure their implementation. Unlike the NDRC or MIIT in China, MITI in Japan and MTI in Korea were both working with an auto industry comprised solely of private firms. While they had influence, it was not complete.

Then again, neither was (or is) that of China’s central regulators. Key institutions in China that wield much influence in the auto industry are local governments. In both Japan and Korea, the influence of local governments on their respective auto industries is practically nil, but in China, local governments have demonstrated their willingness to work against the central government to establish auto enterprises – both locally state-owned and private – even against the wishes of the central regulators. Furthermore, local governments in China also provide local auto firms with funding to keep them afloat even through difficult economic conditions.

Technology Acquisition

For China’s dominant state-owned automakers, the primary source of new technology has been their foreign joint-venture partners. Since the mid-1980s when Beijing Jeep and Shanghai Volkswagen became the first Chinese-foreign joint ventures, all foreign automakers have been required to partner with Chinese state-owned automakers as a condition of conducting business in China. Until China joined the WTO in 2001, technology transfer was a requirement written into most JV agreements. Since joining the WTO, China had to give up the right to condition approval of foreign investment on technology transfers, but they have simply gone about it differently.

There are now several ways in which Chinese companies acquire technology. Some of the joint ventures have established joint venture design centers such as the Shanghai-General Motors PATAC venture. PATAC, or Pan-Asia Technical Automotive Center, was established at the same time as the Shanghai-General Motors joint venture in 1996. In these research and development organizations, foreign and Chinese engineers work together to design vehicles and components, providing learning opportunities for the Chinese. Another method for gaining access to technology is to pay for the technology along with its accompanying intellectual property rights (IPR). For example, Chery hired the Italian auto design firm Pininfarina to design its A3 model.

In some cases, Chinese companies buy foreign companies outright, giving them full ownership of all IPR that the foreign company owns. Geely’s purchase of Australian transmission manufacturer, DSI, gave Geely full ownership of all of DSI’s IPR, past, present and future. The latest example of technology transfer in China is the “JV brand” concept through which the foreign partner in a joint venture transfers the designs of an existing or outdated vehicle model to the JV which then manufactures the model and sells it under a Chinese brand name. According to the CEO of PSA Peugeot-Citroen, helping their new Chinese partner, Chang’an, to bring a Chinese-branded car to market was “part of the deal” for getting the new JV approved. And finally, although Chinese companies are no longer allowed explicitly to demand technology transfer, there is evidence that, by holding out long enough in JV negotiations, Chinese automakers are able to get “voluntary” technology transfers from potential foreign partners under pressure to consummate a deal.

Whereas China has relied primarily on foreign investment through the form of joint ventures, the Japanese and Koreans both heavily circumscribed foreign investment. In the 1930s, the two private firms approved by MITI’s predecessor to assemble vehicles took two different paths to acquire technology. Nissan licensed American technology and hired American engineers to teach their employees. Toyota relied more on “reverse-engineering” of foreign made vehicles and engines. In the early 1950s, MITI approved tie-ups with foreign automakers and part of the requirement always included technical agreements whereby the Japanese could learn from their foreign partners. Unlike Chinese-foreign JV agreements that have tended to last for 20 years or more, MITI restricted Japanese-foreign technical agreements to only seven years.

Of key importance to the success of the Japanese automakers was not only early technology acquisition from the major global automakers, but also of statistical management techniques borrowed from American scholars. The American automakers had employed highly complex statistical techniques for quality control (QC), but kept them in the hands of statistical experts. Americans such as W. Edwards Deming, J.M. Juran and A.V. Feigenbaum advocated a simplification of these statistical techniques so as to place QC in the hands of line employees. While American manufacturers preferred to keep their stats in the hands of white-collar experts, the Japanese automakers proved to be a welcoming audience for the advice of these foreigners and implemented their recommendations, pushing quality control down to the level of assembly line workers. The combination of foreign technology obtained through technical agreements and foreign statistical techniques quickly resulted in both high quality and high efficiency among Japanese automakers.

Since the Japanese auto industry got its start about a decade ahead of the Korean auto industry, Korea benefited from their neighbor’s experience. During the time that Korea was a Japanese colony (1910-1945), the Japanese had already built a significant auto parts manufacturing industry in Korea to feed the needs of Japan’s assemblers. Over the years the Koreans developed expertise in parts manufacture before taking the step up to finished vehicle assembly in the early 1960s. In 1965, following the failed experiment with state ownership of its first automaker, Korea’s MTI allowed three private firms to start producing cars. Each of these companies, Asia Auto, Hyundai and Kia, looked for foreign partners either to license technology or to cooperate in other ways.

In the early 1970s, General Motors took a 50 percent stake in the ailing Shinjin Motors, the company that had been started by the state in 1962 and privatized three years later. After going through bankruptcy and other managerial difficulties in the 1970s, this venture was taken over in 1982 by Daewoo, which remained a partner of GM. Until the late 1990s, all of GM’s manufacturing designs were transferred to Korea. The 2000s brought a reversal in which GM began to look to its Korean partner to design its small cars. The Chevrolet Spark, a new model introduced in the U.S. in 2013, has its roots in an original Korean model, the Daewoo Matiz. Interestingly, the 2013 Spark is also a Shanghai-GM redesign of the original Korean model.

As Hyundai gained confidence in the early 1970s, it ended a joint venture under which it produced the Ford Cortina sedan under license and began to search for a foreign partner who would transfer technology without insisting on managerial control. After negotiating with firms in Europe and North America, Hyundai found Japan’s Mitsubishi to be more accommodating. Mitsubishi took a small equity stake, transferred technology, and did not move to restrict Hyundai’s ability to compete in other markets. By the end of the decade, Hyundai had licensed over thirty different technologies from automakers in Japan, Europe and North America.

Foreign Involvement

In all three of the countries—Japan, Korea, and China—technologies were initially acquired from the more developed markets. In each case, foreign automakers were persuaded to hand over technologies in the hopes of either gaining access to the domestic markets or of using the local automakers as links in their global supply chains. In the cases of Japan and Korea, the pendulum has now swung back in the other direction in which foreign automakers now look to the Japanese and Koreans for design help, while selling very few foreign made cars in the Japanese or Korean markets.

China’s central and local governments began to seek foreign partners for their state-owned automakers not long after China reopened its doors in the late 1970s. While early negotiations brought about differing results in terms of the extent of foreign equity participation in joint ventures, policy eventually settled on a 50 percent limit of foreign ownership, and in general, this has been where negotiations between Chinese and foreign partners begin. The only exception to this 50 percent rule has been in the 2004 auto policy, which allows for a foreign share greater than 50 percent (with no explicit limit, though it is understood to be significantly less than 100 percent) if the joint venture produces vehicles for export. Thus far, the sole beneficiary has been a joint venture among Honda, Guangzhou Auto and Dongfeng in which Honda of Japan holds 55 percent of the shares.

Japan’s Automobile Manufacturing Industry Law passed in 1936 effectively drove both Ford and GM out of Japan by 1939. As noted earlier, the government had already designated two private companies, Toyota and Nissan as Japan’s only producers of sedans, and MITI’s predecessor was laying the groundwork for their success by blocking foreign imports. After the war, however, when foreign multinationals expressed interest in returning to Japan, MITI set up rules that limited the size and scope of Japanese-foreign JVs. In the 1950s Japanese and foreign automakers proposed 11 different tie-ups, but only four of these were approved by MITI. Despite these limits, however, from 1953 to 1959, nearly one-third of car production in Japan came from foreign models assembled from kits or made under license with local parts.

Throughout the 1960s and 1970s, the American automakers constantly sought ways to tap into the Japanese market. According to Chalmers Johnson, their focus was not so much on selling to Japanese consumers (“tariffs were too high, and American cars were too big and too expensive [for] Japan”) as it was on trying to incorporate the Japanese firms into their global supply chains. MITI countered this pressure by attempting to strengthen Toyota and Nissan and form keiretsu around them through mergers with some of the smaller auto firms that had sprung up. Yet in 1969 Chrysler was eventually successful in establishing a JV with Mitsubishi in which Chrysler held 35 percent – over the objections of MITI. As the Japanese auto industry began producing giants of its own, other foreign automakers gradually began to take stakes in Japanese automakers. In the late 1970s and 1980s, Ford gradually built up a controlling stake in Mazda; in 1971, GM took a controlling stake in Isuzu; and in 1981, GM and Isuzu both entered a partnership with Suzuki. By the 1980s, Japan’s automakers had developed a solid reputation for quality and were rapidly becoming a source of automotive technology rather than a destination.

According to Chalmers Johnson, “Japanese bureaucrats, historically, have been close to paranoid on the subject of the dangers of an invasion of foreign capital. By contrast, the Koreans... have given virtuoso performances in how to use foreign ... capital without at the same time becoming subservient to it.” Political scientist Andrew Green, notes that Korea never allowed foreign partners of its auto firms to own controlling stakes. This restriction, “stands in stark contrast to the structure of ownership in the auto industry of virtually every other developing country.” This was possible, says Green, because, as part of the *chaebol*, Korea’s automakers did not need to rely on foreign funding to build plants. [[5](http://www.jpri.org/publications/occasionalpapers/op43.html#notes)] Nevertheless, Korea’s automakers did need foreign technology during their period of development, and they were able to acquire it without giving away operational control. During the 1960s and 1970s, all of the Korean automakers signed agreements with one or more foreign automakers that provided them with licenses for production of foreign design or for technology transfer.

Industry Support

In all three countries we can see gradual shifts in modes of state support for the auto industry; however, the modes of state support in China have changed less than they did during the formative years of Japan’s and Korea’s auto industries. As has already been noted, both Japan and Korea made early attempts to establish state-owned automakers, but in both cases, these efforts were quickly abandoned and the auto industries were left in private hands. By contrast, China’s auto industry remains predominantly state-owned. Because of this, the Chinese state, both central and local, has been a major source of funding. Central government statistics show that 235 billion yuan was invested by the state in China’s auto industry during the tenth five-year plan (2001-2005), an average of 47 billion yuan (approx. US$5.7B) per year. During the first three years of the eleventh five-year plan (2006-2010), spending averaged nearly 80 billion yuan (approx. US$10.6B) per year. But this represents only the documented investment by the central government. Local governments very likely invested billions of yuan as well.

In the pre-war years, Japan’s 1936 Automobile Manufacturing Industry Law provided half the capital for the first licensees, Toyota and Nissan, but after the war, the industry never relied heavily on government funding. Kent Calder notes that post-war, Toyota relied on private sector funding, World Bank loans guaranteed by the state-owned Japan Development Bank, and Ex-Im Bank loans granted to support procurement during the Korean War (1950-1953). When motorcycle manufacturer Honda decided to enter the auto industry in the mid-1960s, the government attempted (unsuccessfully) to *prevent* Honda from getting private sector financial support. Also, the privately-owned Industrial Bank of Japan, according to Calder, “spearheaded” much of the expansion in Japan’s auto industry in the 1960s, providing significant support to Nissan, as did the private Mitsui Bank for Toyota. [[6](http://www.jpri.org/publications/occasionalpapers/op43.html#notes)]

Korea’s experience was different from Japan’s. Because the Korean *chaebol* revolved around general trading companies, and Korea’s banks were owned by the state, Korea’s automakers relied on their *chaebol* for most funding needs. When it came to expansion, however, the government, due to its control of the banks, still had some leverage over funding decisions. Except for a program in the early 1980s in which the MTI provided $120 million in low-interest relief loans to auto parts suppliers, funding was generally obtained by the auto assemblers in through their respective *chaebol*.

Policy Support

There is a distinct difference in the industrial policies among these countries. China’s policies have, throughout the years, consisted of comparatively little in the way of concrete support. Instead, they read more as a list of prohibitions. Though Japan’s and Korea’s policies do contain the requisite regulations, Korea’s early policies in particular offered significant, and very specific, support as the country attempted to launch its auto industry.

Although MITI and the auto industry did not always see eye-to-eye, Phyllis Genther describes an industry in which the government and the firms worked together to formulate policies that delayed the effects of market liberalization. [[7](http://www.jpri.org/publications/occasionalpapers/op43.html#notes)] In the case of Japan, most of these policies consisted of market protection, but in Korea, there existed a business-government relationship that could best be described as “tough love.” Many of MTI’s policies seemed to offer both rewards and punishments in an effort to shape an industry with a handful of globally competitive automakers. In the early 1960s MTI provided tax exemptions for imports of auto parts, but then a few years later, MTI established a domestic content schedule requiring 50 percent localization within five years. Companies that were able to meet the target would receive preferential allocation of foreign exchange. In the 1974 Long-term Development Plan for the auto industry, MTI mapped out a schedule requiring automakers to reach a 90 percent localization rate within 10 years, chose only three firms to produce small cars, and required them all to submit plans for achieving this goal for approval. Once the automakers had reached international quality standards in local production of a part, that part would then benefit from import bans. This provided tremendous incentives for Korea’s privately-owned automakers to improve quality in every possible aspect of production.

In the 1980s Korea’s focus began to turn toward exports, as had Japan’s in the 1970s, and MTI pushed harder for localization of more complex parts such as engines and transmissions. MTI required all three producers of small cars to set export targets for different regions in the world and also encouraged them to set export prices below the price of production. Robert Wade reports that the Hyundai Pony cost $3,700 to produce, sold for $5,000 in Korea, and sold for $2,200 in the U.S. Domestic sales were used to subsidize exports.

Richard Doner describes the Korean business-government relationship as more of a “complex bargaining process” than “state-imposed directives.” [[8](http://www.jpri.org/publications/occasionalpapers/op43.html#notes)] By the 1980s, MTI’s leverage over the automakers began to wane as the companies grew. As Andrew Green describes the transition, “the state can foster the creation of a more efficient and technologically sophisticated industry, ... but because the export viability of the auto industry depends on the nature of competition in the international market, the state lacks power to guarantee its long term success.” In other words, the state has the power to push domestic automakers to improve their domestic performance, and can protect the market to facilitate their growth, but only international competition in the developed markets can push automakers to lift their quality to international standards. By the 1980s, MTI had supported the auto industry as much as it was able, but the industry had to take it from there if it wanted to compete for shares of the European and North American markets. And exports are critical for Korea because its domestic market is so small compared to those of Japan and China.

Market Protection

One of the most common methods late developers have for supporting the development of new industries is market protection. Without limits on the activities of foreign industrial firms within a country’s borders, domestic startups would find it difficult, if not impossible, to compete. All three East Asian countries have made use of market protection to varying degrees.

China’s central government exercised its power to limit foreign investment in China from the beginning of the reform era. Even though policy had yet to specify a percentage limit on foreign ownership of a China-based vehicle enterprise, early 1980s ad hoc negotiations with both American Motors Corporation (for Beijing Jeep) and Volkswagen (for Shanghai Volkswagen) ensured that both joint ventures would not be foreign controlled. Eventually policy settled on an explicit limit of 50 percent ownership with a more recent (2004) exception for JVs producing vehicles for export.

Import limitations came soon after China re-opened its doors in the late 1970s. Imported cars zoomed from 667 vehicles in 1979 to over 19,000 in 1980, so the government implemented import restrictions. Part of the restrictions included a 260 percent import tariff which applied everywhere in China except for Hainan Island. In 1984 Hainan officials took advantage of their exemption to import over 89,000 vehicles, which were then shipped to other areas of China. In response, new policies required that importers apply to both CNAIC and the State Planning Commission (precursor to today’s NDRC) for permission to import vehicles. And in an effort to spur the joint ventures toward faster localization of production, all imported kits and parts were also made subject to import tariffs.

China’s WTO membership in 2001 required it to drastically decrease import tariffs on both parts and assembled vehicles. However, the expectation of a decrease in protection (tariffs would be gradually decreased over a five-year period) led to a price war among domestic car makers that touched off an explosion in auto sales in China. By comparison the increase in imports as a result of lowered tariffs was tiny. In the first full year after WTO accession, total domestic vehicle production experienced its largest ever annual increase of over one million vehicles. Imports during that year only increased by about 56,000.

While WTO membership was a positive development for China’s consumers, the central government noted that sales of Chinese-branded cars were not experiencing an increase commensurate with those of the industry as a whole. And while China was also forbidden from making overt demands of technology transfer, the latest attempt by the central government to increase the market share of Chinese-branded cars has included pressure for help in developing and selling Chinese-branded vehicles. Foreign automakers who wish to invest in China or apply for an expansion in capacity are now expected to include plans for helping their Chinese partners develop Chinese-branded cars that will directly compete with the joint ventures’ foreign-branded cars.

Japan and Korea enjoyed an advantage that China did not. Both countries joined the WTO on day one, January 1, 1995. By this time Japan’s auto industry was a good 45 years into its existence, and Korea’s was over 30 years old. When China joined in 2001, its passenger car industry was still not quite 20 years old. Furthermore, the abilities of the three countries’ citizens to afford cars were considerably different. When Japan joined WTO in 1995, its GDP per capita was nearly $20,000, and Korea’s was nearly $12,000 at the same time. When China joined in 2001, its GDP per capita was still less than $4,000. When Japan and Korea joined WTO, their domestic auto firms were already well-entrenched in their home markets, and they had become so competitive overseas that they were subject to serious limitations in other developed markets. When China joined in 2001, its market was (and still is – see chart 1) dominated by foreign brands, and its only export markets were in other developing countries.

Chart 1 – Foreign and Chinese Brand Passenger Car (轿车) Sales \*\*\*



\*\*\* Sources: Chinese Auto Industry Blue Books, China Association of Automobile Manufacturers.

Japan essentially kept its home market closed to foreign imports during the critical years that Japanese consumers were determining which aspects of automobiles were most important to them. This gave the Japanese automakers time to introduce innovations in both design and process that satisfied the burgeoning Japanese demand for cars. Small cars were protected throughout the 1960s and ‘70s by import tariffs of up to 34 percent. Not until the Japanese companies began to export in significant numbers did MITI move to lower tariffs (to eight percent in 1972, and to zero percent in 1979). However, while MITI was lowering import tariffs, it maintained high commodity taxes on vehicles depending on the size of engines. Since most Japanese-made cars came with smaller engines and most foreign cars with larger engines, these taxes further discouraged purchase of foreign cars. Japan also erected non-tariff barriers to slow the entrance of foreign imports. For example, Japan’s customs inspectors refused to conduct inspections on a sample of cars and insisted on conducting a detailed inspection on every individual car being imported.

When Korea’s auto industry was established under the Park regime in the early 1960s, the Auto Industry Protection Law immediately prohibited imports of assembled vehicles, but it did allow tariff-free imports of parts, giving new Korean automakers opportunities to learn how to assemble foreign cars under license. The complete ban on assembled cars would stay in place until 1985, only one year before the Hyundai Excel became a surprise hit in the U.S. market. (In 1987 Korea exported 347,000 cars to the U.S.) Despite the lifting of the import ban, non-tariff barriers remained. Foreign automakers encountered red-tape with customs inspections, and Korea’s government sponsored an anti-foreign luxury campaign that encouraged purchase of Korean-made goods.

Industry Structure

Of the different forces that affected the structures of the Chinese, Japanese, and Korean auto industries in their developmental stages, the most significant difference is the role of China’s local governments. Though industrial planning in all three countries took (or takes) place with the central government, only China has state-owned automakers, and most of those are local state-owned enterprises (LSOEs). The central government has, at different times, actually enumerated a “big three” or “big four” group of automakers into which it wished China’s smaller automakers could be consolidated, and these listed firms were always the top three or four largest enterprises – an indication that the central government’s most valued trait in an automaker has always been size. However, the sheer *number* of automakers in China—there were 115 automakers at the end of 2011—has been most influenced by local governments. Since China’s economic reforms began in the late ‘70s, local governments have been motivated by economic growth, social stability, and, as some of my interviewees in China have suggested, the prestige of having their own local auto factories. And while the central government has long made consolidation a key component of auto industry policy, it has chosen to use its influence selectively, forcing mergers only when mistakes needed correcting or other policies needed reinforcing. In general, the many auto firms owned by local governments have continued to exist as long as they can generate a positive cash flow, with only a few reluctantly moving toward merger when dire financial circumstances have dictated.

China’s central government has also maintained, since the early 1990s, a “catalogue” in which all approved vehicles must be listed before a local Public Security Bureau can issue a license for the vehicle. Since the catalogue was launched (today it is issued quarterly on CD by MIIT) it appears to have been effective in creating a barrier to entry in the industry as the number of approved auto assemblers peaked at 124 in 1993-4. But if it has been effective in creating a barrier to *entry*, it has had no effect on *exit* as there were still 115 approved auto assemblers at the end of 2011. Another barrier that has remained in place since the last major update of China’s auto policy in 2004 is the prohibition of a transfer of certification from a bankrupt automaker to another firm not already in the auto assembly business. (This was precisely how the private firm BYD entered the auto industry prior to the adoption of this policy measure.)

After its failed experiment with the then state-owned Isuzu in the 1930s, the predecessor of Japan’s MITI designated only two approved producers of sedans, Toyota and Nissan, though there were a few other *zaibatsu* with commercial vehicle assemblers. In the 1960s, MITI promoted a “three group” concept that would have limited the number of conventional passenger car producers to only two -- again, Toyota and Nissan. It would also have allowed two or three companies to make specialty cars and another two or three to make mini-cars, but it would only allow any company to produce a single type of car. To support this plan, MITI applied “administrative guidance” to try to merge some of the smaller automakers into either Toyota or Nissan. Through the state-owned Japan Development Bank (JDB), MITI set aside up to ¥6 billion in loans to support large firms in mergers.

Johnson reports that Nissan’s takeover of the smaller Prince Auto company was influenced by MITI’s provision of an $11.1 billion loan. But Phyllis Genther’s research indicates that Prince was also more open to the prospect of merger due to its poor financial condition. In her analysis of several other mergers and tie-ups in the 1960s, most of which failed, Genther concluded that MITI had not been powerful enough, nor provided enough incentives, to bring about the mergers it wanted to see.

MITI was also unsuccessful in keeping out a new entrant in the mid-1960s. Honda had in 1959 become the world’s largest motorcycle manufacturer. The company’s leader, Honda Soichiro, had wanted, since the early 1950s, to expand into automobiles, against the wishes of MITI which was trying to merge existing automakers into larger players. When MITI introduced its “three group” concept, Japan’s existing automakers were under pressure from MITI to offer verbal support of the plan, but, as the world’s largest motorcycle manufacturer, Honda’s refusal to go along carried significant weight. The plan ultimately failed because there was not enough room in the plan to accommodate the number of automakers already in Japan’s auto market, and none of them wished to be the one eliminated.

The entrance of Honda into the industry is typically held up as an example of MITI’s lack of complete autonomy. However, Robert Wade points out that, in the 1950s and 1960s, MITI had been very successful in restructuring Japan’s auto parts industry which ultimately helped to make the assemblers more competitive globally. Yasheng Huang also suggests that, when threatened with mergers, Japan’s automakers were suddenly able to quickly achieve MES (minimum efficiency scale). [[9](http://www.jpri.org/publications/occasionalpapers/op43.html#notes)] Even the startup Honda was able to increase output six-fold from 1965 to 1968.

In the early 1960s, Korea launched its first state-owned automaker, and within three years the state transferred the plant to private owners. By 1973 automobiles were identified as a priority under the country’s Heavy and Chemical Industry Plan. In the following year MTI designated only three firms that would be allowed to manufacture passenger cars: Hyundai, Kia and GM-Korea.

In the wake of the second oil shock of the late 1970s and the assassination of Park Chung Hee, Korean domestic demand for autos collapsed by over 50 percent. MTI moved to restructure the industry and reorient the industry toward exports, particularly to North America. The first action MTI took was to order Kia to stop producing passenger cars from 1980 until 1987, which it did. Next, MTI wanted to create a single, large automaker by merging the 50/50 joint venture GM-Daewoo into Hyundai. In this case, MTI did not get its way. GM refused to give up its auto venture unless it could own a share equal to Hyundai’s in the new venture, but Hyundai insisted on maintaining a majority share. As a result Korea was left with two passenger car manufacturers (until Kia rejoined them as the third in 1987). Although it did not get the merger it wanted, MTI continued to pressure GM to give managerial control to its partner Daewoo, which it finally did in 1982.

In all three East Asian countries, central governments have attempted, with only mixed success, to shape the structures of their respective auto industries, and, in each case, failure of the state to get is way was due to an external forces. In Japan and Korea, that external force was the will of privately-owned owned automakers. In China, that external force has been local governments. There is another aspect of China’s auto industry that sets it apart from those of Japan and Korea, and that is the bifurcated nature of China’s industry. China’s auto industry actually seems to contain two distinct industries: one consists of the top dozen or so automakers that appear to be viable enough to remain domestically competitive, and the other consists of the remaining 100 or so automakers that appear to serve as a sort of welfare system for local regions. These small, inefficient, local automakers are mostly unprofitable: the costs of their capital are underwritten by local governments, but collectively they employ over 250,000 people, thereby providing a valuable source of social stability for local governments. Though this “welfare system” is essentially run by the local governments, the fact that it continues to exist indicates that China’s central government is not yet ready to force its demise.

Conclusion

In terms of China’s central government objectives, this comparison with Japan and Korea illuminates important similarities and differences in how China has attempted to develop its auto industry. Though central governments in all three countries have attempted to shape their industries by restricting entry, none seems to have been completely successful. In China several independent automakers were able, with the help of local governments, to establish themselves despite rules forbidding their entry. Likewise, despite its attempts to prevent motorcycle manufacturer Honda from entering the auto industry, Japan’s MITI was ultimately powerless to keep it from happening.

In China’s case, however, there is also the overarching goal of regime survival that includes the continued rule of a single political party. Because the need for social stability makes China’s central government hesitant to close poorly performing businesses, the central government finds itself compromising in order to achieve the contradictory goals of both social stability and a competitive auto industry. Japan and Korea do not suffer from such contradictions. This is not to say that Japan’s and Korea’s democratically-elected ruling parties do not wish to remain in power, but with their auto industries completely in private hands, their governments lack the ability—or indeed the *responsibility*—to use state-owned automakers as tools of political expediency.

The most prominent difference among these three countries is in how their respective central governments managed technology acquisition and brand development. Like China, Japan and Korea also acquired technology from foreign multinationals, but unlike China, Japan and Korea never allowed foreign brands to gain a foothold in their markets. Furthermore, Japan’s and Korea’s governments managed to push their automakers to increase quality standards so that they could ultimately export to the developed markets from whence their technology had come. It was this push of their privately-owned automakers to export to the developed markets that ultimately lifted Japanese and Korean automakers from *destinations* of auto technology to sources of auto technology. Both countries are now sources of design for developed markets.

One might argue that Japan and Korea are ahead of China because they started earlier; however, Japan was already exporting to the U.S. in the 1970s, and Korea was exporting to the U.S. in the 1980s – approximately 20 years after launching their respective passenger car industries. Thirty years into the post-Mao relaunch of its passenger car industry, only two Chinese automakers (Great Wall and Chery) have managed to begin exporting a small number of cars to Australia. With very few exceptions, the vast majority of Chinese auto exports are shipped to Africa, Latin America, Russia and the Middle East.

In all fairness to China, the cars that Japan and Korea were learning how to build in the 1950s and 1960s were far simpler machines than the complex, software-driven vehicles produced today. Perhaps some of the Chinese-branded vehicles being built today would have been superior in quality to the Japanese vehicles of the 1970s or the Korean vehicles of the 1980s. Unfortunately for China, its automakers have to compete in the 2010s and beyond, and this comparison demonstrates that continued state dominance of its auto industry is the key reason China’s auto industry has not developed to the extent that Japan’s and Korea’s had at this point in their respective histories.

NOTES

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[4] CNAIC had been established in 1964 as the state owner of China’s 75 automotive plants. It was disbanded during the Cultural Revolution (1966-1976) and accused of being a “revisionist roader organization.” [[Return to Text]](http://www.jpri.org/publications/occasionalpapers/op43.html#4)

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[9] Yasheng Huang, “Between Two Coordination Failures: Automotive Industrial Policy in China with a Comparison to Korea,” *Review of International Political Economy* 9, no. 3 (August 2002) [[Return to Text]](http://www.jpri.org/publications/occasionalpapers/op43.html#9)