Continuous Evolution and Change: Asian Auto Industry Stands at Center of Global Stage

The Asian automobile industry is changing. While carmakers in advanced countries falter, Chinese car manufacturers are growing rapidly, contributing to the expansion of the Asian auto market as a whole, and in the process bringing about not only quantitative changes but also qualitative changes. Chinese car carmakers have advanced into Southeast Asia while Western companies have also set foot in China's compact car market. Meanwhile, ASEAN is emerging as the next auto manufacturing base after China. Let us take a look at the present and future of the rapidly changing Asian auto market.

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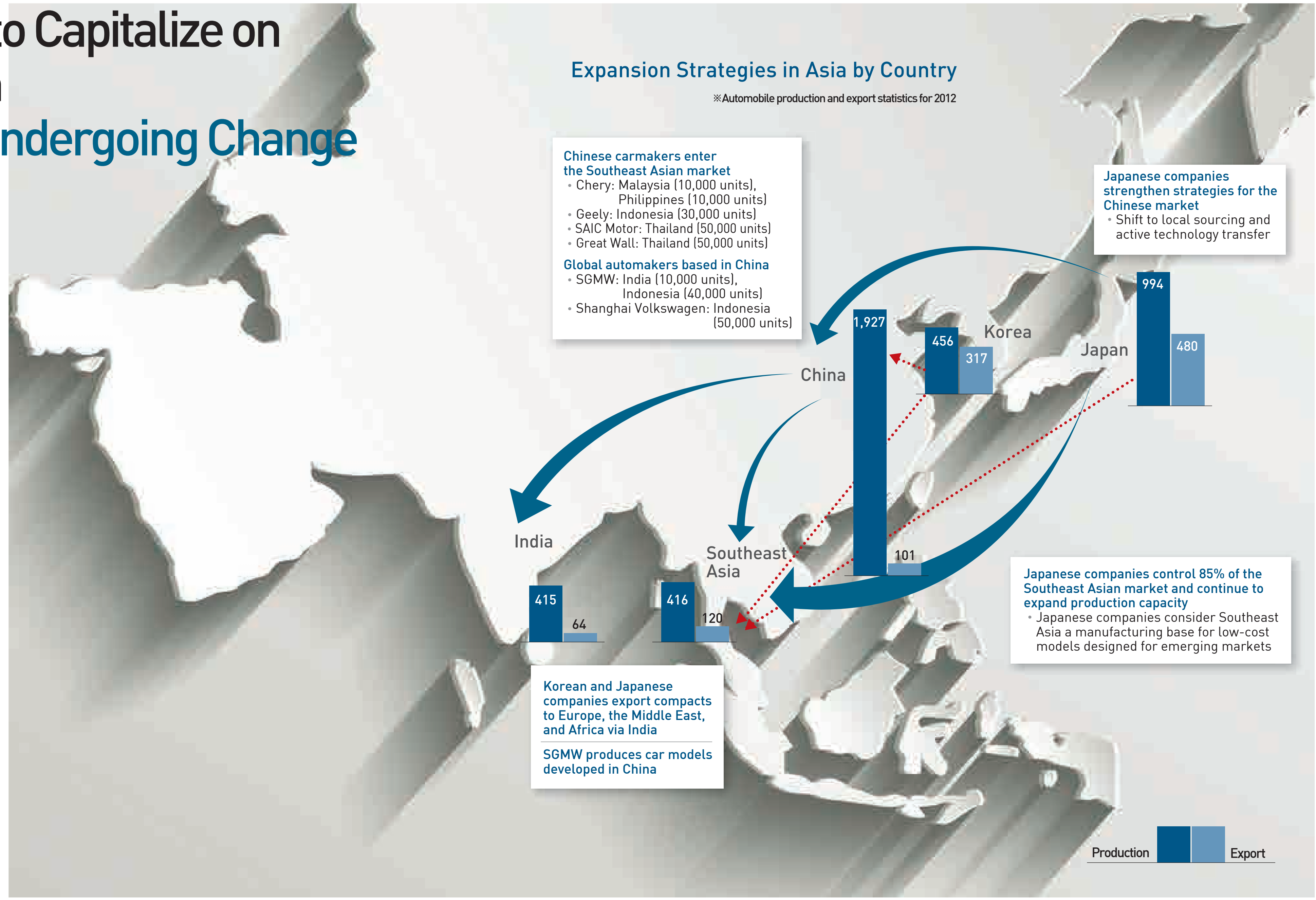
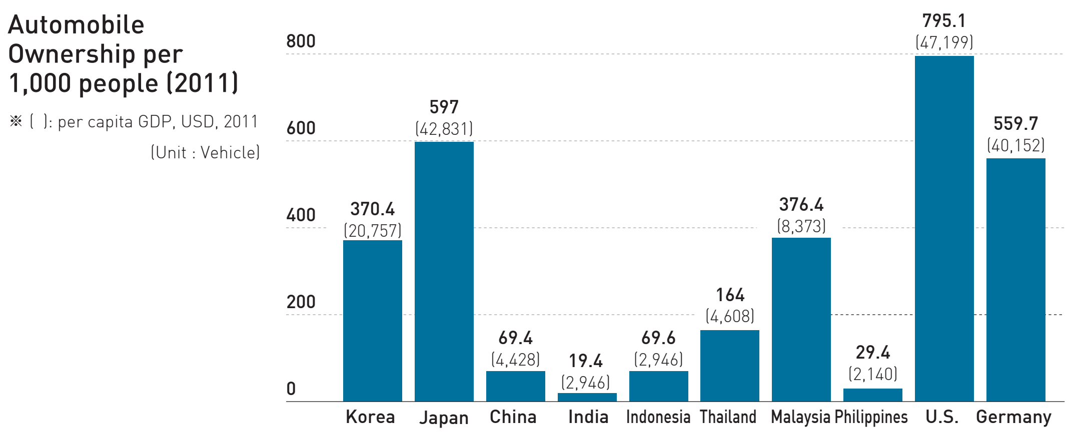
Global Carmakers to Capitalize on China as a Platform

Asian Car Market Undergoing Change



The leading management guru Peter Drucker called the automobile industry "the industry of industries." That may be because the car industry has significant economic importance and impact and represents the development level of a country's manufacturing industry. Autos are closely linked to a wide range of industries from steel, chemicals, and textiles to electricity and electronics, machinery, and finance. Therefore, the auto industry contributes significantly to job creation. The industry accounts for 12% of total employment in Japan and France while it comprises 7-8% of total employment in the U.S. and Korea. That is why emerging countries are eager to promote the auto industry.

Because a car is composed of nearly 30,000 components, it is important for car companies to use auto parts that are competitive in terms of cost, quality, and delivery time. In addition, auto companies must have the ability to establish and operate complex systems in which those parts are assembled, which is one of the reasons why advanced countries are leading the global auto industry.



Structural changes fueled by Asia's rapid growth: Asia accounts for 50% of global auto production

Over the past four or five years following the 2008 global financial crisis, the world auto industry has seen emerging countries, including China, rise sharply while advanced countries have fallen. However, with the U.S. and Japanese economies showing signs of recovery since last year, carmakers in advanced countries are expected to grow while those in emerging markets are likely to see slower growth in the short term.

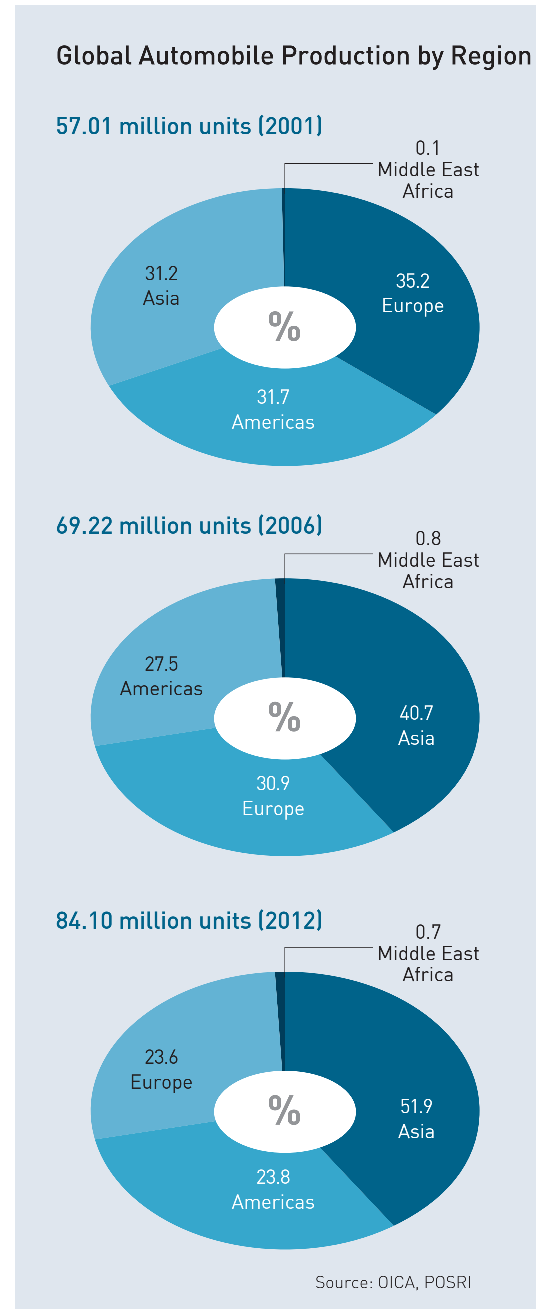
Currently, Asia accounts for more than half of global auto output. Over the past five years, along with quantitative growth, a number of changes have occurred in Asia's auto production and competition among automakers. In the past, advanced carmakers entered China in the form of joint ventures and used the Asian country only as a manufacturing base to sell products locally while minimizing technology transfer. However, global companies have begun to expand production facilities in China significantly and have also transferred their R&D operations. Their efforts to localize parts sourcing have also allowed them to transfer car component technologies to China.

In the meantime, Chinese local carmakers and U.S. and European companies have recently advanced into the Southeast Asian auto market, where Japanese firms have long been active and have built high entry barriers. The structure of division of labor in the ASEAN region, which was formed by Japan, is likely to change as well. India has also emerged as an important export base for global car companies attempting to supply products to the Middle East and Africa.

Global carmakers eager to tap into the Chinese compact car market

We should take notice of the sharp increases in

Asia accounts for more than half of global car production. The Asian auto industry is undergoing structural changes as China grows.



China's auto output and sales. China's car production increased 10 million units within only four years from 9.3 million in 2008 to 19.27 million in 2012. Considering that global auto production grew 13.34 million units from 70.76 million to 84.1 million during the same period, China contributed to 75% of the total increase. During 2009-2010, the Chinese government attempted to promote domestic sales by offering subsidies for car purchases, leading to sharp increases in China's compact car sales. This provided Chinese carmakers with growth momentum. But since the subsidy program expired in 2011, car sales have declined. However, China's market for compact cars has become one of its largest markets as young and middle class urban dwellers have chosen compacts as their first vehicles. Even though carmakers have been able to sell their products to those living around cities and in rural areas without relying on sophisticated strategies thanks to Chinese government subsidies, they may need to differentiate the designs and brands of their compact cars as they are being sold to China's urban middle class.

Global joint ventures, which specialize in selling mid-size and large cars to higher income groups, have pushed ahead with the production and development of compact cars while increasing local production of luxury vehicles. As global car companies must compete with Chinese local automakers in the compact car market, they should pursue cost competitiveness, and to that end, should localize parts sourcing. Toyota, which is set to launch new sedans and hatchbacks at prices approximately CNY 20,000 lower than those of existing models in China, plans to raise the proportion of local parts supply from 60% to 98% in an

Kia Motors attends the Wuhan Motor Show 2013 held last October in Wuhan, China. [JoongAng Photo]

Global carmakers eye China's compact car market, Chinese companies target overseas markets

effort to secure cost competitiveness. Nissan and Honda have also increased compact car production with a goal of using 100% local automobile parts.

Since General Motors discovered that 40% of its sales came from the Asia-Pacific region largely due to increased sales in China, it has targeted mid- and low-priced cars through SAIC-GM-Wuling (SGMW), a joint venture between SAIC Motor, General Motors, and Liuzhou Wuling Motors. The U.S. carmaker aims to increase its production capacity to two million units per year by the end of 2015 by expanding existing plants in Liuzhou, a city in the Guangxi Zhuang Autonomous Region, and building new plants in Chongqing. With the establishment of R&D centers, plants located in Liuzhou are expected to become comprehensive passenger car manufacturing bases, producing and developing cars and procuring parts. Ford is also developing low-priced compact cars in its Chongqing plants while investing in the development of luxury models in Hangzhou.

Intense competition in the Chinese market: Local companies focus on exports while global companies begin to transfer technology

Competition among global auto companies and their respective China strategies have led to meaningful changes in the Asian car market. Since global carmakers have joined the competition for the Chinese compact car market, vehicle prices have fallen and profits have shrunk. Local automakers, which lack production management knowhow and brand power, have managed to compensate for their low profits from the domestic market by increasing exports. A manager at Lifan Motors, a private automaker based in Chongqing, said profits from the Chinese market have fallen close to zero as Lifan competes to sell its products at the lowest prices; instead the company makes profits from exports to Central and South America, Central Asia, and Southeast Asia. A spokesperson for Sichuan Auto based in Chengdu said selling certain low-priced models has caused a loss of CNY 30,000 per unit. Against this backdrop, China's car exports soared to 850,000 units in 2011 or more than 50% compared to the previous year, and to one million units in 2013.

Chinese local car companies have increasingly built assembly plants overseas. Large Chinese automakers that have been entering Central and South America since 2008 have turned their eyes to Southeast Asia. Chinese car manufacturers, including Great Wall, Chery, Geely, and Shanghai Automotive Industry Corporation (SAIC Motor) plan to establish small-scale assembly plants that can produce 10,000 to 50,000 units per year in Thailand, Indonesia, and Malaysia. Chinese carmakers have established assembly lines in Southeast Asian countries, which impose high tariffs on imported cars and encourage them to assemble and sell cars in the region using low-priced Chinese auto parts. This strategy has allowed Chinese companies that have just begun operating overseas to save time and costs required to stabilize parts supply and have the opportunity to study the market.

It is noteworthy that GM is applying the compact car models developed by its Chinese joint venture partner SGMW to GM India, while SGMW has taken the lead in making new investments in Indonesia. As global companies have attempted to use their experiences in China, China has served as a platform for those companies. Changan Ford has begun to export auto parts produced in China to Europe. With increased SKD (Semi Knocked Down) and CKD (Completely Knocked Down) exports by Chinese and global auto companies, auto parts exports have increased accordingly. From January to November 2013, auto component exports grew as much as 50% compared to the same period in the previous year, and this trend is expected to continue.

Japanese Carmakers determined to retain dominance in Southeast Asia

Japanese automakers are taking the offensive against Chinese car companies in the Southeast Asian market where they have already built production bases. Japanese companies have operated manufacturing bases in Southeast Asia since the late 1950s. They have built local assembly lines to respond to Southeast Asian demand while importing key auto components from Japan. Most Japanese car companies have established branches and final assembly lines in Thailand and optimally distributed auto parts manufacturing bases in other Southeast Asian nations, including Indonesia, Malaysia, and the Philippines. However, when the Thai baht slumped in 2007, it dealt a blow to Japanese carmakers that imported essential car components from Japan. Realizing the importance of local sourcing, Japanese companies began to promote local auto parts suppliers. The need to find local parts manufacturers became even more urgent when the Great Tohoku Earthquake in 2011 prevented Japanese factories from shipping auto parts to Southeast Asia.

Since then, Japanese car companies have carried out reform and pursued innovation. For example, Toyota has attempted to overhaul its parts supply system by decentralizing parts manufacturing and applying the same auto parts throughout its product lines. This is part of an effort to manufacture products without interruption even when unexpected events occur. To this end, Toyota has also begun to transfer technology to overseas factories and promote local parts suppliers. It plans to introduce eight new subcompact car models by 2015 designed specifically for emerging markets, and produce them in Thailand, India, and Indonesia. The company also aims to procure 100% of parts locally to be cost competitive while enhancing R&D operations. Nissan is also set to launch its low-cost Datsun model, 90% of whose parts are supplied locally, in India, Indonesia, and Russia. Japanese car companies are working to retain their dominance in the Southeast Asian market with a goal of expanding regional production capacity by 1.5 million units by the end of this year, compared to where it stood in 2011.

Korean automakers and related industries must jointly respond to changes in the Asian Market

Since 2008, the Chinese auto market has grown significantly while conditions in advanced countries have remained stagnant, leading global auto companies to transfer technology and auto parts manufacturing bases to China. And global companies now plan to enter Southeast Asia and India with compact car models and production systems that they have developed in China.

Japanese auto companies, which made inroads into Southeast Asia earlier, formed the regional structure for division of labor, and initially assembled key auto components imported from Japan, have also changed their strategies. They have come up with more sophisticated plans to promote Southeast Asia as a compact car manufacturing base for all emerging markets while capitalizing on Southeast Asia's growing demand.

In the meantime, Thailand, having absorbed advanced technology and knowhow from Japanese car companies while serving as a Southeast Asian base for Japanese companies, has expanded its supply chain to Cambodia and Vietnam to avoid high labor costs. India, Indonesia, and Thailand maintain leadership in the auto industry as they have implemented policies to promote domestic industries and carried out environment-friendly projects.

Asia's automotive market is projected to see further changes. It is high time for Korean carmakers, the auto parts industry, and upstream and downstream industries to respond to changes in the Asian auto market and find ways to take advantage of these changes together. Without a doubt, the auto industry is a key industry that accounts for approximately 10% of manufacturing production, employment and exports, respectively.

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With rapid growth of the Chinese automobile market, a series of motor shows have been held in China's major cities, including Beijing, Shanghai, Guangzhou, and Wuhan. (JoongAng Photo)

China is Now the World's Largest Car Market and the Focus of Global Strategies

Last year, China became the first country to see domestic auto sales exceed 20 million a year with 21.98 million units sold in 2013. China has been the world's largest car market since 2009, currently accounting for more than a quarter of global auto sales. As the Chinese auto market is expected to see steady growth, its position will strengthen further. The Chinese market contributes to more than 20% of passenger car sales of major global automakers, including Volkswagen (VW), General Motors (GM), and Nissan. China has already become an essential market for all global carmakers. As they bet their fate on the Chinese car market, even fiercer competition is expected.

Since 2000, the Chinese market has grown much more rapidly than expected and is likely to grow further. China's growth is projected to remain at around 7% despite the recent economic slowdown. The Chinese car market has high potential as car ownership in the country is still low. Recently, advanced global carmakers have attempted to enter global markets using China as a platform. Meanwhile, Chinese local carmakers have advanced into overseas markets, including South America, Africa and the Middle East. For global carmakers, China's importance as the center of global strategies will increase further.

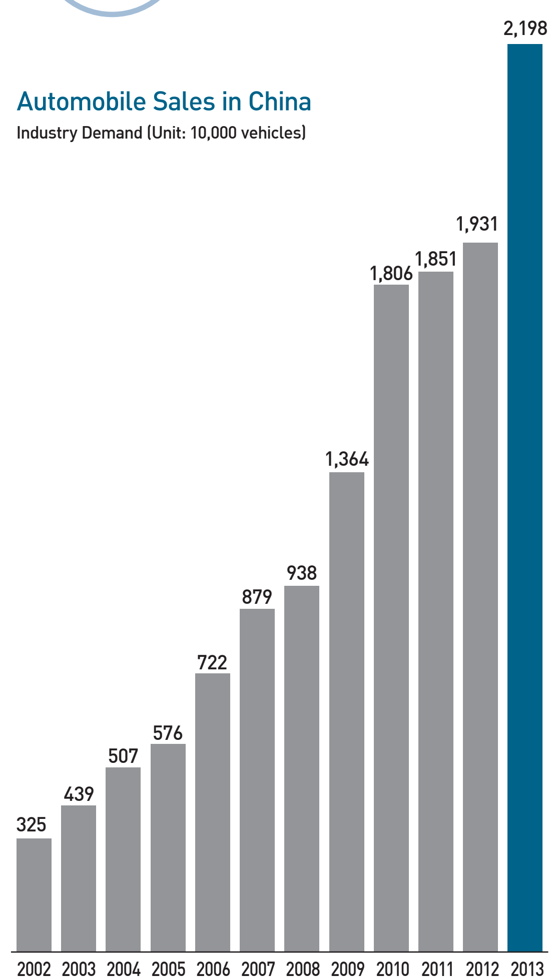
U.S. and European companies: Expand production capacity, unveil new products

China's top auto seller is Volkswagen. In 2013, the German automaker sold more than three million vehicles in China. That year, VW's sales in China comprised 34% of its total global sales, up from 28% in 2010. Volkswagen plans to expand production capacity and launch new models in China. It has continued to build new plants in the country with a view to producing four million cars a year

by 2018, while also seeking potential factory sites not only in the northern and eastern regions but also in the southern and western areas. Volkswagen has built plants in Foshan, Guangdong Province, and Urumqi, Xinjiang Uygur Autonomous Region, and is building a new plant in Changsha, Hunan Province.

Volkswagen will also diversify products available in the Chinese market. It plans to expand its line-up from 70 models to 90 by 2015, producing 30 of them in China. The company already introduced to the global market 60 new and updated models in 2013, of which 29 were launched in China, indicating how much the carmaker emphasized the Chinese market.

In the Chinese market, GM is competing with Volkswagen to win the No. 1 spot. GM's annual car sales increased 11.4% to 3.17 million units in 2013, recording double-digit growth for two consecutive years. GM aims to expand production capacity to five million units in China. To that end, it plans to invest USD 11 billion in the construction of four auto manufacturing plants. GM says it is determined to pursue sustainable growth based on its aggressive investment in products, plants and people (3P).



Source: China Association of Automobile Manufacturers (CAAM)

GM is attempting to promote China as an export base while capitalizing on China's demand for automobiles.

GM is more active than its competitors in targeting overseas markets via China. The U.S. automaker plans to promote China as a major export base. It exported more than 100,000 vehicles from China in 2013 and plans to expand exports to 300,000 units a year within the next seven years. In addition, GM is working with its joint venture partner Shanghai Automotive Industry Corporation (SAIC) to enter the Indian and Southeast Asian markets.

Ford has not been so successful in China, but its business is also growing rapidly with new projects and strengthened strategies. The company sold 940,000 vehicles in 2013, overtaking Toyota as China's fifth-largest automobile seller. Ford plans to expand its annual production capacity to 1.2 million cars in China within the next two years, and expects to see 40% of its global sales come from China by 2020.

Japanese companies: Work with local suppliers, focus on hybrid vehicles

In 2013, the combined sales of Japan's big three carmakers–Toyota, Honda, and Nissan– in China stood at 2.94 million vehicles, a 17% increase from the previous year, and all three car companies showed signs of recovery. The recovery might have been caused by increased sales after the three automakers launched new vehicles in 2013. However, it might also be attributed to the base effect after China's anti-Japanese sentiment in 2012 resulted in decreased auto sales.

Japanese carmakers had a tough time due to Tokyo's territorial disputes with Beijing over the Senkaku/Diaoyu Islands. From the second half of 2012 when the disputes began to intensify, Japanese companies' car sales began to drop sharply. Sales fell by up to 50% during September to October 2012 compared to the same period in the previous year. Japanese automakers were forced to suspend factory operations to reduce production while lowering car prices, compensating car owners for damage and injuries incurred during the anti-Japanese protests, and implementing a range of marketing campaigns aimed at easing consumer anxiety. In addition, all three auto companies announced mid- and long-term plans to focus on compacts and environment-friendly cars, especially hybrids, while also targeting the Chinese market more aggressively with enhanced localization strategies.

Toyota has strengthened its compact sedan line-up with the launch of the new Toyota Yaris and Vios while promoting its corporate slogan in the Chinese market, "yundong (雲動)," which means "movement upon the clouds" in an effort to localize hybrid car technology in China by 2015. The Japanese automaker has opened an R&D center in Changshu, a city near Beijing and set up a joint venture to produce hybrid batteries. Toyota aims to produce hybrid batteries and vehicles locally from 2015.

Honda plans to unveil 12 new models for the Chinese market with a sales goal of 1.3 million vehicles in 2015. The company aims to produce hybrid cars in China in the next three years by adopting new technologies and localizing R&D operations. It has aggressively introduced technologies to ensure environmental protection, safety, and comfort under the concept of "FUNTEC".

Nissan has been most active in conducting lo-

Competition in the Chinese market will grow more intense and the dynamics of the global auto industry will change.

calization strategies in China. It plans to build new plants and release 30 models in the Chinese market with a sales target of 2.3 million units in 2015. To secure a manufacturing base in northeastern China, Nissan is building a plant in Dalian, which will start operating this year. Once completed, the plant will enable Nissan to increase its passenger car production in China to 1.5 million units.

Local companies: Improve brand image and technology, expand to overseas markets

Since the global financial crisis, Chinese local automakers have seen their sales decline. During the crisis, auto sales soared due to the Chinese government's support for car purchases. However, local car companies have lost their position since the government's policy ended and customers began to demand higher standards. Local carmakers have been threatened even more as an increasing number of customers have purchased foreign vehicles instead of local brands, and China has widened restrictions on vehicle purchases. Against this backdrop, local Chinese companies have made every effort to improve product quality and brand image through technology development.

Last year, local carmakers showed signs of recovery. Even though Chery Automobile's sales decreased nine percent from the previous year, selling 500,000 vehicles at home and abroad, Great Wall and BYD achieved double-digit growth, selling 750,000 and 510,000 cars, respectively. Geely also saw its sales increase to 550,000 vehicles, far short of its original target but up 14% from the previous year. Those local companies have set their growth targets for this year between five and ten percent or higher.

Chinese local car companies are more aggressive in entering overseas markets than joint ventures because they should compensate for decreasing sales in the domestic market and improve their respective brand images. BYD is considering entering the U.S. auto market in the second half of 2015. BYD's flagship model is likely to be its plug-in hybrid compact sedan Qin (秦), which has been recently released. It also tested its electric buses in Britain, Colombia, and Brazil with a plan to expand to other overseas markets based on the test results. Chery aims to localize its products by building a plant and R&D center in Brazil with a goal of selling 100,000 cars locally per year by 2015. Great Wall Motor is currently selling its cars in 76 countries and regions. Though it has not yet entered the U.S. and Canadian markets, Great Wall is preparing to advance into those countries by analyzing customer needs and conducting a study on how to establish a network. Geely is also expanding its entry into to the Middle East, South America, and Russia, and plans to enter advanced markets, including the U.S., with the aid of Volvo, which it has recently acquired, using China as a manufacturing base. Beijing Auto is also scheduled to build a production base in Yunnan, southern China, with a view to using it to venture into the Southeast Asian market.

China is becoming not only the world's largest auto market but also the focus of global strategies for global car companies. Global carmakers' performance in the Chinese market not only has a direct impact on their global status, but also has a growing importance on the operation of global production bases, the introduction of new models, and R&D activities. China, which had been put on the back burner when companies worked out their strategies, is now being viewed as a critical market. What this means is that competition in the Chinese market will be more intense and the dynamics of the global auto industry will continue to change. How companies respond to changes in the Chinese market will determine their survival and growth.

French automaker Citroën's Chinese joint venture in Wuhan, China

Key Strategies of Carmakers Operating in China for 2014

BYD's electric car on display in New York

Chinese Local Companies

Companies	Great Wall	BYD	Geely	Chery
Sales Target (Passenger cars/ 10,000 units)	88	55	58	36
Production Capacity (10,000 units per year)	150 (Three plants)	65 (Three plants)	91 (Eight plants)	148 (Six plants, including a commercial vehicle plant)
New Plants	Expand its third plant in Tianjin with an annual production capacity of 300,000 units Increase annual production capacity to 1.8 million units by 2015	Build a new plant in Tianjin Aim to produce 10,000 new-energy vehicles per year	A new plant in Qinzhou, Guangxi Zhuang Autonomous Region, will begin operating in 2015 with an annual production capacity of 100,000 units	Its third plant will begin operating with an annual production capacity of 350,000 units
New Models	Expand SUV line-up, Launch the Haval series (H8 and H2) in 2014	Introduce the BYD S7 SUV and the Tang hybrid SUV in 2014	Launch new Dihao models (EV8 MPV and EX8 SUV) in 2014	Introduce the Chery A2 (C1) in 2014

Source : Hyundai Motor Research Institute for the China Management

U.S. and European Companies

Category	GM	Volkswagen		Ford
Companies	Shanghai General Motors (SGM)	Shanghai Volkswagen	FAW-Volkswagen	Changan Ford
Sales Target (10,000 units)	166	170	169	79
Production Capacity (10,000 units per year)	160 (Four plants)	185 (Seven plants)	172 (Four plants)	80(Three plants)
New Plants	Its fourth plant will begin operating in Wuhan with an annual production capacity of 300,000 units	Its seventh plant will begin operating in Ningbo with an annual production capacity of 300,000 units	Its third plant in Chengdu will increase output with an annual production capacity of 600,000 units	Its third plant will begin operating with an annual production capacity of 350,000 units
New Models	Introduce updated vehicles	Launch the new "A-Plus" sedan and Skoda Rapid hatchback in October 2014	Introduce the locally produced Audi A3 in January 2014	Produce the 2014 Ford Fiesta SUV locally

Source : Hyundai Motor Research Institute for the China Management

Japanese Companies

Category	Toyota		Honda		Nissan
Companies	FAW Toyota	GAC Toyota	Dongfeng Honda	GAC Honda	Dongfeng Nissan
Sales Target (10,000 units)	64	34	38	48	108
Production Capacity (10,000 units per year)	76 (Six plants)	36 (Three plants)	36 (Two plants)	60 (Three plants)	120 (Five plants)
New Plants	Its fourth plant will begin operating in Tianjin with an annual production capacity of 200,000 units	Its third plant is under construction (completion: 2015, annual production capacity: 200,000 units)		Its second plant will begin operating in Zengcheng with an annual production capacity of 120,000 units	Its new plant will begin operating in Dalian with an annual production capacity of 150,000 units
New Models	Introduce the New Corolla, Corolla HB, and the new Prado	Launch C2 models	Introduce the new Spirior vehicles designed for the Chinese market (C2) and the Honda Insight HEV	Introduce the new Fit, the new City, and an SUV (C1)	Launch the new Nissan Qashqai, the X-Trail, the new Murano, and the QX50L

Source : Hyundai Motor Research Institute for the China Management

Southeast Asia Emerges as a Post-BRICs Auto Market

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Over the past few years, emerging economies have driven the growth of the global automobile market. In particular, the BRICs–Brazil, Russia, India, and China– have played a major role in that growth. Recently, however, ASEAN has emerged as a new auto market. From 2006 to 2012, auto sales in major ASEAN countries, including Thailand, Indonesia, Malaysia, the Philippines, Vietnam, Singapore, and Brunei increased an annual average of 13.1%. In that time, Thailand and Indonesia saw their auto sales grow a substantial 17.9% and 20.8%, respectively, leading the expansion of the ASEAN auto market. In 2012, the two countries sold more than one million vehicles each with Thailand selling 1.44 million cars and Indonesia 1.12 million cars. On the other hand, auto sales in Malaysia increased only slightly to 630,000 vehicles. The combined auto sales of major ASEAN countries in 2012 amounted to 3.51 million units, accounting for 4.5% of global auto sales, which is comparable to sales figures for India, the world's fifth-largest car market.

However, the growth of the ASEAN market has slowed since 2013 when auto sales in the region's largest car market Thailand began to decrease due to political instability. According to some estimates, auto sales rose a mere 2.6% to 3.61 million units in major ASEAN countries in 2013. What is worth noting, however, is that sales continued to grow by 10% in Indonesia even as sales fell 6% in Thailand. The ASEAN auto market is expected to be led by Indonesia. Car ownership rates in Thailand and

Workers at a Mitsubishi plant in Thailand (JoongAng Photo)


1. Robot arms weld vehicles at a Proton assembly plant in Shah Alam, Malaysia
2. PT Honda Prospect Motor plant in Indonesia
3. A Jaguar car on display in Manila, the Philippines
(JoongAng Photo)

Malaysia have already reached a certain level of maturity and are unlikely to rise significantly considering the populations of the two countries. On the contrary, Indonesia has the world's fourth-largest population, its car ownership rate is still low, and its economy is growing rapidly, indicating that the country still has great growth potential. According to Indonesia's auto industry development plan, domestic car sales are projected to increase to 1.22 million units by 2015, 1.97 million units by 2020, and 3.18 million units by 2025. However, as car sales in Indonesia are increasing faster than expected, they will have reached 1.23 million units already by 2013.

ASEAN not just an important consumer market but a manufacturing base as well

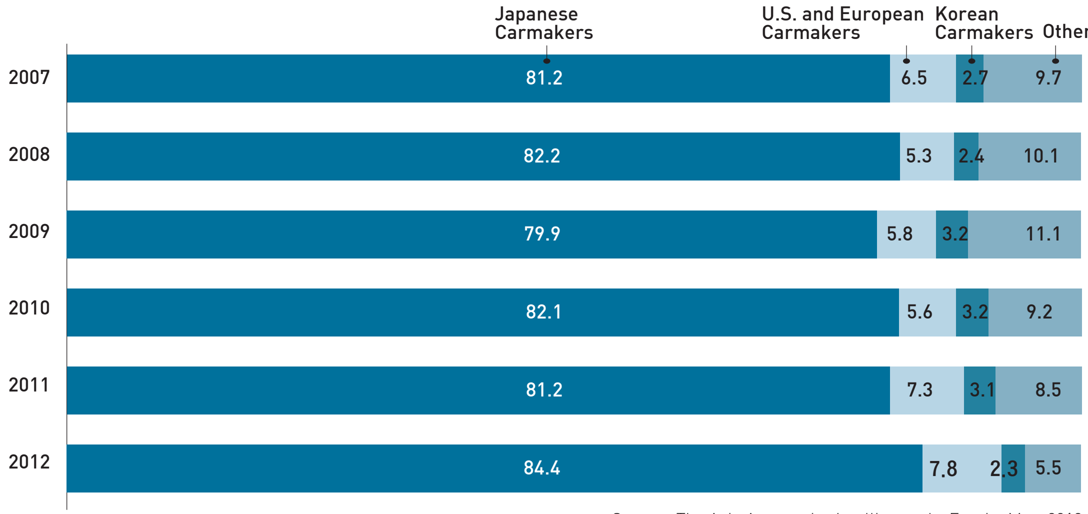
In fact, ASEAN is more important as an auto manufacturing base than as a consumer market. Auto production in major ASEAN countries amounted to 4.24 million units in 2012, much higher than the number of cars sold in the region, indicating that the region's auto industry not only met demand but also exported products. The largest exporter in ASEAN is Thailand. It produced 2.45 million vehicles in 2012, about one million units more than the number of cars sold in the country. Thailand exported 1.02 million cars, becoming one of the world's top ten automakers. Auto production in the ASEAN region has surpassed that of India, the world's sixth-largest auto producer, comprising more than 5% of global output.

Auto production among ASEAN countries has gone up sharply at an annual average rate of 12.6% since 2006. The country that has witnessed the fastest growth in car production is Indonesia. Since 2006, Indonesia's auto output has grown 23.8% per year on average. Even in 2013, when overall auto production declined in the ASEAN region, Indonesian car output rose 12.7%.

Japan, absolute leader in the ASEAN auto market

Japan is the absolute leader in the ASEAN auto industry. Japanese carmakers account for more than 80% of auto sales in major ASEAN countries, including Thailand, Indonesia, Malaysia, the Philippines, Vietnam, Singapore, and Brunei. In 2012, Japanese brands accounted for a substantial 84.4% of total auto sales in the region. Meanwhile, Korean carmakers lagged far behind, holding the lowest market share of 2-3% in the ASEAN market. And the combined market share of U.S. and Euro-

Auto Sales in ASEAN (Unit : %)



Source: *The Asia Automotive Intelligence* by Fourin, Mar. 2013

Auto Sales in ASEAN (Unit : Vehicles)

	2007	2008	2009	2010	2011	2012	rowth Rates (%)	Share (%)
Thailand	631,251	615,270	548,871	800,354	794,081	1,436,335	17.9	40.9
Indonesia	433,341	603,774	483,548	764,712	894,164	1,116,230	20.8	31.8
Malaysia	487,176	548,115	536,905	605,156	599,329	627,753	5.2	17.9
Philippines	117,903	124,449	132,444	170,348	165,056	184,248	9.3	5.2
Vietnam	91,906	143,846	160,814	146,021	138,117	92,584	0.1	2.6
Singapore	122,254	110,574	79,503	51,891	39,570	37,247	-21.2	1.1
Brunei	14,220	14,680	12,365	13,589	14,555	18,634	5.6	0.5
Total	1,898,051	2,160,708	1,954,450	2,552,071	2,644,872	3,513,031	13.1	100.0

Source: *The Asia Automotive Intelligence* by Fourin, Feb. 2013

pean automakers in the region was only 7.8%, with GM and Ford comprising 2.7% and 2.5% of total sales, respectively, and German carmakers selling few vehicles.

Among Japanese automakers, Toyota and its affiliates such as Daihatsu have secured a dominant position. The Toyota Group comprises 44.2% of total auto sales in the ASEAN region with Toyota and Lexus accounting for 32.3%, Daihatsu (including Perodua, Daihatsu's joint venture with Malaysian companies) 10.2%, and Hino 1.7%. The second-largest carmaker in the region is Honda, holding a market share of 8.4% as of 2012. Japanese automakers have been able to maintain their dominance thanks to the strong local production system they have established. In 2012, the Toyota Group manufactured 1.88 million vehicles and sold 1.54 million vehicles in ASEAN countries while Nissan produced 360,000 cars and sold 230,000 cars, and Honda produced 320,000 cars and sold 290,000 cars. Japanese automakers have not only met local demand for autos, they have also exported their products manufactured in the region.

In addition, Japanese car companies have developed vehicles designed for local markets. They have produced family minivans in Indonesia, and pickup trucks in Thailand. Japanese automakers have also successfully established a local auto parts sourcing system based on their abundant experience in overseas markets. As a result, they have achieved a local procurement rate of 70-80% in Indonesia, where the auto parts industry is weak, as well as in Thailand, where the car parts industry is well developed. Japanese carmakers have also successfully formed a cooperative production network in the ASEAN region centered on Thailand. For example, Japanese automakers operating in Indonesia have imported passenger car parts from Thailand. Indonesia depends on Japan for 39.6% of its auto parts imports and on Thailand for 34.2%.

Green car policy and automakers' expansion strategy

The ASEAN region has been at the center of attention for global carmakers because of its importance as an auto production base, not just as a car market. According to Global Automakers' Investment Plans for Asia published last September in *The Asia Automotive Intelligence* by Fourin (Japanese research firm specializing in the world automotive industry), auto output across the ASEAN region is expected to increase to 1.7 million units by 2016. The Toyota Group plans to expand its production by 310,000 units in Thailand, 140,000 units in Indonesia, and 100,000 units in Malaysia. Nissan also aims to increase auto production by 150,000 units in Thailand and 150,000 units in Indonesia.

Aside from Japanese car companies, GM and Volkswagen are both poised to enter the ASEAN market, with each building a new plant in Indonesia with an annual capacity of 40,000 units and 50,000 units, respectively. Chinese automakers have expressed interest in the ASEAN market as well. Chery plans to build plants with an annual capacity of 10,000 units and 12,000 units in Malaysia and the Philippines, respectively, while Geely aims to build a plant with an annual capacity of 30,000 units in Indonesia. In addition, both Shang-

Localization Rates of Major Car Models Produced in Indonesia (Unit: %)

Models	Localization Rates
BMW 3 Series	21
Chery Sedan	10
Daihatsu Terios	74
Daihatsu Xenia	77
Daihatsu Luxio	80
Daihatsu Gran Max	83
Hino Trucks	65
Honda Jazz	50
Hyundai Sedans, MPVs, SUVs	40
Isuzu Trucks, Buses	80
Benz Sedans	30
Benz Bus Chassis	40
Mitsubishi Maven	72
Mitsubishi Fuso	29
Mitsubishi Colt Diesel	47
Mitsubishi L300	57
Mitsubishi Colt T120 SS	62
Nissan Livina	33
Nissan X-Trail	22.7
Nissan Serena	26
Nissan Diesel Trucks	50
Suzuki APV	75
Suzuki Futura	58
Suzuki SX4	20
Suzuki Baleno	20
Suzuki Grand Vitara	20
Toyota Innova	71
Toyota Fortuner	32
Toyota Dyna	59
Toyota Avanza	76
Toyota Rush	73

Source: Association of Indonesian Automotive Industries

hai Automotive Industry Corporation (SAIC Motor) and Great Wall Motor Company will build plants with an annual capacity of 50,000 units in Thailand.

Companies have concentrated their efforts on expanding production capacity especially in Thailand and Indonesia. The reason may be related to auto policies of the two countries. In 2007, Thailand initiated the Eco Green Car project, the first stage of which has already been completed. The second stage of the project has been underway since October 2012. According to Just-Auto, an online news agency, carmakers including Toyota, Mitsubishi, Honda, Nissan, and Suzuki invested a total of USD 900 million in the first stage of the project, expanding their production capacity significantly. The eco-friendly project has contributed to increasing sales of eco-friendly cars considerably as the project was designed to offer incentives for purchases of passenger cars with an engine displacement of less than 1.3 liters. Thailand announced that it would provide more benefits to companies participating in the second stage of the project with stricter qualifications. Not just Japanese carmakers but SAIC Motor, Volkswagen and GM have also announced their intentions to participate in the second stage of the eco project. The Thai government estimates that the country's eco-friendly car production capacity will increase to 935,000 units by 2017 and 1.2 million units by 2020.

Indonesia has also implemented programs to promote eco-friendly car purchases. As part of this effort, the Indonesian government has imposed 10% lower consumption taxes on vehicles with a minimum fuel efficiency of 20 km per liter under the LCGC (Low Cost Green Car) program.

ASEAN is more important as an auto manufacturing base than as a consumer market.

To take advantage of this program, Japanese carmakers plan to increase production capacity in Indonesia. If everything goes as planned, their annual production capacity will increase by 570,000 units. The Japanese automakers' target models are likely to be compacts, which may lead to increased production and sales of Japanese passenger cars in Indonesia as well as family minivans, their flagship model.

Korean companies' strategies to enter ASEAN auto market

Even though ASEAN is emerging as one of the world's major auto consumer markets and manufacturing bases, Korean carmakers have not aggressively entered the ASEAN auto market and are not likely to establish a production network in the region. With Japanese carmakers taking the lead in the ASEAN auto market, entry barriers remain very high. In addition, Korean companies may find it difficult to export their products to ASEAN countries because of high tariff and non-tariff barriers. Indonesia imposes tariffs of up to 40% on most imported vehicles except for certain items subject to a ten percent tariff. In Thailand, auto tariffs on imported passenger cars amount to 80% with commercial vehicles 30%. Even though Indonesia's import duties on Korea-made cars could decrease in the near future if Korea and Indonesia finalize the CEPA, Korean automakers may find it difficult to export their products directly as Indonesia applies different tax rates to locally produced vehicles and foreign-made cars. Auto sales taxes in Thailand are between 30% and 50% while Indonesia imposes 30-75% sales taxes on most vehicles. Korean carmakers cannot even enjoy the tax benefits that automakers operating in Indonesia would receive under green car projects.

However, Korean automakers should not give up on entering ASEAN, which is a great market in terms of both size and growth potential. In particular, they must focus on Indonesia. Indonesian markets are relatively open to foreign companies and likely to grow further. On the contrary, Thailand, the largest auto market in ASEAN, does not have great potential. In Thailand, auto production has already surpassed domestic demand by more than one million units and competition among automakers is likely to be more intense as global companies plan to expand their production facilities in Thailand. Companies planning to enter foreign markets must consider whether they would offer favorable business environments as well as market prospects. Thailand has a competitive edge in parts sourcing, but labor costs are cheaper in Vietnam than Thailand or Indonesia. On the other hand, Vietnam and Thailand are most active in attracting foreign investment.