

# Outlook for APEC & Japanese Economy

## Analysis from Perspective of Next Generation

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### Trade in Asian Region

The Asia-Pacific Economic Cooperation (APEC) forum is a regional economic cooperation framework encompassing 21 Pacific-Rim countries and regions with a broad variety of cultural and economic backgrounds. In fact, the APEC members include not only Asian economies but those in the Australasian region, North and South America, and even Russia. In the Chinese sphere, China is not the sole member. Taiwan and Hong Kong also are APEC members. This means that APEC aims for a new framework based on a perception beyond the conventional geographical bounds, bilateral frameworks and national borders.

In the APEC region, trade is expanding remarkably. In particular, trade in Asia has grown significantly since the 1990s. This stems largely from active introduction of foreign direct investment (FDI). A good number of multinational corporations have set up production bases in the Asian region. They produce goods there and export

them to their home and third countries. In this way, they have built up cross-border production systems. Particularly in the fields of consumer electronics, electronic parts and textiles, parts and products are traded across borders. This is called intraindustry trade. Such trade used to be conducted entirely within a single country. Currently, multinationals are trying to get an upper hand over their rivals in cross-border competition by locating the manufacturing processes of parts and products – producing parts, and fabricating and processing them into products – to multiple countries they regard as most fitted for each process in view of its properties. Such an international division of labor has reduced production costs and product prices, helping multinationals win market competition.

The cross-border moves have become popular among a wide range of industries. The Asian region, however, has not achieved completely free, cross-border economic activities as yet. In reality, there is still room for further changes in the trade structure. To prove this, this article takes up as an example the automobile industry and auto trade in the Asian market.

TABLE 1

### Value of intraregional trade in autos/auto parts (\$1 mil.)

		Completed autos			Auto parts		
		Asia	NAFTA	EU	Asia	NAFTA	EU
1988–1990		Export areas			Export areas		
Import areas	Asia	5,929	1,044	791	3,530	1,787	3,362
	NAFTA	1,107	18,171	562	5,428	17,204	305
	EU	1,240	184	7,393	4,096	452	13,462
1991–1995		Export areas			Export areas		
Import areas	Asia	20,496	4,195	7,579	22,798	12,402	36,821
	NAFTA	37,703	100,478	15,902	138,941	205,755	47,623
	EU	9,561	5,369	111,114	53,662	7,860	293,768
1996–2000		Export areas			Export areas		
Import areas	Asia	21,028	6,767	10,993	25,087	10,952	37,446
	NAFTA	41,147	170,758	24,697	160,754	345,560	91,472
	EU	16,030	12,446	246,900	84,962	15,380	589,141
2001–2005		Export areas			Export areas		
Import areas	Asia	42,801	8,483	21,464	36,236	7,640	47,491
	NAFTA	59,523	207,314	34,790	237,642	423,526	157,037
	EU	19,525	11,656	340,966	99,240	26,836	759,493
2006–2008		Export areas			Export areas		
Import areas	Asia	49,946	6,540	22,737	35,919	9,358	45,553
	NAFTA	54,736	139,537	26,345	183,404	291,895	105,999
	EU	22,890	8,827	338,883	81,645	36,413	699,127

Note: 1. Figures in amber cells are values of intraregional trade. 2. Asia includes Japan, South Korea, Singapore, Thailand, China, Hong Kong, Macao, Indonesia, Malaysia, Philippines, Vietnam, Mongolia, Brunei, Cambodia & Myanmar. 3. EU comprises 27 member countries plus Turkey. 4. NAFTA comprises U.S., Canada & Mexico.

Source: UN Commodity Trade Statistics Database (six-digit HS92 code, mainly covering autos/auto parts)

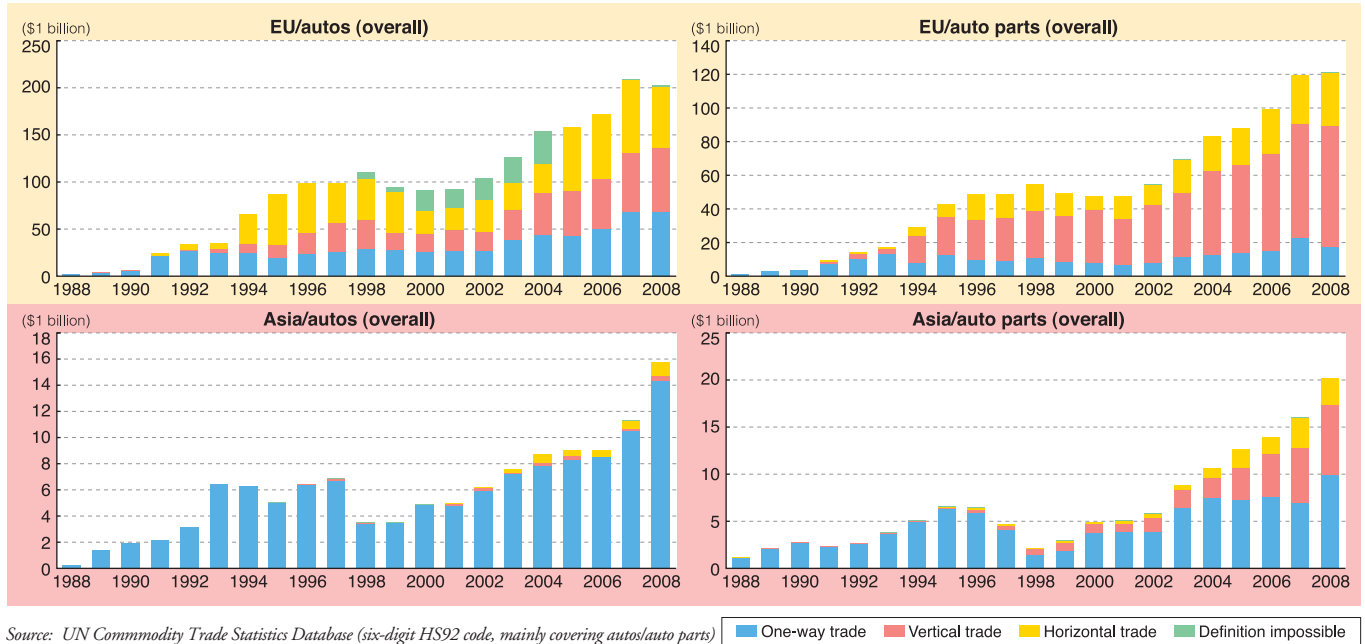
### Features of Auto Trade in Asian Region

The auto industry, closely linked to steel, chemicals and many other industries, is widely known for its huge potential to create jobs and advance technologies in a broad range of sectors. For this reason, not a few Asian countries have protected and fostered their auto industries. From the 1990s onward, Asian countries actively took in FDI. In the meantime, Japanese and other foreign automakers formed partnerships with local car manufacturers and cranked up production. Auto trade in the intra-Asian region, however, remained rather slow. This becomes evident if you compare trade structures in Asia with those of European Union (EU) member states, which have pursued the unification of their markets since the 1990s.

Table 1 shows trends of the value of trade in completed autos and auto parts in Asia, the North American Free Trade Area (NAFTA) and the EU. Turkey is included in the EU from 2000 onward, taking into account the fact that Turkey has become one of the key hubs for production of Europe-bound autos, and is playing a pivotal role in the European auto industry's international division of labor.

A study of these regions shows intraregional trade accounts for the bulk of global trade in the EU and NAFTA (the United States, Canada and Mexico). In the Asian region, however, auto trade is smaller in size, and exports to NAFTA are greater than intra-Asian sales. The data cover only trade between different countries and do not include domestic production, cargo pickup and sales. For this reason, intra-Asian exports are small in size, with the data based only on auto

## Features of intraregional trade in EU/Asia



Source: UN Commodity Trade Statistics Database (six-digit HS92 code, mainly covering autos/auto parts)

parts and completed autos mostly shipped to home countries or to the United States and Europe.

### Liberalization of Auto Trade & Transformation of Production System

Since the 1990s, the EU has pushed forward systemic reforms in the region starting with the standardization of auto parts and removal of tariff barriers as initial challenges. In line with the efforts toward the unification of systems, European automakers have formed cross-border production bases, and eventually established an international division of labor in the EU region. Further, carmakers have set up type-by-type manufacturing plants in accordance with respective member states' economic situations, technological and wage levels and labor force quality. Using those plants as their production bases, they have exported autos to respective countries.

In the Asian region, however, a common market has yet to be created, and Asian countries still put priority on protecting/nurturing domestic auto industries, positioning them as important in-country sectors. Particularly for completed autos, they maintain high tariffs and restrictions on imports. This means that unlike the EU, Asian countries did not start with reforms of their trade systems, but are trying to gradually and modestly enhance economic alliances between them while luring FDI. In this way, Asian countries are edging toward creating a common market.

Driven by systemic reforms, cross-border auto trade has expanded strongly in the EU market, with not only auto parts but completed autos as well briskly traded between member states. However, the shape of trade in the EU is currently being transformed. *Chart* shows intraregional trade in autos and auto parts. In the chart, the value of autos and auto parts traded is classified according to three trade patterns that were defined on the basis of the scale of trade and prices for traded goods. The first pattern is defined as "one-way trade" between two countries, in which the scale of bilateral trade in one country is more than 10 times as large as that of the other country in terms of value. In this case, it is perceived that the country with the bigger trade scale largely produces autos and auto parts, and the other country

mostly imports and consumes the autos and auto parts. If a gap of trade scale between two countries is less than 10 times, the bilateral trade is then regarded as "two-way trade." The second pattern is called "vertical trade," in which one of the two countries specializes in producing high value-added goods and the other in low value-added products. The third is defined as "horizontal trade," in which two countries produce similar levels of value-added goods in parallel.

Looking at the EU based on this definition, it becomes clear that the region has rapidly expanded "vertical trade" since 2000. Over the last decade, automakers have relocated their manufacturing bases to East European countries and Turkey as part of efforts to realign their production systems. Also, manufacturers had each production base focus on a specific auto type. They have raised production efficiency as a result. Based on this setup, some countries concentrated on the production of high value-added luxury cars, while other countries focused on low-value added autos, and sales networks have been built up in various countries in the region through cross-border auto transactions.

In the Asian region, however, with the exception of trade in some auto parts, regional trade has largely been "one-way trade," and a cross-border division of labor has yet to be established. This indicates that unlike the consumer electronics and precision instrument industries, procurement of auto parts and trade in completed autos across national borders are scarcely carried out in the Asian region.

### Future Direction of Auto Industry

However, changes have gradually been emerging in the global landscape of the auto industry in recent years. The auto industry is confronted with a situation in which expansion of its market size is unlikely in the industrialized world, and production capacity is excessive. Given such circumstances, the industry faces the necessity to reshape its production/sales system with an eye on a high growth potential in the Asian market. Earlier this year, Nissan Motor Co. started boosting production of its new global compact car *March* at its Thai subsidiary, Nissan Motor (Thailand) Co. (NMT), for export to Japan, other Asian countries and Australia. On top of this, NMT reportedly intends to not only procure auto parts locally but also increase procurement from

TABLE 2

## Gobal rankings of container throughput by port (in TEU\*)

Rank	2006		Rank	2007	
	Port	Throughput		Port	Throughput
1	Singapore	24,792,400	1	Singapore	27,932,000
2	Hong Kong (China)	23,538,580	2	Shanghai (China)	26,150,000
3	Shanghai (China)	21,710,000	3	Hong Kong (China)	23,998,449
4	Shenzhen (China)	18,468,900	4	Shenzhen (China)	21,099,000
5	Busan (S. Korea)	12,038,786	5	Busan (S. Korea)	13,270,000
6	Kaohsiung (Taiwan)	9,774,670	6	Rotterdam (Netherlands)	10,790,604
7	Rotterdam (Netherlands)	9,654,508	7	Dubai (UAE)	10,653,026
8	Dubai (UAE)	8,923,465	8	Kaohsiung (Taiwan)	10,256,829
9	Hamburg (Germany)	8,861,545	9	Hamburg (Germany)	9,900,000
10	Los Angeles (US)	8,469,853	10	Qingdao (China)	9,462,000
11	Qingdao (China)	7,702,000	11	Ningbo (China)	9,360,000
12	Long Beach (US)	7,290,365	12	Guangzhou (China)	9,200,000
13	Ningbo (China)	7,068,000	13	Los Angeles (US)	8,355,039
14	Antwerp (Belgium)	7,018,899	14	Antwerp (Belgium)	8,175,952
15	Guangzhou (China)	6,600,000	15	Long Beach (US)	7,312,465
23	Tokyo	3,969,015	24	Tokyo	4,123,920
28	Yokohama	3,799,883	28	Yokohama	3,428,112
33	Nagoya	2,751,677	35	Nagoya	2,896,221
38	Kobe	2,412,767	44	Kobe	2,472,808
44	Osaka	2,231,516	46	Osaka	2,309,820
106	Hakata	785,182	111	Hakata	827,062
155	Shimizu	423,677	129	Kitakyushu	622,192

Note: 1. Total of outgoing & incoming cargoes, 2. Both loaded & empty containers included, 3. Transshipment cargoes included, 4. Data in/before 2006 confirmed, those in 2007 provisional, 5. For Japan, the top seven ports are listed.  
\* Twenty-foot equivalent unit

Source: Ministry of Land, Infrastructure, Transport & Tourism data based on "Containerization International Yearbook 2009"

India and other nearby countries by taking advantage of expanding free trade agreements (FTAs).

This means Nissan is poised to make low-cost autos in low-cost countries in the Asian region just as European carmakers did in their region. If other automakers follow suit, then the realignment of production systems is likely to occur in the Asian region as well. This in turn would force the current production system in Japan to be overhauled, and have a great impact on the employment situation in Japan and the Japanese economy overall. With these aspects in mind, we need to continue mulling ways to deal with possible structural changes.

The EU abolished tariff and other trade barriers in the region. It also standardized auto parts and unified safety standards ahead of moving forward an international division of labor. Hence, the EU approach cannot simply be applied to the Asian market. Hereafter, Asian countries are expected to gradually lift trade barriers as a greater number of FTAs are expected to be concluded among them. Should Asian countries make little headway in standardizing auto parts and unifying safety standards, automakers may consider whether or not the EU ways of concentrating production of certain types of autos on certain production bases are really efficient. So, we need to keep a close watch on future developments in bilateral and regional trade, including trade agreements.

### Infrastructure Improvement in Asian Region

Just like tariffs that greatly affect trade as they could become trade barriers, infrastructure has significant bearings on trade because upgrading it is prerequisite for the expansion of transportation. Asian countries have so far made massive investment to improve their social infrastructure as a way to invite foreign corporations to make more FDI in the region. A good number of large harbors and airports have been built in various parts of the region as a result, and throughput of cargo, particularly containers, in the region is now one of the largest in the world.

As shown in *Chart*, Asian ports such as Singapore, Shanghai and Busan currently dominate top slots on the world's list of container throughput. In Japan, Tokyo and Yokohama ports handle a relatively large volume of containers, but are still smaller in scale than the Asian hub ports. This is one example that proves social infrastructure has played a significant part in expanding trade in the Asian region in recent years as it has provided underlying support to the distribution of goods.

Still, there is room for further improvement in those transportation facilities. The concept of logistics has become important worldwide. It is intended for integrated management/control of the whole process of distribution ranging from materials procurement to production to sales. For automakers, it is vital to make as efficient as possible the process of procuring parts, assembling them into completed autos, shipping them to their dealerships and selling them to consumers. The just-in-time system designed by Toyota Motor Corp. to minimize inventories based on the concept of procuring parts and producing autos only when necessary represents an ultimate approach for efficiency.

At the moment, however, such an efficient, cross-border logistics system has yet to be established in the Asian region. But if more FTAs are concluded among Asian countries, cross-border procurement of auto parts and trade in completed autos are expected to grow. At that stage, Asian countries may become aware of the need

to build an efficient logistics system as well as social infrastructure and information and telecommunication networks that support logistics. In particular, it will become even more important to upgrade infrastructure related to information and telecommunications as well as information networks linking logistics hubs in Asian countries. Further, it will become indispensable to unify technological standards. For that purpose, greater cross-border efforts and cooperation will be necessary.

Japan is planning to open up more international flight slots at Tokyo's Haneda airport to make it a hub airport. Also, it is trying to designate hub seaports from among main ports such as Tokyo, Kawasaki and Yokohama. These efforts are significant from the viewpoint of making the nation's logistics system more efficient. In Asian hub ports, meanwhile, information technologies are actively being introduced. South Korea's Busan port, for instance, has been operating intelligent-type port systems at its terminals. It has introduced a radio frequency identification (RFID) system, a global positioning system (GPS) and a ubiquitous sensor network (USN). By tracking the moves of yard tractors with these systems, the port has succeeded in substantially reducing the time and cost required for handling containers cargoes (*Table 2*).

Japan lags behind other Asian countries in introducing hub ports and upgrading logistics systems, and so needs to further improve such systems and social infrastructure. To make port operations even more efficient, it is necessary to introduce state-of-the-art technologies and systems in ports and harbors in preparation for the expected expansion of trade not only in the Asian region, including Japan, but around the globe. **JS**

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