2010 JETRO Global Trade and Investment Report

A Global Strategy for Japanese Companies to Open New Frontiers in Overseas Markets

Japan External Trade Organization (JETRO)
Overseas Research Department

2010 JETRO Global Trade and Investment Report

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Preface

We herewith deliver the "2010 JETRO Global Trade and Investment Report."

When we look back over the past year's world economy, trade, and investment, the world economy shows signs of steady recovery from the financial crisis that began in 2008 in the US. However, the economies of developed countries still cannot completely emerge from the stagnation phase. In addition to this, as the lingering uncertainty triggered by recent financial problems in Greece demonstrates, we still cannot get rid of uncertainty in the future.

Since first publishing "The Current Situation of Overseas Markets" in 1956, JETRO has been publishing our overseas business information report on trade and investment every year to be of some help to those dealing with overseas business. Since 2002, we have issued our "White Paper on International Trade And Investment," an integrated version of our "White Paper on International Trade" and "White Paper on Foreign Direct Investment," each published since 1999.

Under the circumstances in which the Japan's market has reached a matured stage, the overseas market has become more important for Japanese companies; the global situation in Japan has changed dramatically and continues to change day by day.

In light of these circumstances, in order to widely and rapidly deliver the information to those aiming to deal with global business, JETRO has decided to place the information, which was carried in our "JETRO Trade and Investment White Paper" before, on the JETRO Website (www.jetro.go.jp). Also, by changing the title to "JETRO Global Trade and Investment Report," we have started out on our new way.

In this Report, Chapter I, "The World Economy, Trade and Foreign Direct Investment," mainly analyzes world trade and investment trends in 2009, and searches for future implications. Chapter II, "Recent International Trade Issues Pose a Change in Priorities," deals with the latest information on WTO and FTA as well as the discussions on "Trade and Environment," which have been drawing attention in recent years. Chapter III, "Exploring New Frontiers in Business Overseas," deals with the consumer market in emerging countries, which can expect continuous high growth, as well as the latest business trends in the service industry, environment, and infrastructure business, all of which are expected to become new frontiers for Japanese companies.

Please note that this is a provisional translation from Japanese.

August, 2010
Japan External Trade Organization (JETRO)

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Explanatory Notes

1. Abbreviations of publications and publishing organizations

(1) IFS: International Financial Statistics (IMF)
(2) DOTS: Direction of Trade Statistics (IMF)
(3) WEO (D) : World Economic Outlook (Database) (IMF)
(4) BOP: Balance of Payments Statistics (IMF)

2. Figures (As follows, unless otherwise indicated.)

(1) In text, figures and tables, "year" indicates the period January-December, and "fiscal year" indicates the period April-March.
(2) In tables, figures for "foreign currency reserves" and "outstanding outward debt" are year-end figures. "Foreign currency reserves" exclude gold.
(3) Figures for "rate of growth" are year-on-year figures. In figures and tables, "-" indicates lack of results, "0" indicates figures of less than a unit, and "n.a." indicates that figures are unclear or unavailable.
(4) Because figures are rounded, there may be discrepancies in total.

3. Country and region classifications (As follows, unless otherwise indicated.)

(1) ASEAN (Association of Southeast Asian Nations) : Indonesia, Singapore, Thailand, the Philippines, Malaysia, Brunei, Vietnam, Laos, Myanmar, Cambodia
(2) ASEAN 4: Indonesia, Thailand, the Philippines, Malaysia
(3) Hong Kong and Taiwan are treated as independent economies
(4) EU27: EU15 (Austria, Belgium, Denmark, Germany, Greece, Finland, France, Ireland, Italy, Luxembourg, Portugal, Spain, Sweden, Netherlands, UK), plus 12 new members (10 countries which acceded in 2004 (Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia) and 2 countries which acceded in 2007 (Romania, Bulgaria))
(5) EU member candidates: Croatia, Macedonia, Turkey
(6) EFTA (European Free Trade Association) : Liechtenstein, Norway, Switzerland, Iceland
(7) NAFTA (North American Free Trade Agreement) : U.S., Canada, Mexico
(8) BRICs: Brazil, Russia, India, China

4. Base point in time

As a general rule, the base point in time is at the end of June 2010 unless mentioned otherwise.

I The World Economy, Trade and Direct Investment

1. Current Issues of the World Economy

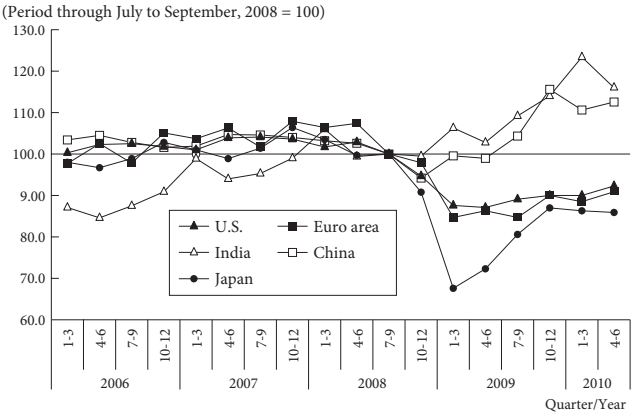
(1) Recovery of the world economy through Asian initiatives and leadership

Country differences exist in the power of recovery

2009 has become the year of economic recovery around the world. Leading developed nations, though eclipsed by emerging countries, saw the bottoming out of the economy in mid 2009, and the economy is beginning to move back onto a growth trajectory. This move can be generally detected by production behaviors relative to GDPs (Figure I-1). Emerging countries like China and India have surpassed the production pace of developed nations and the world economy has regained the economic level of the pre-financial crisis. However, Russia, also categorized as an emerging country, took a period of 6 quarters to begin to see a sluggish recovery and it was only in the first quarter of 2010 that its economic growth has shown positive gains. It cannot be generalized to say that the economies of all developing nations are on complete growth trajectories. Worldwide, the pace of economic recovery is dappled and uneven.

The postwar world for the first time has seen negative growth of 0.6% according to an April, 2010 estimate by the IMF, based on the world's real GDP growth rate (Purchasing Power Parity [PPP] basis). Helped by the reactionary trend, the economy is expected to grow at the high rate of 4.2% in 2010. After this year, the world economy is projected to maintain a steady growth of about 4% (Figure I-2). Furthermore, in July the IMF revised the growth figure to 4.6%, which is an upward adjustment of 0.4%. The driving forces of the world economy are centered in China and India and other Asian countries. The world economic growth rate sank in 2009 but Asian economies contracted only slightly. Their presence is increasingly becoming stronger even after the crisis. According to IMF estimates, the recovery of the U.S. economy will be quicker, than that of Europe (EU27).

Figure I – 1 Trends in industrial production indices (Manufacturing)



(Notes) (1) Value of Jan. -Mar. for China is calculated from the value of Jan. -Feb.
(2) For China, all industries.
(3) Apr. -Jun., 2010 is for the U.S., Apr. -May average is for China and for Euro area, India and Japan, the value of April is used to calculate.

(Sources) Statistics of Indices of Industrial Production, Ministry of Economy, Trade and Industry, FRB and others.

The effect of the worldwide financial crisis caused by the collapse in September 2008 of Lehman Brothers, a major U.S. global financial services company, lasted even well into 2009. In the United States, the epicenter of the worldwide financial crisis, in February 2009 a major financial services company, Citigroup, virtually became under the control of the U.S. Government. However, this rescue plan not only failed to stabilize credit confidence but also further propelled the credit crisis, which already had no signs of light ahead. In March 2009, the Dow Jones Industrial Average, the Dow 30, hit a 12- year low.

The turning point came at the end of March 2009 when the details of U.S. Government and private funds for the bad assets buyout were made available. In the wake of this announcement market uneasiness subsided on the faith that the bad assets in the financial sector would be relieved. In addition to the return of calmness to financial markets, the new regime of President Obama in February enacted a stimulus package of US$787 billion, which helped the economy back onto the road to recovery. The bold monetary relaxation policy taken by the FRB (Federal Reserve Board) also helped support the Government's economic growth program. The U.S. real GDP growth rate (seasonally adjusted annual rate) saw a decline of 6.4% in the first quarter of 2009 but saw a large gain of 5.6% in the fourth quarter.

The effects of the financial crisis that began in the United States were thought to be minimal in Japan since the major financial institutions in Japan invested only a limited amount in securitized subprime-loan instruments, but the weak economy was soon revealed due to the dependence of economic growth on external demand, which showed contraction due to the crisis abroad and a rapid increase in the value of the yen. In March 2009 the Nikkei average hit the lowest figure since the bubble economy and Japan was filled with gloomy economic prospects. After that, helped by government simulative measures and the strength of the economic power of Asia, Japan raised above the surface in economic growth in the second quarter of 2009, for the first time in 5 quarters, a condition similar to that of the U.S.

In Europe, excessive lending to border countries' financial institutions and the lack of coordination within the region led to the delayed recovery. In spite of this situation, Europe's economic slowdown also hit bottom like in Japan and the U.S. in the first quarter of 2009 due to recovery in the export market and domestic stimulus packages such as those for new car purchases. However, the rate of recovery was sluggish. UK's high dependence on financial institutions

Figure I – 2 GDP growth and contribution by country and region

(%)

	2006		2007		2008		2009		2010 (Estimate)		2011 (Estimate)	
	Growth Rate	Contri-bution	Growth Rate	Contri-bution	Growth Rate	Contri-bution	Growth Rate	Contri-bution	Growth Rate	Contri-bution	Growth Rate	Contri-bution
U.S.	2.7	0.6	2.1	0.5	0.4	0.1	−2.4	−0.5	3.1	0.6	2.6	0.5
EU 27	3.4	0.8	3.1	0.7	0.9	0.2	−4.1	−0.9	1.0	0.2	1.8	0.4
Euro Zone	3.0	0.5	2.8	0.5	0.6	0.1	−4.1	−0.6	1.0	0.1	1.5	0.2
UK	2.9	0.1	2.6	0.1	0.5	0.0	−4.9	−0.2	1.3	0.0	2.5	0.1
Japan	2.0	0.1	2.4	0.2	−1.2	−0.1	−5.2	−0.3	1.9	0.1	2.0	0.1
East Asia	9.1	1.5	10.1	1.8	6.9	1.3	5.4	1.0	8.3	1.7	8.2	1.7
China	11.6	1.1	13.0	1.3	9.6	1.0	8.7	1.0	10.0	1.3	9.9	1.3
South Korea	5.2	0.1	5.1	0.1	2.3	0.0	0.2	0.0	4.5	0.1	5.0	0.1
ASEAN	6.2	0.2	6.6	0.3	4.4	0.2	1.3	0.1	5.4	0.2	5.6	0.2
Thailand	5.1	0.0	4.9	0.0	2.5	0.0	−2.3	−0.0	5.5	0.0	5.5	0.0
Singapore	8.7	0.0	8.2	0.0	1.4	0.0	−2.0	−0.0	5.7	0.0	5.3	0.0
Malaysia	5.8	0.0	6.2	0.0	4.6	0.0	−1.7	−0.0	4.7	0.0	5.1	0.0
Vietnam	8.2	0.0	8.5	0.0	6.2	0.0	5.3	0.0	6.0	0.0	6.5	0.0
India	9.8	0.4	9.4	0.4	7.3	0.3	5.7	0.3	8.8	0.4	8.4	0.4
Australia	2.6	0.0	4.7	0.1	2.4	0.0	1.3	0.0	3.0	0.0	3.5	0.0
New Zealand	1.0	0.0	2.8	0.0	−0.1	−0.0	−1.6	−0.0	2.9	0.0	3.2	0.0
Central and South America	5.6	0.5	5.8	0.5	4.3	0.4	−1.8	−0.2	4.0	0.3	4.0	0.3
Brazil	4.0	0.1	6.1	0.2	5.1	0.1	−0.2	−0.0	5.5	0.2	4.1	0.1
Central and Eastern Europe	6.5	0.2	5.5	0.2	3.0	0.1	−3.7	−0.1	2.8	0.1	3.4	0.1
Russia	7.7	0.2	8.1	0.2	5.6	0.2	−7.9	−0.3	4.0	0.1	3.3	0.1
Middle East and Northern Africa	5.7	0.3	5.6	0.3	5.1	0.2	2.4	0.1	4.5	0.2	4.8	0.2
Sub-Saharan Africa	6.5	0.1	6.9	0.2	5.5	0.1	2.1	0.0	4.7	0.1	5.9	0.1
South Africa	5.6	0.0	5.5	0.0	3.7	0.0	−1.8	−0.0	2.6	0.0	3.6	0.0
World	5.1	5.1	5.2	5.2	3.0	3.0	−0.6	−0.6	4.2	4.2	4.3	4.3
Reference												
Developed Countries	3.0	1.8	2.8	1.6	0.5	0.3	−3.2	−1.7	2.3	1.3	2.4	1.3
Developing Countries	7.9	3.3	8.3	3.5	6.1	2.7	2.4	1.1	6.3	2.9	6.5	3.1
ASEAN+6	7.3	2.0	8.1	2.3	5.3	1.5	3.4	1.0	7.0	2.2	7.1	2.2
BRICS (Including South Africa)	9.4	1.9	10.3	2.2	7.8	1.7	4.3	1.0	8.3	2.0	8.0	2.0
BRICs (Excluding South Africa)	9.5	1.9	10.5	2.1	7.9	1.7	4.5	1.0	8.4	2.0	8.1	2.0

(Notes) (1) The world GDP growth rate is calculated with the IMF's purchasing power parity (PPP).
(2) Contribution by each country and region is calculated with the weighted PPP for 2009.
(3) East Asia refers to China, South Korea, Hong Kong, Taiwan and ASEAN.
(4) ASEAN+6 refers toASEAN, Japan, China, South Korea, India, Australia and New Zealand.
(5) Figures may differ from other parts due to the revision of and difference in original statistics.
(6) The definition of developed and developing countries follows the World Economic Outlook (IMF).
(Source) WEO (IMF).

and ailing real estate bubbles in Spain and Ireland contributed to the slow recovery.

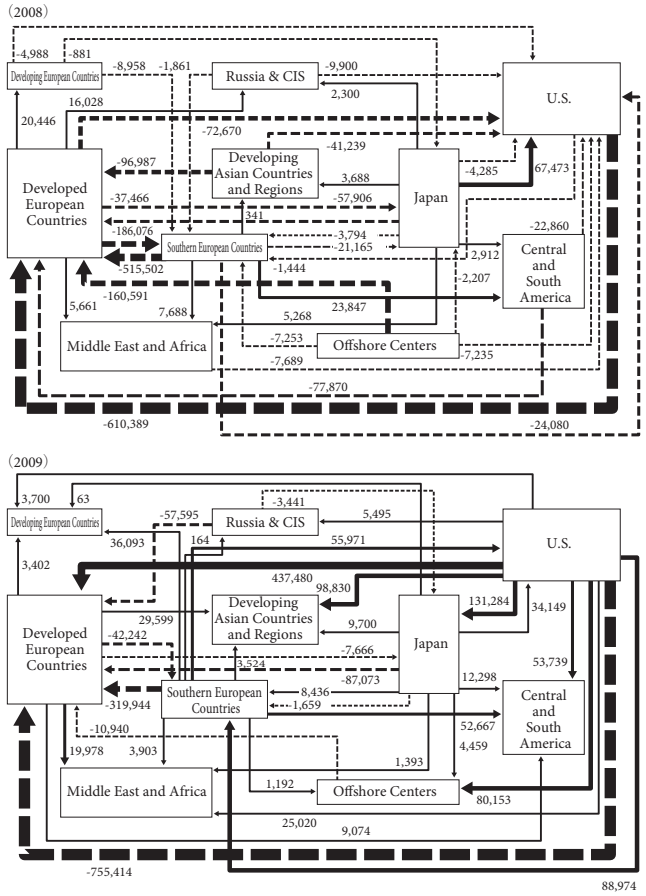
Emerging countries have been the driving force of economic recovery after the world economic crisis. In November 2008 China quickly launched a major economic stimulus plan of 4 trillion yuan and bank loan promotion measures, which helped to lessen economic downturns and later accomplished a high level of growth as a leader of the world economy. Helped by strong domestic demand that prompted fast economic recovery, financial systems in India and Brazil were little impacted by the financial crisis in the U.S. In addition to various measures taken by respective countries, recovery was also aided by the price of crude oil (WTI), which, in the period between November 2008 and the beginning of 2009, fell to less than US$50 a barrel from over US$100 in September 2008. This rapid fall in oil price helped to improve terms of trade in emerging countries and boosted domestic consumption. In India, for example, government spending stimulated consumption until the fourth quarter of 2008 but in the first quarter of 2009 strong domestic demand took the baton over to the private sector as the pulling force of the economy. However, not all developing countries are sailing with the full wind in their sails. In Russia recovery has been sluggish. Dependent on the high price of natural resources, economic growth suddenly lost its driving force in the country due to the price fall. In other words, within developing countries, differences in the strength of recovery became apparent in 2009 (Column I-1 will be shown later).

Relaxation of credit crunch in international financial markets

Contracted and frozen financial markets around the world began to see the light ahead. Figure I-3 shows changes in cross-border bank balances compared to one year ago. In 2008, the worldwide flow of money completely changed as a result of the U.S. subprime loan problem (easy home loans provided to individuals with lower credit ratings) and the world financial crisis. Europe acted to repatriate large sums of money and funds from the U.S., the epicenter of the crisis. The U.S., which then had no extra lending power, withdrew funds previously accorded to Europe, Asia, Central and South America and Japan back home. In 2009, the flow of money and capital began to normalize. The U.S., whose growth rate had hit bottom, started recovery of investment and lending to Europe, Asia, Central and South America, and to the rest of the world. In the monetary world, the U.S. is coming back ahead of the others.

Nonetheless, it still cannot be said that the world's financial situation has returned to pre-crisis conditions. This is clearly seen from the movement in Europe. Developed countries in Europe (Austria, Belgium, Denmark, Finland, France, Germany, Luxembourg, the Netherlands, Norway, Sweden, Switzerland and UK), not being able to accelerate their pace of recovery with burdensome national finances, continued repatriating large amount of money from the U.S. in 2009. (The amount withdrawn was US$755.4 billion.) This move to withdraw money was also directed toward Japan, Russia and CIS, and especially to debt-ridden Southern European countries (Italy, Greece, Spain, and Portugal) and Ireland. European financial institutions have been directing their investments to fast- growing economies in Asia but

Figure I – 3 Rise and fall of cross-border bank credit balances (Consolidated, ultimate-risk basis : US$ 1 million)



(Notes) (1) Positive values denote an expansion of credit; negative values represent a contraction (capital withdrawal).
(2) The ultimate-risk basis values were compiled in order to gain an understanding of the actual country risk, and were calculated in part by adding transnational money flows moving through banks (excluding their overseas subsidiaries and branches) into foreign banks located within each country.
(3) Classification of countries and regions follows the BIS system in principle, except that Russia and the CIS countries were excluded from the developing Asian and European countries.
(4) The developed European countries are Austria, Belgium, Denmark, Finland, France, Germany, Luxembourg, The Netherlands, Norway, Sweden, Switzerland and the UK.
(5) The southern European countries are Ireland, Italy, Greece, Spain and Portugal.
(Source) "Consolidated banking statistics"(BIS).

have not reached the level of 2007, still showing the weak recovery of European markets. The flow of European money can be a cause of risk for the financial markets, therefore the overall future conditions there are difficult to predict.

(2) Change in the quality of Asian financial markets "Transformation" from Asian monetary crisis

The worldwide economy has been greatly disturbed by the contraction of credit in international money markets caused by the financial crisis that originated in the U.S. However, as previously mentioned, the recovery process has varied and the speed of continued growth is expected to differ from country to country. The IMF predicts that the ratio of developed countries in the world's nominal GDPs in developed countries, including the U.S., Europe and Japan, will fall to 61.2% from 69.1% as of 2009. On the other hand, this ratio in developing areas in South East Asia is predicted to increase to 17.8% from 13.5%. It is becoming clear that the future world economy will be led by Asia.

The strong Asian economy experienced a major monetary crisis in the recent past. The Asian monetary crisis of 1997 - 1998 was caused by the sudden evacuation of short term funds from Asia and the countries affected suffered great economic losses.

The situation now is quite different from the last crisis. ASEAN5 and Korea, which greatly suffered in the monetary crisis of 1997-1998, showed a growth rate in 2009 that surpassed the growth rate of other countries in the world, proving their strong economic existence. These countries sought economic growth through exports after the monetary crisis. Supported by the excessive spending of the U.S., the world economy accomplished a high level of growth from 2004. This economic growth around the world stimulated exports from Asian countries. As a result, each of these countries' showed a surplus in balance of payments and foreign ex-

Figure I – 4 Balance of payments surplus and foreign currency reserves to GDP by countries and regions

(%)

		Current-account balance as a share of GDP			Foreign-currency reserves as a share of GDP		
		1997	1998	1999	2000	2001	2002
Asia and Oceania	Japan	2.3	2.1	2.8	5.2	9.6	20.2
	China	3.9	1.3	5.8	15.0	16.3	47.8
	Hong Kong	-4.4	5.9	11.1	52.6	66.7	121.4
	Taiwan	2.4	6.4	6.2	28.0	41.6	91.9
	South Korea	-1.6	1.6	5.1	3.8	20.4	32.4
	ASEAN5	-3.1	3.9	5.1	23.6	37.7	41.7
	Thailand	-2.1	4.4	7.7	17.3	28.0	51.3
	Indonesia	-1.6	4.3	2.0	7.0	17.0	11.8
	Malaysia	-5.8	7.9	16.7	20.4	31.8	49.8
	Philippines	-5.2	-2.4	5.3	8.7	18.9	24.1
	Singapore	15.5	13.0	19.1	74.5	88.3	106.0
	Vietnam	-5.7	2.1	-7.8	7.4	11.3	17.8
	India	-0.7	0.3	-2.1	6.0	9.7	21.5
	Australia	-2.8	-2.0	-4.1	3.9	4.7	3.9
Americas	U.S.	-1.7	-3.9	-2.9	0.7	0.6	0.8
	Mexico	-1.8	-2.6	-0.6	6.6	6.6	11.4
	Brazil	-3.5	-4.2	-1.5	5.8	6.4	15.1
Europe	EU27	1.0	-0.3	-0.3	5.2	3.9	3.9
	German	-0.5	0.0	4.8	3.6	2.7	1.8
	UK	-0.1	-2.1	-1.3	2.4	2.3	2.6
	France	2.7	1.9	-1.5	2.2	2.4	1.7
	Italy	2.8	-0.1	-3.4	4.7	2.2	2.2
	Poland	-3.7	-2.8	-1.6	13.0	13.5	17.6
	Hungary	-4.5	-6.0	0.4	18.4	20.1	34.1
	Czech Republic	-6.3	-5.3	-1.0	17.0	23.2	21.1
	Russia	-0.0	11.1	3.9	3.2	10.6	33.9
Middle East and Africa	Saudi Arabia	0.2	5.1	5.5	9.0	9.6	110.9
	United Arab Emirates	10.1	9.5	-3.1	16.3	20.6	17.7
	Egypt	0.2	-0.0	-2.4	24.6	13.5	17.2
	Kenya	-3.4	-3.1	-6.2	5.9	8.2	11.8
	Nigeria	4.8	4.6	11.6	21.4	23.7	26.2
	South Africa	-1.5	0.3	-4.0	3.2	5.1	12.3

(Notes) (1) Some of the data includes estimates.
(2) For 2009 foreign-currency reserves, figures for China and Nigeria are as of October, and figure for the UAE is as of November.
(3) "Foreign-currency reserve" excludes gold.
(Sources) WEO (IMF) and material from the Central Bank of Taiwan.

change reserves were smoothly accumulated (Figure I-4).

These surplus of foreign exchange reserves have acted as shock absorbers in the current international crisis, minimizing the effects of the crisis in these Asian countries. Korea and Thailand, which were particularly hit badly by the Asian monetary crisis, have worked to maintain foreign reserves that correspond to the size of their economies in order to sustain a sound balance of payments in hopes of never making the same mistake. Asian developing countries, which are continuing their economic growth, are at the same time trying to get their feet firmly on the ground at this time of crisis. However, they still run the risk of exposing their power of payment if they rely only on the reserves of a specific currency, which may experience a sudden change in exchange rates.

Furthermore, compared to the economic recession of 2001, the U.S. deficit in the balance of payments to the ratio of GDP has improved. Since 2000 the U.S. deficit ratio had continued to grow larger, but the current crisis took the shape of stopping the continuous deficit growth. On the other hand, national finance deficits greatly worsened between 2008 and 2009 in the U.S., and even in other developed countries. The IMF estimates that the deficits to the ratio of nominal GDPs in 2010, similar to the year 2009, will stay at around 10% in Japan, the U.S. and the UK. Though expenditures will expand along with large stimulus measures, revenues will decrease due to decreased tax incomes, and the balance of national governments' income and expenditure will continue to worsen.

Diversification of investment targets

As Asia came out the currency crisis of the late 1990s, it has been supporting the recovery of the world economy even in the area of monetary funds. Figure I-5 shows the flow of Asian money in direct investments and portfolio investments from current account surplus countries, such as China, Indonesia and Korea. Except during the peak period of IT bubbles in 2000 and 2001, the flow of money was inconspicuous for direct investments from 1990 through 2003, and portfolio investments only showed a gradual increase. The target of investment was mainly directed to U.S. government bonds or other government bonds.

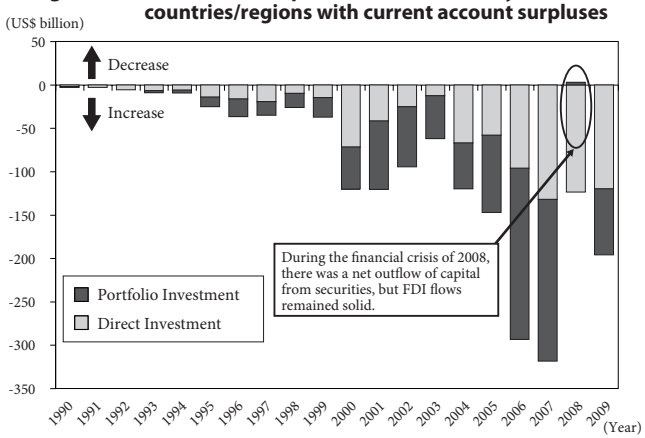
On the other hand, the world economy, which recovered completely from the IT recession in 2004, Asian countries' flow of investments took a different form in 2008 when the effects of the Lehman shock and financial crisis reached all corners of the world. Although portfolio investment greatly expanded due to the economic boom in the period from 2004 through 2007, in 2008, facing the financial crisis, securities investors around the world directed funds back to their homelands to minimize risk. As a result, Asian securities investors repatriated US$11.9 billion from the markets. But direct investments, which saw contraction at the time of IT recession, is steadily flowing even during the period of economic crisis in 2008. Singapore, China, Korea and other Asian countries have begun to place more weight on direct investments, which are more stable and long-lasting compared to fast-moving portfolio investments.

With lessons learned from the currency crisis, Asian countries accumulated current account surpluses and recently took steps forward in actively investing directly in Europe and North America, not only to seek for operating profits but also to gain access to natural resources, technology and new distribution channels. For example, in January 2008 a sovereign wealth fund, GIC (Government of Singapore Investment Corporation), invested US$6.9 billion in Citigroup, a major American financial services company. This action was to supplement the group's lacking capital due to the subprime loan crisis while GIC sought capital gains as well as acquiring the know-how of the American bank with high international competitiveness.

China active for direct investments

Similarly, the characteristics of China's investment funds are changing. The balance of portfolio investment in stocks in 2008 was US$252.5 billion, or a negative growth of 11.3%. This is a result of the financial crisis that prompted the government and corporate entities to return their funds to the

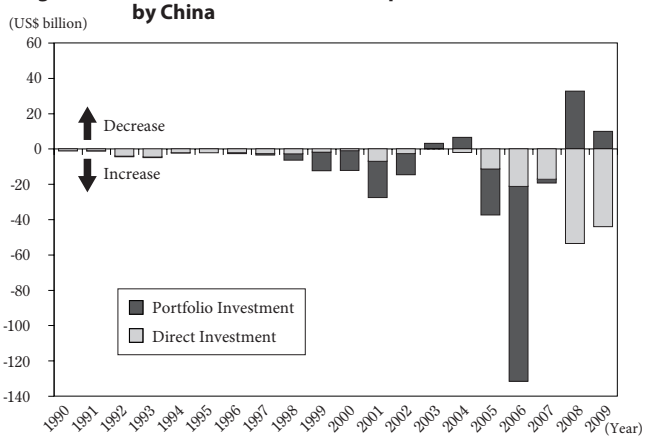
Figure I – 5 Trends FDI and portfolio investment by Asian countries/regions with current account surpluses



(Note) Asian countries / region with current-account surpluses are China, Hong Kong, Indonesia, South Korea, the Philippines, Singapore and Thailand.

(Sources) BOP (IMF), the Singapore Bureau of Statistics and others.

Figure I – 6 Trends of outward FDI and portfolio investment by China



(Source) BOP (IMF).

Column I - 1

◉ Commodity price transition after financial crisis

Bi-polar transitions in the course of uneven economic recovery

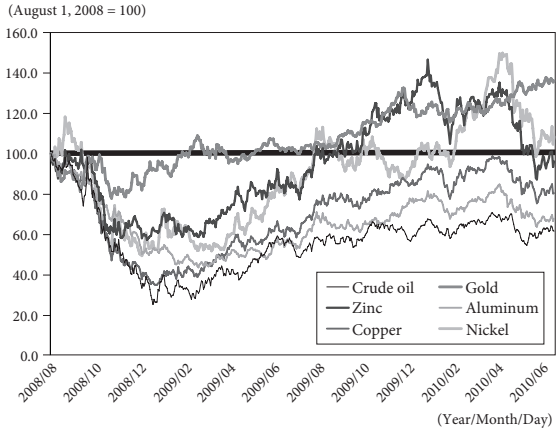
In the normal stage of economic recovery, as consumer demands pick up the commodity markets prices also go up. But in the current economic situation, growth paces between and among emerging countries and developing countries have been uneven and this trend caused a different pattern of increase in commodity markets prices.

Taking pre-financial crisis prices of August 1, 2008 as 100, Figure I indicates commodity prices by index for commodities, such as crude oil and precious metals. The figure shows that crude oil prices have not only been unable to regain the pre-crisis level but are also seen as the weakest commodity in terms of rebound power. Although emerging countries are in the process of positive economic recovery, developed countries, mainly Europe and Japan, are still experiencing sluggish growth. In addition U.S. demand for oil is not as strong as pre-crisis levels, in turn pushing the top price of crude oil down.

Gold, in contrast, is the commodity with the highest level of continuous price increase. The price of gold rose almost 50% between August 2008 and June 2010. Even in the global financial crisis, the price of gold increased its bottom price in the period after the second half of 2008, where prices in real estate, securities, crude oil and other commodities plummeted. Gold has the characteristic of being a currency as well as a commodity, hence the saying, "buy gold in crisis." The gold price in general is known to have a reverse relationship with the dollar market price. The trend is to buy gold as a tangible asset and sell the key currency, the dollar, when the value of the dollar becomes unstable due to some sudden changes in economic condition (Figure II).

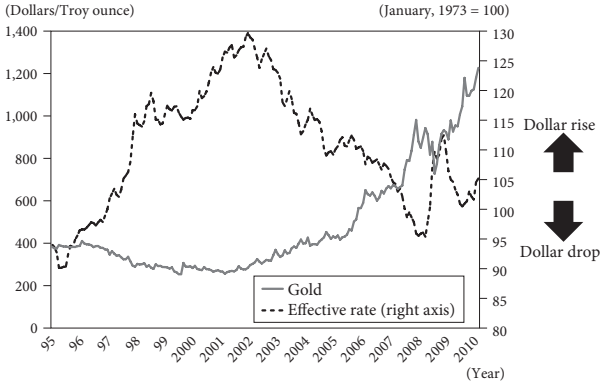
For nonferrous metals, when comparing the ratio of price increases to June 2010, zinc and nickel prices bottomed in early 2009 and showed a strong steady increase since then. In contrast, aluminum has weak positive growth power and has never once regained the price level of pre-monetary crisis. Zinc, mainly used for the anti-corrosion of steel materials, and nickel, used for home electric appliances and machinery, has positive demands in emerging countries for their needed infrastructure but on the other hand, aluminum, which is used for automobiles and sashes for home buildings, has overwhelmingly greater market demand in developed countries. For this reason, the economic slowdown in advanced countries is holding the price of aluminum down. Uneven recovery of the global economy, as a result, has brought about bipolarization of prices in commodity markets.

Figure I Commodity price indicator



(Note) Data used is from August 1, 2008 to June 30, 2010.
(Source) Thomson Reuters.

Figure II Gold price indicator and effective exchange rates



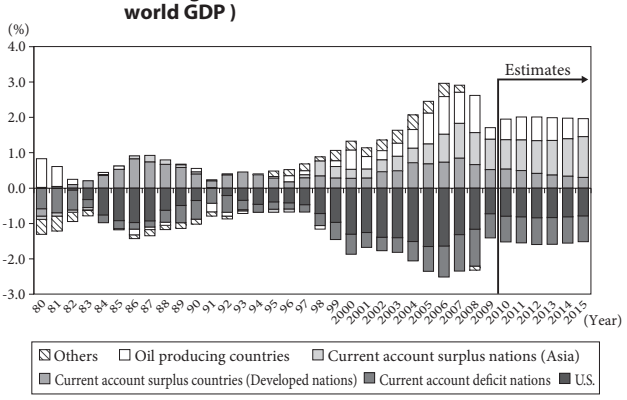
(Note) Data used is from January, 1995 to June, 2010.
(Source) Thomson Reuters.

homeland. The portfolio investment balance in 2006 was 127.2% compared with the previous year, but in 2007 the balance saw an increase of only 7.3%. The negative flow of funds became further clear in 2008.

On the other hand, the balance of direct investments in 2008 was US$185.7 billion, an increase of 60.1%. This increase of direct investments shows China's active operations abroad. An example of China's very recent large investment is the acquisition, in August 2009, of Addax Petroleum; a major petroleum corporation headquartered in Switzerland, at the price of US$9 billion by China's major oil company, SINOPEC. Reports of investments by Chinese entities in recent years regularly appear in the list of large-scale acquisitions in the world.

In the background, entities are accelerating their global operations and the government is simplifying procedures for the establishment of corporations abroad in the joint effort to facilitate investments. This is clear in the flow of money after 2004 which shows that efforts are being made in China for direct investments (Figure I-6). This trend became especially clear in 2008, when China sold a large number of securities, which in the past had been bought in excess, to replace with direct investments.

Figure I – 7 Trends for Current Accounts of Major Countries and Regions (Ratio of current account to the world GDP)



(Note) Current account deficit countries: Australia, Brazil, Columbia, Czech, Greece, Hungary, India, Ireland, Italy, Kazakhstan, Mexico, New Zealand, Pakistan, Peru, Poland, Portugal, Romania, The Republic of South Africa, Spain, Turkey and the UK
Current account surplus countries (Developed countries): Japan and Germany
Current account surplus countries (Asia): China, Hong Kong, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand
Oil producing countries: Algeria, Angora, Bahrain, Ecuador, Gabon, Iran, Kuwait, Libya, Nigeria, Norway, Oman, Qatar, Russia, Saudi Arabia, United Arab Emirates and Venezuela.
(Source) WEO (IMF).

Moves for the adjustment of global imbalance

The balance of payments between Asia and the U.S. had been considered unsustainable well before the financial crisis and sooner or later, the adjustment for the imbalance would have become unavoidable in the world economy. What will come in the future? Figure I-7 shows the ratio of current account surpluses/deficits of each country against the GDP of the world. Japan and Germany (in the figure, developed nations with current account surplus) from 1980 through 2009, except for a certain period, always kept the current account surplus.

After 2000, Asian countries with China at the top (in the figure, current account surplus countries <Asia>) always recorded a surplus of their current accounts. In the year 2000, the ratio was at 0.3% but by 2007 the ratio kept increasing to 1.0%. Even in 2009, when the world economy for the first time after WWII dropped to negative growth, Asia kept the ratio of 0.9%, which clearly shows a strong trend of current account surplus in Asia. The U.S., which is the biggest current account deficit country, has kept increasing its deficit in contrast to the current account surplus countries of Asia and oil producing countries. It became customary after 2000 that the U.S. ratio of current account deficit against the world GDP has been constantly above 1% level.

The IMF estimates that the U.S. deficit in current account in 2015 will come down to about 0.7% of the world GDP compared to the ratio of 2009. The average deficit between 2000 and 2008 was 1.4%; considering this figure, the U.S. will improve its current account considerably. Japan and Germany will gradually see their current account surplus decrease. On the other hand, Asia's current account surplus will increase, but by a very small amount. The big increase in current account of the past will come to a stop in Asia, but even in 2015, the area will be seen as a major current account surplus area.

U.S. and other countries have voiced concern over the state of Asian current accounts and have requested measures to decrease surplus in order for the world to sustain continuous economic growth. For example, China, in relation to the world GDP in 2015, is expected to see 0.9% surplus of its current account, up from 0.5% in 2009. U.S. and other current account deficit countries fear that China, a surplus country, is pushing their exports, thus deteriorating the importing countries' industries and leading to loss of jobs. For this reason, it is difficult for a country like the U.S. to overlook China's exports expansion. It is also difficult for China to restrain exports in light of the promotion of its

Figure I – 8 Structural changes on the inversion of current account to a surplus

(Unit: %)

	Current account (Ratio to GDP of each country)		Ratio to per capita real GDP		Contribution to net exports		Contribution to domestic demand	
	Prior to policy implementation	After policy implementation	Prior to policy implementation	After policy implementation	Prior to policy implementation	After policy implementation	Prior to policy implementation	After policy implementation
Germany ('70)	2.3	0.2	3.6	3.4	0.0	-1.2	3.6	4.6
Japan ('73)	1.9	-0.4	6.7	1.6	0.1	0.6	6.6	1.0
Japan ('88)	3.8	2.1	3.6	5.7	-0.5	-0.4	4.1	6.1
Korea ('89)	6.6	-0.4	9.9	9.6	1.6	-3.9	8.3	13.5
Taiwan ('88)	17.7	7.4	8.4	6.1	3.6	-3.2	4.9	9.3

(Notes) (1) Figure shown at the right side of country names shows definite effect on suppressing the current account surplus after the implementation of policy.
(2) Average value of three years prior to inversion to current account surplus and three years after the policy implementation.
(Source) WEO (IMF).

own export industry and the preservation of employment. The conflict of interests exists in respective countries.

In fact, if a country with a current account surplus acts to cut its surplus, does it slow economic growth? History has shown that by raising its own currency trading value and taking proper actions on national finance and money market policy, a country can ease international trade friction and at the same time maintain its economic growth. For example, in 1985, Japan had severe trade friction with the U.S.; to cope with this Japan acted to depreciate the U.S. dollar in the foreign currency exchange market, with the help of the concerted intervention of other developed nations (Plaza Accord). This policy cooperation had tremendous effects on the current account for Japan. The current account surplus of Japan against its GDP, which was 3.8% in 1985, started to decrease, and by 1989 the ratio decreased to 2.1% (Figure I-8). The Japanese Government also enacted in 1986 an aggressive fiscal policy of strong spending. As part of the structural reform, after 1985 the government started to free the interest rates. These measures succeeded in the contraction of the current account surplus and turned the growth pattern to more domestic consumption, carefully balancing dependency on foreign demands and thus, from the late 1980s through the beginning of 1990s, Japan realized a strong economic growth (Note 1).

If a government excessively and continuously applies macro-economic policy, the economy will be liable to face the risk of inflation and soaring assets value. In fact, the effect of Japanese economic policy at the end of 1980s appeared in the form of the bubble economy, which later led to its own collapse and Japan entered a long tunnel of economic stagnation.

Figure I – 9 Itemized composition of nominal GDP of Major Asian countries

(Unit: %)

	Household expenditure		Total fixed capital formation		Export	
	1997	2008	1997	2008	1997	2008
Bangladesh	79.7	74.5	20.7	24.2	12.0	19.4
China	45.2	37.3	31.8	47.2	21.0	37.8
India	62.9	54.5	23.3	34.3	10.8	21.7
Indonesia	56.5	60.9	25.8	27.6	27.0	29.8
Malaysia	46.8	45.2	42.7	19.6	89.8	103.6
Pakistan	73.0	82.6	16.6	20.0	13.6	14.1
Philippines	72.6	70.4	24.4	15.3	49.0	38.0
Thailand	54.7	53.6	33.8	27.1	48.0	78.6
Vietnam	71.8	67.3	26.7	36.0	43.1	73.2
Japan	55.2	57.8	27.7	23.1	10.9	17.4

(Note) The figure is intended for Asian countries with GDP above US$50 million (Asia NIES excluded).
(Sources) Based on "National Accounts Main Aggregate Database" (United Nations), and WEO (IMF).

(Note 1) IMF studied 28 cases of countries which came out of huge current account surpluses. As a result, it became clear that the surplus could drastically be small by raising real effective exchange rates and by enacting a macro-economic policy of stimulating domestic consumption. IMF has also shown implementation of policies to decrease the current account surpluses do not trigger slow down or decrease in production and unemployment in the country which enacted such measures.

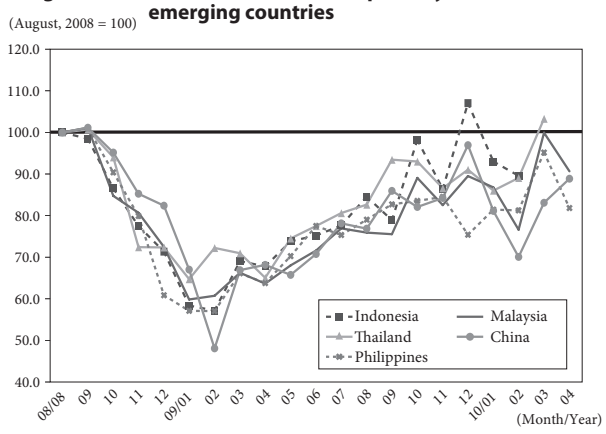
There is a blind spot in Asia's high-level growth

There are different factors supporting strong growth for each emerging country in Asia. Bangladesh and Pakistan in South Asia, for example, are starting to enjoy economic structure not dependent to external demand largely because of increases in domestic individual spending (Figure I-9). In particular, in the past 10 years Pakistan has increased its consumer spending ratio to 10% against the GDP. Strong household spending will help to keep economic growth firm even if the overseas economy plummets. In contrast, China and Malaysia have low consumer spending compared to 10 years ago and this portion of lost consumer spending is being covered by external demand. Thailand and Vietnam also have largely increased their export ratio against GDP compared to 10 years ago. In general, Asian emerging countries are following an economic growth pattern which is dependent on exports.

It is quite noticeable that China, Vietnam and India are increasingly accumulating total fixed capital formation, which is the sum of fixed capital formation of equipment and machinery investments, home building and public investments. The world average is 23% at 2008. Increasing capital stock according to real demand will give a foundation for further economic growth but excessive capital investment will also affect the demand side. When the U.S. had been the consumption center of the world in early 2000s, Asian countries kept increasing their exports in an export- oriented economic structure. As a result, these countries involved enjoyed a high level of economic growth. In addition, their foreign exchange reserves, which show the power of external solvency, increased, and Asian countries are now able to prepare and cope with external shocks such as the monetary crisis and the financial crisis. But if the world economic downturn is prolonged, the real economy will be deeply damaged because of decreasing external demands. Especially, China, Malaysia and Thailand, which all have a high reliance on external demands and low consumer spending, must aim to achieve equilibrium in external and internal demands and seek balanced economic growth.

Furthermore, looking at the export figures of Asian

Figure I – 10 Trends in amount of exports by Asian emerging countries



(Note) Prepared based on data of April, 2010, for the Philippines, Malaysia and China, and March for Thailand, and February for Indonesia.
(Source) Statistics from individual countries/regions.

emerging countries after the monetary crisis (Figure I-10), each country's export amount has not yet returned to pre-crisis levels. This reveals the worrisome reality of Asian countries' economies highly dependent on external demands.

(3) Risks and issues faced by the world economy

Next focus of concern is deficit financing, national debt

Recovery of the world economy is expected in 2010 but there are some uncertainties and worrisome matters. Especially, 1) national finance, 2) interest rate hikes in emerging countries, and 3) employment in the U.S.

In order to cope with the global financial crisis, many countries have enacted stimulus national financing which led to rapid national deficits and countries' sovereign risks (credit risk rating for national debts) became apparent. It all started from October 2009 in Greece, which falsely represented its national debts and the fact came out in the open. Originally, South European countries had thick social security protection, which inflated national spending and led to debt financing, making the slowdown in the economy and the low tax income added factors for South Europe's serious financial problems. Triggered by the debt crisis in Greece, stock markets were shaken all at once. Market worries have spread to even bigger economies, such as Spain and Portugal, which also have huge national debts.

Different from the past financial and monetary crisis of Central and South America, the European crisis this time is characterized by the fact that the crisis occurred in hard currency countries (exchangeable international currency). In this case, even when the crisis occurred in Europe (Euro area), EU member states were able to rescue the country in trouble; this is a big difference from the past crisis. However, the by-product of this is lower credit ratings for the international currency, the Euro. In fact, when Greece's false representation of statistics became obvious in October, 2009, the effective exchange rate of the Euro depreciated by 12.4% in June, 2010.

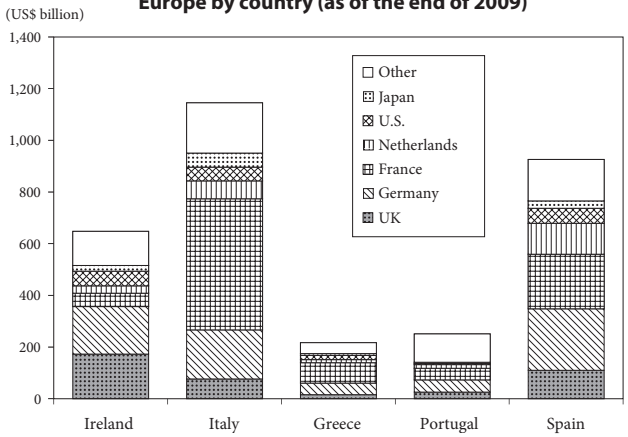
The seriousness of this financial crisis is that the commotion, which started in Europe's steady financial system, may spread to the world. When looking at the amounts invested by financial institutions around the world in debt-ridden Ireland, Italy, Greece, Portugal and Spain, it is clear that the exposure of France and Germany exceeds the others. (Figure I-11). Especially, the balance of investment and finance to these five countries by French financial institutions amounts to over 30% of France's GDP. If South European countries and/or Ireland's crises become grave, detrimental effects may engulf the great country of France.

In general, a lending practice by financial institutions is conducted to a debtor nation taking the nation's bonds as collateral. If sovereign risk is high, the interest rate of the bond rises for the bond-issuing country. As a result, the face value of the bonds held by lenders is liable to depreciate and aggravate the financial institution's balance sheet. For this reason, financial institutions will move to settle the accounts early, which will lead to shaky financial system of Europe.

From a different perspective, the amount of exposure of the U.S. to southern Europe and Ireland to the nominal GDP is merely 1.3 %. Even including Germany and France, the ratio is only 3.4%. For this reason, damage arising from the crisis in Europe to the U.S. will be limited. In addition, the amount of exposure of Spain, a South European country, in Central and South America must be watched carefully (Figure I-12).

In the situation where the economic recovery is opaque and imperceptive, the rush of each European country's ef-

Figure I – 11 Stock of loans and investments to southern Europe by country (as of the end of 2009)



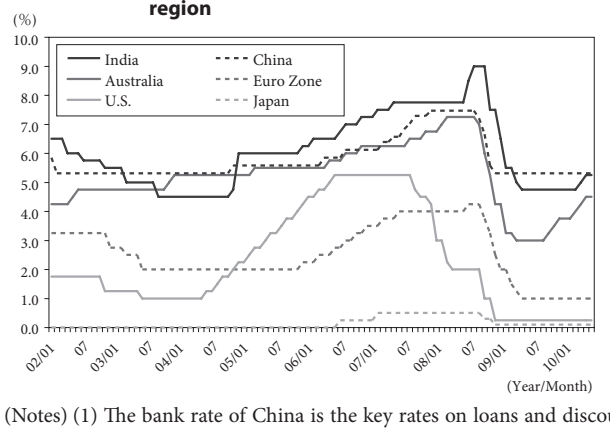
(Source) "Consolidated banking statistics" (BIS).

Figure I – 12 Investment and financing by Spanish financial institutions (As of the end of 2009)

	Amount (US$ million)	Ratio
UK	406,000	29.8
U.S.	196,528	14.4
Brazil	146,948	10.8
Mexico	126,568	9.3
Portugal	84,973	6.2
Chili	53,249	3.9
France	51,720	3.8
Germany	51,639	3.8
Italy	47,154	3.5
Netherlands	22,202	1.6
Total amount	1,361,003	100.0

(Source) Prepared based on International Financial Statistics (BIS).

Figure I – 13 Trends in bank rates in leading countries and region



(Notes) (1) The bank rate of China is the key rates on loans and discounts (1-year).
(2) Figures are current through the end of June 2010.
(Sources) Central banks.

forts toward financial reconstruction may cause a second bottoming of the economy, for which a careful maneuvering of national finance must be sought.

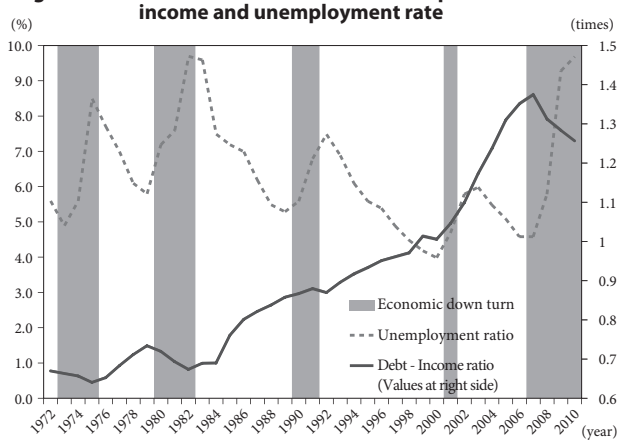
The second risk is a rapid rise in interest rates in emerging countries, which may be an obstacle to the recovery of the world economy. The path of recovery of the world economy is varied in many ways. This naturally causes varied strategies for the exits from monetary relaxation. Australia already raised their interest rates since October 2009, due to the fast pace of recovery supported by high resource prices. Their monetary policy is returning to normalcy from the monetary risk aversion mode (Figure I-13).

The rate of inflation has stopped at a high point in China and as well in India and Brazil, which have already raised interest rates, and these countries are taking the direction of tightening financial policy. Japan and the Euro area, which is suffering from sovereign risks, in fact, are unable to see interest rate hikes and their future economies are uncertain. If national monetary authorities choose the wrong timing of interest rate hikes, which is now led by emerging countries, the economic growth of these areas will distinctively slow down. The consequence may lead to the reality of the scenario of further downgrading the world economy.

The third risk is in the durability of economic recovery of the U.S. There is no mistake in saying that the U.S. is still the main player of world politics and economy considering its size and power, although the presence of Asia, with its center in China, is surely becoming strong. The U.S. is the only country among the developed countries to see a population increase. The Central Intelligence Agency (CIA) analyzes that there is a population increase of about three million people every year in the U.S. The U.S. market (consumer market) in 2008 occupied 30% of world consumption. China, even though the consumption is increasing, it is still at the level of only about 5%. The position of the U.S. in the consumer market is phenomenal. The U.S. economy is the key factor to predict the future of the world economy.

Although the U.S. economy is in the process of recovery, the main pillar of the economy is in household accounting, which has only begun to start the repayment of huge debts. It is difficult to overly expect at this time a growth based heavily on its consumer spending as it was in the past (Figure I-14). The level of unemployment in June, 2010, is way above the stable tolerable level of 5%. It is becoming clear that in order to decrease unemployment, measures have to be taken to increase corporate revenues and earnings, but this will not come from the current state of the domestic demand and must come instead from external demand.

Figure I – 14 Debt ratio in U.S. household disposable income and unemployment rate



(Note) (1) Unemployment rates of 2010 are Jan. to Jun. Debt-Income ratio is Jan. to Mar.

(2) The economic downturn started in end of December, 2007 has not officially been announced over and therefore, the current analysis is on an assumption that the trend is continuing.

(Source) Personal Income and Consumption statistics of U.S. Department of Commerce Bureau of Economic Analysis. Labor statistics, Department of Labor. Money supply environment statistics, FRB.

Japan's issues for further growth

Although the Japanese economy is on the path to recovery, it is considered that a long term economic growth strategy is just beginning. The Japanese per capita GDP in 2000 was ranked third in the world, but it went down to 23rd place in 2008. In the future, the driving force of the world economy will move to Asia, with the central force in China and India. Naturally, business entities will try to accelerate plans to have production and research headquarters in Asia, seeking the opportunity of further earnings and profits. In contrast, Japan's population decrease, together with the expected drop in domestic spending, will unavoidably lead to decreased economic growth. Understanding this situation, in June 2010, the Industrial Competitiveness Committee under the Industrial Structure Council of the Ministry of Economy, Trade and Industry expressed the need for a major shift in the industrial structure.

Acceleration of advances to overseas markets will have the worrisome side-effect of hollowing out domestic employment. The Industrial Competitiveness Committee, for this reason, demands a shift in industrial structure that will create added domestic values and employment. This committee advises a major shift in industrial structure from the one in which 40% of the growth from 2000 through 2007 was dependent on the auto industry. Instead, the focus of industry should be directed to 1) the export of infrastructure related goods, services and systems in business areas such as atomic energy and water- related businesses, 2) the environmental and energy problem solution industry such as introduction of smart communities and next generation vehicles, 3) the culture industry like fashion and contents production, 4) medical and nursing, health care and child care services, 5) and cutting edge technology of robots and space.

In the structural shift, these strategic 5 areas of industries should have 50% growth shares in the period from 2007 through 2020. In the committee's report, it is hoped that exports will also automatically shift to the strategic 5 areas instead of the past export structure dependent on the so-called "global 4": automotive and transportation equipment, electronics, general machinery and iron and steel. This dynamic shift in the industrial structure is an important first step to put the Japanese economy back on the path of growth again by breaking the current deadlock.

2. World Trade

(1) World trade saw historical decline in 2009

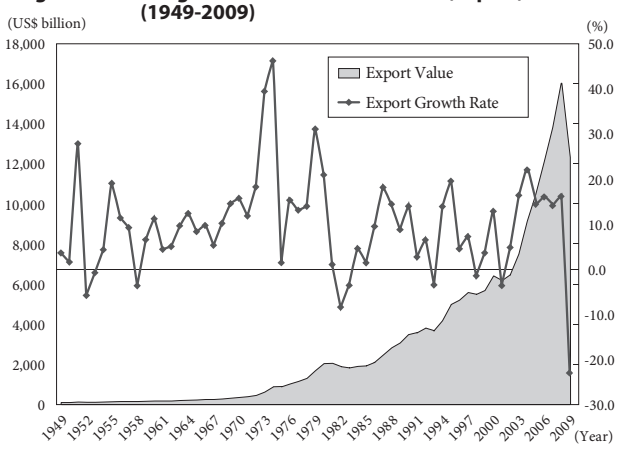
World trade in 2009 (merchandise trade, nominal exports), fell by 23.0% over the previous year to US$12.3 trillion, while imports decreased by 23.3% to US$12.7 trillion (Figure I –15). This was a sudden decrease after six years of consecutive double-digit expansion, declining for the first time in eight years. This was the largest drop since 1949, the earliest year for which statistics are available, although in the past world trade declined due to the oil crisis and the bursting of IT bubble (Figure I-16). World trade decreased for 12 consecutive months beginning in November 2008.

When the effect of price fluctuation is excluded, real exports fell by 12.4% with a 10.6% decline in imports. The growth rate can be broken down into the price factor (import and export price indices) and the volume factor (import and export volume indices, real imports and exports). In 2009, export prices declined 10.6% and import prices also declined 12.6% (both dollar based, IMF) showing that the price and volume factors are almost comparable. Real growth rate decreased for the first time since 1982, a year which showed a 4.5% decline. A double-digit decline was the first time ever since records began in 1949.

Figure I-17 shows the trends of import volume of the world (World Bank basis) and major developed countries, based on the figure of August 2008, prior to the Lehman shock. As for the the U.S., the largest importer, while the nominal imports bottomed in February 2009, real imports continued to decline until May 2009. For Germany, Japan and the UK, the real imports were rather weak throughout the year, but they picked up in the second quarter.

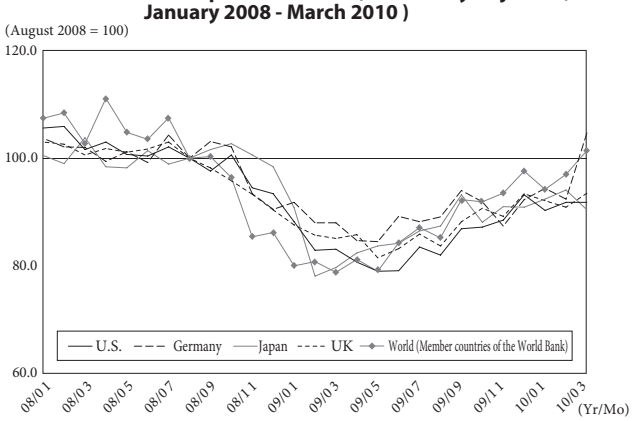
The value of trade was tamped down by a decrease in demand and a plunge in commodity prices following their appreciation through the middle of 2008. Commodity prices continued to rise after 2002 to reach their peak in 2008, but the drop in 2009 pushed the trade value down (Figure I-18).

Figure I – 16 Long term trends in world trade (Export) (1949-2009)



(Sources) IFS (IMF) and national trade statistics.

Figure I – 17 Trends in real imports of the world and developed economies (Seasonally-adjusted , January 2008 - March 2010)



(Sources) U.S. Department of Commerce, Federal Statistical Office of Germany, Bank of Japan, National Statistics of UK and World Bank.

Figure I – 15 World trade indices

		Units	2005	2006	2007	2008	2009
World merchandise trade (export basis)		US$ billion	10,417	12,080	13,774	15,988	12,295
Nominal growth rate		%	14.3	16.0	14.0	16.1	-23.0
Real growth rate		%	9.6	11.5	5.6	5.4	-12.4
Price growth rate		%	4.7	4.5	8.4	10.7	-10.6
World merchandise trade (import basis)		US$ billion	10,641	12,214	14,071	16,227	12,744
Nominal growth rate		%	13.8	14.8	15.2	15.3	-23.2
Real growth rate		%	8.2	9.4	7.2	3.6	-10.6
Price growth rate		%	5.7	5.4	8.0	11.7	-12.6
World trade in services (export basis)		US$ billion	2,483	2,818	3,381	3,804	3,312
Growth rate		%	11.8	13.5	20.0	12.5	-12.9
World trade in services (import basis)		US$ billion	2,359	2,637	3,127	3,535	3,115
Growth rate		%	11.2	11.8	18.6	13.1	-11.9
World real GDP growth rate		%	4.5	5.1	5.2	3.0	-0.6
Growth in industrial production index (developed economies)		%	2.0	3.1	2.5	-2.0	-13.3
Crude oil	Prices (average)	US$/barrel	53.4	64.3	71.1	97.0	61.8
	Quantity of demand	million bbl/day	83.5	84.4	85.6	85.2	84.1

(Notes)(1) 2009 trade value and growth rates are JETRO estimates.
(2) Real growth rate = nominal growth rate - price growth rate.
(3) Real GDP growth rates based on purchasing power parity.
(4) Definition of developed economies follows IFS classification.
(Sources) IFS (IMF), WEO (IMF), WTO, BP and national trade statistics.

China emerges as the world's leading exporter

In 2009, developed countries' exports contracted to US$7.6 trillion, a 21.6% year-on-year decrease, while exports by developing countries fell to US$4.7 trillion, down 25.2%. Sluggish demand in developed countries impacted developing countries—the drivers of world trade until 2008—causing a large contraction of double-digit decline in their trade value.

The U.S. imports in 2009, or 12.2% of the world imports, showed a radical decrease of 25.9% to US$1,560 billion. On account of a considerable decrease in consumer demand after the 4th quarter of 2008, the growth continued to decrease from November 2008 through November 2009.

The imports by EU declined to US$4,690 billion. Especially, imports from Russia, a

Figure I – 18 Growth rate of commodity price indices (YoY basis)

(%)

	2005	2006	2007	2008	2009
All primary commodities	24.3	20.7	11.8	27.5	-31.0
Non-fuel commodities	6.0	23.2	14.1	7.5	-18.7
Food	-0.9	10.5	15.2	23.3	-14.7
Beverages	18.1	8.4	13.8	23.3	1.6
Agricultural raw materials	0.5	8.8	5.0	-0.8	-17.0
Metals	22.4	56.2	17.4	-8.0	-28.6
Energy	38.1	19.2	10.4	40.1	-36.9

(Source) IFS (IMF).

Figure I – 19 World trade by country and region (2009)

(US$ million,%)

	Exports				Imports			
	Value	Growth rate	Share	Contribution	Value	Growth rate	Share	Contribution
NAFTA	1,602,425	-21.3	13.0	-2.7	2,115,498	-25.0	16.6	-4.3
U.S.	1,056,043	-18.0	8.6	-1.4	1,559,625	-25.9	12.2	-3.3
Canada	316,761	-30.6	2.6	-0.9	321,488	-21.4	2.5	-0.5
Mexico	229,621	-21.5	1.9	-0.4	234,385	-24.1	1.8	-0.4
EU27	4,590,840	-22.9	37.3	-8.5	4,689,461	-25.1	36.8	-9.4
EU15	4,082,018	-23.0	33.2	-7.6	4,129,204	-24.3	32.4	-8.0
Germany	1,127,089	-22.2	9.2	-2.0	937,772	-20.9	7.4	-1.5
Netherlands	498,859	-21.9	4.1	-0.9	445,856	-23.3	3.5	-0.8
France	484,519	-21.5	3.9	-0.8	559,630	-21.9	4.4	-0.9
Italy	404,737	-25.7	3.3	-0.9	410,325	-27.1	3.2	-0.9
Belgium	369,992	-21.8	3.0	-0.6	351,942	-24.7	2.8	-0.7
UK	354,434	-26.7	2.9	-0.8	512,974	-23.4	4.0	-0.9
Spain	218,771	-22.5	1.8	-0.4	287,782	-31.9	2.3	-0.8
Austria	137,697	-24.2	1.1	-0.3	143,418	-22.3	1.1	-0.2
Japan	580,787	-25.2	4.7	-1.2	552,252	-27.0	4.3	-1.2
East Asia	2,880,460	-16.0	23.4	-3.4	2,568,017	-17.8	20.2	-3.3
China	1,202,047	-15.9	9.8	-1.4	1,003,893	-11.3	7.9	-0.8
South Korea	363,534	-13.9	3.0	-0.4	323,085	-25.8	2.5	-0.7
Hong Kong	329,738	-11.0	2.7	-0.3	352,688	-10.4	2.8	-0.2
Taiwan	193,815	-20.3	1.6	-0.3	174,071	-27.4	1.4	-0.4
ASEAN	791,326	-18.0	6.4	-1.1	714,280	-22.7	5.6	-1.3
Singapore	269,909	-20.2	2.2	-0.4	245,852	-23.1	1.9	-0.4
Malaysia	157,527	-21.1	1.3	-0.3	123,907	-21.1	1.0	-0.2
Thailand	151,948	-14.6	1.2	-0.2	134,735	-25.4	1.1	-0.3
Indonesia	116,510	-15.0	0.9	-0.1	96,829	-25.1	0.8	-0.2
Vietnam	57,096	-8.9	0.5	0.0	69,949	-13.3	0.5	-0.1
Philippines	38,335	-21.8	0.3	-0.1	43,008	-24.1	0.3	-0.1
Russia	233,936	-36.4	1.9	-0.8	155,206	-39.3	1.2	-0.6
Switzerland	172,903	-13.7	1.4	-0.2	155,778	-15.0	1.2	-0.2
India	163,167	-16.4	1.3	-0.2	249,967	-22.2	2.0	-0.4
Australia	154,452	-17.2	1.3	-0.2	159,266	-16.6	1.2	-0.2
Brazil	152,995	-22.7	1.2	-0.3	127,647	-26.3	1.0	-0.3
Turkey	102,155	-22.6	0.8	-0.2	140,929	-30.1	1.1	-0.4
South Africa	62,380	-22.2	0.5	-0.1	64,867	-28.8	0.5	-0.2
World trade value (estimate)	12,294,956	-23.0	100.0	-23.0	12,743,679	-23.2	100.0	-23.2
Developed countries	7,607,313	-21.6	61.9	-13.1	8,046,790	-24.0	63.1	-15.3
Developing countries	4,687,643	-25.2	38.1	-9.9	4,696,889	-22.0	36.9	-8.0
BRICs	1,752,145	-20.0	14.3	-2.7	1,536,713	-18.3	12.1	-2.1

(Notes) (1) Trade values for the world, EU27, developed and developing countries are estimates.
(2) ASEAN in this chart stands for the following six countries: Singapore, Thailand, Malaysia, Indonesia, Vietnam and the Philippines.
(3) East Asia in this chart are the following countries and regions: China, South Korea, Hong Kong, Taiwan and ASEAN.
(4) Definitions of developed and developing countries follow DOT (IMF) for Figures I-22, I-26 to 27, I-31.
(Sources) National trade statistics.

major energy trading partner, decreased.

As for developing countries, China's exports decreased 15.9% to US$1,202 billion. China's exports had continued their double-digit growth from 2002, but after November 2008, the growth turned negative yoy. As a result, China's exports decreased for the first time in 26 years after the second oil crisis of 1983, when exports declined by 0.4%. Meanwhile, China became the world's leading exporter, surpassing Germany (US$1,127 billion). While China's exports fell by15.9% in 2009, it accounted for 9.8% of world trade, a roughly threefold increase from 3.5% in 1999. The economic slowdown mainly affected the trading of durables but in the case of China, daily consumer goods such as clothing, account for a large part in its exports. Since decrease in demand for these goods was relatively small, China's export share, as a result, increased. For example, textiles and related products, a share of 13.4% of the total exports in 2009, although the ratio has decreased compared to 21.2% of 10 years ago, are still the major export commodities along with electric equipment and general equipment. Regarding textiles and related products, China's exports accounted for 29.2% of total world trade in 2009, the composition rate expanding compared to 10 years ago.

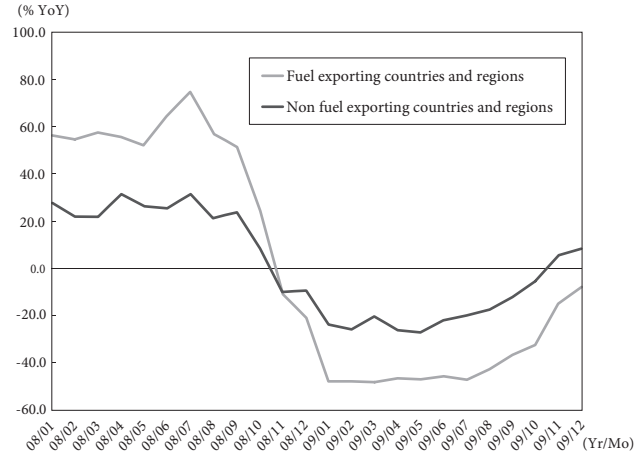
Among developing countries, Russia's exports decreased by 36.4% to US$234 billion, which is one of the largest drops among major countries. Crude oil accounts for 38.4% of Russia's total export, and due to falling oil prices, its exports posted negative growth for 11 consecutive months from November 2008. Not only Russia, but other countries highly dependent on natural-resource exports also saw their exports tumble in the wake of plunging commodity prices. (Figure I-20).

World trade fell in 2009 on the whole, but the exports of 17 among 20 major countries, and imports of 16 countries bottomed in the first quarter. In December 2009, there were more countries which rebounded to a yoy increase (Figure I-21). By regions, exports among the developed countries plummeted the most in April 2009, but maintained a gradual recovery since May. Exports between the developed and developing countries also turned positive in November. On the other hand, exports among the developing countries were sluggish (Figure I-22).

Regional integration brings synchronized effects

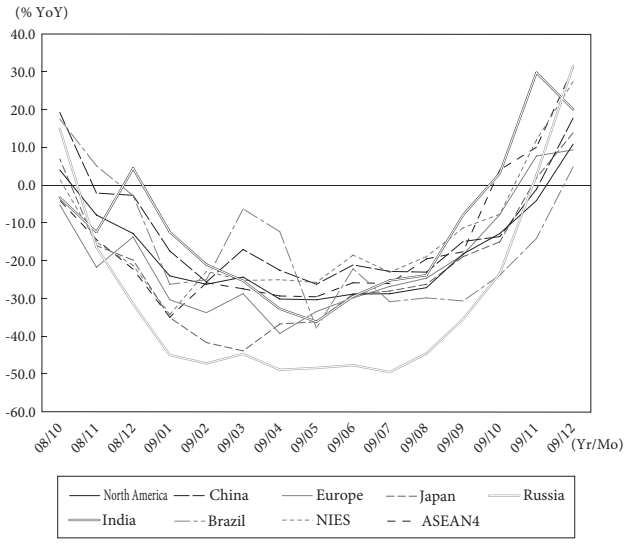
ASEAN4 (Malaysia, Thailand, Indone-

Figure I – 20 Export trends in fuel exporting countries and regions (2008 - 2009)



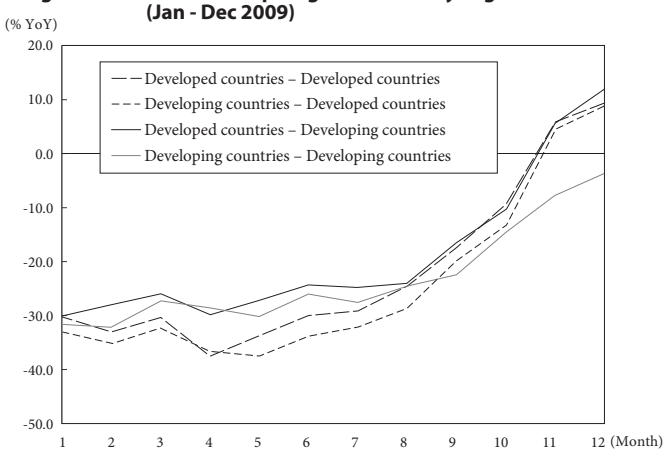
(Source) DOT (IMF).

Figure I – 21 Trends in major 18 economies' exports (October 2008 - December 2009)



(Note) North America here stands for the U.S. and Canada. Europe stands for Germany, France and the UK.

Figure I – 22 Trends in export growth rates by eegions (Jan - Dec 2009)



(Source) Same as Figure I-20.

sia and the Philippines) had continued 20% to 30% growth in exports until September 2008; exports then dropped 20% to 40% due to decreased exports to China. NIES (Korea, Hong Kong, Singapore and Taiwan) also experienced massive decreases in exports, the main reason also being sluggish exports to China. China has strengthened trade relations between the U.S. and other advanced economies and at the same time, has deepened mutual dependence within ASEAN4 and NIES (hereafter called 'major Asian countries') through the production networks. In fact, as shown in Figure II-13, each region in Asia has been expanding intraregional trade. When the demand in advanced economies dropped in 2008 through 2009, China's exports fell and in effect damaged the trade between major Asian countries as well. Once demand in advanced economies experience a downturn, Asian exports being linked to the economic growth of advanced economies, repercussions will spread faster in the region through the global supply chains.

In the latter half of 2009, when exports began to recover, exports to China from major Asian countries showed immediate increase in contrast to exports to the U.S. and Europe. Especially, the recovery of IT parts such as computer parts, semiconductors and integrated circuits, took place first, compared to finished IT products such as computers and video equipment. The recovery of IT parts occurred two months earlier than finished IT products, resulting in the positive yoy growth in September 2009, and from November onward showed double-digit growth. The accelerated production to buildup inventories after the production adjustment in IT equipment, is considered to have caused the rapid growth in semiconductor exports.

Regarding exports of IT equipment within major Asian countries and China, IT parts still accounts for as much as 70% of total IT equipment. (Figure I-23). This composition ratio is decreasing year by year, but is still high compared to that in EU which is approximately 40%. Especially in NIES's intra regional trade, this ratio of IT part exports has been growing. On the other hand, finished IT products, such as computers, office equipment and video equipment, are the majority of the exports to the U.S. and the EU, from China, ASEAN4 and NIES. The percentage of finished IT product exports to the U.S. is particularly increasing.

China is increasing its presence in major Asian countries' exports, irrespective of IT products. On the other hand, major Asia's percentage of China's r exports has been dropping since 1997. Meanwhile, the U.S.'s composition ratio in China's exports has remained unchanged, and trade intensity index has increased (Note 2). EU's presence in China's exports has also been increasing since 1998, and therefore, the U.S. and the EU remain the important destination for China's final goods. Asia's trade structure is deeply connected to the developed economies and this is not expected to change in the near future. As Asian countries are highly

(Note 2) The trade intensity index (export basis) between China and the U.S is rising from 0.5 points in the 1980s to 1.0 points in the 1990s and 1.3 points in the 2000s.

Figure 1 – 23 Share of exports of IT products by country and region (1999/2004/2009)

(Unit: %)

China		1999	2004	2009
U.S.	IT parts	31.5	24.1	17.0
	Finished IT products	68.5	75.9	83.0
EU27	IT parts	33.9	27.9	27.6
	Finished IT products	66.1	72.1	72.4
ASEAN4	IT parts	77.9	70.5	53.5
	Finished IT products	22.1	29.5	46.5
NIES	IT parts	69.7	59.1	46.5
	Finished IT products	30.3	40.9	53.5
ASEAN4		**1999**	**2004**	**2009**
U.S.	IT parts	66.7	39.5	33.7
	Finished IT products	33.3	60.5	66.3
EU27	IT parts	70.2	59.7	61.0
	Finished IT products	29.8	40.3	39.0
China	IT parts	87.6	73.5	65.7
	Finished IT products	12.4	26.5	34.3
ASEAN4	IT parts	96.3	86.5	77.6
	Finished IT products	3.7	13.5	22.4
NIES		**1999**	**2004**	**2009**
U.S.	IT parts	51.8	49.8	43.3
	Finished IT products	48.2	50.2	56.7
EU27	IT parts	55.5	47.5	52.4
	Finished IT products	44.5	52.5	47.6
China	IT parts	74.2	82.3	78.5
	Finished IT products	25.8	17.7	21.5
ASEAN4	IT parts	81.0	82.9	87.1
	Finished IT products	19.0	17.1	12.9
Major Asian countries(regional)	IT parts	85.3	77.5	67.8
	Finished IT products	14.7	22.5	32.2
China and Major Asian countries(regional)	IT parts	82.5	77.7	70.0
	Finished IT products	17.5	22.3	30.0

(Notes) (1) Share of IT parts and Finished IT products to the total exports in each country and region.
(2) Major Asian countries are: 8 countries/regions of ASEAN4 and NIES.
(3) Hatchings show countries and regions that have rising trends in share.
(Source) Same as Figure I-19.

Figure I – 24 World trade (Exports) by product in 2009

(US$ million, %)

	Value	Growth Rate	Share	Contribution
Total value	12,294,956	-23.0	100.0	-23.0
Machinery and equipment	4,825,714	-20.2	39.2	-7.6
General equipment	1,531,600	-21.9	12.5	-2.7
Air conditioners	26,273	-23.5	0.2	-0.1
Mining and construction machinery	70,847	-38.9	0.6	-0.3
Machine tools	21,115	-43.2	0.2	-0.1
Electrical equipment	1,616,160	-16.1	13.1	-1.9
Transport equipment	1,251,749	-25.5	10.2	-2.7
Automobiles	522,683	-33.4	4.3	-1.6
Passenger vehicles	433,635	-31.7	3.5	-1.3
Motorcycles	15,259	-33.0	0.1	0.0
Automotive parts	247,086	-27.1	2.0	-0.6
Precision instruments	426,204	-10.5	3.5	-0.3
Chemicals	1,712,746	-15.1	13.9	-1.9
Industrial chemicals	1,204,107	-12.9	9.8	-1.1
Pharmaceuticals and medical supplies	423,736	4.6	3.4	0.1
Plastics and rubber	508,638	-19.8	4.1	-0.8
Foodstuffs	875,429	-10.2	7.1	-0.6
Seafood	70,018	-4.6	0.6	0.0
Grains	71,827	-28.1	0.6	-0.2
Wheat	30,710	-29.1	0.2	-0.1
Corn	19,412	-27.8	0.2	0.0
Rice	14,638	-19.6	0.1	0.0
Processed food products	393,902	-6.8	3.2	-0.2
Oils, fats and other animal and vegetable products	126,720	-19.3	1.0	-0.2
Miscellaneous manufactured goods	380,960	-15.0	3.1	-0.4
Iron ore	57,890	-15.8	0.5	-0.1
Mineral fuels, etc.	1,662,471	-38.5	13.5	-6.5
Mineral fuels	1,558,977	-38.6	12.7	-6.1
Coal	84,118	-13.0	0.7	-0.1
LNG	63,972	-30.0	0.5	-0.2
Petroleum and petroleum products	1,291,060	-40.6	10.5	-5.5
Crude oil	821,046	-42.3	6.7	-3.8
Textiles and textile products	551,850	-14.5	4.5	-0.6
Synthetic fibers and textiles	61,284	-18.0	0.5	-0.1
Clothing	315,272	-13.0	2.6	-0.3
Base metals and base metal products	849,958	-36.9	6.9	-3.1
Steel	496,616	-40.3	4.0	-2.1
Primary steel products	273,196	-48.0	2.2	-1.6
Steel products	223,420	-27.2	1.8	-0.5
Copper	43,815	-21.2	0.4	-0.1
Nickel	9,239	-37.3	0.1	0.0
Aluminum	35,648	-37.1	0.3	-0.1
Lead	4,051	-25.1	0.0	0.0

(Source) Same as Figure I-19.

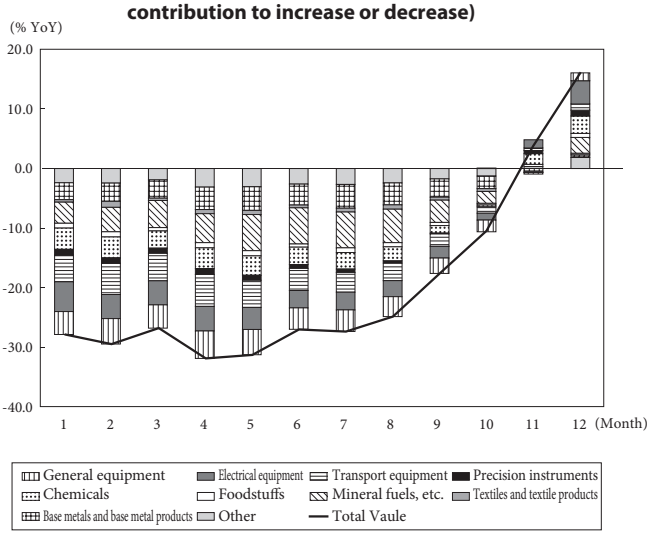
dependent on exports, they will continue to be structurally affected by the demand fluctuation in other regions. In January 2010, ASEAN-China FTA came into effect, which is expected to increase regional trade as well as building a well-balanced trade structure, so that the region will be resistant to exterior shocks.

(2) Low-end trends in world trade

Considering 2009 exports trends by product, machinery and equipment, which accounted for approximately 40% of world trade, decreased by 20.2% to US$4,826 billion (Figure I-24, I-25). The growth rate of machinery and equipment exports continued a double-digit decline yoy from November 2008 through October 2009. Particularly, transport equipment showed a massive decrease of 25.5% to US$1,252 billion. According to the International Organization of Motor Vehicle Manufacturers (OICA), the vehicle production in 2009 decreased by 13.6% to 61 million. The imports by developed economies notably declined (Figure I-26). Although the shrink in developing countries was relatively small, recovery was sluggish than in developed countries. Since consumers tend to hold off high-priced merchandise such as automobiles during the recession, their sales seem to have dropped sharply. Automobile imports have been on a recovery trend in developed countries since November 2009. However, in Russia, import figures are still in decline even through 2010, although China and India among BRICs have recovered. In addition to low consumer spending in Russia, the country raised the import tariffs on automobiles in January 2009, and in October this measure was extended another 9 months, which must have some effect on imports.

Steel plummeted 40.3% to US$497 billion, on lackluster demand for use in machinery and equipment. Steel continued to be sluggish until around July 2009, while other products bottomed out in the first quarter of the year. According to the Japan Iron and Steel Federation, the steel production

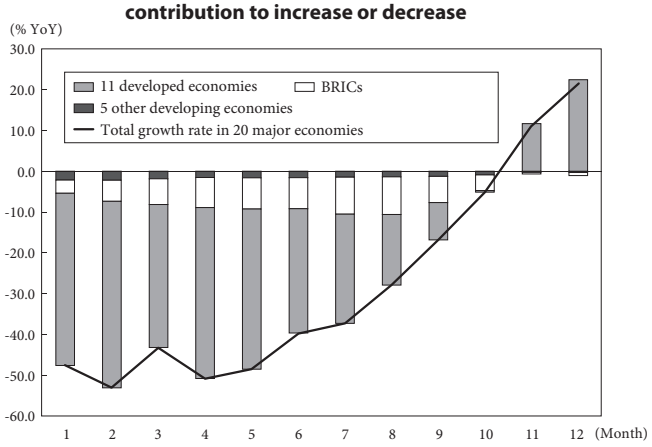
Figure I – 25 Import trends for 20 major economies (January – December 2009, dollar-denominated values' contribution to increase or decrease)



(Note) The major 20 economies are: China, Germany, the U.S., Japan, France, South Korea, the UK, Hong Kong, Canada, Russia, Singapore, Mexico, Taiwan, Switzerland, Malaysia, India, Australia, Brazil, Thailand and Indonesia.

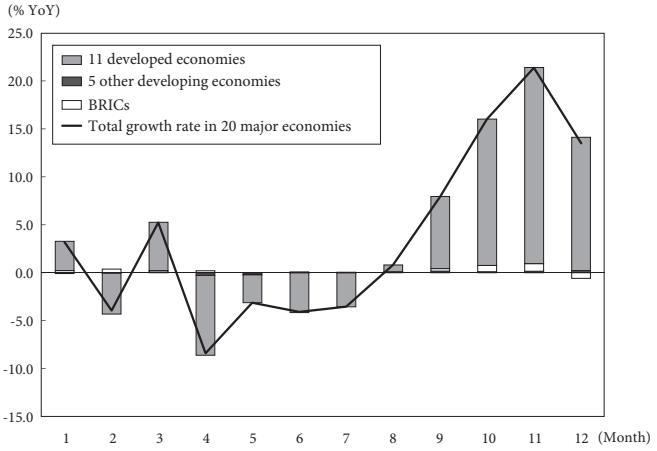
(Source) Same as Figure I-19.

Figure I – 26 Imports trends for 20 major economies (January – December 2009, dollar-denominated values' contribution to increase or decrease



(Source) Same as Figure I-19.

Figure I – 27 Export trends in pharmaceuticals and medical supplies for 20 major economies (January – December 2009, dollar-denominated values' contribution to increase or decrease)



(Source) Same as Figure I-19.

by major countries decreased by 7.9% in 2009, which recorded two consecutive years of decrease.

Exports of mineral fuels and grains, which were expanding at a pace of more than 40% in 2008, fell sharply in 2009, down 38.6% to US$1,559 billion and 28.1% to US$71.8 billion respectively, due to plunging commodity prices.

Meanwhile, most products picked up in August 2009 and the recovery spurred in November. Chemicals showed an increase of 14.4% yoy in November 2009, which was the quickest recovery among major products. Pharmaceutical and medical supplies had already entered a positive growth trend in August (Figure I-27). The reason may have been the pandemic H1N1 flu virus, which boosted procurement of the flu vaccine. Compared to the previous year, the export of the vaccines for human medecine (HS300220) by 20 major economies showed a huge increase of 59.5% to US$11 billion.

Export of IT related products decreased by 14.9% to US$1,765 billion, which was a relatively small decrease among other products (Figure I-28).

Price decline caused contraction in trade

The decline of trade in 2009 was influenced not only by the decrease in volume but also by the falling price of products. Among the products ranked high in export value (only products for which it was possible to collect volume and value data based on six digit HS code) by the major developed countries, only a few increased both in volume and unit price: German Aircraft (HS880240), Japanese freighters (HS890190), and U.S. pharmaceutical products(HS300490) (Figure I-29). It is considered that megacarriers such as aircraft and freighter, are tend to be traded based on long term contracts and are therefore less affected by the economic

Figure I – 28 World IT trade (Export basis, 2009)

(Unit: US$ million, %)

	Total	Growth rate	Share of total exports	Share of IT exports	
				Scale	Contribution
Total IT equipment	1,765,027	-14.9	14.4	100.0	-14.9
IT parts	865,929	-15.6	7.0	49.1	-7.7
Finished IT products	899,099	-14.3	7.3	50.9	-7.3
Computers and peripherals (total)	396,372	-13.5	3.2	22.5	-3.0
Multifunctional digital equipment	17,294	-5.4	0.1	1.0	-0.0
Computers and peripherals	254,097	-11.8	2.1	14.4	-1.6
Parts of computer and peripherals	124,980	-17.6	1.0	7.1	-1.3
Office equipment	3,904	-23.4	0.0	0.2	-0.1
Telecommunications equipment	297,317	-13.0	2.4	16.8	-2.1
Semiconductors and electronic components	402,292	-11.9	3.3	22.8	-2.6
Electronic tubes and semiconductors	82,136	-14.8	0.7	4.7	-0.7
Integrated Circuits	320,156	-11.1	2.6	18.1	-1.9
Other electronic components	333,362	-18.8	2.7	18.9	-3.7
Flat panel displays	48,796	-21.2	0.4	2.8	-0.6
Video equipment	163,524	-15.8	1.3	9.3	-1.5
Digital cameras	36,252	-12.2	0.3	2.1	-0.2
Reception apparatus for televisions	73,071	-8.3	0.6	4.1	-0.3
Audio equipment	4,974	-27.5	0.0	0.3	-0.1
Portable audio players	4,241	-25.5	0.0	0.2	-0.1
Measuring and testing equipment	141,561	-16.6	1.2	8.0	-1.4
Machines and apparatus for the manufacture of semiconductors	21,723	-32.8	0.2	1.2	-0.5

(Source) Same as Figure I-19.

downturn in the short term. As for other products, all except for machinery and components from China and Japan, fell in volume and unit price. As medical and pharmaceutical products were the only products which increased, it can be mentioned that vital products tend to be traded actively regardless of price, less being affected by the economic downturn.

The fall in unit price is apparent also from the import statistics. Among 4,242 products imported by the U.S. for which data of volume and unit price were available, 3,146 decreased in volume, and over half of them, 1,665 decreased in unit price. In order to grasp demand trends, data was collected for 897 final goods imported by the U.S., the EU (only external imports), China and Japan for which volume comparison was possible. Of these, only 37 products increased in volume (Figure I-30). Not many products had a unit price increase in each country or region individually. The products those increased both in volume and unit price, in other words products that had a strong demand even in price increases, were foodstuffs, textiles, and medical and pharmaceutical products.

However, 187 products faced volume decreases in these 4 economies. Precision instruments of HS91 category all decreased in volume compared to the previous year, and durable consumer goods, such as voice recorders and players (HS851981), large vehicles (gasoline engine over 3000cc) (HS870324) and passenger vehicles (diesel engine, below 1500cc) (HS870331) also lost in volume. The decrease in demand of transportation equipment, which contributed considerably to the trade decline in 2009, and in the situation in which worldwide consumer demand had fallen, the quest for low-cost products became strong and non-durable consumer products and general consumer goods, which have more price competitiveness, gained more consumer demand in exchange.

Using automobiles and IT finished products as the sample to figure out the trade trend in final goods,

Figure I – 29 Value, volume and unit price increase rates of top export products for major 4 countries in 2009

(Unit: %)

Exporting country	HS code	Products	Value	Volume	Unit Price
China	847130	Portable automatic data processors	1.6	23.6	-17.8
	851712	Cell phones and wireless telephone	2.2	7.4	-4.8
	847330	Components of automatic data processing machine	-18.0	-20.9	3.7
	851770	Telephone components	-10.3	-14.5	5.0
	901380	Liquid crystal devices, laser and other appliances	-14.6	-5.7	-9.4
Germany	300490	Pharmaceuticals and other medical supplies	-6.9	-0.1	-6.8
	870332	Passenger vehicles (diesel engines, 1500-2000cc)	-25.2	-21.9	-4.2
	870323	Passenger vehicles (gasoline engines, 1500-3000cc)	-17.5	-17.2	-0.4
	880240	Airplanes and other aircraft (exceeding 15,000kg)	9.6	6.3	3.2
	870324	Passenger vehicles (gasoline engines exceeding 3000cc)	-44.6	-41.4	-5.5
U.S.	300490	Pharmaceuticals and other medical supplies	20.0	2.2	17.4
	854231	Electronic processors and controllers	-23.1	-5.6	-18.5
	870323	Passenger vehicles (gasoline engines, 1500-3000)	-43.6	-34.9	-13.5
	870324	Passenger vehicles (gasoline engines exceeding 3000cc)	-44.1	-43.1	-1.7
	710239	Diamonds and others	-32.2	-24.3	-10.5
Japan	890190	Freighters and cargo ships for goods and person	10.6	8.8	1.7
	844399	Components for printing machine	-20.6	-27.6	9.6
	870840	Gear boxes and parts	-13.2	-20.6	9.4
	854239	Other integrated circuits	-19.5	-12.6	-7.9
	852580	TV camera, digital camera and video camcorder	-28.2	-23.1	-6.7

(Source) Same as Figure I-19.

Figure I – 30 Trends in imports of final goods by 4 major economies (2009)

Final goods① 897 products②	Number of products with their volume increased	Number of products with their unit price increased	Main products⑥ HS Code	Description
4 economies total③	37	0	–	–
U.S.	298 (41)⑤	84 (10)	640220	Footwear
			020714	Cut meat, meat pieces (frozen)
			490210	Newspapers, Magazines and other Periodicals
			481110	Tarred, bituminized or asphalted paper and paper board
			210112	Items prepared from concentrates and coffee base
			030374	Mackerel (frozen)
EU27④	269 (47)	76 (9)	640419	Other footwear
			200290	Tomatoes cooked or treated
			611521	Other pantyhose and tights of synthetic fibers
			490300	Children's picture, drawing or coloring books
			210410	Soups and broths and preparations
			610413	Dresses (wool or animal hair)
China	429 (134)	137 (43)	870323	Passenger vehicles (gasoline engines 1500~3000cc)
			490890	Decalcomania
			491191	Paintings, designs and photos
			300439	Pharmaceuticals, including antibiotics
			620293	Coats of synthetic fibers
			840721	Outboard motors
Japan	349 (72)	32 (7)	070310	Onions and shallots
			300691	Pharmaceuticals and medical supplies (only products related to nephrostomy)
			630229	Bed linen (machine woven)
			850870	Vacuum cleaners
			630699	Tarpaulin, sun shades, tents, sails
			850640	Primary cells (one with silver oxide)

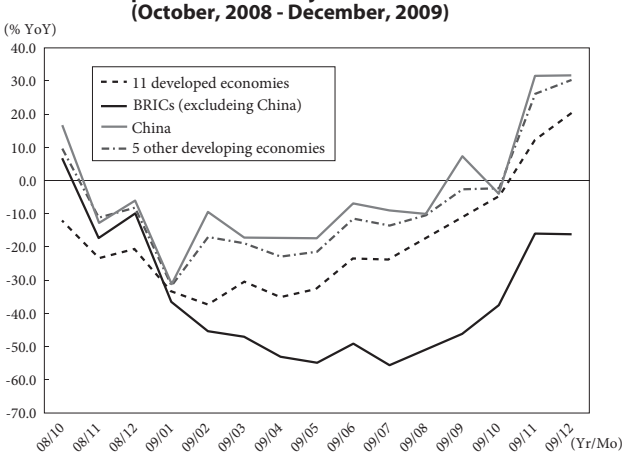
(Notes) (1) Definition of final goods is based on HS2007/BEC (UN) and RIET-TID2009 (Research Institute of Economy, Trade & Industry). Also applicable to Figure 1-32.
(2) Comparison of import volume was made with products whose data were available.
(3) 4 countries and EU region total means growth was observed by the countries and area.
(4) Imports of EU27 are all from outside the region
(5) Figures in parentheses are the volume of imports of products that only the U.S. has shown the growth and other countries and region have not. The same as to the price.
(6) Main products are, as a rule, chosen for products with a higher degree of contribution in price within each country and region.

(Source) Same as Figure I-19.

imports for 20 major economies, hit bottom in February 2009, but in October 2010 regained the level of before the economic crisis. The 20 major economies make up 80% of world trade but the pace of growth is higher in developing economies (Figure I-31).

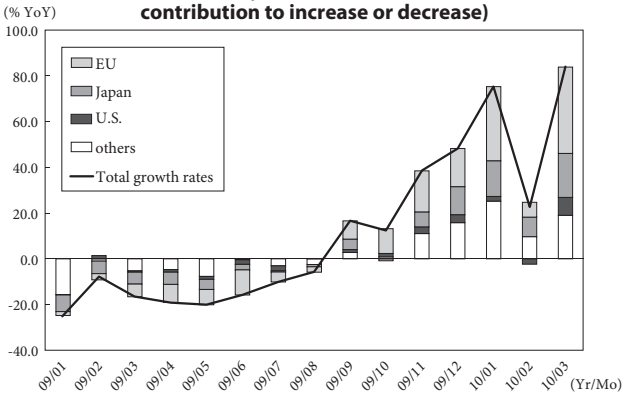
China's imports showed a pronounced increase compared with other nations. China is firmly increasing its imports, mainly from the EU and Japan. Growth rate, though dropping temporality in February 2010, is on a rising trend since September 2009 (Figure I-32). As in Figure I-30, it is apparent that the quantity of products imported by China expanded the most among the major economies. In the products which showed an increase in both volume and unit price, China was the only country whose imports of durable consumer goods, namely automobiles (HS870323) contributed. Although China's automobile imports showed a continuous drop throughout 2009, there still seemed to be strong demand for the product. Since the beginning of 2010, the imports in large-sized passenger vehicles (HS870324) and video cameras (HS852580) have recorded double-digit growth yoy. This trend is thought to be derived from China's stimulus measures encouraging purchases of automobiles and home electronic appliances. Actually, the sales for the products applicable for subsidy showed an increase of 50% from January through May 2010 yoy. In June, China announced to expand the areas to be supported by the replacement promotion policy for refrigerators and television sets, which is considered to encourage consumption. China's imports for final consumption goods in 2009 were US$54 billion, far behind U.S., which imported US$454 billion. However, there is an expectation for boosting consumption in developing economies, led by China.

Figure I – 31 Growth trends of automobiles and finished IT products for 20 major economies (October, 2008 - December, 2009)



(Source) Same as Figure I-19.

Figure I – 32 Trends of China's imports of final goods from major developed economies (January 2009 - March 2010, dollar-denominated values' contribution to increase or decrease)



(Source) Chinese trade statistics.

(3) Moderate growth expected for world trade in 2010

According to the data available from 18 major economies as of the first quarter of 2010, world trade hit bottom in February 2009 and has slowly returned to a growth trend. Exports in the first quarter of 2010 grew by 27.7% yoy to US$2,442 billion, a gain in two consecutive quarters (Figure I-33). The exports of the first quarter of 2010 recovered to 81.6 % of the trade peak (June to August 2008), and it seems that the worst of the trade downturn is behind. The monthly trends in imports shows that growth is evident in China and Asian developing economies, which shows that the consumer demand in these economies is recovering (Figure I –34). The commodity price once again has been rising which drove down exports from fuel exporting economies.

As for exports by products, many of the major products showed positive growth after November 2009 yoy (Figure I-35). Machinery and equipment fell sharply in 2009, but showed an increase of 20.6% in February 2010, which in March further accelerated to a 27.4% gain. Electronic equipment, especially, had already gained 25.3% in December and kept double-digit growth every month regaining the level of early 2008. The price of mineral fuel increased as well, gaining 59.4% increase in the first quarter of 2010 in contrast to the continued decrease which lasted until the fourth quarter of 2009. Exports of crude oil, which accounted for 30% of mineral fuel, showed a rapid increase of 81.6% to US$55 billion. Crude oil prices gradually increased from the bottom of the mid December in 2009 to the level of US$70's in June 2010 on the NYMEX.

According to the IMF, the nominal exports in 2010 is predicted to increase by 16.3% (Note 3), while the value will not regain the peak of 2008 within this year.

(4) Trade in services also down heavily in 2009

In 2009, trade in services (exports of commercial services, excluding government services) declined 12.9% to US$3,312 billion, which was the first decline in 26 years (Figure I-36). It showed double-digit growth for 6 consecutive years but turned to the largest decrease recorded since 1981, the year statistics were first kept.

Trade in services by category shows a noticeable decrease of 21.4% to US$704 billion in transportation services, a decrease of 11.2% to US$854 billion in travel services, and

(Note 3) WTO estimated in March 2010, that the world exports in real terms will grow by 9.5% in 2010, while exports from developing economies led by East Asia is expected to rise by 11%.

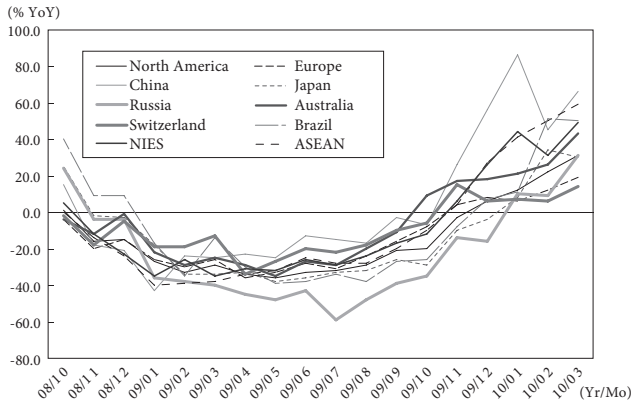
Figure I – 33 Quarterly trends of the world trade for 18 major economies (By main products)

(US$ million, %)

	Exports						Imports					
	18 major economies' share of world total in 2009	2009				2010	18 major economies' share of world total in 2009	2009				2010
		I	II	III	IV	I		I	II	III	IV	I
Total	59.7	1,600,604 (-28.1)	1,722,212 (-29.9)	1,911,069 (-23.4)	2,106,565 (1.4)	2,044,221 (27.7)	58.4	1,636,428 (-29.5)	1,738,894 (-31.3)	1,953,587 (-24.7)	2,113,501 (-0.1)	2,088,922 (27.7)
Machinery and equipment	72.7	752,498 (-30.2)	822,523 (-28.6)	903,028 (-19.9)	1,031,168 (2.9)	969,018 (28.8)	62.5	652,451 (-29.6)	717,424 (-27.6)	793,516 (-18.3)	887,144 (3.7)	837,722 (28.4)
General equipment	70.3	245,342 (-27.6)	252,313 (-29.6)	270,867 (-23.3)	308,519 (-3.0)	294,460 (20.0)	59.8	212,438 (-25.9)	221,387 (-27.8)	234,763 (-21.6)	260,840 (-2.8)	255,540 (20.3)
Electrical equipment	75.4	245,205 (-29.1)	285,215 (-23.7)	324,947 (-15.8)	363,765 (8.2)	328,490 (34.0)	69.5	239,937 (-28.7)	278,751 (-21.6)	319,372 (-14.6)	357,462 (8.6)	321,494 (34.0)
Transport equipment	70.5	192,244 (-36.1)	207,344 (-35.4)	220,070 (-24.5)	262,483 (0.0)	254,009 (32.1)	53.9	138,717 (-37.2)	148,988 (-37.8)	163,276 (-22.6)	185,458 (3.4)	180,743 (30.3)
Precision instuments	77.6	69,706 (-24.1)	77,650 (-21.4)	87,144 (-9.7)	96,401 (12.4)	92,059 (32.1)	68.5	61,359 (-26.1)	68,297 (-23.6)	76,105 (-13.3)	83,384 (5.6)	79,945 (30.3)
Chemicals	61.4	232,258 (-24.4)	251,839 (-24.3)	276,890 (-16.2)	290,209 (10.8)	300,835 (29.5)	55.5	215,879 (-23.2)	234,261 (-23.1)	258,980 (-16.4)	271,317 (6.9)	281,321 (30.3)
Pharmaceuticals & medical supplies	55.1	55,509 (1.6)	55,792 (-5.0)	59,708 (1.5)	62,344 (17.7)	63,179 (13.8)	52.1	50,403 (-2.3)	52,601 (-3.3)	57,372 (2.6)	63,211 (22.6)	61,505 (22.0)
Foodstuffs	47.1	91,645 (-14.5)	100,532 (-14.9)	105,847 (-13.1)	114,621 (4.0)	105,313 (14.9)	52.0	108,216 (-12.0)	117,078 (-13.0)	115,771 (-10.6)	127,847 (2.0)	121,008 (11.8)
Grains	68.6	12,765 (-25.5)	12,996 (-28.9)	12,192 (-34.2)	11,328 (-22.0)	12,669 (-0.7)	32.7	6,887 (-25.5)	7,254 (-29.4)	5,764 (-34.3)	5,936 (-19.5)	7,278 (5.7)
Iron ore	70.9	10,055 (27.8)	9,637 (-19.7)	10,696 (-35.0)	10,655 (-9.5)	10,749 (6.9)	88.3	15,311 (-23.8)	16,008 (-32.3)	19,209 (-29.2)	19,077 (-5.4)	20,691 (35.1)
Mineral fuels	34.2	107,728 (-39.5)	117,600 (-50.2)	147,161 (-42.7)	160,651 (-5.3)	171,732 (59.4)	62.7	216,290 (-46.5)	232,492 (-50.9)	289,506 (-44.7)	309,312 (-8.2)	326,620 (51.0)
Crude oil	21.3	30,025 (-50.7)	38,676 (-52.9)	50,634 (-42.7)	55,871 (-1.7)	54,530 (81.6)	70.2	110,548 (-56.4)	138,088 (-53.7)	182,415 (-45.4)	187,753 (-5.2)	191,101 (72.9)
Textiles and textile products	57.7	69,793 (-16.4)	75,095 (-17.4)	88,896 (-15.0)	84,534 (-4.2)	78,820 (12.9)	57.4	73,412 (-14.7)	71,147 (-17.5)	86,391 (-12.7)	79,729 (-3.2)	78,930 (7.5)
Clothing	53.2	38,071 (-9.1)	36,947 (-13.9)	49,981 (-15.1)	42,710 (-11.8)	39,367 (3.4)	64.2	49,554 (-9.0)	44,248 (-13.1)	58,913 (-11.3)	49,913 (-6.5)	49,647 (0.2)
Steel	59.2	70,466 (-32.7)	68,247 (-46.5)	74,263 (-47.1)	80,983 (-19.1)	81,282 (15.3)	48.7	62,852 (-30.6)	56,788 (-47.8)	61,666 (-47.1)	67,991 (-23.7)	68,716 (9.3)

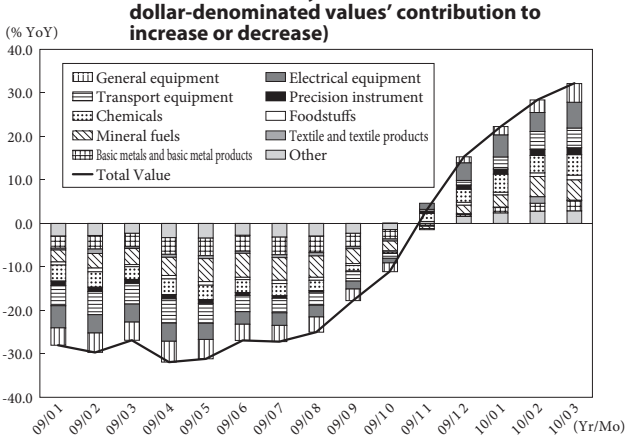
(Notes) (1) Figures are based on data available as of June 2010.
(2) As with Figures I-34 and 35, the 18 major economies are: Japan, Germany, China, the U.S., France, UK, South Korea, Canada, Hong Kong, Singapore, Russia, Taiwan, Australia, Switzerland, Brazil, Malaysia, Thailand and the Philippines.
(3) Figures in parentheses are YoY growth rates.
(Source) Same as Figure I-19.

Figure I – 34 Trends in imports of 18 major economies (January 2009 - March 2010)



(Note) North America: The U.S. and Canada; Europe: Germany, France and UK. ASEAN: Malaysia, Thailand and Singapore.
(Source) Same as Figure I-19.

Figure I – 35 Trends in exports by product for 18 major economies (January 2009- March 2010, dollar-denominated values' contribution to increase or decrease)



(Source) Same as Figure I-19.

a decrease of 9.9% to US$1,754 billion in other services such as financial services, insurance, communications and royalties.

In 2008, every category of services followed a downward trend but the drop in transportation services was conspicuous. Transportation reflects the movement of merchandise trade itself. According to the International Air Transport Association (IATA), international passenger air travel and international air cargo transportation decreased by 3.5% and 10.1%, respectively, the largest drop ever recorded.

With regard to travelling, the United Nations World Tourism Organization (UNWTO) announced that the international tourist arrival dropped 4.2% in 2009 to 880 million, due to the poor performance in business trips. This was the first decrease in six years since the Severe Acute Respiratory Syndrome (SARS) pandemic in 2003. Because of the worsening economic condition and the spread of the new H1N1 influenza, consumers tended to prefer domestic travel to cross border travel, which eventually brought less trade in services. Though the number of travelers kept decreasing for 14 consecutive months from August 2008, it started to increase from October 2009. UNWTO estimates that the number will grow by 3-4% in 2010.

Trade in services by country and region shows that, in the U.S., the leader in both imports and exports of services, exports declined by 9.3% yoy to US$470 billion, while imports declined by 9.4% to 331 billion. These rates of decline are smaller than those of other major countries (Figure I-37).According to the U.S. Department of Commerce, trade in services fell substantially in the first quarter of 2009 due to decreases in travel and transportation services (excluding passenger fee) but rebounded in the second quarter.

In the EU, exports of services showed a decrease by 14.4% to US$1,513 billion and imports dropped by 12.8% to US$1,329 billion. Each service category recorded a double-digit decline.

In Asia, both exports and imports dropped by 12.7% to US$751 billion and by 10.7% to US$776 billion, respectively. China became the 5th largest exporter in services, surpassing Japan. In imports as well, China exceeded Japan and ranks 4th following the U.S., Germany and the UK. Although China's imports in services dropped by 0.3%, the value remained steady compared to other major countries which experienced a double-digit decrease.

Figure I – 36 Trends in growth rate of world trade in services (Export basis)

(Unit:%, US$ million)

	2008	2009		
			Value	Contribution
Total value of exports	12.5	-12.9	3,311,600	-12.9
Transportation	15.8	-21.4	703,500	-5.0
Travel	10.7	-11.2	854,300	-2.8
Other services	11.9	-9.9	1,753,800	-5.1

(Source) WTO.

Figure I – 37 Trade in services by country and region (2009)

(Unit: %, US$ million)

	Exports			Imports		
	Value	Growth rate	Share	Value	Growth rate	Share
Value	3,311,600	-12.9	100.0	3,114,500	-11.9	100.0
NAFTA	542,300	-9.9	16.4	430,300	-9.7	13.8
U.S.	470,217	-9.3	14.2	330,759	-9.4	10.6
Europe	1,675,100	-14.2	50.6	1,428,100	-12.7	45.9
EU27	1,513,200	-14.4	45.7	1,328,800	-12.8	42.7
UK	239,713	-15.9	7.2	159,883	-18.8	5.1
Germany	214,799	-11.1	6.5	255,428	-9.8	8.2
France	140,375	-14.2	4.2	124,097	-12.4	4.0
Spain	122,264	-14.3	3.7	86,536	-17.0	2.8
Italy	100,947	-14.7	3.0	113,568	-11.2	3.6
Asia	750,500	-12.7	22.7	775,900	-10.7	24.9
China	128,700	-12.1	3.9	157,500	-0.3	5.1
Japan	124,315	-15.2	3.8	145,658	-10.8	4.7
ASEAN10	162,800	-10.5	4.9	180,400	-11.1	5.8
CIS	69,100	-17.6	2.1	90,500	-20.8	2.9
Russia	41,901	-17.3	1.3	60,126	-19.4	1.9
South and Central America	100,100	-8.2	3.0	110,700	-8.0	3.6
Brazil	26,267	-8.9	0.8	44,073	-0.7	1.4
Middle East	96,100	-11.6	2.9	162,400	-13.4	5.2
Israel	21,926	-8.9	0.7	17,257	-12.1	0.6
Africa	78,400	-11.0	2.4	116,600	-11.4	3.7
Egypt	21,002	-14.9	0.6	13,489	-17.4	0.4

(Source)Same as Figure I – 36.

3. Global Direct Investment & Cross-Border M&As

(1) Global foreign direct investment falls by 42.6% in 2009

A heavy decline of M&As and decrease in reinvestment of earnings influenced FDI

Global inward FDI (JETRO estimates of net flows based on the balance of payments) decreased by 42.6% in 2009 on a year-on-year basis to US$1.1326 trillion (Figure I-38).

The reasons for the large decline are: 1) A significant drop in global cross-border M&As (merger of corporate entities and acquisition over country borders) due to the Lehman shock of September 2008, which caused financial instability and a credit crunch; 2) A stronger inclination to curb new or additional capital investments (green field investment) due to the state of the global economic condition; 3) Falling earnings of foreign-based corporate subsidiaries in the early half of 2009; 4) Prevalent repatriation of operating funds from foreign-based subsidiaries to their parent corporations. The categorical classification of FDI is as follows: 1) and 2) concern equity capital such as acquisition of new corporate shares.

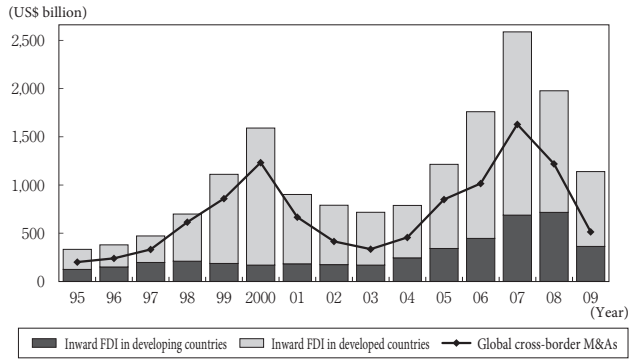
Figure I – 38 FDI of major economies (net flow, based on balance of payments)

(US$ million, %)

	Inward direct investment		Outward direct investment	
	Value	Growth rate	Value	Growth rate
U.S.	134,707	-59.0	268,680	-23.5
Canada	18,657	-66.2	38,832	-51.9
EU27	506,611	-37.2	692,125	-45.4
EU15	479,379	-30.1	687,648	-42.4
France	59,628	-4.2	147,161	-8.6
Germany	39,158	47.8	62,705	-53.4
Italy	28,985	70.2	43,703	-0.3
Luxembourg	166,964	63.3	188,657	37.8
Netherlands	53,074	-68.2	120,007	-52.1
Spain	15,031	-79.5	16,334	-78.2
UK	22,992	-75.0	46,916	-71.0
12 new EU member states	27,233	-77.5	4,477	-93.9
Switzerland	9,695	90.6	15,501	-69.7
Australia	22,572	-51.7	18,426	-43.9
Japan	11,839	-51.8	74,650	-42.9
East Asia	162,154	-35.8	134,390	-9.5
China	78,200	-47.1	43,900	-17.9
South Korea	1,506	-54.5	10,572	-44.2
Hong Kong	48,449	-18.7	52,269	3.3
ASEAN 5	31,196	-14.8	21,781	42.8
Singapore	16,809	54.0	5,979	n.a.
India	34,574	-15.1	14,855	-25.9
Brazil	25,949	-42.4	-10,084	n.a.
Russia	38,722	-48.7	46,057	-17.9
32 developed countries	761,473	-39.3	1,219,489	-37.3
Developing countries	371,163	-48.3	152,723	-47.3
World	1,132,635	-42.6	1,372,212	-38.6

(Notes) (1) JETRO estimates for "World" and "Developing countries" figures. The figure for the developed countries is the sum value.
(2) The ASEAN 5 includes Thailand, Malaysia, Indonesia, the Philippines and Singapore.
(3) "East Asia" includes China, South Korea, Taiwan, Hong Kong and the ASEAN 5.
(Sources) Balance of payments statistics, BOP (IMF) and other sources.

Figure I – 39 Global inward FDI and cross-border M&As



(Sources) Balance of payments statistics, BOP (IMF) and Thomson Reuters.

3) is about reinvested earnings (undistributed profits internally reserved by foreign-affiliated subsidiaries within a region). 4) applies to other capital (loans from parent companies to their subsidiaries). All of these have been the elements of decline.

When looking at developed countries and developing countries, both economies showed a massive decrease. Inward FDI in the developed countries (based on classification by BOP (IMF) of 32 countries and regions) dropped 39.3% to US$761.5 billion and inward FDI in developing countries declined 48.3% to US$371.2 billion. Growth of FDI to developing countries was strong until 2008, but it started to decrease due to shortages of funds in developed countries and a temporary slide in the price of resources (Figure I-39). Global outward FDI dropped 38.6% to US$1.3722 trillion (Note 4). Outward FDI by China and Brazil was robust and active in 2008, but even in these developing countries it started to decline in 2009.

Marked decreases of FDI in the U.S. and European developed economies

Inward FDI dropped in almost all major countries and regions. Among them, the decrease in the U.S. was most conspicuous.

The value of U.S. inward FDI in 2008 was US$328.3 billion, but dropped to US$134.7 billion, a decrease of 59.0%. This is an even a bigger decline than the drop of 48.0% in 2001 to US$167 billion, from the US$ peak of the information technology economic boom in 2000 (US$321.3 billion). There was a noticeable increase in 2008 for U.S. targeted M&As, but this decreased due to the global economic downturn in 2009. The value of inward equity capital in 2008 was US$261.6 billion, but it was only US$94.8 billion in 2009, recording the lowest equity capital growth since 1999. The reinvested earnings also decreased. In the first quarter of

(Note 4) Even though global value of inward and outward FDIs should theoretically match, the actual numerical values differ due to discrepancies caused by differences in statistical methods between countries. Differences by country to country are: limits of the lowest values to be posted, handling of reinvested earnings and treatment of subsidiaries of subsidiaries, handling of remittance of profits and transaction with offshore companies.

2009, when the worsening of U.S. economy became apparent, there was a net outflow of US$9.8 billion in reinvested earnings. Although in the latter half of 2009 this outflow improved, overall a decrease of 39.4% to US$28.5 billion was reported. The U.S. outward FDI has continued to drop for two years in a row to US$268.7 billion, a decrease of 23.5% yoy. FDI in the form of equity capital was US$18.4 billion, the lowest figure since 1993. Although reinvested earnings dropped, it occupied 89.3% of the total inward FDI value. In the fourth quarter alone, reinvested earnings posted a value of US$75.7 billion. The reason for this increase is due to the world economic recovery, in which business performance of U.S. subsidiaries in Central and South American and Asian regions showed improvement in the latter half of the year and corporate retained earnings have also increased.

Inward FDI in the EU decreased 37.2% to US$506.6 billion (JETRO estimates). In 2008, EU inward FDI already markedly decreased due to the global credit crunch in the economic crisis, therefore the rate of decrease was smaller than in the U.S. in 2009. There was a big increase in FDI in Luxembourg, where many special-purpose entities (SPE) are located. Luxembourg surpassed the U.S. to earn the first place in the value of inward FDI in 2009 (Figure I-40). There were moves by U.S. pharmaceutical corporations to concentrate the capital of their foreign subsidiaries to their controlling holding companies in Luxembourg, which resulted in inflows of capital amounting to 30% of its total inward FDI.

According to the Statistical Office of the European Commission (Eurostat), FDI from regions other than the EU increased 5.8% to US$308 billion, a small percentage gain due to a rebound from the marked decrease of the previous year. FDI from the U.S. raised 82.0% to US$134.5 billion, and direct investment from the Cayman Islands (a British overseas territory) and offshore financial centers (38 countries and regions by definition of Eurostat) doubled to US$58.4 billion each showing recovery. On the other hand, inward FDI inside the EU area dropped 59.7% to US$215.2 billion, a small amount as a total FDI in this area reflecting a contraction of M&As in the area (discrepancy may exist in figures between Eurostat and JETRO statistics due to differences in timing and method).

A major country in the EU, the UK, suffered a huge drop of 75.0% to a total inward FDI of US$23 billion yoy, a decrease in two consecutive years. The cause of this decline was a decrease in equity capital inflow. In the past several years there were noticeable M&As of famous British companies, but in 2009 the number was small.

The outward FDI of the EU decreased by 45.4% to US$692.1 billion (JETRO estimates). This drop was caused by a decline in direct investment which was actively directed to the U.S. in 2008. According to Eurostat, FDI to the U.S. dropped by 46.1% to US$95.8 billion, and outward FDI to the EU area also showed a huge decrease of 61.8% to US$302.7 billion. Extra-EU outward FDI by the EU saw a total decrease of 28.2% to US$365.8 billion, but FDI to emerging and developing countries was brisk. For example, FDI to China increased by 6.0% to US$7.3 billion and to India by 7.0% to US$4.6 billion.

The quarterly report of inward FDI in major developed economies (Figure I-41) in 2008 indicates that a large inflow of equity capital continued in the U.S. until a sudden decline in the first quarter of 2009. Reinvested earnings, which represent revenues by foreign capital owned entities in the U.S., started to decrease in the fourth quarter of 2008, and in the first quarter of 2009 recorded a drastic repatriation of funds, marking a total outflow. In the second quarter of 2009, a mild recovery of the inflow of direct investment was observed, although in a moderate manner when compared to the previous several years, could be observed.

However, in major European countries inward FDI remained stagnant until the latter half of 2009. In the fourth quarter of 2009, equity capital increased in the UK with a big M&A of a British corporation and also in Germany when, in the first quarter of 2010, a sizeable inflow of reinvested earnings amounting to US$5.3 billion was posted showing mild growth trends in the area.

Asia showing quicker recovery

Inward FDI in East Asia decreased by 35.8% to US$162.2 billion affected by a temporary drop in inward FDI in China, the driving force of the area.

China's inward FDI showed a decrease of 47.1% to US$78.2 billion, in contrast with a strong recovery in the domestic economy. According to the State Administration of Foreign Exchange's data, the gross amount of inward FDI was US$110 billion of which the nonfinancial sector showed a decrease of 28% to US$105.9 and the financial sector, (banks, securities and insurance area) in comparison showed a large decrease of 72% to US$4.1 billion. The gross amount of outflow, or repatriation, reached 143% to US$31.8 billion. Capital repatriation from the financial sector by developed countries, such action taken by Bank of America selling part of its stock of China Construction Bank, must be responsible for the outflows.

In East Asia, inward FDI targeted to Hong Kong was down 18.7%, a relatively smaller de-

Figure I – 40 Global top 10 countries and region for FDIs

(Unit: US$ million)

	Inward FDI				Outward FDI			
	2008		2009		2008		2009	
1	U.S.	328,334	Luxembourg	166,964	U.S.	351,141	U.S.	268,680
2	Netherlands	166,797	U.S.	134,707	Netherlands	250,626	Luxembourg	188,657
3	China	147,791	China	78,200	UK	161,884	France	147,161
4	Belgium	109,956	France	59,628	France	161,071	Netherlands	120,007
5	Luxembourg	102,259	Netherlands	53,074	Luxembourg	136,872	Japan	74,650
6	UK	91,961	Hong Kong	48,449	Germany	134,592	Germany	62,705
7	Russia	75,461	Germany	39,158	Japan	130,801	Hong Kong	52,269
8	Spain	73,294	Russia	38,722	Belgium	129,951	Russia	46,057
9	Hungary	62,838	India	34,574	Canada	80,797	China	43,900
10	France	62,257	Belgium	33,780	Spain	74,856	Italy	43,703

(Sources) Balance of payments statistics by country and region and BOP (IMF).

Figure I – 41 Trends in major developed countries' inward FDI by quarter and by type of investment

(Unit: US$ million)

	Year	2007	2008				2009				2010
	Quarter	Ⅳ	Ⅰ	Ⅱ	Ⅲ	Ⅳ	Ⅰ	Ⅱ	Ⅲ	Ⅳ	Ⅰ
U.S.	Inward total	48,334	80,597	90,838	57,000	99,899	5,866	31,524	55,803	41,514	47,289
	Equity capital	21,690	55,306	35,058	53,871	117,348	19,542	25,384	27,140	22,696	11,106
	Reinvested earnings	444	17,505	22,086	8,354	-952	-9,813	6,068	10,629	21,601	18,994
	Other capital	26,200	7,786	33,694	-5,224	-16,497	-3,862	71	18,034	-2,783	17,188
UK	Inward total	95,377	55,273	26,992	-8,314	19,555	-2,624	-4,803	10,268	21,958	40,309
	Equity capital	62,819	54,725	22,303	3,610	17,420	5,935	3,127	3,594	22,710	21,456
	Reinvested earnings	10,881	5,054	10,745	-2,291	-3,238	1,771	-550	9,436	4,325	5,535
	Other capital	21,677	-4,506	-6,056	-9,633	5,373	-10,330	-7,380	-2,762	-5,076	13,318
Germany	Inward total	25,426	9,985	11,683	-560	5,695	4,998	12,748	9,699	12,107	9,180
	Equity capital	15,937	5,774	8,631	6,104	2,616	6,100	-445	3,570	3,518	-374
	Reinvested earnings	2,889	4,724	-2,556	-3,184	-1,580	1,907	517	689	-7	5,321
	Other capital	6,600	-513	5,609	-3,479	4,658	-3,008	12,675	5,441	8,596	4,233
France	Inward total	50,579	9,536	26,284	27,215	1,560	4,598	28,698	9,989	16,709	13,279
	Equity capital	16,180	12,244	-6,015	4,688	10,151	945	10,585	3,209	1,851	2,654
	Reinvested earnings	3,878	-355	-370	-356	-313	676	706	742	767	3,355
	Other capital	30,520	-2,353	32,669	22,882	-8,278	2,977	17,407	6,037	14,091	7,270
Japan	Inward total	-8	10,158	6,337	1,675	6,379	3,911	2,872	4,636	419	535
	Equity capital	579	8,877	7,331	1,231	6,700	3,656	1,679	4,416	979	4,992
	Reinvested earnings	1,087	1,202	1,030	704	819	831	691	291	-619	-640
	Other capital	-1,674	80	-2,024	-260	-1,139	-577	503	-71	59	-3,817

(Note) The country's balance of payments was converted to US dollars using the IFS quarterly average rate. Figures for Japan were converted to US dollars using Bank of Japan quarterly average interbank rates.
(Source) Balance of payments statistics.

crease, to US$48.4 billion. The importance of Hong Kong as a stronghold for Chinese corporations is increasing due to the corporate income-tax regulations enacted in China in 2008. Such regulations mean that Chinese entities benefit from smaller tax levies paid on dividends to Hong Kong entities compared to dividends paid to other countries. This resulted in an increasing number of Chinese companies incorporating in Hong Kong for tax saving purposes.

FDI in the ASEAN5 economies had dropped by 14.8% to US$31.2 billion. In ASEAN, Singapore has shown the fastest recovery. Singapore, affected by the financial crisis of 2008, recorded a decrease of 69.5% in 2008 compared to 2007, but since the second quarter of 2009, recovery picked up and showed 54.0% increase in 2009 on a yearly basis to US$16.8 billion. Moreover, in 2010, the domestic economy veered to a rapid recovery and in the first quarter direct investments increased by 3.5 times year-over-year. Even Indonesia, which suffered a decrease of 41.5% in 2009, showed an increase of 35.2% yoy in the first quarter of 2010.

In a statement made by the Department of Planning and Investment in Vietnam, inward FDI on the newly permitted basis decreased 75.4% to US$16.3 billion. In 2008, Vietnam enjoyed the highest amount of direct investments one after another in permits basis, such as projects of iron and steel and harbor improvements by the Lion Group of Malaysia (US$9.8 billion) and refinery and petrochemical plant jointly by Idemitsu Kosan Co., Ltd and Mitsui Chemicals (US$6.2 billion). However, a rebound came in 2009 as global investment in new projects stagnated. As for the legislative revisions in the country, it became possible in 2009 to operate retail and wholesale businesses owned 100% by foreign entities. The domestic economy recovered in the latter half of 2009 supported by its domestic consumption. Therefore, it is projected that direct investments in services will increase as exemplified by the opening of Family Mart in December 2009, the first ever Japanese retailer to operate in Vietnam.

Outward FDI in East Asia showed a moderate decrease of 9.5% to US$134.4 billion showing the strength of the region. Even though outward FDI by China turned to a decrease, it still kept a high level of investment and, moreover, outward FDI by the ASEAN5 increased by 42.8%. The recovery of Singapore by year-over-year basis is important to this increase. Outward FDI from China fell modestly by 17.9% to US$43.9 billion rebounding from continuous sizeable M&As in 2008, and due to increased repatriation by the financial sectors. According to China's State Administration of Foreign Exchange, gross outflows by the financial sectors decreased by 69% to US$4.7 billion, while in the nonfinancial sectors outward FDI grew by 7% to US$43.3 billion. Increases occurred in outward FDI in the area of services and resources.

In 2010, outward FDI in East Asia is showing a large recovery. In China, disbursed outward investments to nonfinancial sectors doubled yoy in the first quarter of 2010 and in Singapore more than quintupled year-over-year. In Korea, based on the information by the Ministry of Strategy and Finance in reporting basis, these investments increased by 76% yoy, reflecting a robust recovery in the region.

Inward FDI in India, according to the announcement made by the Central Bank of India on balance of payments basis, dropped by 15.1% to US$34.6 billion and the effected figure by the Ministry of Commerce and Industry declined by 15.8% to US$27.1 billion, both pointing to relatively robust inflows of investment. Regarding the domestic economy, in the second quarter of 2009, the recovery of the growth rate to pre-financial crisis level was already accomplished and the expectation of growth would be driving further inflows of foreign capital. In April, 2010, India's

Department of Industrial Policy and Promotion, Ministry of Commerce and Industry announced its 'unified FDI implementation policy' in which all different legislations on FDI are unified into one authority. The previous repeated changes in FDI-related legislations turned into heavily complicated implementation rules; therefore, this unification is being appreciated as a measure to increase the transparency of the rules, but on the other hand more restrictions are applied to investments in the wholesale business. The government of India has shown a more cautious attitude toward needed liberation in service businesses.

Decrease in 2009 seen in Central and South America and rebound in 2010

According to the UN Economic Commission for Latin America and the Caribbean (ECLAC), inward FDI in the region dropped by 41.9% to US$76.7 billion. It was a big decrease in contrast to the record high experienced in 2008. A temporary but sudden drop in the price of resources in the second half of 2008 caused decline in investments in resources-related businesses, which had enjoyed continuous robust growth in prior years. In Brazil, investments for mineral resources and mining businesses reached US$10.7 billion in 2008 but in 2009 it declined as far as 87.9% to US$1.3 billion.

The U.S. economic slowdown led to the decrease of FDI from the U.S., which is the top investor in Latin America. At the same time eagerness to invest in the region in order to target U.S. markets was also lost. Mexico which is heavily dependent on the U.S. showed a decrease of 47.1% to US$12.5 billion, and although the Republic of Chile also lost 16.3% to US$12.7 billion, it became the second largest recipient of investments in Central and South America and the Caribbean after Brazil.

Outward FDI from Central and South America and the Caribbean decreased by 69% to US$11.4 billion mainly due to the negative inward FDI balance in Brazil by a large number of repatriation. Suffering from the lack of operating funds by companies in Brazil, repatriation of funds from the foreign subsidiaries increased resulting in a negative FDI balance of US$10.1 billion. As the result, Chile by value (US$8 billion) became the largest investor in 2009 in Central and South America.

According to an estimate by the ECLAC, with the price of resources rising again, followed by a corresponding increase in investments for resources and for the iron and steel industry, an increase in inward FDI of 40-50% is expected in 2010.

As for inward FDI in Russia, in the form of equity capital there was a large outflow of the capital close to the inflow of equity capital resulting in a decrease of 48.7%, to US$38.7 billion in total. There was a strong inclination to repatriate capital from Russian entities owned or invested in by foreign entities.

Inward FDI for the Turkish Republic faced a decrease of investment from the EU, which covers more than 80% of investments in Turkey. Furthermore, Turkey suffered a decrease of over 90% yoy in investments from the Middle East and Arab countries which had been rapidly growing since 2005. Taken together, these decreases in investment resulted in a total decline of 56.8% to US$7.9 billion.

Direct investments to Africa dropped from the highest amount of US$72.2billion recorded in 2008 to US$58.6 billion, a decrease of 18.9% (UNCTAD estimates). M&As to African entities decreased by 63.1% to US$10.8 billion. In 2008, Chinese entities were highly visible with their M&As in Africa which amounted to US$5.6 billion, but in 2009 it turned out to be close to none.

Recovery foreseen in 2010 for direct investments

Along with the recovery in the world economy, multinational corporations, a major player of direct investments are now recovering and their corporate earnings are generally increasing, reflecting brighter trends. Figure I-41 shows that the U.S. and major countries in Europe had increasing growth in corporate earnings by foreign-owned entities in the first quarter of 2010, leading to a recovery in reinvested earnings.

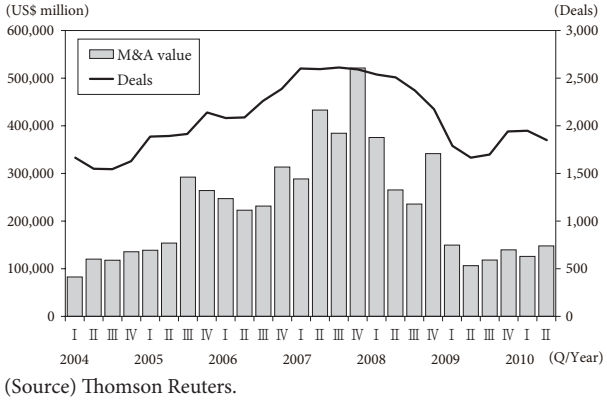
The FDI index, which is calculated by the UNCTAD from the quarterly flow of inward FDI for over 60 countries and regions, shows the bottom figure of 72 in the first quarter of 2009 (the quarterly average for 2005: 100). The fourth quarter of 2009 shows a mild increase to 117, and according to the evaluation made by the UNCTAD, though it is too early to predict a path of strong recovery, it should be safe to predict a mild recovery.

Furthermore, M&As, which account for a large share in direct investments, are showing a gradual increase as of the beginning of 2010. There are some insecure factors such as the instabilities in the financial markets in the EU, but at least the decrease experienced in early 2009 has been surpassed. Although it may be a little difficult to say FDI is on a sure track of recovery, it seems to have hit bottom in 2009.

(2) Global Cross-Border M&As down by 57.8%

The total value of global cross-border M&As completed in 2009 was US$513.6 billion, a decrease of 57.8% yoy (Note 5). It was a five-year low since 2004, only one third the value compared to the peak of 2007, which amounted to US$1.6274 trillion (Figure I-42).

Figure I – 42 Global cross-border M&A value trends by quarter (2004-2Q 2010)



(Source) Thomson Reuters.

The global M&A market had two peaks in the 2000s. Due to the information technology boom in the 2000, the first peak (US$1,213 billion) came by utilizing stock swaps, which made many large-scale acquisitions possible in industry fields such as telecommunications. However, after the information technology bubble burst, the amount quickly receded to US$334.1 billion in 2003. The second peak of 2007 was the highest value ever recorded. M&As entered an expansion period from 2004, characterized by LBOs (a scheme in which assets of a targeted company are used to finance the capital for acquisition), which it made possible to complete many large-scale acquisitions through the huge capital borrowed by the scheme. However, by the beginning of subprime loan problems, and followed by the Lehman shock in 2008, which accelerated confusion in the financial markets and led to the credit crunch, fundraising for M&A became difficult and M&As decreased in 2009.

Significant drops in the U.S. and the EU

A look at values of M&As by countries and regions' acquired entities shows U.S. targeted M&As among the developed countries dropped by 63.5% to US$116.3 billion and the EU by 57.3% to US$200.7 billion, both sizeable decreases.

In the U.S. in 2008, there were many cases of capital injunctions to troubled financial institutions. However in 2009, the only large-scale M&A above US$10 billion (two such acquisitions in 2008) was the acquisition of Genentech, Inc. at the price of US$46.7 billion by Roche Holding AG of Switzerland (only two acquisitions in 2008) (Figure I-43). This acquisition alone amounted to 40% of cross-border M&As to the U.S. in 2009.

In the EU, industrial reorganization in the area of chemicals and foodstuffs, which had continued for several years, quieted down and showed a decrease, but large scale M&As

Figure I – 43 10 largest cross-border M&As (2009 and January-June 2010)

2009 (US$ million)

	Acquiring company			Target company			Value	% owned after transaction
		Nationality	Industry		Nationality	Industry		
March	Roche Holding AG	Switzerland	Drugs	Genentech Inc	U.S.	Drugs	46,695	100.0
January	Electricite de France SA	France	Electric, Gas, and Water Distribution	British Energy Group PLC	UK	Electric, Gas, and Water Distribution	15,400	99.6
June	Enel SpA	Italy	Electric, Gas, and Water Distribution	Endesa SA	Spain	Electric, Gas, and Water Distribution	13,470	92.1
May	BNP Paribas SA	France	Commercial Banks, Bank Holding Companies	Fortis Bank SA/NV	Belgium	Commercial Banks, Bank Holding Companies	12,765	74.9
September	RWE AG	Germany	Electric, Gas, and Water Distribution	Essent NV	Netherlands	Electric, Gas, and Water Distribution	11,489	100.0
December	Qatar Investment Authority	Qatar	Other Financial	Volkswagen AG	Germany	Transportation equipment	9,569	17.0
August	China Petrochemical Corp	China	Oil and Gas; Petroleum Refining	Addax Petroleum Corp	Switzerland	Oil and Gas; Petroleum Refining	9,024	100.0
June	Citi Infrastructure Investors	U.S.	Other Financial	Itinere Infraestructuras SA	Spain	Construction Firms	7,941	42.8
February	Padua Holdings LLC	Canada	Investors	Puget Energy Inc	U.S.	Electric, Gas, and Water Distribution	6,717	100.0
July	Canada Pension Plan	Canada	Investment & Commodity Firms,Dealers,Exchanges	Macquarie Communications	Australia	Radio and Television Broadcasting Stations	6,455	100.0

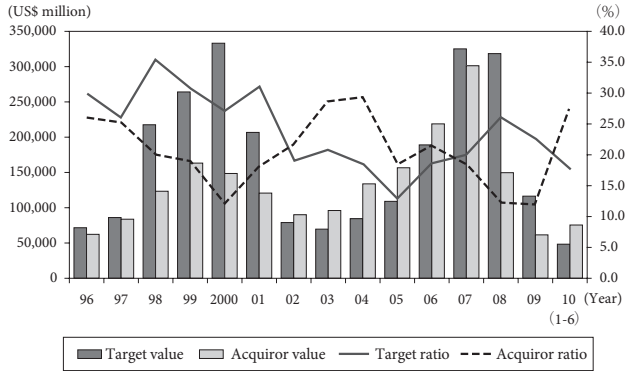
January-June 2010

	Acquiring company			Target company			Value	% owned after transaction
		Nationality	Industry		Nationality	Industry		
April	Kraft Foods Inc	U.S.	Food and Kindred Products	Cadbury PLC	UK	Food and Kindred Products	21,418	100.0
June	Bharti Airtel Ltd	India	Telecommunications	Zain Africa BV	Nigeria	Telecommunications	10,700	100.0
April	Orange PLC	France	Telecommunications	T-Mobile(UK)Ltd	UK	Telecommunications	8,496	100.0
February	Abbott Laboratories	U.S.	Drugs	Solvay Pharmaceuticals SA	Belgium	Drugs	7,603	100.0
April	Heineken NV	Netherlands	Food and Kindred Products	FEMSA-Beer Op	Mexico	Food and Kindred Products	7,346	100.0
April	Vimpelkom	Russia	Telecommunications	ZAO Kyivstar GSM	Ukraine	Telecommunications	5,589	100.0
January	Orange Participations SA	France	Telecommunications	Egyptian Co for Mobile Svcs	Egypt	Telecommunications	5,207	51.0
January	Liberty Media Corp	U.S.	Radio and Television Broadcasting Stations	Unitymedia GmbH	Germany	Radio and Television Broadcasting Stations	5,195	100.0
June	China Petrochemical Corp	China	Oil and Gas; Petroleum Refining	Syncrude Canada Ltd	Canada	Oil and Gas; Petroleum Refining	4,650	9.0
February	KDDI Corp	Japan	Radio and Television Broadcasting Stations	Liberty Global-Subsidiaries(3)	U.S.	Telecommunications	4,000	100.0

(Notes)
(1) Year and month indicate the completion date of the transaction.
(2) Nationality of the acquiror is that of its ultimate parent company.
(3) The definition of M&A follows Thomson Reuters.
(4) The ranking is based on the value of a single transaction.
(5) If the acquirer is a single purchasing unit of a business corporation, the business corporation name is cited; if there is more than one business corporation, the industry is denoted as "Investors."
(Source) Thomson Reuters.

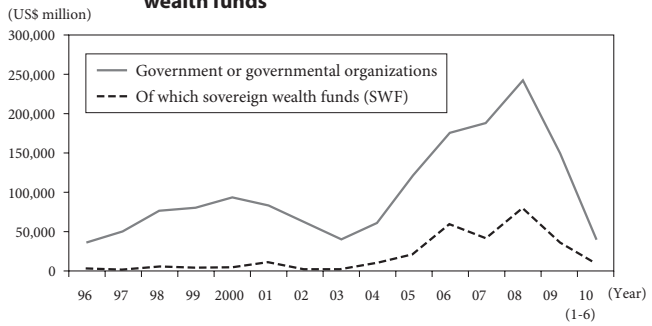
(Note 5) Thomson Reuters (as of July 2, 2010). While FDI statistics on an international balance of payments basis represent the difference between outflows and inflows (net figures), M&A figures are calculated by totaling values upon completion of individual M&As (gross figures). M&A transactions in which the nationality of the ultimate parent company differs from that of the company invested in are defined as cross-border M&As. Under this definition, some M&As between residents or between nonresidents, not recorded in FDI statistics are included in cross-border M&As. In addition, FDI statistics include only investment of 10% share or more, and some cases, in which funds were raised in the country where the acquisition took place, are not included. In cases such as these, definitions and categories of FDI statistics and M&A data may differ. However, in terms of actual results, M&As account for a large share of FDI, and the two moves more or less in the same way. In all cases in this chapter, "M&A" refers to cross-border M&As unless specific mention is made.

Figure I – 44 Trends in ratio of value to M&As by the U.S.



(Note) Ratio means the ratio of value to the global value of M&A in each respective year mentioned above.
(Source) Thomson Reuters.

Figure I – 45 Trends in value of M&As involving sovereign wealth funds



(Note) 1. SWF and government entities as defined by Thomson Reuters.
2. Deals involving direct or indirect investment in both acquiror and target basis.
(Sources) Thomson Reuters.

continued to stand out in the field of electric energy. Important deals included the acquisition of British Energy Group by Electricite de France (US$15.4 billion) and the acquisition of equity investment by Enel SpA, a large electric power company in Italy, which resulted in raising its share ratio in Endesa SA of Spain (US$13.5 billion). In the financial sectors, a French bank, BNP Paribas SA, took over the financial business of Fortis Bank SA/NV in Belgium and Luxembourg (US$12.8 billion), the bank which was once nationalized by the Belgium government due to the loss incurred by the financial crisis.

From the acquirer's side, acquisition value by U.S. entities decreased by 58.9% to US$61.5 billion; EU acquisition value decreased by 64.7% to US$203.1 billion. The total value of acquisition by U.S. entities hit its lowest level since 1995, and its share in the world total acquisition value reached its lowest level (12.0%) since 1990 (Figure I-44). In the EU, acquisitions by British entities showed a massive decrease of 75.3% to US$34.3 billion. The UK had always maintained second or above position in the value of acquisition by going toe-to-toe with the U.S. from 1991 to 2008, but in 2009 it was overtaken by Switzerland, France and Germany. The Netherlands, which had large-scale acquisitions in beer and chemicals in 2008, was all but absent in large dealings in 2009 and showed a 93.4% decrease to US$4.2 billion.

Lagging overall in developing countries, activating movements in 2010

Looking at the M&A of enterprises in developing and emerging countries, there was a significant decrease of 61.3% to US$42.4 billion in East Asia as a region, and also a large decrease 44.3% to US$8.8 billion in India. M&As for China was relatively steady in the level of 16.7% at US$17 billion. Legislation for facilitating and controlling M&As are progressing in China, such as "The M&A of Domestic Enterprises by Foreign Investors," enforced in 2006, and the Anti-Trust Laws of 2008.

Overall, M&As by enterprises in emerging countries were low during 2009. The reaction against Chinalco's US$10 billion investment in British Rio Tinto during the previous year repressed further M&As, resulting in a 65.7% decrease to US$26.4 billion. Nevertheless, China is proceeding with constant procurement from overseas in the field of natural resources headed by the M&A of the major Swiss Petroleum Addax (US$9 billion) by the state-owned Sinopec.

In 2010 M&As in developing countries followed one after another, aiming for market expansion in the telecommunications field, such as the M&A of the African operations of the Zain Group of Kuwait by the major cell phone enterprise of India, Balti Airtel (US$10.7 billion), and the M&A of Kievstar of Ukraine by the major Russian cell phone company, VimpelCom.

In 2007 and 2008, sovereign wealth funds (SWF) became one of the main source of investment in developing countries. However, in the oil producing countries of the Middle East SWFs have been markedly more restrained in directly investing funds overseas since the financial crisis. In the latter half of 2009 when crude oil prices increased this trend generally did not greatly change (Figure I-45), but large investments were seen such as the investment in Germany's Volkswagen (US$9.6 billion) by Qatar's Ministry of Investment, and the investment (US$4.4 billion) in Spanish Petroleum Exploration Enterprise (CEPSA) by UAE's International Petroleum Investment Co. (IPIC).

The Chinese SWF China Investment Corporation (CIC) is once again quickly turning to start active M&As. CIC drew attention for their investment in U.S. financial compa-

Figure I – 46 Highest-valued M&As by industry in 2009

(US$ million, %)

Industry (target company)	2009 value	Share	Percentage point rise or drop (share in 2008)
Electric, Gas, and Water Distribution	79,646	15.5	7.2(8.3)
Drugs	75,009	14.6	10.5(4.2)
Oil and Gas	52,542	10.2	4.0(6.2)
Mining	28,345	5.5	0.4(5.1)
Food and Kindred Products	24,397	4.8	-4.1(8.9)
Telecommunications	23,200	4.5	-1.8(6.3)
Commercial Banks, Bank Holding Companies	22,242	4.3	-5.9(10.2)
Real Estate; Mortgage Bankers and Brokers	18,776	3.7	-0.2(3.9)
Insurance	17,685	3.4	0.3(3.1)
Business services	16,733	3.3	-1.8(5.1)
Transportation equipment	16,410	3.2	2.1(1.1)

(Source) Thomson Reuters.

nies that had suffered losses in the subprime problem, but due to great latent losses that accrued thereafter temporarily restrained their overseas investment activities. Nevertheless, CIC is once again active in energy and resources related M&As. For example, they invested US$500 million in a Canadian resources company SouthGobi Energy in 2009, and US$1.6 billion in a U.S. energy services company AES in 2010.

Electric power related enterprises outstand in classification by industry

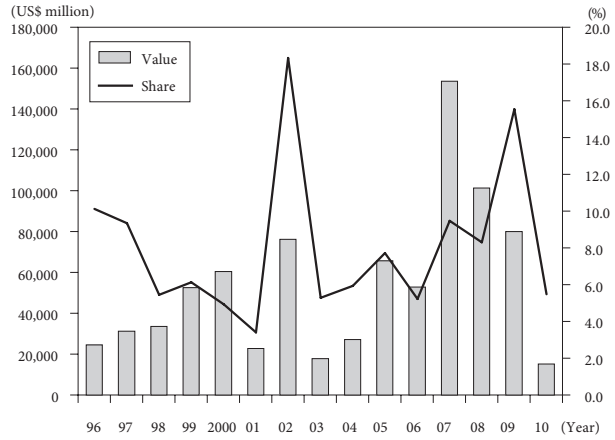
When comparing M&As of 2009 by classification of industry, the value in most industries fell below that of the previous year, but in the composite ratio there was a characteristic movement. Looking at the industries which ranked high in the composite ratio of global M&As in 2009, electricity, gas, and water; pharmaceuticals; and oil and natural gases covered the top three positions with their composite

Figure I – 47 Top 10 M&A values of major industries

	Month/year of completion	Acquiring company	Country	Target company	Country	Value (US$ million)	% owned after transaction(%)
Electricity, gas, water	January-09	Lake Acquisitions Ltd	France	British Energy Group PLC	UK	15,400	99.6
	June-09	Enel SpA	Italy	Endesa SA	Spain	13,470	92.1
	September-09	RWE AG	Germany	Essent NV	Netherlands	11,489	100.0
	February-09	Padua Holdings LLC	Canada	Puget Energy Inc	U.S.	6,717	100.0
	July-09	Vattenfall AB	Sweden	Nuon NV	Netherlands	6,139	49.0
	November-09	Electricite de France Intl SA	France	Constellation Energy Nuclear	U.S.	4,500	50.0
	May-09	ENI G&P Belgium SpA	Italy	Distrigaz SA	Belgium	3,174	100.0
	March-09	YTL Power International Bhd	Malaysia	PowerSeraya Ltd	Singapore	2,357	100.0
	August-09	Verbund	Austria	E ON AG-Hydro Power Plants	Germany	1,932	100.0
	November-09	EDF	France	SPE SA	Belgium	1,848	51.0
Pharmaceuticals	March-09	Roche Holding AG	Switzerland	Genentech Inc	U.S.	46,695	100.0
	February-10	Abbott Laboratories	U.S.	Solvay Pharmaceuticals SA	Belgium	7,603	100.0
	September-09	Sanofi-Aventis SA	France	Merial Ltd	U.S.	4,000	100.0
	July-09	GlaxoSmithKline PLC	UK	Stiefel Laboratories Inc	U.S.	3,600	100.0
	October-09	Warner Chilcott PLC	UK	Procter & Gamble Pharm Inc	U.S.	3,100	100.0
	June-10	Astellas Pharma Inc	Japan	OSI Pharmaceuticals Inc	U.S.	3,014	88.5
	October-09	Dainippon Sumitomo Pharma Co Ltd	Japan	Sepracor Inc	U.S.	2,357	91.4
	February-10	Sanofi-Aventis SA	France	Chattem Inc	U.S.	2,107	100.0
	February-09	Sanofi-Aventis SA	France	Zentiva NV	Czech Republic	1,952	96.7
	December-09	Watson Pharmaceuticals Inc	U.S.	The Arrow Group	Britain	1,737	100.0
Oil and gas	August-09	China Petrochemical Corp	China	Addax Petroleum Corp	Switzerland	9,024	100.0
	June-10	China Petrochemical Corp	China	Syncrude Canada Ltd	Canada	4,650	9.0
	July-09	IPIC	UAE	CEPSA	Spain	4,372	47.0
	October-09	E ON AG	Germany	Severneftegazprom	Russia	3,959	25.0
	December-09	KNOC	Korea	Harvest Energy Trust	Canada	3,863	100.0
	November-09	Investor Group	China	OAO MangistauMunaiGaz	Kazakhstan	2,604	100.0
	January-10	Total E&P USA Inc	France	Chesapeake Energy-Upstream	U.S.	2,250	25.0
	March-09	Surgutneftegaz	Russia	MOL Group	Hungary	1,852	21.2
	February-10	PetroChina Intl Invest Co Ltd	China	Athabasca Oil Sands-Assets	Canada	1,737	60.0
	April-10	Reliance Industries Ltd	India	Atlas Energy Inc-Marcellus	U.S.	1,700	40.0
Transportation equipment	December-09	Qatar Investment Authority	Qatar	Volkswagen AG	Germany	9,569	17.0
	March-09	Aabar Investments PJSC	UAE	Daimler AG	Germany	2,664	9.1
	January-10	Volkswagen AG	Germany	Suzuki Motor Corp	Japan	2,527	19.9
	March-09	MAN SE	Germany	Volkswagen Caminhoes e Onibus	Brazil	1,612	100.0
	February-10	Spyker Cars NV	Netherlands	Saab Automobile AB	Sweden	963	100.0
	April-10	Daimler AG	Germany	Renault SA	France	899	3.2
	April-10	Daimler AG	Germany	Nissan Motor Co Ltd	Japan	778	3.2
	February-09	Porsche Automobil Holding SE	Germany	Scania AB	Sweden	513	45.7
	February-09	Volkswagen AG	Germany	Scania AB	Sweden	508	41.4
	February-10	Faurecia SA	France	Emcon Technologies	U.S.	408	100.0
Mining	December-09	Yanzhou Coal Mining Co Ltd	China	Felix Resources Ltd	Australia	2,565	100.0
	April-10	Vale SA	Brazil	BSG Resources Guinea Ltd	Gandhi (Britain)	2,500	51.0
	March-10	Glencore International AG	Switzerland	Xstrata Coal South America	Columbia	2,250	100.0
	December-09	Grupo Industrial Minera Mexico	Mexico	ASARCO LLC	U.S.	2,200	100.0
	March-09	Xstrata Coal South America	Switzerland	Glencore Intl AG-Prodeco Bus	Colombia	1,962	100.0
	December-09	Eldorado Gold Corp	Canada	Sino Gold Mining Ltd	Australia	1,426	100.0
	June-09	China Minmetals Nonferrous Metals	China	OZ Minerals Ltd-Certain Assets	Australia	1,386	100.0
	March-09	Paulson & Co Inc	U.S.	AngloGold Ashanti Ltd	South Africa	1,277	11.3
	July-09	Wandle Holdings Ltd	Cyprus	Polyus Zoloto	Russia	1,249	29.6
	June-09	Newmont Mining Corp	U.S.	Boddington Gold Project,WA	Australia	1,090	100.0

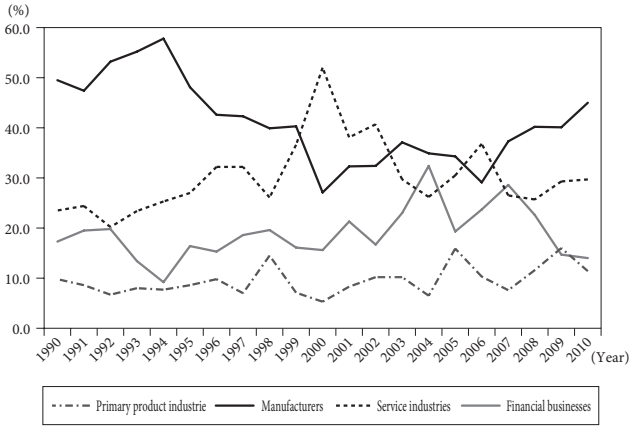
(Note) Completed 2009 – June 2010.
(Source) Thomson Reuters.

Figure I – 48 Trends in M&A value and share for utilities (Electric, Gas, and Water Distribution)



(Source) Thomson Reuters.

Figure I – 49 Transition of M&A composite ratio by industry classification



(Source) Thomson Reuters.

ratios overriding that of the previous year (Figure I-46). Mining and transportation equipment also surpassed the composite ratio of the previous year. As for banks and bank shareholding companies, which had the highest composite ratio in 2008, both the value and composite ratio dropped with the runaround of capital infusion problems accompanying the financial crisis.

Looking at M&As since January 2009 to June 2010, 9 of the top 10 M&As in electricity, gas, and water were of electric power, of which 7 were acquisition or investments accompanying the reorganizing of electric power within the EU area (Figure I-47). Based on the revised EU directive of 2003, the electric power market in the area was basically liberalized in July 2007 and since then reorganization within the area was activated (Figure I-48). As result of reorganization in the past 3 years this flow seems to have completed its circle coming into the year 2010.

Headed by the acquisition of U.S. Genetics as a subsidiary by Roche, in the Pharmaceutical field 7 of the top 10 M&As were acquisitions of U.S. enterprises; the acquisitions by European and Japanese pharmaceutical companies of U.S. bio-ventures were marked. Major pharmaceutical companies focused on the prime pharmaceuticals to be off-patented to establish new pillars for profits by proactively proceeding with the integration of new medicinal development technologies and diversifying product range. Also in the U.S., great IN-IN type M&As such as the acquisition of Weiss by Pfizer followed one after the other.

In oil and natural gases, corporations of developing countries and of Asia covered 8 of the top 10 M&As. Among which China, with national backup, is developing its resource exploitation spearheaded by the acquisition of Swiss Addax by Chinpec, to be listed 4 times in the top 10.

For transportation equipment, injection of capital and strengthening of capital ties by the German automobile companies, Volkswagen and Daimler, were highly impressive. Lead by the buyout of Swedish Volvo (US$1.8 billion, incomplete as of end of June) announced in March 2010 as reported by Zheijiang Geely, the rapidly emerging automobile makers of China are increasing the import of technologies and brands of automobile and parts makers of developed countries.

In mining as in petroleum, corporations in developing countries like China and Brazil were high on the list. Australia is outstanding on the side of bought-out companies. Australia accepted plenty of large capital infusions for resource development and direct inward investment was maintained with comparative firmness. On the other hand, in May 2010 the Australian government pronounced the adoption of new taxation measures against profits of companies for mineral resources, which will be applicable from 2012, and their influence on future investment activities are being watched.

The M&A's of manufacturers was relatively high after 2006, taking up over 40% of the overall by 2009 (Figure I-49). Over the past few years, in the boom of M&A's the food and beverage (including tobacco), chemical, and pharmaceutical industries are reflecting the situation continued in the great reorganzation of industries. Finance-related businesses peaked in 2007 at 28.6%, but in 2009 this had dwindled to 14.7%. It may be said that primary products like petroleum and mining are on the trend of gradual increase.

Recent noticeable trends of major economies' competition law

The reorganization of industries taking advantage of M&As effect changes in the competitive environment of the market. Major economies are proceeding with the strengthening of maintenance and enforcement of competition laws against M&As.

Under the Obama Administration in the U.S., the Chief of the Anti-trust Bureau of the Department of Justice, Christine Varney, attracted a great deal of attention for her proposal to strengthen enforcement of the Anti-trust Bill. In contrast to the Bush Administration, which allowed monopolization, the contents of such strengthening set out controls on monopoly (Article 2 of the Sherman Bill). Though substantial changes were not expected in the enforcement of the Anti-Trust Bill as regards M&As (Article 7 of the Clayton Bill), there was a case of post-merger review after the completion of an M&A for the size not satisfying

the threshold of the pre-merger review. As for matters not meeting the M&A review thresholds, there are possibilities of performing post-merger reviews as indicated by the Department of Justice, and it is necessary to keep close watch on the strengthening of enforcement by the Department of Justice.

In the EU, after the Lisbon Treaty went into effect in April 2010, new regulations and guidelines for the application of Section 3 of Article 101 (formerly 81) of the Treaty on the Functioning of the European Union was proclaimed. Article 101.3 sets forth the exemption from the prohibition regulations of the competitive limitations, specifically cooperative action under Section 1 of the said Article. The European Commission considers the pros and cons of economic merits in the application of exemption under reviews of Article 101.3, as well as the anti-competitive influence on cooperative actions between industries such as in joint ventures. Said regulations are applicable to the cooperative actions of the companies where manufacturers and transportation companies (excluding the automobile field) and sub-contractors are in a vertical relationship. From an economic point of view, the new guidelines are thought to be more permissive and flexible towards cooperative actions between companies provided that detailed analysis in the scope of economic efficiency by the European Commission is progressing, and that the companies involved are requested to submit more minute details and complex proofs in the economic merits of the cooperative actions.

By the Revision of the Anti-monopoly Laws of Japan in 2009, M&A regulations were integrated into a prior notification system. Section 2 of Article 10 of the former Anti-monopoly Law required the acquisition of shares to be a post-factum notification. However, due to the fact that many countries approve M&As in the prior-notification system, even if the prior notification had been completed and cleared in other countries, the result of reviews based on the post-facto notification system of Japan, the prediction of corporate activities would be greatly damaged if the M&A would be disapproved. It may be thought that the change to prior-notification has been implemented in consideration of this matter. Also, the standard for notification was changed from total assets to total sales volume base. This is the same as the EU.

Since its enforcement in 2008, there have been concerns regarding the application of the Chinese competition law, especially regarding the M&A regulations, but since 2009 the details of implementation are being remedied. The Chinese Ministry of Commerce in November 2009 established and promulgated both a Merger Notification Act and a Merger Review Act, which went into effect on January 1, 2010, detailing greater clarity in formalities of the system. On the other hand, the contents of the M&A reviews remain unclear. For instance, in the pre-merger review for the subsidiarization in the take-over bid of Sanyo Electric by Panasonic in 2009, the limits of the geographic market, which was certified by the Ministry of Commerce was the "global market." In this respect, the demarcation of the geographic market, despite that it is an important factor in reviewing the changes to the competitive environment through acquisition; experts indicate that the authorities did not give explanations in the reasons for certification. In the end of this case, the merger was approved by the Ministry of Commerce under various conditions including an order on both parties that some of their production bases in Japan be sold to third parties.

M&As are on recovery trend in the first half of 2010

Since 2008, the international M&A market had continued to decline, but for the first half of 2010 M&As increased 6.9% compared to the year before, with US$273.4 billion and it seems that it has hit the bottom. With the recovery of the world economy, U.S. companies especially seem to be recouping their presence. Acquisitions by U.S. companies compared to the same term last year increased by 140.0%, reaching US$75.4 billion after a quarter terms covering an increased composite ratio of 27.6% of the world's total figure.

Industry classification-wise, some industries such as foodstuffs and electronic communications began to be distinguished in their offensive acquisition targeted at gaining market in developing countries. In the foodstuffs industry, large reorganizations and groupings of industries covering the tobacco and beer industries occurred over the past few years. The acquisition of Cadbury (US$21.4 billion) by a U.S. corporation, Kraft Foods, which ranks 2nd in the world of foodstuff manufacturing industries, so impressed the market that reorganizations will continue in the industry. Cadbury has its strength in developing countries such as Brazil and China.

In the telecommunications field, besides acquisitions of companies of the same industry by the fore-mentioned Indian and Russian corporations, like the acquisition of an Egyptian cell phone company by France Telecom (US$5.2 billion), penetration into the communications market of developing countries where expansions can be expected, such as in Africa, is noteworthy.

For resources such as petroleum and mining, acquisitions are constant for the purpose of obtaining concession rights. Backed by the gradually rising price of crude oil since the latter half of 2009, it is thought that acquisitions within the industry by the oil majors and capital participation in resource exploration business by trading firms will continue further.

Including incomplete M&As, the M&A value announced for the first half of the year compared to the year before has increased 40.3%, reaching US$436.6 billion, which is indicative of recovery throughout the year. M&As are an essential element for business expansion strategy of corporations, and although temporary setbacks in connection with financial market movements may occur, as they have in the past two years, M&As may not be just a transient boom that will settle down such as those that occurred prior to the 1990s.

4. Japan's Trade and Direct Investment

(1) Japan's trade had an unprecedented decline in 2009

In 2009, Japan's trade (customs clearance basis) showed a decrease in exports over the previous year, falling to US$580.8 billion or down 25.2%, while imports fell by 27.0% to US$552.3 billion (Figure I-50). This was the first time since 2001, when exports decreased by 15.7% and import decreased by 7.9%, that both exports and imports fell in the same year, when trade was stagnant due to a global IT depression. Exports recorded the largest percentage decrease since the end of World War II (down 70.1% in 1945) and imports was an all-time low since1958 (down 29.2%).

On a quantity basis, from the fourth quarter of 2008 exports decreased for four continuous quarters over the previous year, especially in the first and second quarter's exports recorded major decreases of 39.7% and 34.9%. The fourth quarter of 2009 turned positive in the narrow range with 1.6% increase, and dramatically increased by 46.4% in the first quarter of 2010. Although the export amount did not reach the level for first-third quarters of 2008 (approx. US$200 billion), it is on its way to recovery. As for imports, the crude oil price peaked in mid 2008 and in addition to the price downward trend of domestic demand became stagnant, there was a two digit decrease as compared to the previous year in all four quarters of 2009. However, the speed of the deceleration gradually slowed towards midyear; imports then recovered to a 21.1% gain in the first quarter of 2010.

The trade balance in 2009 expanded, due to large decline in imports than exports, to the surplus of US$28.5 billion, increased US$8.7 billion from the previous year (US$19.8 billion), which had significantly shrunk. The trade balance from the third quarter of 2008 to the first quarter of 2009 recorded deficit for 3 consecutive quarters, especially in the first quarter, when deficits amounted to US$10.1 billion—the most significant deficit since the US$10 billion or more in the first quarter of 1981, but because of return to surplus in the second quarter, the surplus of 2009 grew over those of the previous year.

Considering the 2009 trade on a volume basis, export decreased 26.6% for the second consecutive years, and imports fell 14.4% for the three consecutive years. Especially, the export volume index (2005=100) was 81.6; almost the same level of 2001 (79.2). These double-digit decline in both exports and imports index was the first time since 1960, since when comparable data is available. On a volume basis also, the speed of decrease became slow towards the latter half of the year, and in the first quarter of 2010, both exports and imports have turned to an increase.

Appreciation of the yen may be listed as one cause for the significant decrease in export volume. The yen to dollar rate in 2009 (average of the period) was 93.5 yen, which was 10.5% higher than the previous year, and with the significant rise (13.9%) in 2008, the dollar went below 100 yen for the first time in 14 years when in 1995 it hit 94.1 yen.

On balance of payments basis, the surplus in the current account balance in 2009 fell by US$15.6 billion (9.9% decrease) compared to the previous year to US$141.6 billion (Figure I-51). Trade surplus was at US$43.2 billion, US$4.6 billion increase over the preceding year. However the service account deficit was US$20.4 billion with a decrease of US$400 million, the income account surplus decreased to US$131.1 billion, which fell by US$21.4 billion from the preceding year's highest-ever surplus at US$152.5 billion. As a result, the ratio to GDP of current accounts fell to 2.8% from 3.2% of the previous year, which was a drop of more

Figure I – 50 Trends in Japanese trade (2008-20101Q)

(US$ million, %)

	2008	2009	2009				2010
			Ⅰ	Ⅱ	Ⅲ	Ⅳ	Ⅰ
Total export value	775,918	580,787	120,869	131,279	153,325	175,314	177,000
(Growth rate)	8.9	-25.2	-38.7	-34.9	-25.0	1.6	46.4
Total import value	756,086	552,252	130,946	122,885	142,179	156,242	158,593
(Growth rate)	21.7	-27.0	-26.6	-36.4	-30.9	-12.6	21.1
Trade balance	19,831	28,535	-10,078	8,394	11,146	19,072	18,407
(Difference from previous year [quarter])	-71,820	8,703	-28,727	-285	12,412	25,303	28,484
Export volume index	111.2	81.6	66.6	76.6	87.4	96.2	95.7
(Growth rate)	-1.5	-26.6	-42.5	-33.2	-24.9	-1.2	43.8
Import volume index	103.0	88.2	83.7	82.2	90.5	96.5	94.7
(Growth rate)	-0.6	-14.4	-18.9	-20.7	-12.6	-5.0	13.1
Crude-oil import price (US$/barrel)	101.9	60.5	43.6	52.5	70.3	75.1	77.6
(Growth rate)	46.8	-40.6	-53.1	-52.2	-45.7	-1.6	77.8
Ratio of crude-oil imports	20.5	14.7	11.6	13.2	16.6	16.6	17.1
Ratio of manufactured imports	50.1	56.1	55.8	57.2	55.6	56.0	54.6
Average exchange rate (Yen/US$)	103.4	93.5	93.6	97.3	93.6	89.7	90.7
(Rate of increase)	13.9	10.5	12.4	7.4	15.0	7.2	3.2

(Notes) (1) 2005 is the base year for volume indices.
(2) The exchange rate is the average of the interbank rate through each period.
(3) Quarterly growth rates are year-on-year comparisons.
(Sources) "Trade Statistics" (Ministry of Finance) and "Foreign Exchange Quotations" (Bank of Japan).

Figure I – 51 Trends in Japanese current account

(Unit : US$ million)

	2008	2009	Change
Current account	157,157	141,573	-15,584
Goods and service account	17,780	22,800	5,020
Trade balance	38,593	43,178	4,585
Exports	740,613	545,328	-195,285
Imports	702,020	502,150	-199,870
Service account	-20,813	-20,378	435
Income account	152,470	131,050	-21,420
Current transfers	-13,093	-12,277	816
Current account/GDP	3.2%	2.8%	-

(Note) Exchange rates are based on the rules in the ministerial ordinance concerning reports on foreign exchange transaction. Exchange rates for exports and imports are calculated by JETRO based on the foreign exchange rate provided by regulation on Ministry of Finance.
(Sources) "Balance of Payments Statistics" (Ministry of Finance, Bank of Japan) and"National Economic Accounting (Cabinet Office).

than 3% over the last 7 years.

Looking at the service account, the transportation service deficit expanded to US$8.9 billion by US$1.8 billion compared to the previous year. The decrease in the volume of freight transport along with the worldwide economic stagnation, and the decrease of travelers due to the H1N1 influenza epidemic, etc., weakened the overall transportation business, especially influenced the recipients of freight service. Therefore, the deficit expanded for four consecutive years.

On the other hand, economic stagnation and the H1N1 influenza epidemic had negative effects on both receipts and payments of the travel services, and the decrease in payments by the loss of Japanese overseas travelers had a great influence. The deficit was US$14.9 billion, a decrease of US$2.2 billion against the preceding year (Note 6). According to The Japan National Tourism Organization (JNTO) the number of Japanese travelers overseas was 15.4 million (3.4% decrease), the third consecutive year of decrease, and the number of foreigners visiting Japan also decreased from a record 83.5 million in 2008 down to 67.9 million, a 18.7% decrease, in 2009. Travelers from Asia accounted for over 70% of the foreigners, but the numbers of Korean and Taiwanese travelers fell drastically, by 33.4% and 26.3%, respectively. Due to the start of the tourist visa in July 2009, private tourists from China increase of 0.6%.

Other services held on to the level of the previous year with a fifth consecutive year at US$3.4 billion surplus. In recent years, royalties and license fee, construction services and financial services, respectively, recorded over US$ 1 billion surplus. The surplus of royalties and license fee was US$4.8 billion, in particular, decreased US$2.6 billion from the preceding year, the first decrease since 2003, when it turned to the surplus. Royalties and license fee cover two categories, fee for industrial processes, franchises, and copyrights; looking through traceable records after 1996, the first category has been consistently recorded the surplus since 1997 while the latter continues deficit. The surplus of the first category greatly owed to royalty payments to Japanese automobile makers for overseas production. Along with the increase of number of overseas production, the credit of industrial processes, franchises increased. But in Europe and the U.S., the number of automobiles produced by Japanese manufacturers in 2008 and 2009 fell below the previous years, which lead to a drastic decrease in amounts received and became the major cause for the reduction of the surplus for royalties and license fee.

Figure I – 52 Trends in Japanese trade by country/region

(US$ million, %)

			2008	2009	2009				2010
					I	II	III	IV	I
World	Exports	Value	775,918	580,787	120,869	131,279	153,325	175,314	177,000
		Growth rate	8.9	-25.2	-38.7	-34.9	-25.0	1.6	46.4
	Imports	Value	756,086	552,252	130,946	122,885	142,179	156,242	158,593
		Growth rate	21.7	-27.0	-26.6	-36.4	-30.9	-12.6	21.1
	Export volume growth		-1.5	-26.6	-42.5	-33.2	-24.9	-1.2	43.8
	Import volume growth		-0.6	-14.4	-18.9	-20.7	-12.6	-5.0	13.1
U.S.	Exports	Value	136,200	93,653	19,379	21,043	24,603	28,629	26,610
		Growth rate	-5.0	-31.2	-47.2	-40.0	-26.9	-7.0	37.3
	Imports	Value	77,018	59,044	14,754	13,980	14,253	16,057	15,921
		Growth rate	8.7	-23.3	-21.9	-32.1	-26.6	-11.4	7.9
	Export volume growth		-10.9	-35.7	-51.3	-44.9	-30.6	-10.8	31.9
	Import volume growth		-5.6	-23.1	-23.2	-32.9	-27.2	-6.1	4.9
EU 27	Exports	Value	109,383	72,374	16,549	16,807	17,753	21,265	20,107
		Growth rate	3.9	-33.8	-45.6	-40.8	-35.4	-7.8	21.5
	Imports	Value	69,915	59,130	14,706	13,664	14,778	15,981	15,910
		Growth rate	7.6	-15.4	-17.3	-24.3	-15.6	-3.6	8.2
	Export volume growth		-4.0	-35.6	-46.0	-39.8	-35.7	-16.9	19.4
	Import volume growth		-4.0	-20.3	-23.4	-27.3	-19.6	-9.3	9.4
East Asia	Exports	Value	371,515	305,621	58,680	70,107	83,386	93,447	95,161
		Growth rate	11.3	-17.7	-35.5	-28.9	-17.2	15.0	62.2
	Imports	Value	300,886	241,916	56,891	54,597	62,315	68,114	68,239
		Growth rate	14.4	-19.6	-20.5	-27.8	-20.3	-9.8	19.9
China	Exports	Value	124,035	109,630	20,596	25,939	29,766	33,329	32,969
		Growth rate	13.7	-11.6	-29.1	-22.1	-11.9	19.4	60.1
	Imports	Value	142,337	122,545	28,569	27,760	31,581	34,635	33,081
		Growth rate	11.5	-13.9	-12.8	-22.3	-14.0	-6.7	15.8
	Export volume growth		7.8	-15.4	-33.5	-23.5	-13.4	11.7	47.2
	Import volume growth		-1.1	-12.6	-18.6	-20.3	-9.1	-2.1	17.9
ASEAN	Exports	Value	102,799	80,449	15,430	17,469	22,541	25,009	25,873
		Growth rate	18.2	-21.7	-37.6	-34.3	-18.7	5.3	67.7
	Imports	Value	106,118	77,936	19,202	17,320	19,912	21,502	23,085
		Growth rate	22.1	-26.6	-25.3	-34.5	-29.1	-16.9	20.2
	Export volume growth		8.5	-24.0	-42.5	-33.3	-20.5	3.6	54.5
	Import volume growth		1.3	-15.1	-23.1	-19.1	-11.9	-5.6	16.9
South Korea	Exports	Value	58,985	47,248	10,082	10,791	12,512	13,862	14,822
		Growth rate	8.8	-19.9	-33.5	-30.6	-22.7	14.8	47.0
	Imports	Value	29,248	21,997	4,981	4,992	5,670	6,353	6,187
		Growth rate	7.3	-24.8	-32.4	-33.6	-23.1	-9.0	24.2
Taiwan	Exports	Value	45,708	36,426	6,711	8,410	9,803	11,502	12,160
		Growth rate	2.1	-20.3	-44.4	-32.3	-19.6	27.4	81.2
	Imports	Value	21,637	18,339	3,865	4,233	4,874	5,367	5,465
		Growth rate	9.2	-15.2	-26.3	-24.2	-13.1	3.2	41.4
Hong Kong	Exports	Value	39,988	31,868	5,861	7,498	8,764	9,744	9,338
		Growth rate	3.0	-20.3	-41.4	-30.2	-18.6	15.0	59.3
	Imports	Value	1,545	1,099	274	291	278	256	421
		Growth rate	6.7	-28.9	-35.0	-22.6	-26.6	-30.7	53.6
Middle East	Exports	Value	33,722	21,650	5,389	4,221	5,398	6,643	6,587
		Growth rate	28.8	-35.8	-31.7	-43.7	-40.7	-28.1	22.2
	Imports	Value	165,445	92,850	18,871	18,240	26,337	29,402	30,460
		Growth rate	45.4	-43.9	-52.8	-56.6	-48.5	-9.1	61.4
Central and South America	Exports	Value	40,684	33,116	8,436	6,887	8,091	9,702	11,046
		Growth rate	16.0	-18.6	-18.6	-29.1	-25.7	-0.2	30.9
	Imports	Value	27,448	20,160	4,969	4,404	5,154	5,633	6,023
		Growth rate	13.8	-26.6	-23.6	-36.5	-28.5	-17.2	21.2

(Note) East Asia here includes China, ASEAN, South Korea, Taiwan and Hong Kong.
(Source) "Trade Statistics" (Ministry of Finance).

(Note 6) Ministry of Finance and Bank of Japan are updated fundamental data about using allocate of travel service from authentic information in January to March, 2009. According to the estimate that based on updated fundamental data, the deficits of travel service in 2008 is up to US$ 12.8 billion, Therefore the deficits in 2009 is increased.

On the other hand, amounts received as industrial processes, franchises from Asia also decreased, but because of the increase in overseas automobile production the shrinkage was comparatively low, and as a result, the amounts received from Asia reversed that from Europe and the U.S. for the first time.

In the construction service, the construction rush in the Middle East including Dubai, the surplus for the Middle East in 2007 and 2008 recorded more than the world. But in 2009 the surplus for the Middle East decreased to a level of 20% of the previous year, the surplus for the world in construction service decreased to a level of 40% of the previous year, at US$ 1 billion. On the other hand, the payments for sales control costs and publicity costs decreased due to stagnation of corporate activities in 2009, the surplus of other business services decreased at US$3.7 billion, which was a drastic increase over the previous year with US$3.2 billion.

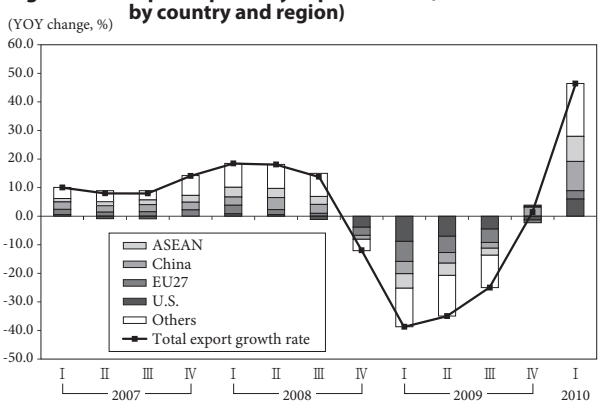
The surplus in the balance on income, indicating transactions of interest, dividends, etc. from overseas investments, decreased to US$131 billion by US$21.4 billion from the record high (US$152.5 billion) of the previous year. The surplus for income balance continued to surpass the trade surplus since 2005, and though it fell below the preceding year in 2009, it still kept in the level three times of the trade surplus. For the view of the overseas income structure, the importance of earnings from investments is growing over trade and it may be said that the environments aren't significantly changing.

China becomes Japan's top export market

On a customs-clearance basis, the exports to almost all major countries/areas were on the decline in the fourth quarter of 2009. The growth rate of the export to many countries/areas, comparison to the same period of the preceding year, dropped at a two digit rate until the third quarter of 2009 (Figure I-52). But the pace of the decline was gradual to the bottom in the first quarter, and by the fourth quarter East Asia turned to an increase, Europe and the U.S. followed in the first quarter of 2010 (Figure I-53).

Exports to the U.S. lead the other areas in the decline, which started in the third quarter of 2008, continued for 6 consecutive quarters to the fourth quarter of 2009. Exports to the U.S. totaled US$93.7 billion in 2009, a 31.2% decrease, and 3 year consecutive decrease with the export level falling below the US$100 billion level, which had been upheld for 16 years since 1993. Lead by the major product, transportation equipment such as automobiles, machinery equipment such as general machinery, and electronics, etc., fell for three consecutive years. In 2009, chemical products and steel dropped to a minus. Noticeably, transportation equipment, which covered 40% of the exports, fell 37.5% at a drastic drop of US$33.8 billion, which was approximately half of the export amount prior to in 2006, before the decrease. The contribution ratio against the decrease in export of transportation equipment to the U.S. covered over 50% and the impact of the drop was great.

Figure I – 53 Japan's quarterly export trends (contributions by country and region)



(Source) "Trade Statistics" (Ministry of Finance).

Export to the EU27 (hereafter EU) decreased from the fourth quarter of 2008, a bit later than in the U.S., and the decrease continued until the fourth quarter 2009. With exports decreasing for five consecutive quarters, with a 33.8% decrease at US$72.4 billion in 2009, the biggest drop in four years. Transportation equipment, which accounted for approximately 1/4 of the export, fell by 40.2% to US$16.4 billion, similar with the U.S. General machinery also accounted for 1/4 of the export, down by 42.9%, or US$16 billion, with exports of mining/construction machinery down by 79.8%. These two export decreases accounted for 60% of the EU export decrease.

Exports to Germany account for 20% of the exports to the EU. Germany had a higher share in electronics and general machineries than transportation equipment, and the decline in both (electronics: 32.8% decrease, general machinery: 41.0% decrease) resulted in a 30.0% decrease to US$16.7 billion. As for exports to the Netherlands, general machinery makes up 40% of all exports, with a decrease of 41.2%, which in the entire export was 35.4% decrease to US$13.5 billion. In the UK, transportation equipment fell with a 25.3% decrease, and general machinery also suffered a drop of 50% against the previous year with a 27.5% decrease to US$11.8 billion in entirety.

In East Asia, China and ASEAN leaped in two digits in 2008 but in 2009 there was a 17.7% decrease to US$350.6 billion, the first drop in eight years. Like the EU, the decline of exports to East Asia began in the fourth quarter of 2008 and continued until the third quarter of 2009, and the decline gradually slowed towards the latter half of the year. In the fourth quarter of 2009 it turned to grow, ahead of Europe and the U.S.

Of all exports to East Asia, exports to China decreased 11.6% to US$109.6 billion. Though exports to China declined for the first time in eleven years, China displaced the U.S. as Japan's largest export destination due to the steep fall in exports to the U.S. Because China was the largest import counterpart for Japan since 2002, China became the largest in exports and imports. Electronics made up 1/4 of exports to China, and had a 14.6% decrease to US$25.7 billion, mainly in part products; a 17.5% decrease to US$19.3 billion for general machinery, and a 14.4% decrease to US$9.5 billion for steel, recording a decline in every major product. But with regard to transportation equipment, though auto-

mobiles decreased compared to the year before, automobile parts continued two digit growth with a 23.4% increase in 2009, which contributed to the growth of all transportation equipment exports, totaling US$10.2 billion, with a 10% increase, and the share it holds in exports to China is nearing 10%. China became the top in the world ahead of Japan in automobile production and sales in 2009; further, the domestic market in China is forecast to continuously thrive, thus the expansion in export of transport equipment and related products can be expected. Exports to China in the fourth quarter of 2009 turned up for the first time in five quarters, pulled up by exports of transportation equipment and chemical products, and in the first quarter of 2010 transportation equipment is having an 2.7 times upswing against the same period of the preceding year.

Exports to ASEAN amounted to US$80.4 billion, a 21.7% decrease. In addition to electronics and general machineries, each accounting for 20% of exports and which dropped 21.6% and 28.0%, respectively, steel fell by 37.2%. As for exports to Thailand, accounting for almost 30% of exports to ASEAN, the drop in steel and general machinery was influential at 23.9% decrease to US$22.3 billion, and the decrease in electronics and general machineries for Singapore was similarly significant at 21.7% decrease to US$20.7 billion. General machinery and steel were stagnant for Korea and Taiwan, with decreases of 19.9% decrease to US$47.2 billion, and 20.3% to US$36.4 billion, respectively. However, in China, ASEAN, Korea and Taiwan, have returned to positive growth in the fourth quarter of 2009. Chemical products, electronics, and transportation equipment pulled total exports up, making up for the slump in EU and U.S. exports.

Sharp fall of energy prices caused imports from resource countries to decrease

Imports trend by county and region shows that imports from the Europe, U.S., Asia NIES, and resource countries decreased in the fourth quarter of 2008, while imports from China and ASEAN continued to increase, resulting in a minor increase overall. However, in the first quarter of 2009, imports from China as well as ASEAN decreased and only began to increase again in the first quarter of 2010.

Total imports from China, Japan's biggest supplier, decreased 13.9% to US$122.5 billion, which had not occurred over the last eleven years. Increases were seen in electronics such as TVs and other visuals and communication devices, accounting for approximately 20% of import. However, there was an overall decrease of 11.3% to US$26 billion. General machinery also recorded a 16.7% decrease to US$20.1 billion and chemical products fell 25.7% to US$8.8 billion. Foodstuffs, which continued declining against the previous years due to factors such as concerns about the safety of Chinese food, since turning to small grow for manufactured foodstuff, foodstuffs in entirety posted a modest decline of 0.8%. On the other hand, textiles and textile products, accounting for approximately 20% of imports, had a 0.5% increase to US$24.5 billion, stayed at the same level.

From other East Asian countries, imports from ASEAN decreased 26.6% to US$77.9 billion; those from Korea decreased 24.8% to US$22 billion; from Taiwan 15.2% to US$18.3 billion. The import of resources from Indonesia and Malaya, which made up 30% of all imports from ASEAN was decreased. The major cause of the decrease of imports from ASEAN was due to mining resources such as liquefied natural gas (31.7% decrease) and petroleum and petroleum products (70.1% decrease). Other causes that pushed down overall imports were electronics (19.3% decrease) and chemical products (28.2% decreases). Due to the import of integrated circuits from Korea and Taiwan falling by 38.6% and 13.0%, respectively, the contribution ratio of electronics against the decline of total imports became approximately 30% and was the major cause of the downward plunge in both countries.

Imports from the U.S. declined 23.3% to US$59 billion. Foodstuffs hold a 20% share of imports; in 2007 and 2008, prices soared for primary products, and the cereal crop was high, but because of the turnover of prices in 2009, foodstuffs in entirety decreased 26.0% to US$13 billion. Also, due to the decline in semiconductor manufacturing equipment, general machinery fell below US$10 billion for the first time in six years for a 22.8% decrease to US$7.8 billion, and for transportation equipment the number of automo-

Figure I – 54 Japan's exports by product (2009)

(US$ million, %)

	World		US		EU 27		China		ASEAN 10	
	Value	Growth Rate	Value	Growth Rate	Value	Growth Rate	Value	Growth Rate	Value	Growth Rate
Total value	580,787	-25.2	93,653	-31.2	72,374	-33.8	109,630	-11.6	80,449	-21.7
Machinery and equipment	367,190	-29.6	71,349	-34.7	51,303	-38.3	61,633	-11.5	46,114	-21.9
General equipment	101,968	-32.7	18,427	-35.2	16,004	-42.9	19,341	-17.5	15,105	-28.0
Mining and construction equipment	5,543	-57.6	410	-75.1	429	-79.8	892	-7.4	1,090	-33.6
Machine tools	3,439	-59.3	558	-71.9	440	-76.5	963	-38.4	499	-49.2
Electrical equipment	107,278	-22.6	13,783	-31.4	13,285	-36.3	25,651	-14.6	17,527	-21.6
Transport equipment	128,564	-34.4	33,790	-37.5	16,406	-40.2	10,165	10.0	10,558	-14.1
Automobiles	71,311	-45.7	24,227	-40.7	9,676	-46.0	3,877	-4.9	3,187	-28.3
Passenger vehicles	62,475	-45.9	23,962	-40.8	9,488	-44.6	3,511	-6.4	1,602	-34.1
Motorcycles	3,166	-45.4	1,010	-48.9	1,314	-43.3	1	-63.7	51	-62.9
Automotive parts	27,612	-16.8	5,963	-28.6	3,629	-35.8	6,356	23.4	4,128	-16.0
Precision instruments	29,380	-16.8	5,350	-21.3	5,608	-17.9	6,477	-6.1	2,925	-14.7
Chemicals	77,180	-12.5	8,831	-17.8	8,706	-23.2	17,412	-1.8	8,749	-18.9
Base metals and base metal products	53,096	-25.8	3,304	-33.0	2,308	-32.0	14,440	-13.4	10,817	-35.0
Steel	38,915	-26.6	2,265	-32.1	1,394	-28.6	9,459	-14.4	8,025	-37.2
Primary steel products	28,399	-27.7	676	-44.4	542	-35.0	7,577	-12.9	5,824	-39.9
Steel products	10,516	-23.8	1,589	-25.1	852	-23.9	1,882	-20.0	2,201	-28.8

(Note) See Appendix: Annotation I at the end of this report for the definitions of products.
(Source) "Trade Statistics" (Ministry of Finance).

biles slumped to half of the previous year and resulted in a 27.7% decrease to US$4.9 billion. For import from the EU was a 15.4% decrease to US$59.1 billion. Due to the amount of decrease was small compared to the U.S., imports from the EU surpassed imports from the U.S. for the first time. The major reasons for the decline were that general machinery (32.1% decrease to US$6.5 billion) and transportation equipment (28.6% decrease to US$6.1 billion) both accounting almost 10% of total imports, respectively, covered half of the contribution ratio to decrease imports from the EU. For chemical products, making up covering 1/4 of the imports, pharmaceuticals, due to the H1N1 influenza epidemic, had a high rate for imports in 2008 (20.1% increase) and 2009 (25.7% increase) to expand to 3.9% to US$19.6 billion in entirety for chemical products.

On the other hand, the influence of the rapid changes in the prices of energy since 2008 remained strong and import of crude oil from the Middle East that account for 90% of total imports of crude oil, had a steep increase of 45.4% for 2008, but in 2009 it decreased by 43.9% (US$92.9 billion), which covered 30% in the contribution ratio for the decrease of the total imports.

Greatly influenced by decrease in the export of transportation equipment to Europe and the U.S.

For exports by products for 2009, of machinery and equipment, which made up 70% of the exports, there was a 34.4% decrease to US$128.6 billion for transportation equipment, a 32.7% decrease to US$102 billion for general machinery, and a 22.6% decrease to US$107.3 billion for electronics, which all contributed to a two digit decrease (Figure I-54).

The stagnation of automobile exports, Japan's major export item, greatly influenced overall exports. Automobile exports decreased by 45.7% in 2009 to US$71.3 billion. The drop in automobile exports contributed to a third of the overall decline. The major export counterparts were the U.S. (share 34%) and the EU (share 13.6%), but these shares, too, are declining with China leading the growth in East Asia. Automobile exports to China in 2009 decreased 4.9% to US$3.9 billion, but from the third and fourth quarters of 2009, they have continued recording new highs each quarter. Compared to the noteworthy stagnation of exports to Europe and the U.S., the decrease in exports to China was small (Figure I-55). From the low level of the same period of the preceding year, in the first quarter of 2010 exports of automobiles to the EU, the U.S., and Asia increased enormously, but while exports to the EU and the U.S. have not reached the level of 2008 prior to the financial crisis, exports to Asia have recovered due to the strong exports to China.

The great decline in mining and construction equipment was striking among general machinery. Exports to developing countries, which were growing in 2008, rapidly dropped with Russia decreasing by 84.9% and UAE decreasing by 76.4%, falling to less than half of the preceding year with 57.6% decrease to US$5.5 billion. However, construction investment in China remained relatively stable thereby sustaining the 7.4% decrease in mining and construction equipment. Regarding machine tools, the U.S., formerly Japan's biggest export counterpart, had a 71.9% decrease fol-

Figure I – 55 Number of automobiles exported from Japan

(Unit : No. of automobiles %)

	2007	2008	2009		2010 I	
	Number	Number	Number	Growth Rate	Number	Growth Rate
Total	6,550,173	6,727,091	3,616,168	-46.2	1,144,630	69.8
U.S.	2,215,452	2,068,062	1,202,732	-41.8	334,325	88.9
Europe	1,497,800	1,589,054	685,026	-56.9	200,878	45.6
Asia	440,920	525,081	378,840	-27.9	138,313	135.4
China	113,716	167,380	150,585	-10.0	61,049	205.2
(Reference) Overseas production of automobiles by Japanese automaker.						
Total	11,859,761	11,651,554	10,117,552	-13.2	3,233,967	64.5
U.S.	3,324,326	2,893,466	2,108,161	-27.1	724,389	96.3

(Note) (1) Only four-wheel vehicles included above.
(2) Growth rate of 1st quarter 2010 is year-on-year comparisons.
(Source) Japan Automobile Manufacturers Association Inc.

Figure I – 56 Japan's imports by product (2009)

(US$ million, %)

	World		US		EU27		China		ASEAN	
	Value	Growth Rate	Value	Growth Rate	Value	Growth Rate	Value	Growth Rate	Value	Growth Rate
Total	552,252	-27.0	59,044	-23.3	59,130	-15.4	122,545	-13.9	77,936	-26.6
Machinery and equipments	147,204	-19.8	25,242	-21.5	20,467	-26.9	52,089	-14.5	22,160	-20.4
General equipment	45,951	-22.2	7,807	-22.8	6,450	-32.1	20,078	-16.7	6,106	-23.7
Electronical equipment	64,916	-16.5	6,729	-19.3	3,275	-30.5	26,037	-11.3	13,016	-19.3
Transport equipment	16,333	-27.7	4,892	-27.7	6,057	-28.6	2,340	-19.9	1,083	-33.3
Automobiles	4,866	-32.6	269	-56.3	3,996	-27.3	22	-42.4	115	-28.4
Passenger vehicles	4,598	-32.6	244	-54.6	3,886	-27.1	12	-35.8	7	-77.3
Motorcycles	629	-11.9	191	-6.3	93	-11.4	127	-19.7	40	-12.3
Automobole parts	4,319	-37.1	293	-61.0	1,320	-37.9	1,311	-27.8	840	-34.9
Precision instruments	20,004	-16.9	5,815	-16.2	4,685	-11.5	3,634	-20.0	1,954	-6.0
Chemicals	56,937	-13.1	9,805	-15.6	19,627	3.9	8,840	-25.7	6,463	-28.2
Foodstuffs	53,810	-11.2	12,982	-26.0	7,299	-0.3	6,987	-0.8	7,366	-1.8
Iron ore	8,705	-34.4	0	893.3	9	238178	0	-82.2	15	174374
Mineral fuels, etc	152,460	-42.8	1,053	-47.7	221	-67.0	1,373	-68.5	22,192	-43.8
Coal	21,987	-25.6	190	-59.4	0	7.1	785	-63.8	3,346	-20.5
Liquefied Natural Gas	30,337	-32.8	243	-16.6	0	n.a.	0	n.a.	14,566	-31.7
Petroleum and petroleum products	93,316	-47.8	507	-50.4	205	-68.6	462	-57.0	4,104	-70.1
Crude oil	80,120	-48.1	0	n.a.	0	n.a.	112	-71.1	2,352	-70.9
Base metals and base metal products	21,731	-47.0	1,419	-46.1	1,659	-40.7	5,748	-40.7	3,240	-39.2
Steel	10,186	-42.1	494	-51.4	656	-24.1	3,537	-39.6	647	-30.5
Primary steel products	4,930	-56.6	122	-73.6	256	-34.6	643	-75.0	83	-66.2
Steel products	5,256	-15.9	372	-32.7	400	-15.4	2,894	-11.7	564	-17.8

(Note) See Appendix: Annotation I at the end of this report for the definitions of products.
(Source) "Trade Statistics" (Ministry of Finance).

Figure I – 57 Japan's imports and exports of IT-related products(2009)

(US$ million, %)

	Export			Import		
	2008	2009		2008	2009	
	Value	Value	Growth Rate	Value	Value	Growth Rate
Computers and peripherals (Total)	7,768	5,469	-29.6	20,326	16,438	-19.1
Multifunctional digital equipment	980	554	-43.5	1,592	1,356	-14.8
Computers and peripherals	3,601	2,498	-30.6	14,077	11,312	-19.6
Parts of computer and peripherals	3,187	2,418	-24.1	4,657	3,769	-19.1
Office equipment	114	77	-32.1	267	251	-6.1
Telecommunication equipment	8,655	7,129	-17.6	10,779	10,731	-0.4
Semiconductors and electronic components	44,515	36,563	-17.9	23,820	18,769	-21.2
Electronic tubes and semiconductors	11,671	9,166	-21.5	3,153	2,494	-20.9
Integrated circuits	32,843	27,397	-16.6	20,668	16,275	-21.3
Other electronic components	34,612	25,589	-26.1	17,701	13,815	-22.0
Flat-panel displays	8,902	5,125	-42.4	4,588	3,371	-26.5
Video equipment	16,162	10,974	-32.1	5,754	6,259	8.8
Digital cameras	12,353	8,864	-28.2	1,640	1,434	-12.5
Reception apparants for television	799	291	-63.5	1,151	2,074	80.3
Audio equipment	144	91	-37.1	432	295	-31.7
Portable audio players	115	80	-30.9	323	232	-28.4
Measuring and testing equipment	17,266	13,338	-22.7	8,843	6,770	-23.4
Machines and apparantusfor the manufacture of semiconductor devices	13,742	8,293	-39.7	2,501	1,123	-55.1
IT parts	84,709	66,400	-21.6	46,813	36,780	-21.4
Finished IT products	58,269	41,123	-29.4	43,612	37,672	-13.6
Total IT equipment	142,978	107,523	-24.8	90,425	74,452	-17.7

(Note) See Appendix: Annotation I at the end of this report for the definitions of products.
(Source) "Trade Statistics" (Ministry of Finance).

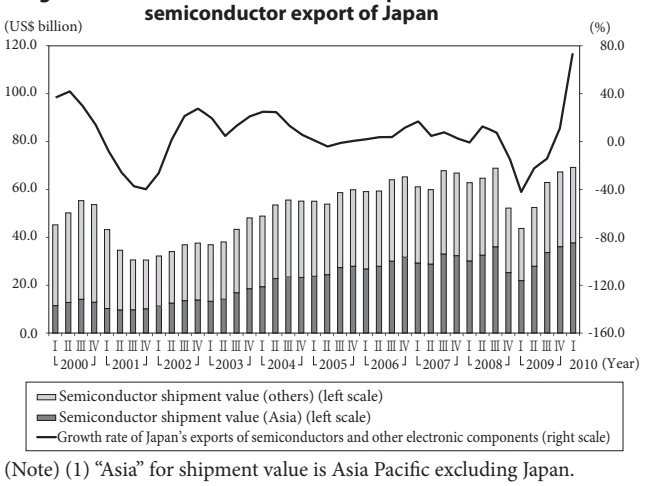
lowed by EU at 76.5% with exports to Europe and the U.S. dropping to 1/4 of the level of the preceding year. China also had an enormous decrease of 38.4%. Approximately half of the orders received for machine tools were from overseas, the domestic stagnant economy with the decline of export resulted in a steep drop of 57%, or US$5.8 billion(by Japan Machine Tool Builders' Association), for machine tools production in Japan. As a result Japan's production ranked third in the world, following Germany, and giving up the top held since 1982 to China.

Due to the decline in the export of integrated circuit (HS8542) to major export counterparts Korea, China, and Singapore, covered 1/4 of electronics exports, the export of all electronics decreased by 16.6%. Exports of wireless communication equipment accessories (HS8529) such as those for televisions and radio wireless communication equipment and television cameras (HS8525) also dropped, mainly in the U.S. In other items, steel, which had a steep increase in 2008, with China and ASEAN heading the rapid increase, could not keep the preceding year's level and ended with 26.6% decrease to US$38.9 billion. According to the Japan Iron and Steel Federation, the total tonnage of steel exports decreased by 9.7% to 34.44 million tons, Indonesia recording a 40% decrease, Thailand a 35.5% decrease, and Malaysia a 30.6% decrease. On the other hand Vietnam recorded a 19.0% increase and the Philippines also increased by 10.1% increase among ASEAN countries, Korea also had a 5.9% increase.

For imports by products, the steep drop in energy prices over the latter half of 2008 through 2009 rebound on the imports of mineral fuels with 42.8% decrease to US$152.5 billion (Figure I-56). The drop in mineral fuels, which accounted for 30% of the total import, was responsible for over half of the decrease of all imports. The import price of crude oil, US$135.2/barrel in August 2008, fell more than US$90 in a mere five months to US$43.1/barrel in January 2009. This was the bottom price, and by the end of the year there was a gradual increase for crude oil price, settling at US$60.5/barrel in year's average, a 40.6% drop. Price of primary products other than energy have been on a declining trend since 2008, with aluminum recording a 59.7% decrease, iron ore a 34.4% decrease, and grain a 36.5% decrease and they had some influence on imports. Partly as a result of crude-oil and other primary products imports decline, the share of manufactured imported was up from 50.1% in 2008 to 56.1% in 2009, rebounding to the 2007 level.

On the other hand, due to the weak domestic demand, the import of machinery equipment such as general machinery (19.8% decrease to US$46 billion) and electronics(16.5% decrease to US$64.9 billion) was stagnant, and chemical products also fell with a 13.1% decrease to US$56.9 billion. Steel, which had renewed the record in 2008, fell 42.1% but sustained US$10.2 billion. Although imports in the overall declined, pharmaceuticals and medical supplies, due to the increase of imports of anti-influenza drugs, increased by 30.7% to US$13.1 billion, exceeding US$10 billion for the first time. Especially, drugs import from Switzerland took big strides by 79.2% increase, accounting for over 30% of total trade from Switzerland.

Figure I – 58 Global semiconductor shipment value and semiconductor export of Japan



(Note) (1) "Asia" for shipment value is Asia Pacific excluding Japan.
(2) Growth rate is a comparison to the same period of the previous year.
(Sources) "Trade Statistics" (Ministry of Finance), Semiconductor Industry Association (SIA).

Column I - 2

◉ Local small/medium companies exploit overseas markets

Over 99% of the Japanese small/medium companies account for 2/3 of permanent employees and are truly the backbone support of the industrial infrastructure of Japan. However, most of them have been late to become involved in exporting and setting up operations overseas, and the situation remains that they have not been able to participate in the vigor of the overseas market. According to the Bank of Japan's national quarterly short-term economic survey, the participation rate of small/medium companies in total exports was only 7% in 2009 with an export ratio (proportion of sales volume to export value) at 6.9% showing an increase against past levels, but compared to the major enterprises which have 26.1% participation, they are under enormously inferior circumstances (Figure). Deployment overseas has also been delayed; according to the "Survey on the International Operations of Japanese Firms" (target of the survey: 3,110 JETRO members, effective responses: 935 companies, response rate: 30.1%) performed in November through December 2009, the ratio of companies that have overseas offices was 81.6% (302 out of 370 companies) for the major corporations and 49.4% (279 out of 565 companies) for the small/medium companies.

Among the small/medium companies of Japan are companies that are unsatisfied with domestic market exploitation, and there are many that have proactively started taking a firm foothold in the overseas market. Not only the small/medium companies in the metropolitan region, but local powerful companies with individualized products, technology and service as their weapons, have entered the arena of the overseas market. Here are examples developed around JETRO supported cases in which local small/medium companies succeeded in the overseas market.

Image processing technology to Indonesia-Claro, Inc. (Hirosaki City, Aomori Prefecture)

Claro, a research development venture company, opened the doors to the life science market with their image processing technology. They lead the world in the production of a fully automated virtual slide system (automatic digital sample making device), effective for tissue observation such as cancer.

The system is greatly useful for on-the-spot pathology in tissue observation such as for cancer. The needs for medical care are common to all countries and the demand for their product overseas is strong. Their challenge in the overseas started with their contacting JETRO Aomori in June 2008, and the export business exploration project of JETRO led them to decide to fully proceed. In September 2009, the first export of the virtual slide system was shipped to Indonesia to become known worldwide. The government, in its growth strategy of June 2010, established a national strategy for the promotion of medical equipment industries. Such movements became an essential support for expanding overseas exploitation for the company.

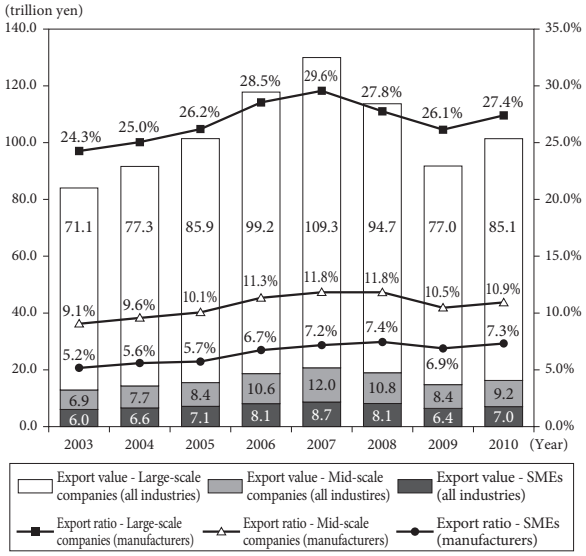
The good tastes of the Seto Archipelago to China-Kabushiki Kaisha Yakuri (Takamatsu City, Kagawa Prefecture)

Yakuri manufactures and sells sushi material, fusing the gifts of the seas of the Seto Archipelago. Their target is the greater China region. They accepted trainees from China and went to give technical instructions at cooperative manufacturing factories in China. With this opportunity, Yakuri strengthened its desire to convey the good tastes of the gifts of the Seto Archipelago to the world along with China. In May 2009, Yakuri displayed their product, rigidly committed to native material, at the exhibition in Hong Kong to gather great interest by the attending food and beverage industry people. They are presently continuing business talks with those companies which demonstrated interest at the exhibition after shipping those samples. Keeping their sales point to "Good Taste of Seto," Yakuri will take advantage of exhibitions as a tool for market exploitation while pushing forward their promotion to greater China, including Hong Kong.

Authentic coffee of Japan to Hong Kong-Goshi Kaisha Okada Coffee (Kumamoto City, Kumamoto Prefecture)

Local service industries also enforce overseas market exploitation. The phrase, "First date with Okada Coffee …" has saturated the city for the long-established coffee shop, Okada Coffee, which in 2009 opened a specialized coffee shop in Hong Kong. What triggered this was their participation in the "Hong Kong Food Business Mission" sponsored by the city of Kumamoto and JETRO Kumamoto in August 2008. It had been suggested that they open a coffee shop in Hong Kong by Ricky Chen, owner of the popular sushi shop chain in Hong Kong from earlier days. There were no shops that had either a coffee roaster or a professional pâtissier for cakes like in Japan, and by participating in the mission; they were convinced of the business opportunities. For the shop in Hong Kong to reproduce the authentic taste of Japan, they imported most of the coffee beans and ingredients from Japan and using coffee roasters made in Japan adhering to their persistency on "Japan". There is much attention to how Okada Coffee will do in Hong Kong where the evaluation of taste is very strict.

Figure Trends in export value and export ratio by size of enterprises



(Notes) (1) Export ratio stands for the ratio of export value in the total sales value.
(2) Large-scale companies: capital of 1 billion yen and over; Mid-scale companies: capital of 100 million yen to less than 1billion yen; SMEs: capital of 20 million yen to less than 100 million yen.
(3) Figures for 2010 are estimates made in June, 2010.

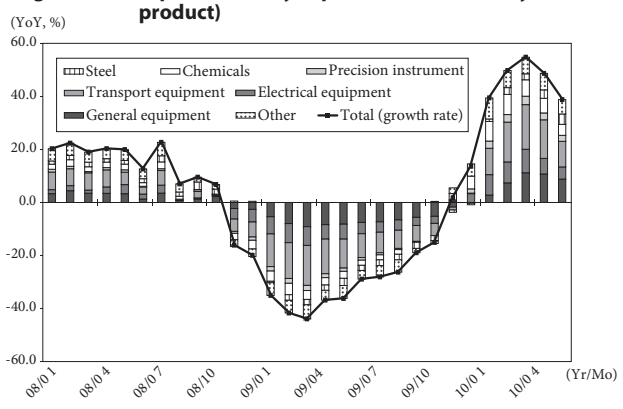
(Source) "Short-Term Economic Survey of All Enterprises in Japan (Tankan)", the Bank of Japan.

First drop in seven years for IT imports

The IT product trade lead the Japan's exports together with automobiles, but in 2009 exports of IT products decreased by 24.8% to US$107.5 billion, the first decrease since the IT depression of 2001 (24.2% decrease), with a two digit decrease. IT imports decreased by 17.7% at US$74.5 billion, the first drop in seven years (Figure I-57). As a result of the drastic decreases in exports, the surplus of IT trade balance decreased to US$33.1 billion decreased by US$19.5 billion from the previous year. Especially, the surplus of finished IT products was US$3.5 billion, in the level of 1/4 from the previous year.

For IT exports by product, semiconductors and electronic components had been a decrease of 17.9% to US$36.6 billion, which cover approximately 30% of IT exports. The export of integrated circuits to East Asia, accounting for the close to 90%, to Korea decreased by 33.1%, to China by 9.6%, and to Singapore by 26.0%. Due to the economic depression, the demand for IT products decreased synchronized with the decrease in the production of semiconductors in the world, of which shipment values showed a slump equivalent to the 2001 IT depression (Figure I-58). For this reason, export of semiconductor manufacturing equipment fell an enormous 39.7% to US$82.9 billion. Compared to the last IT depression, the drop this time hit bottom rather quickly, and in the fourth quarter of 2009 the semiconductor shipment value had recovered to the level held prior the drop. Exports from Japan of semiconductors and electronic components recovered in the fourth quarter 2009, and semiconductor manufacturing equipment showed a healthy trend, increasing by 72.0% in the first quarter of 2010. For other IT products, due to the export slump of digital cameras (28.2% decrease), exports of video equipment as a whole decreased 32.1% to US$11 billion, and measuring and testing equipment, influenced by the decrease in the U.S., stagnated with a 22.7% decrease to US$13.3 billion. By country and area classification, besides IT exports to the U.S. and EU, which fell 30.7% and 34.3%, respectively, China, Japan's biggest IT export counterpart, had a decrease of 15.7%. In the fourth quarter of 2009, however, Asia, headed by China, began to increase followed by the U.S. and EU in the first quarter of 2010.

Figure I – 59 Japan's monthly exports (contribution by product)



(Source) "Trade Statistics" (Ministry of Finance).

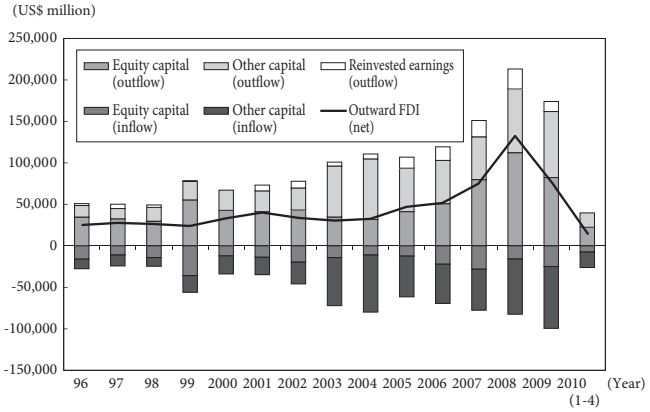
Looking at IT imports, semiconductors and electronic components (21.2% decrease to US$18.8 billion), other electronics and electronic equipment (22.0% decreases to US$13.8 billion) and computers and peripherals (19.1% decrease to US$16.4 billion) suffered an overall stagnation. On the other hand, video equipment such as television receivers had a rapid 80.3% increase, supporting an 8.8% increase to US$6.3 billion. The domestic economy continued to be sluggish, but due to the complete digitalization of television broadcasts expected in 2011, repurchase demand remained brisk with increased imports from Japanese makers in China and ASEAN. By country and area, China had a 12.7% decrease, which accounted for 40% of the IT imports, while ASEAN had a 19.9% decrease and the U.S. had a 24.9% decrease. Together with exports, IT imports from Taiwan, China and Asia turned to an increase and in the first quarter of 2010 Europe and the U.S. followed.

Expected recovery in Europe and U.S.

Automobiles were the major cause of the decrease in exports for Japan in 2009, the inability to break free of the export structure of relying on automobile exports, became one of the reasons that brought about the current depression since the end of the war. In 2008 prior to the financial crisis, automobiles accounted for over 10% of the total exports in developed countries was three: Japan (16.9%), Spain (13%), and Germany (11.3%). Compared to 2000, Spain and Germany declined 3.8 points and 1.3 points, respectively, while Japan increased by 3.6 points with the growing dependence on automobiles. In addition, Japan's export to the U.S. surpassed 30% of all automobile exports, followed by Russia and Australia; neither Russia nor Australia reached 10%, which shows the concentration on the U.S. as outstanding. Under these circumstances it may be thought that when the U.S. economy became depressed and consummation of high priced products dropped, Japan's exports suffered the most compared to other countries.

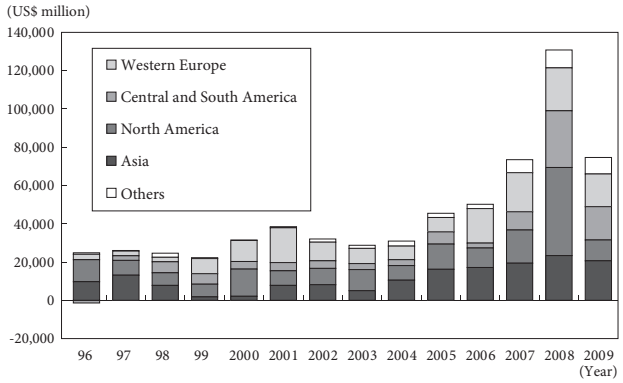
Japanese trade hit the bottom in the first quarter of 2009 and then started on the trail of recovery. In terms of product classification, exports of chemical products, electric equipment, and precision instruments increased in November 2009 compared to the same month of the previous year, and in December transport equipment also showed an increase (Figure I-59). Recovery in Asia for a wide range of products was a bit earlier with Asian countries headed by China, showing growth in November compared to the same month of the preceding year. Exports to Europe and U.S. turned positive only after 2010 mainly in automobile-related products. The export amount to Europe and U.S. for January-May 2010 was still only 70% of the level of January-May 2008, which was prior to financial crisis, while Asia has almost fully recovered. Expectancy for high growth in Asia headed by China is great, but exports from Japan to Asia are considerably intermediary products, then exports as finished products from Asia to Europe and U.S., a solid recovery in the European and U.S. economies will have to be waited for the growth of Japan's trade.

Figure I – 60 Trends in Japan's outward FDI by type



(Note) The yen-based value is converted to dollars each quarter by using the average quarterly Bank of Japan interbank rate and then the annual sum is calculated. For 2010, it was converted monthly.
(Source) "Balance of Payments Statistics" (Ministry of Finance, Bank of Japan).

Figure I – 61 Trends of Japan's outward FDI by areas



(Note) The yen-based value is converted to dollars each quarter by using the average quarterly Bank of Japan interbank rate and then the annual sum is calculated.
(Source) "Balance of Payments Statistics" (Ministry of Finance, Bank of Japan).

(2) Japan's outward FDI continued on a steady pace

Japan's outward FDI (net flows based on balance of payments) declined 42.9% from the year earlier to US$74.7 billion, In 2008, large-scale M&As targeting the U.S. helped to set a new record for Japan's outward FDI (US$130.1 billion), but in 2009 FDI declined as the lower earnings of subsidiaries based in the U.S. and Europe caused reinvestment of earnings in those regions to shrink (Figure I-60). Even as it became clear that the economy was heading into a recession, FDI proceeded on a sure footing and still remained above the 2007 level (US$73.5 billion).

A look at figures by type, in the outflow of assets (gross), setting out of operations overseas by Japanese corporations, equity capital which exceeded US$100 billion for the first time in the previous year (US$112.3 billion), fell 26.7% to US$82.3 billion as recoiled reduction. Other capital increased by 3.8%, or US$79.6 billion, and remained more or less on the same level against which reinvested earnings, influenced by declining profits of overseas subsidiaries, dropped to half of the previous year to US$12.1 billion. The outflow in total was US$174.1 billion, following the previous year's peak of US$213.2 billion. On the other hand, the pullout of Japanese corporations, or, in other words, the inflow of assets (gross), had a great share in the equity capital increase of 58.1% to US$25 billion against the previous year (US$15.8 billion). Because other capital increased to US$74.5 billion (11.8% increase), the total inflow amounted to US$99.4 billion with gross statistics recording the highest amount since 1996.

On a quarterly basis, both outflow and inflow throughout 2009 were on a gradual declining trend. Viewing the net outflow, with the US$10.9 billion net outflow to finance and insurance sector of the Cayman Islands (UK), the third quarter reached the US$20 billion level. This level was not reached in any other quarter. Net outflow in the first quarter of 2010 fell to US$9.8 billion, and it, below the US$10 billion level, was the first time in 16 quarters (since the first quarter of 2006).

Healthy investment to Oceania and Asia

In classification by countries and areas, investments to North America and Central, South America, which contributed to the great expansion in 2008, decreased by 76.4% to US$10.9 billion and 41.3% to US$17.4 billion, respectively, which resulted in enormous decreases for world (Figure I-61).

For North America, investment in the U.S. was US$10.7 billion, decrease by 76.1% compared to the year before. In addition to the great peel-off of the subject on capital reinforcement in finance and insurance sector in 2008, the deterioration in profits by Japanese subsidiaries due to the U.S. economic depression was notable, and reinvested earnings decreased. In transport equipment, etc. (hereafter transport equipment), there was a minus US$2.4 billion (negative balance) in 2009. Among other manufacturing sector, foodstuffs (minus US$10 million), petroleum (minus US$100 million), in non-manufacturing, real estate business with a minus US$400 million. On the other hand, in pharmaceutical sector, headed by Dainippon Sumitomo Pharma Co. Ltd. of Japan's buyout of Sepracor Inc (US$2.4 billion), M&As with business expansion in the U.S. became active, and though the amount of investment for chemical and pharmaceutical sector, was a decrease against the year before, to US$4.6 billion, they supported investments in the U.S.

In Central and South America, Brazil, which had a sharp increase for investments in mining the year before, fell to US$3.8 billion (30.1% decrease), but iron/non-ferrous/metals, wholesale/retail, finance,/insurance had an increase over the previous year, and the total investments stood firm exceeding those of 2006 and 2007. From 2008, there were movements in capital reinforcement via special purpose entities (SPE) (Note 7) mainly in the Cayman Islands (UK).

(Note 7) Through acceptance by Japanese securities corporations of preferred investment shares published by Japan's financial agencies for special purpose entities in the Cayman Islands (UK), etc., they were posted as overseas direct investment to SPE established countries from Japan. It is expected that the invested amount will be 10% of the netflow of overseas direct investment.

Investments in the Cayman Islands (UK) totaled US$12.9 billion (42.8% decrease), over the US$10 million level, exceeding the U.S. as overseas direct investment counterpart for seven consecutive years.

West Europe had a 23.8% drop to US$17.1 billion. As in the U.S., the decline in profits seems to have had an influence, and Germany posted a 46.5% decrease to US$2.1 billion and Britain posted a 68.5% decrease to US$2.1 billion, though with the buyout of Lucite International, a chemical maker, by Mitsubishi Rayon (US$1.6 billion). On the other hand, the Netherland experienced a 2.8% increase to US$6.7 billion, sustaining the level of the previous year, and Luxemburg increased to US$3.3 billion, which was an increase in sextuple against the preceding year, and the total investments in these two countries accounted for 60% of the investments to West Europe. Investments to these two countries are considered to be a one-time passing investment through SPE. For instance in Luxemburg, foodstuffs were posted at US$2.4 billion but when Suntory Holdings bought out the French beverage maker Orangina Schwepps Group (Note 8), it seems that the fact Orangina had a holding company in Luxemburg was a great contribution.

Although there was an 11.6% decrease at US$20.6 billion in Asia, China (6.2% increase), Singapore (164.5% increase) and Hong Kong (23.7% increase) were significant, and compared to Europe and U.S., Asia transitioned comparatively well. For investment by area, it was the first time in five years, since 2005, that Asia had a maximum share (27.6%). China had the biggest investment in Asia with US$6.9 billion and broke the record of high amounts in four years. It can be perceived that steady investments were made to partake in the significant growth of the Chinese market. Transport equipment, earning profits from the increase of automobile demands, kept the level of the previous year with US$1 billion, and in foodstuffs, Asahi Breweries's investment in Tsingtao Beer (US$700 million) doubled that of the previous year with US$900 million. For finance/insurance, in addition to Mitsui Sumitomo Bank establishing a wholly-owned local subsidiary (7 billion Chinese won, approximately US$1 billion capital), wholesale/retail as a whole did well.

India was next with great investments (US$3.7 billion, 34.0% decrease). It did not reach the record investment (US$5.6 billion), with a major buyout of a pharmaceutical company, of the previous year, but it was more than two times the investments of 2007, becoming the second largest investment amount in years. From NTT Docomo's investment (US$2.7 billion) in the major communications company, Tata Teleservices, communications recorded rapid growth and transport equipment (US$600 million) among manufacturing industries maintained the good level of the previous year.

Singapore had a tremendous increase of 164.5% to US$2.9 billion, with transportation accounting for approximately half of the steep growth of US$1.4 billion. Hong Kong had an increase of 23.7% to US$1.6 billion. FANCL, for the purpose of expanding local sales, proceeded with capital participation in cosmetic import and sales company to enjoy healthiness in both wholesale/retail. Philippines had a 14.8% increase at US$800 million with Kirin Holdings investing (total US$1.7 billion) in San Miguel Beverage (Note 9) which contributed to total investment.

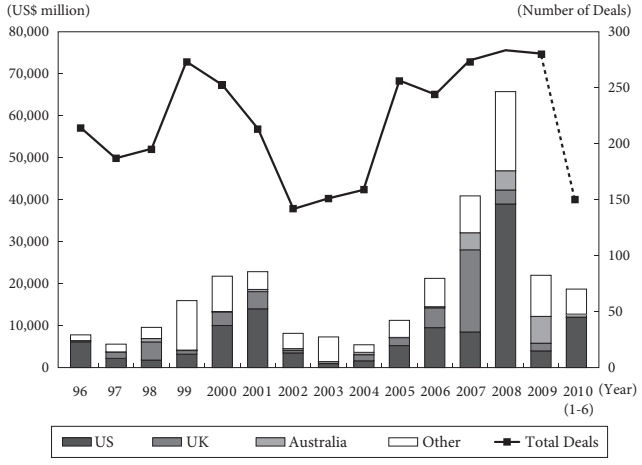
In contrast to other areas where there were declines in investments, Oceania had an increase of 25.9% to US$7.6 billion, breaking records for three consecutive years. Australia had a 36.4% increase to US$7.1 billion with foodstuffs on a steep climb by quintuple (US$3.6 billion) over the previous year, while mining industries kept the level of the previous year at US$2.6 billion. The steep climb of foodstuffs was due to the whole ownership of the beverage maker Lion Nathan by Kirin Holdings (US$3.4 billion), and the buyout of the beverage maker Cadbury Schweppes Australia by Asahi Breweries (US$800 million). In addition to these, M&As aiming for the establishment of operating bases in Asia-Pacific areas by major domestic beverage makers occurred one after another in 2009; to mention one, the buyout of the beverage maker in New Zealand, Frucor Group by Suntory Holdings (US$800 million).

Foodstuffs expands 250% over previous year

A look at FDI by industry, manufacturing sector decreased by 27.2% to US$32.9 billion, and non-manufacturing sector decreased by 51.2% to US$41.7 billion.

In the manufacturing sector, retrospective to 2005, transport equipment, which had sustained a US$8 - US$10 billion, drop in 2009 to US$600 million, 1/20 of the previous year, became the greatest contributing factor to the decrease of investments in the manufacturing sector. The depression of the European and U.S. subsidiaries caused a 97.6% decrease to US$50 million for West Europe, and a minus US$2.4 billion (negative balance) in the U.S. In Asia, China (US$1 billion, 1.4% decrease) and India (US$600

Figure I – 62 Trends in Japan's outward M&A value and number of deals



(Source) Thomson Reuters.

(Note 8) The buyout amount on this transaction was not disclosed. But according to the press it was approximately ¥300 billion (approximately US$3.8 billion).

(Note 9) Total amount inclusive of wholly-owned subsidiary rate in January 2010. The amount for 2009 alone was US$1.4 billion.

Figure I – 63 Japan's 10 largest overseas M&A (2009-June 2010)

Month Completed	Acquiring company		Target company			Amount (US$ mil.)	Equity after acquisition (%)
		Industry		Nationality	Industry		
Oct 2009	Kirin Holdings Co Ltd	Food and Kindred Products	Lion Nathan Ltd	Australia	Food and Kindred Products	3,417	100.0
Jun 2010	Astellas Pharma Inc.	Drugs	OSI Pharmaceuticals Inc	U.S.	Drugs	3,029	79.2
Mar 2009	NTT DOCOMO	Electronic and Electrical Equipment Communications	Tata Teleservices Ltd.	India	Electronic and Electrical Equipment Communications	2,655	26.0
Oct 2009	Dainippon Sumitomo Pharma Co., Ltd.	Drugs	Sepracor Inc	U.S.	Drugs	2,357	91.4
May 2009	Mitsubishi Rayon Co Ltd	Rubber/Plastic	Lucite International Ltd	Britain	Rubber/Plastic	1,600	100.0
Mar 2010	Shiseido Co Ltd	Soap/Cosmetics other Chemical Product	Bare Escentuals Inc	U.S.	Soap/Cosmetics other Chemical Product	1,522	86.9
May 2010	MITSUI & CO., LTD.	Commerce	Anadarko Petro Corp-Shale Assets (2)	U.S.	Oil and Gas	1,500	32.5
Jun 2010	MITSUI & CO., LTD. / Tokyo Gas & Co., Ltd	-	Natural Gas Thermal Power Plant of Gas Natural (Spain) (3)	Mexico	Electric, Gas, and Water Distribution	1,465	76.0
Jun 2009	Nippon Paper Group Inc	Paper and Allied Product	PaperlinX Ltd (4)	Australia	Paper and Allied Product	1,417	100.0
May 2009	Kirin Holdings Co Ltd	Food and Kindred Products	San Miguel Brewery Inc	Philippines	Food and Kindred Products	1,225	43.3

(Note) (1) The ranking above is based on the value of each single transaction.
(2) Acquired 32.5% stake in shale gas project in Marcellus Shale area, Pennsylvania, U.S. of Anadarko Petroleum. (shale gas: natural gas contained in mudstone, unconventional form of natural gas.)
(3) Five natural gas thermal power companies, natural gas pipeline companies, etc
(4) Parent company of Australian Paper
(5) KDDI acquisition of shares of Jupiter Telecom (J:COM), a major cable television company from the subsidiary groups under U.S. Liberty Global in Feb. 2010 (US$4 billion) is excluded as considered a domestic investment from the contents of the transaction.
(Source) Thomson Reuters.

million, 6.7% decrease) decreased slightly, and in entirety of Asia decreased by 19.7% to US$2.4 billion, balancing out the European and U.S. depression. On the other hand, foodstuffs headed by the whole ownership of Lion Nathan by Kirin Holdings, the M&As of beverage makers followed one after another in various areas and caused a growth of 250% to US$9 billion over the previous year. The chemicals/pharmaceuticals sector, where the amount was expanded by the enormous buyout in 2008 of the pharmaceutical maker of India, fell 36.4% to US$7.4 billion in 2009. However, pharmaceutical makers investment in the U.S., such as the buyout of Sepracor by Dainippon Sumitomo Pharma, and of Noven Pharmaceuticals by Hisamitsu Pharmaceutical Inc. (US$300 million), chemical/pharmaceutical sector kept a high level at US$4.6 billion. In Europe, too, the Netherland had a triple increase over the previous year at US$800 million. Britain had a consecutive-year hike to US$400 million and the entire West Europe tripled to US$1.4 billion. With glass/ceramics sector having an increase of 44.1% to US$2 billion in investment growth for Britain, and through the buyout of Australian Paper, the third largest in Australia by Nippon Paper Group (US$1.9 billion) (Note 10), wood/pulp increased 64.4% at US$1.2 billion.

In non-manufacturing sector, with a peel-off of big projects in previous year, finance/insurance sector ended with a 70.4% decrease to US$15.5 billion. But still to be the largest sector for three years consecutively. In the mining sector, there was a decrease of 38.4% to US$6.5 billion, and there were movements in securing resources such as Sumitomo Metal and Mining's investments of Bogo Metal Mines (Alaska, U.S.) held by Canadian Tech Resources (US$300 million), and the decision by Idemitsu Kosan for the expansion of production (approx. ¥ 11.5 billion) at the coal mine which they own in Australia. In communications sector, investment by NTT Docomo in Tata Teleservices was a contribution for a 131.1% increase to US$3.9 billion.

Overseas M&As expanding to domestic demand-led industries

Outward M&As by Japanese companies totaled US$22.0 billion, down 66.6% from the previous year. (Figure I-62). In 2008, big transaction, such as the buyout of Millennium Pharmaceuticals by Takeda Pharmaceutical Co. Ltd. (US$8.1 billion), and investment by Mitsubishi UFJ Financial Group in U.S. Morgan Stanley (US$7.9 billion) followed one after the other, but in 2009 recorded only half the amount of 2007. However, in the number of cases, there were 278 cases in 2007, 273 in 2008, and 282 cases practically unchanged in 2009. The fact that the number of cases are sidestepping along may indicate that Japanese companies are actively taking this opportunity to go overseas in spite of this economic depression.

Outward M&As by country in 2009 had a 1/10 decrease of US$4 billion for the U.S. In contrast, Australia's great leap, a 38.7% increase to US$6.4 billion, renewed records for three consecutive years, accounting for approximately 30% share in the entirety. Following these two countries were India (US$2.9 billion, 42.9% decrease), Britain (US$1.8 billion, 45.2% decrease), and the Philippines (US$1.4 billion, 39.1% increase), all influenced by mega deals of over US$1 billion.

A look at by industry, foodstuffs made the largest sector with US$7.4 billion going octuple of the previous year. In 2009, among the foodstuffs, leading domestic beverage producers, for the purpose of expanding their operational

(Note 10) According to Thomson Reuters, the transaction amount was inclusive of net debts (subtracting from handover the debt amount of the acquisition target company, adding the net debts of the acquisition company to the transaction amount). According to the announcement by Nippon Paper Group the total investment amount was AUS$600 million (approximately ¥36 billion).

base in Asia/Oceania and Europe, bought out or made companies of local brands full subsidiaries in which they had already invested.

Kirin Holdings invested in Lion Nathan, having the second share of beer in Australia, participating capital in 1998, and made it a fully-owned subsidiary (US$3.4 billion), and also invested in San Miguel Brewery of the Philippines, gradually raising their investment to acquire full company shares (US$1.7 billion) (Figure I-63). Suntory Holdings bought out Fulcore from the Danon Group, which had an overwhelming nutritional beverage share in Oceania (US$800 million), and in Europe, ensured the operational base by acquiring the French Orangina Schwepps Group known for their "Schwepps" brand in Europe. Asahi Breweries participated in capital of Tsingtao Brewery (US$700 million) having a second largest share in beer market, Breweries with high expectations of growth in China, reinforcing its operations base in the Chinese market, and in Oceania, acquired from the Cadbury Group, Schwepps Australia (US$800 million), a beverage division of this major British foodstuff company.

Following foodstuffs in terms of amounts was pharmaceuticals sector, with an 83.7% decrease to US$3.2 billion. Though there were not mega deals, M&As by second-tier and middle sized companies were prominent in 2009, such as the buyout of the U.S. Sepracor by Dainippon Sumitomo Pharma, of U.S. Noven Pharmaceuticals by Hisamitsu Pharmaceutical Inc., of Bristol Myers Squibb Indonesia (Indonesian subsidiary of U.S. Bristol Myers Squibb) by Taisho Pharmaceutical Co. (US$300 million), and of Tillotts Pharma AG by Zeria Pharmaceutical Co. (US$100 million). Moreover, the major Japanese pharmaceutical companies have already completed M&As starting with Eizai's acquisition of U.S. MGI Pharma (US$3.7 billion), U.S. Millennium Pharmaceuticals by Takeda Pharmaceutical Co. (US$8.1 billion), and Ranbaxy Laboratories Ltd. of India by Daiichi Sankyo Co. (US$5 billion); the middle sized makers thus entered outward M&As in 2009 for a full global expansion.

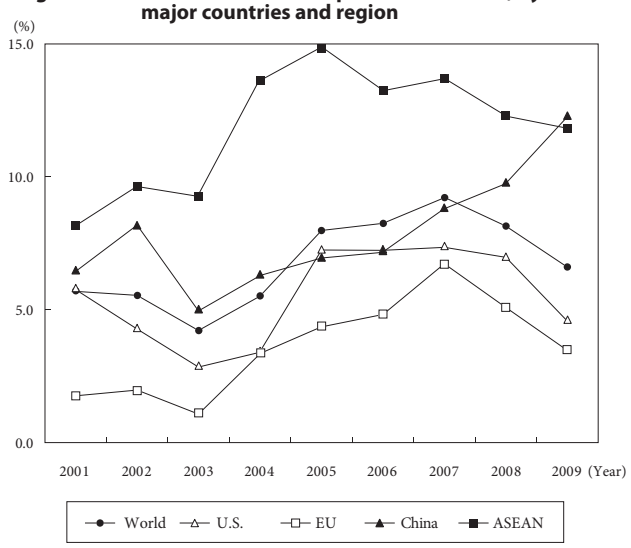
These foodstuffs and pharmaceuticals companies had mainly targeted the domestic market as an industry to meet

Figure I – 64 Main targets of M&As in and after 2009 by domestic-demand oriented industries

Acquiring company	Industry	Completed	Summary
Kirin Holdings Co Ltd	Food and Kindred Products (Beverages)	Oct 2009	Acquired Lion Nathan, Australia's second-largest beer manufacturer as a wholly-owned subsidiary for US$3.4 billion. Aims to strengthen its Asia/Oceania base, which already includes under its umbrella the dairy-and-beverage maker National Foods (bought in 2007) and the dairy giant Dairy Farmers (making it a wholly-owned sbusidiary in 2008).
		Jan 2010	Obtained, as a wholly-owned subsidiary, the affiliated company of the Philippines' beverage giant San Miguel's beer operations for US$1.7 billion. Boasting a 95% share of the Philippines' beer market and a strong brand presence in Southeast Asia, it will help Kirin to strengthen its base of its alcoholic-beverage operations in Southeast Asia.
Suntory Holdings Ltd	Food and Kindred Products (Beverages)	Jan 2009	Bought France's food giant Dannon's New Zealand subsidiary Frucor Group, the second largest soft-drink manufacturer in New Zealand, for US$800 million. Suntory can accelerate expansion of its operations by synchronizing the presence it has built throughout Asia to Frucor Group's strong sales network in Oceania.
		Nov 2009	Acquired 100% of the French soft-drink manufacturer Orangina Schweppes Group for approximately ¥300 billion. Its market share (volume basis) of soft drinks (excluding water) of 10% in France and 6% in Spain and Portugal will help Suntory to expand its operations in Europe.
Asahi Breweries Ltd	Food and Kindred Products (Beverages)	Jan 2009	Took a stake (about 20% for US$700 million) in China's second-largest beer producer, Tsingtao. This was the first investment in a Chinese beer manufacturer by a Japanese beer producer. Leveraging Tsingtao's sales network, it aims to expand sales of its "Super Dry" brand to China.
		Mar 2009	Bought the British foods manufacturer Cadbury Group's Schweppes Australia unit for US$800 million. Bringing Australia's second-largest soft-drink manufacturer under its umbrella will give it a base of operations in Oceania.
Nissin Foods Holdings Co Ltd	Food and Kindred Products	Jan 2009	Took a stake (originally US$1 billion, ultimately 33%) in Angleside, Russia's largest instant-nudle manufacturer and the holding company for Mareven Food Central. Aims to enter the Russian market.
Astellas Pharma Inc.	Drugs	Jun 2010	Purchased the U.S. pharmaceutical manufacturer OSI Pharmaceuticals for US$3.5 billion, thereby acquiring an integrated operations base--including OSI's strength in the cancer field--to leverage for drug creation, from drug discovery through development and into commercialization.
Dainippon Sumitomo Pharma Co., Ltd.	Drugs	Oct 2009	Acquired mid-size U.S. drug manufacturer Sepracor for US$2.4 billion. Dainippon is scheduled to put a new drug on the U.S. market, and will use Sepracor's sales network to build sales for the new drug.
Hisamitsu Pharmaceutical Co., Inc.	Drugs	Aug 2009	Bought U.S. drug manufacturer Noven Pharmaceuticals for US$300 million. To strengthen its overseas strategy, it will use its new U.S. base to build a development, manufacturing and sales regine. Hisamitsu will leverage Noven's strength in transdermal absorption therapy systems (transdermal preparations, whereby the medical agent is absorbed into the body through the skin).
Taisho Pharmaceutical Co Ltd	Drugs	Oct 2009	Purchased Bristol Meyers Squibb Indonesia, the Indonesian subsidiaryof pharmaceutical giant Bristol Meyers Squibb, for US$300 million, thereby acquiring its over-the-counter brands. The deal is a first step toward truly entering the OTC arena in Asia.
Zeria Pharmaceutical Co Ltd	Drugs	Sep 2009	Acquired Tillotts Pharma of Switzerland for US$100 million, gaining sales rights for Tillotts' core products in 53 countries (excluding North America and Germany). Through Tillotts, Zeria will expand its sales network to sell new Zeria pharmaceutical products in overseas market.
NTT DOCOMO	Communications	Mar 2009	Took a 26% stake for US$2.7 billion in India's cellphone giant Tata Teleservices. There are high expectations for growth in this nation of more than 300 million cellphone users, a market that is second only to China in size.
Nippon Paper Group Inc	Paper/pulp	Jun 2009	Purchased Australian Paper, the 3rd largest in Australia's paper industry, for US$1.9 billion. Acquired a foothold in Australia, whose prospects for growth are good, and aims to expand exports to Asia and Oceania in the future.
Oji Paper Co., Ltd.	Paper/pulp	Mar 2010	Acquired Malaysia's largest paper board and cardboard manufacturer GS Paper and Packaging to beef up its operations in the East Asian region.
Shiseido Co Ltd	Cosmetics	Mar 2010	Bought the U.S. cosmetics manufacturer Bare Essentials for US$1.8 billion in an attempt to shore up its limited U.S. operations and to use Bare Essentials' brands to build global operations.

(Note) Dollar-based values are from Thomson Reuters.
(Sources) Thomson Reuters, company press releases and news reports.

Figure I – 65 Rates of return on Japan's outward FDI, by major countries and region



(Note) (1) The rate of return on outward FDI is caluculated as follows: FDI earnings in the term / average of outward FDI balances at the start and the end of the term
(2) EU :2001- 2003 : 15 countries, 2004-2007 : 25 countries, 2008-2009 : 27 countries
(Source) "Balance of Payment Statistics" (Ministry of Finance, Bank of Japan).

Figure I – 66 Japan's direct investment income by area

(US$ million)

	2005		2009		
	Value	Share	Value	Share	Yearly average growth rate
World	30,388	100.0	45,383	100.0	10.5
Asia	9,873	32.5	17,761	39.1	15.8
China	1,573	5.2	6,197	13.7	40.9
ASEAN	5,707	18.8	8,208	18.1	9.5
North America	11,360	37.4	10,413	22.9	-2.2
U.S.	10,632	35.0	10,140	22.3	-1.2
Western Europe	4,564	15.0	5,844	12.9	6.4
EU	4,296	14.1	5,748	12.7	7.5
Central/South America	1,900	6.3	5,768	12.7	32.0
Oceania	1,469	4.8	4,253	9.4	30.5

(Note) (1) The yen-based value is converted to dollars each quarter by using the average quarterly Bank of Japan interbank rate and then the annual sum is calculated.
(2) 25 countries for EU in 2005, 27 countries for 2009
(3) Annual average growth rate for 2005 – 2009
(Source) "Balance of Payment Statistics" (Ministry of Finance, Bank of Japan).

domestic demands. According to the Survey of Overseas Business Activities (Ministry of Economy, Trade and Industry), the ratio of overseas sales in FY2008 (based on all domestic corporation) (Note 11) of foodstuffs was 3.8%, chemical products was 17.4%. Compared to transport equipment (39.2%), and information and communications equipment (28.1%), the rate of foodstuffs and chemical products were higher in domestic sales.

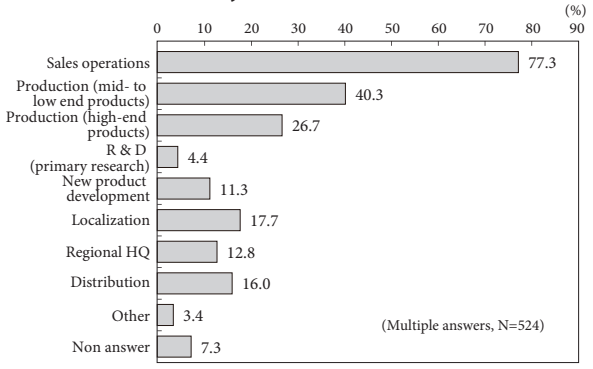
However, the domestic market ripened, and with expectations for expansion of the market thinned by the low birthrate, shift to overseas have speedily progressed (Figure I-64). The Asia/Oceanic areas are attracting attention as they recovered comparatively quickly from the financial crisis. In the communications sector, NTT Docomo's investment in Tata Teleservice was spurred by the fact that the domestic cell phone market was almost fully saturated and so they aimed at taking over the prospective growth of the yet low cell phone saturation in India. In the paper production sector, besides the takeover of Australian Paper by Nippon Paper Group, Oji Paper Co., the largest in the sector, acquired GS Paper & Packaging, the biggest cardboard and corrugated paperboard maker in Malaysia, and are expecting to start commercial operations of the paper/pulp factory at Chiangsu, China in the latter half of the year, and are aiming to end dependence on domestic demands by developing business evolution in Asia/Oceania.

China upswings in declining return rate on FDI

Japan's outward direct investment stock (assets) in 2009 increased over the preceding year by US$56.5 billion totaling US$740.4 billion (8.3% increases). The main areas of increase were Asia and Oceania, especially Australia, which contributed l/4 of the increase. North America had the most, 32.4%, in shares by areas, but is declining yearly against Asia which is growing in shares and which in 2009 was 23.7%, exceeding by a very small margin the side-stepping West Europe with a share of 23.6%. For shares by industry, the manufacturing sector was 47.8%, and transport equipment and electronic equipment decreased their shares 11.0% and 8.8%, respectively, in 2009 to which foodstuffs, 6.4%, and pharmaceuticals, 8.2%, are closing up. In non-manufacturing sector, finance/insurance had 23.7% and wholesale/retail had 14.2%, both of which exceeded US$100 billion in outward FDI stock. Mining follows with 5.7%.

Return rate of overseas direct investment was 6.6% in 2009 for a decrease in two consecutive years (Figure I-65). In major countries and areas, the U.S., which had continued at 7% for four years, dropped 2.4 points to 4.6%. EU fell 1.7 points to 3.5%, and Asia fell 0.5 points to 11.0%., demonstrating the affects of the decline in earnings in Europe and U.S. One reason for Asia not falling in rate of earnings compared to Europe and U.S. might be the high returns of

Figure I – 67 Functions to be expanded in overseas (for the next three years or so)



(Source) FY 2009 Survey on the International Operations of Japanese Firms (JETRO).

(Note 11) The survey has "overseas production ratio", but the basis of calculation is the sales value of domestic and local companies and has been referred to here as "overseas sales ratio").

Column I - 3

◉ Earnings of Asia/Oceania remained steady - trends of overseas earnings of Japanese companies

Profits from the Americas recovered considerably

According to JETRO's tabulation of corporate overseas sales and profits, compiled from consolidated financial results posted by listed 887 companies whose fiscal year end between December 2009 and March 2010, the sales contributions by Japanese overseas unit to sales (not including exports from Japan) and the operating profits were 35.0% and 43.5%, respectively. The recovery pace of the operating profit in domestic divisions exceeded that of overseas divisions, and though it had declined in the overseas division ratio, operating profits considerably exceeded the level of the years prior to 2007 (Figure1).

Considering 854 companies for which year-on year comparison is possible, proceed from overseas operation (sales and operating profits) recorded a 13.4% in sales while operating profits rose by 14.0% year-on year-a slower recovery than their domestic units. (Figure 2). Despite recording double digit decrease of sales for 2 consecutive years, the reducing operating costs by downsizing, etc, became the reason for sustaining profit. The recovery in the Americas was outstanding with operating profits quadrupling from the level of the year before. There was a repercussion from the 90% decrease recorded the year before, especially in transportation equipment, which amounted to close to 50% of sales of industry total, which contributed considerably to the change to a profit of ¥506.5 billion from a deficit of ¥374.9 billion the year before. In the ratio to the total profits, it recovered from 1.9% to 9.7%. The European division could not fully overcome the depression with a 23.2% decrease, recording a double digit decrease for 2 consecutive years in operating profits. The transportation equipment and electric appliances decreased their deficits respectively to attain considerable profit gains, but industries such as in machinery, oil/coal products, and glass/ceramics products decreased their profits, falling into deficits. Of the 29 industries, 9 industries recorded deficits, increased from 7 industries the year before.

The operating profits from Asia/Oceania was 8.6% and the recovery pace was slow compared to the Americas and domestic divisions. Unlike the Americas and the domestic divisions which recorded a rapid recovery following a sharp decrease in profits during the last fiscal year profits from Asia/Oceania recorded remained steady, with just 20% decline in the previous fiscal year. Of the 29 industries, 14 industries recorded profit increase or turned into profits, and only the real estate fell in deficit. While mining, metallic products, and machinery industries were met with two digit decreases in profits, the electrics appliances and transportation equipment sustained an increase in profits, and pharmaceutical also contributed to the profit gains. The ratio on the whole of operating profits fell from 39.4% the previous year to 23.6%. However, when compared to prior levels, the profit from this region has gained importance.

Overseas development by non-manufacturing industries have a late start

Though Japanese companies have steadily been expanding their profits from overseas in the past, there are differences by the industries. While the manufacturing industries having 40% of sales and 50% of operating profit from overseas, the non-manufacturing industries are in around the 10% level (Figure 3). Industries that have over a 30% overseas sales ratio, exclusive of mining, are all manufacturing industries (Figure 4). The cause for this is that they had started their overseas operation at an early stage, launching their market exploitation, while the non-manufacturing companies were originally mostly small and did not have the power to develop business overseas and late in franchising or making manuals. But facing with the maturing domestic market, it is expected for non-manufacturers to enhance profit bases by expanding overseas operations.

Figure 1 Listed Japanese companies' overseas earnings by region

(%)

Fiscal Year (Number of companie)		Share of sales by region					
		Domestic	Overseas	Americas	Europe	Asia/ Oceania	Other
FY 1997	(582)	71.4	28.6	11.3	5.4	5.8	6.1
FY 1998	(593)	71.1	28.9	13.4	6.0	4.9	4.6
FY 1999	(643)	72.5	27.5	12.4	5.4	5.5	4.2
FY 2000	(668)	71.9	28.1	12.6	5.2	6.4	3.9
FY 2001	(715)	69.7	30.3	13.7	5.5	6.7	4.4
FY 2002	(728)	68.0	32.0	13.7	6.0	7.8	4.6
FY 2003	(738)	67.9	32.1	12.9	6.1	8.2	4.9
FY 2004	(774)	67.3	32.7	12.2	6.4	8.8	5.3
FY 2005	(804)	66.1	33.9	12.5	6.3	10.1	5.0
FY 2006	(832)	66.2	33.8	12.6	6.9	10.3	4.1
FY 2007	(866)	63.1	36.9	13.0	8.5	12.0	3.5
FY 2008	(890)	63.8	36.2	11.0	7.0	14.8	3.4
FY 2009	(887)	65.0	35.0	11.3	7.1	12.9	3.6

(%)

Fiscal Year (Number of companie)		Operating profit share by region					
		Domestic	Overseas	Americas	Europe	Asia/ Oceania	Other
FY 1997	(582)	76.6	23.4	9.8	3.4	4.8	5.3
FY 1998	(593)	73.4	26.6	13.8	4.8	4.4	3.6
FY 1999	(643)	75.0	25.0	14.1	2.1	5.0	3.7
FY 2000	(668)	79.9	20.1	10.4	0.7	6.0	3.0
FY 2001	(715)	76.0	24.0	12.4	0.6	6.7	4.2
FY 2002	(728)	72.9	27.1	13.0	2.8	7.2	4.1
FY 2003	(738)	73.3	26.7	11.1	4.3	7.5	3.7
FY 2004	(774)	71.8	28.2	10.9	4.7	8.6	4.0
FY 2005	(804)	70.8	29.2	10.8	4.7	10.0	3.7
FY 2006	(832)	73.5	26.5	9.1	4.1	8.3	5.1
FY 2007	(866)	67.1	32.9	8.7	6.8	12.2	5.2
FY 2008	(890)	47.5	52.5	1.9	3.6	39.4	7.6
FY 2009	(887)	56.5	43.5	9.7	3.0	23.6	7.1

Figure 2 Growth rate of overseas operating profit for listed Japanese companies

(Year-on-year, %)

Fiscal Year (Number of companie)	Growth rate of sales						
	World	Domestic	Overseas	Americas	Europe	Asia/ Oceania	Other
FY 1998 (556)	-7.0	-7.5	-5.8	10.9	3.0	-21.6	-29.3
FY 1999 (576)	-3.6	-2.9	-5.3	-7.9	-9.6	11.5	-10.1
FY 2000 (620)	4.2	3.0	7.5	7.4	1.2	22.2	-3.8
FY 2001 (650)	-2.7	-6.0	5.8	7.6	4.8	1.2	9.1
FY 2002 (683)	2.4	0.0	7.7	2.3	11.3	16.8	6.4
FY 2003 (694)	-0.4	-0.9	0.9	-4.9	5.4	3.6	7.5
FY 2004 (710)	7.4	6.1	10.0	2.9	11.7	17.1	15.1
FY 2005 (748)	10.3	7.8	15.4	13.7	10.5	28.0	4.2
FY 2006 (773)	13.9	14.3	13.0	10.3	18.7	16.7	3.9
FY 2007 (786)	7.9	6.4	10.5	7.5	19.1	15.0	-8.5
FY 2008 (841)	-13.0	-12.3	-14.2	-18.8	-16.0	-11.1	-7.4
FY 2009 (854)	-12.8	-12.5	-13.4	-17.2	-20.4	-4.7	-15.2

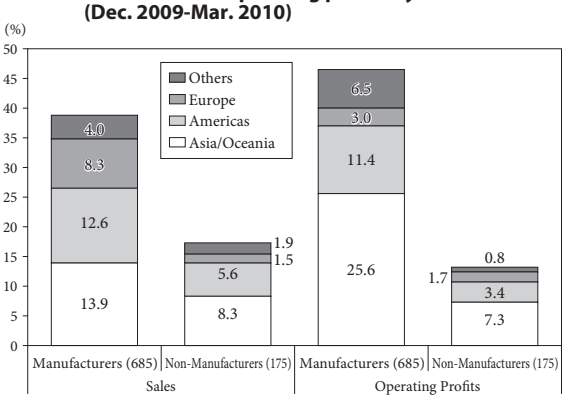
(Year-on-year, %)

Fiscal Year (Number of companie)	Growth rate of operating profit						
	World	Domestic	Overseas	Americas	Europe	Asia/ Oceania	Other
FY 1998 (556)	-20.0	-23.7	-8.0	12.9	14.9	-26.4	-45.7
FY 1999 (576)	7.8	9.7	2.7	13.1	-50.6	22.0	10.9
FY 2000 (620)	26.8	34.8	2.9	-4.7	-58.5	51.4	2.1
FY 2001 (650)	-31.3	-35.6	-14.6	-13.2	-33.0	-22.1	-0.2
FY 2002 (683)	40.2	35.7	54.0	40.8	389.8	49.0	38.1
FY 2003 (694)	15.5	15.7	15.2	-0.4	86.3	24.4	2.6
FY 2004 (710)	15.4	14.4	18.0	17.6	6.7	21.1	26.3
FY 2005 (748)	14.6	12.4	20.3	16.1	18.2	33.7	5.4
FY 2006 (773)	28.2	33.4	14.9	6.5	38.2	2.9	47.8
FY 2007 (786)	11.3	7.4	20.3	-10.0	55.0	41.2	12.5
FY 2008 (841)	-55.0	-65.5	-38.7	-89.8	-69.9	-20.0	-10.8
FY 2009 (854)	20.0	25.1	14.0	300.8	-23.2	8.6	-28.4

(Notes) (1) The data cover listed companies whose fiscal years end between December and march (excluding banks and insurance companies), and whose consolidated financial statements included segment information by region.
(2) For FY 2009, the data include corporations that had released their consolidated financial results for FY 2009 by June 25, 2010
(3) Total sales include inter-segment sales.
(4) The data include some listed subsidiaries and thus are duplicated in some cases.
(5) "Other," in regions, includes data covering multiple regions, such as "Europe and the U.S." or "overseas."
(6) Year-on-year growth rates were only calculated for companies whose previous-year figures were available and allowed for comparison.

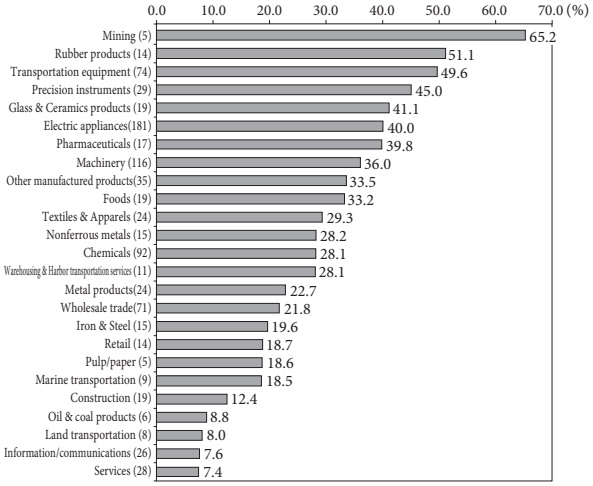
(Sources) Toyo Keizai Inc. "CD-ROM of Corporate Financial Records" (for FY 2005 and earlier years); published consolidated financial statements and securities reports (FY 2006-2009).

Figure 3 Composition ratio by area classification of overseas sales/operating profits by industries (Dec. 2009-Mar. 2010)



(Note) (1) Number of companies in parenthesis
(2) Non-manufacturers consist of land transportation, marine transportation, air transportaion, Warehousing & Harbor transportation services, wholesales, retail, real estates, other financing business, and services

Figure 4 Overseas sales ratio by industries of listed companies (December 2009 – March 2010 Periods)



(Note) (1) Classification of industries follows the classification by Securities Identification Code Committee.
(2) The overseas sales ratio herein is based on the geographical segment information and does not include exports from Japan.
(3) Number of companies are in parenthesis.
(4) Counted companies that have over 5 industries have been posted.

China. The Chinese rate of earnings in 2009 marked a 6-year consecutive climb at 12.3%, which was the first time exceeded 10%. ASEAN had been keeping a high earnings rate so far in Asia, but since 2005 it showed a gradual decline and in 2009 was 11.8%, going below China.

Viewing the level of amount of earnings from overseas direct investment, the growth of China is outstanding (Figure I-66). There was an increase of US$6.2 billion for a 51.3% increase in 2009, accounting for 13.7% of total earnings, exceeding 10% for the first time and going over Europe. In terms of the amount of earnings by country, China was in second place since 2008 following the U.S. in first at 22.3%. The speed of expansion of earnings received from overseas direct investment in China was fast with two digit growth every year since 2004, with an average annual growth rate (2005-2009) of 40.9%. It went over not only Eu-

rope and U.S. but even the comparatively high earnings rate of ASEAN. Central and South America, and Oceania are also growing in earnings. The earning structure of Japanese overseas direct investment has a trend to shift to developing countries from the three axes of Europe, U.S. and Asia.

Outward M&As going well in first half of 2010

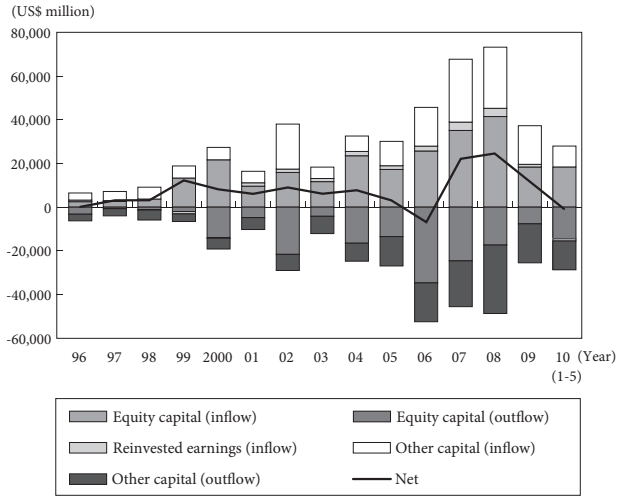
Outward direct investments in Jan. -May 2010 were US$15.8 billion for a 44.3% decrease against the same period the previous year. On the other hand, outward M&As for the first half of 2010 were US$18.7 billion for a 52.3% increase, which already in the first half year alone made the level of almost 80% of the amount of 2009. The difference in trends of outward direct investment on balance of payment basis and M&As is mainly on whether in gross or net flow (Note 12), but reinvested earnings since September 2009 have been negative and are greatly influencing the difference of the trends of both statistics of 2010.

In the direct investment statistics on balance of payment basis, reinvested earnings show the internal reserves of the earnings of overseas subsidiaries. In 2009, in addition to the decline of the sales amount from overseas subsidiaries of Europe and U.S., and through the "system of exclusion of gains from dividends from overseas subsidiaries" adopted from April, due to the alleviated burden of the capital backflow to Japan, with worsening finance management to parent companies in Japan, there is movement to excavate the internal reserves of overseas subsidiaries. Under these circumstances, reinvested earnings fell to negative in September 2009 for the first time since August 2000, which continued into 2010 (Note 13). For this reason, unless there will be a big project in the latter half year, a leap in outward direct investment for 2010 cannot be expected.

On the other hand, outward M&As were strong in the first half of 2010 with US$18.7 billion. This amount, due to limitations of data, included KDDI's acquisition of shares of Jupiter Telecom (J:COM), a major cable television company from the subsidiary groups under U.S. Liberty Global in Feb. 2010 (US$4 billion). From the details, it was considered a domestic transaction, and therefore was not an outward M&A . Even excluding this case, active M&As were performed starting with the buyout of U.S. OSI Pharmaceuticals (US$3.5 billion) by Astellas Pharmaceuticals, which had not performed a mega deal among the major pharmaceutical companies. The leading cosmetics maker, Shiseido, bought out U.S. Bare Escentuals (US$1.8 billion), and in the resource field, Mitsui & Co., Ltd and Tokyo Gas & Co., Ltd acquired Mexico' s natural gas thermal power plant (US$1.5 billion).

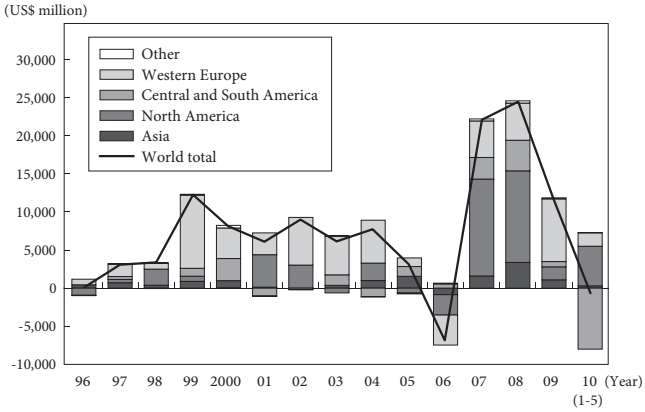
According to the "FY2009 Survey on the International Operations of Japanese Firms" conducted by JETRO in Nov. -Dec. 2009, 56.0% of companies that have plans to expand overseas plan to increase the scale of their operations there. Sales, cited by 77.3% of the respondents, was the foremost function targeted for expansion. Among the markets slated for larger operations, China—as with last year's survey—was the highest at 55.3%. There was also an increasing degree of interest in other Asian markets, including Asian NIEs (such as Hong Kong and South Korea) and other countries such as Indonesia and Vietnam (Figure I-67).

Figure I – 68 Transition of Japan's inward FDI by type



(Note) The yen-based value is converted to dollars each quarter by using the average quarterly Bank of Japan interbank rate and then the annual sum is calculated.
(Source) "Balance of Payments Statistics" (Ministry of Finance and Bank of Japan).

Figure I – 69 Breakdown of Japan's inward FDI by region



(Note) The yen-based value is converted to dollars each quarter by using the average quarterly Bank of Japan interbank rate and then the annual sum is calculated.
(Source) "Balance of Payments Statistics" (Ministry of Finance and Bank of Japan).

(3) Large decrease in Japan's inward direct investment

Japanese inward direct investments in 2009 (balance of payment basis, net, flow) decreased by 51.8% to US$11.8 billion, falling below the record established in 2008.

With the global recession from the latter half of 2008,

(Note 12) refer to Note 5 on page 23.
(Note 13) Reinvested earnings of balance of payments, at half a year after the end of the fiscal year of the parent companies, 1/12 of the increase/decrease of internal reserves of overseas subsidiaries will be posted monthly. Since most of the parent companies settle their accounts at the end of March, there are many cases where the statistics reflect those after September of the correspondent year.

there were companies that backed off from overseas investments in 2009 and the scraping of large cases in the financial field in 2007 and 2008 resulted in the great decrease. Especially in the past two years, investments from the U.S. which constitutes the greatest part of Japan's inward FDI decreased drastically. In 2008 there was US$11.8 billion investment to Japan from the U.S. In 2009, however, there was only $1.8 billion, showing the strong influence of the U.S. economic depression since 2008.

As a general trend of Japanese inward FDI in 2009, both the inflow and the outflow (pullout) showed a relatively small yearly transactions. For inward direct investments on a gross basis, the inflow of capital decreased by 49.1% to US$37.3 billion against outflow, with a 47.7% decrease to US$25.4 billion, both greatly decreasing (Figure I-68). M&As of Japanese companies by foreign companies had a 71.3% decrease to US$5.5 billion.

In 2010, there were large transactions both in inflow and outflow. The German Volkswagen investment in Suzuki bore US$5.7 billion inflow in January. In February, it turned around to have an excess US$7.4 billion outflow. The biggest outflow counterpart was Mexico, but it is thought that there was much influence by the pullout by the U.S. financial organizations. As of May, the inward FDI is in excess of outflow by US$700 million for 2010.

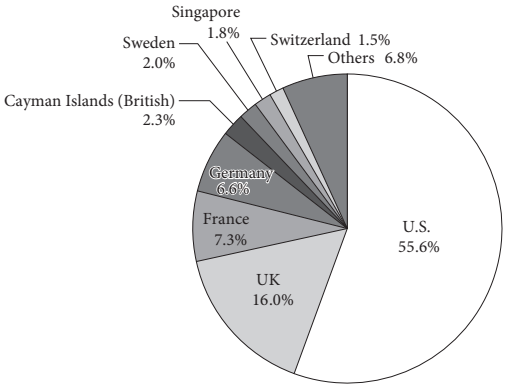
Sharp fall of investment from the U.S.

As for 2009 net capital inflow amount classified by country/area (Figure I-69), North America fell with a 85.7% decrease to US$1.7 billion, and Central & South America fell with a 82.8% decrease to US$700 million for a tremendous decrease from the Americas. Large investments such as the buyout of Nikko Cordial Group by Citi Group, and investment in Shinsei Bank by U.S. investment fund via Cayman Islands (British) followed in the financial field in 2008, but due to the financial crisis, investments from the Americas were fixed at a small rate in 2009.

Western Europe increased by 68.9% to US$8.2 billion, which was the only increase in the major area. The British acceptance of part of the public stock offering of the major Japanese financial corporation for fund procurement influenced a great inflow of US$5.6 billion for the UK (Note 14). The Netherlands followed with an inflow of US$2.6 billion. In the electric machinery industry, major fund procurements through public stock offerings were performed, and it is likely that Dutch companies made the investments. In other countries, there was a US$400 million inflow from France, double which of the previous year, for transportation machines, but on the overall the capital inflow was small.

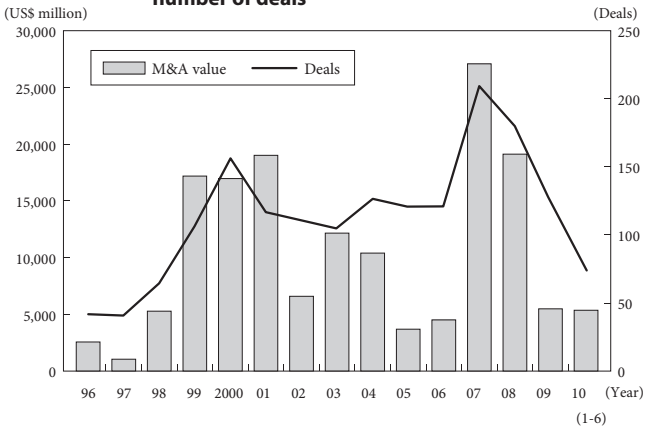
Investment from Asia was inactive, decreasing by 67.7%, or US$1.1 billion. There were not a few cases of real estate acquisition by Asian companies, such as the buyout of Westin Hotel Tokyo by GIC, the real estate governmental fund of Singapore in 2008.

Figure I – 70 Composition ratio by countries of total M&A value to Japan (1996 – June 2010)



(Source) Thomson Reuters.

Figure I – 71 Trends in Japan's inward M&A value and number of deals



(Source) Thomson Reuters.

Due to the decrease in overseas investments by governmental funds in 2009, investments from Singapore fell 72.2% to US$800 million. There was a major outflow in wholesale/retail for China which ended in an excessive pullout of US$100 million to China.

For Oceania, there was a major investment by the investment company of New Zealand, Benesse Corporation in 2008, but in 2009 there were little transaction resulting in an 80.8% decrease to US$500 million.

Decrease in financial/insurance

By industries, the manufacturing industry had a growth of 54.3%, an increase to US$3.5 billion. On the other hand, non-manufacturing industries marked a 62.5% decrease at US$8.3 billion due to a small investment in the financial sector.

In the manufacturing industries, iron/non-iron/metal (US$300 million, 131.8% increase), electric machinery (US$1.7 billion, 165% increase) had growth. There was inflow from the UK and France, for iron/non-iron/metal. For electric machinery, the growth in public stock offerings contributed as explained above.

For the non-manufacturing industries, finance/insurance

(Note 14) In the face of statistics, It is reported at FDI, at the point that International brokerage house underwrite more than10% of publicly-offered company's stock.

Figure I – 72 Top M&A deals to Japan (2009 – June 2010)

Month Completed	Target company		Acquiring company			Value (US$ mil.)	% owned after transaction
		Industry		Country	Industry		
Jan 2010	Suzuki Motor Corp	Transportation Equipment	Volkswagen AG	Germany	Transportation Equipment	2,527	19.9
Sep 2009	Resona Holdings Inc	Commercial Banks, Bank Holding Companies	Merrill Lynch	U.S.	Investment & Commodity Firms,Dealers,Exchanges	1,095	6.5
Aug 2009	Olympus Corp-Diagnostic Bus	Health Services	Beckman Coulter Inc	U.S.	Precision machinery	785	100.0
Apr 2010	Nissan Motor Co Ltd	Transportation Equipment	Daimler AG	Germany	Transportation Equipment	778	3.2
Jun 2009	KDX Toyosu Grandsquare Bldg	Real Estate; Mortgage Bankers and Brokers	Carlyle Group	U.S.	Investor group	362	100.0
Apr 2010	SSP Co Ltd	Drugs	Boehringer Ingelheim GMBH	Germany	Drugs	302	93.8
Jun 2010	Hoya-Hard Disk Glass Media	Computer and Office Equipment	Western Digital Corp.	U.S.	Electronic and Electrical Equipment	234	100.0
May 2009	Crescendo Investment Corp	Investment & Commodity Firms,Dealers,Exchanges	investors group of MSREF VI	Cayman Islands (British)	Investor group	231	44.3
Nov 2009	Broadleaf Co Ltd	Prepackaged Software	Carlyle Group	U.S.	Investor group	212	100.0

(Note) (1) Classification of industries by Thomson Reuters. Nationality of the acquiror is that of its ultimate parent company.
(2) US company Bain Capital's acqusition of 99.29% interest in Bellsystem24 Inc a call center services provider and a majority owned unit of Citigroup Inc is excluded from the list because in reality it was a transaction between foreign companies.
(Source) Thomson Reuters.

had a 73.7% decrease to US$5.2 billion. The finance/insurance industry in 2008 ran up to 80.7% in composite ratio covering all industries in 2008, but it stayed at 44% in 2009. Among the non-manufacturing sector, in "other services," investment from the Netherlands contributed to a 184.1% increase to US$1.3 billion.

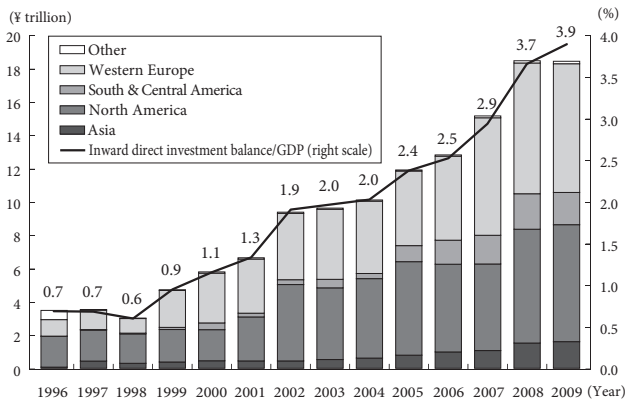
Large scale investments seen in the automobile industry in 2010

Viewing M&As in Japan by acquiring countries in 2009, the U.S. accounted for 75% of the total although with a 56.6% decrease to US$4.1 billion. There was a buyout of the analytic instrument division of Olympus (US$800 million) by Beckman Coulter, a U.S. medical instrument maker. In ranking by value, Cayman Islands (British) (US$400 million) and Singapore (US$200 million) followed. Since 1996, the U.S. covers 55.6% of the total M&As in Japan by acquiring countries, and Britain, France and Germany, together with the U.S. have been the top 4 countries, accounting for 85.6% (Figure I-70). However, total M&As to Japan by Britain, France and Germany in 2009 did not reach US$100 billion.

By target industries, business service (US$1.2 billion), banks/bank holding companies (US$1.1 billion), and health care services (US$800 million) were the top three in value.

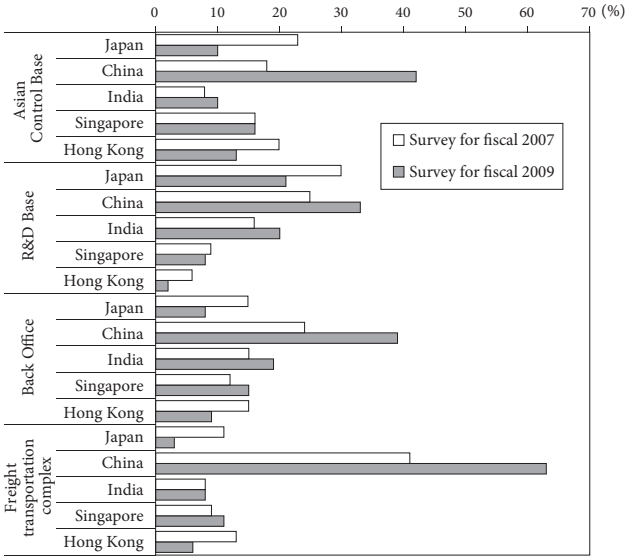
In 2010, due to continuing large investments in the automobile industry with the investment by Volkswagen in Suzuki (US$2.5 billion, investment ratio 19.9%) and the investment by German Daimler in Nissan Automobiles (US$800 million, investment ratio 3.2%), the M&A value to Japan for the first half of 2010 totaled US$5.3 billion, which

Figure I – 73 Japan's inward direct investment stock



(Sources) "Direct Investment Balance Statistics" (Ministry of Finance and Bank of Japan) and the Economic and Social Research Institute of the Cabinet Office.

Figure I – 74 Most appealing countries/areas in Asia (classified in order of function)



(Source) Survey of the Degree of Interest for Investment in Japan by Overseas Companies of Europe/U.S./Asia for 2009 (Ministry of Economics, Trade and Industry).

Characteristics of recent cases of inward FDI

According to the Bank of Japan, out of inward direct investments to Japan, around 40% to 60% of the actual amounts were investments under ¥10 billion. In other words, direct investments to Japan are supported by the piling up of small/medium investment cases which themselves individually do not necessarily reflect greatly on the statistics. Recent examples explore clues to attracting small/medium investments.

The functional material maker, Umicore of Belgium, in April 2010 announced they will establish their lithium ion battery material base factory in Kobe. The investment amount was US$4 billion and they are expecting to employ about 40 people. The execution of this investment have a large impact in the industry and the Ministry of Economics, Trade and Industry backed it up with approval of "Subsidy for Implementing Projects of Establishing Employment Creating Industry for Low Carbon." This subsidy aids in the domestic establishment of environmental/energy saving industries, such as lithium ion battery/LED lighting, and is aiming for the creation of employment in the environmental field. Umicore was the only foreign investment entity that was approved to receive approximately ¥600 million in aid. The reason for the approval could be said that as a supplier of lithium batteries to the automobile industry, the said company was in a complementary relationship with domestic industry. With the demand for lithium ion batteries rapidly growing together with the expansion of hybrid and electric automobiles, the company affirmed the necessity to establish a domestic base to supply the automobile industry and for customer support.

The cargo/passenger ship company DBS Cruise Ferry of South Korea established a Japanese registered company in April 2009, and in June started operations between Donghae City (South Korea), Vladivostok City (Russia) and Sakae Minato City, Gifu Prefecture. Not only did they contribute to attracting tourists from South Korea, and increase the export of greengroceries and manufactured food, but a propagation effect for investment to Japan was generated and a Russian tourist company was established a Japan-registered company in Tottori Prefecture in November 2009. In its future vision drawn by Tottori Prefecture in 2008, they have set up a scheme to be the gateway to Northeast Asia, and have promoted the "three county route" as the key activity. After the start of the actual service, they are backing them up with promotion and financial aids.

Umicore matched the government policies for market expansion in new fields such as environmental technology and for employment creation. The vision of the internationalization of prefectures with administrative public backup brought together a perfect condition in the case of DBS. These are just few of successes. Yet, M&As cover 90% of direct investment to Japan, and the new green-field type in whole is still extremely small. Nevertheless, green-field type investment can expect to create employment, and as with DBS, the "infrastructure development type" investment bears great propagation effects on the local economy. The role played by the administration and public organization is important in the support for the promotion project.

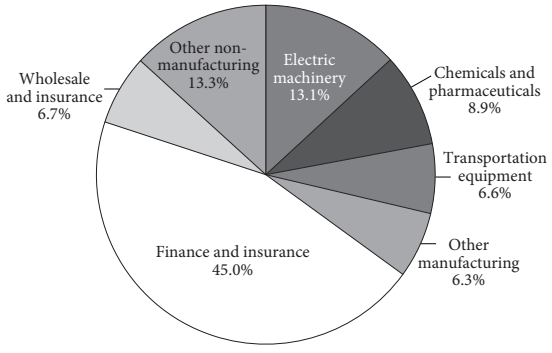
In terms of M&As, corporations of the U.S. and European countries have an overwhelming share but recently investment from developing countries has been increasing. In April 2008, Petrobras, the state owned company of Brazil, bought out Nansei Petroleum of Okinawa for ¥5.5 billion. Their aims were not only to distill Brazilian crude oil to gasoline to sell to the Japanese market but also to export oil from Japan. They evaluated the importance of Okinawa, having superior port infrastructure closer to the China than Honshu area, as a logistic base for the Asian market and decided on the buy-out.

In M&As of other industries, just as the Chinese solar battery company SunTech Power bought out MSK for US$300 million with one of its objective to obtain the know-how of integrating solar batteries into building material, acquisition of manufacturing techniques and product design have become important targets. In this respect, though not many in number, this tendency among the Asian companies such as those in China and Taiwan is coming to be highlighted.

There are various objectives for foreign companies establishing bases in Japan, but one of the recent trend is that they are outside the metropolis, or in the so-called rural areas. DBS has chosen the Japan Sea side, which is closer to Korea and Russia, and Petrobras chose Okinawa as geographically convenient to China and Mainland Asia. In these cases, the government or the administrative office was involved in the active promotion with public aids for their establishment in Japan. Access to subsidies and public aids and acknowledgement of the geographical convenience of the rural areas was due to the active promotional role by JETRO.

Viewing the balance of direct investment to Japan (2009) by classification of industries, the non-manufacturing industry covered 65%, and only with finance and insurance industry alone it covered 45% of the entire balance (Figure). In this sense, there are rooms yet to be explored in other industries. For instance, Umicore was a good example of the governmental promotion policy of low carbon technology matching the needs of both the overseas and customer companies. Umicore's green innovation, DBS' tourism, and Petrobras with its integration of the Asian market, all fit in with the "New Strategy for Growth" policy announced by the government in June 2010, and it should be especially noted that there would be a growth of investment to Japan by exploring the needs of the companies utilizing public aids in these important fields of the governmental policy.

Figure Japan's inward direct investment stock by industry (as of the end of 2009)



(Sources) "Direct Investment Balance Statistics" (Ministry of Finance and Bank of Japan)

is nearly the value of the full year of 2009 (Figure I-71, Figure I-72). The investment by Daimler being less than 10% is posted as portfolio investment in the balance of payment statistics.

M&As by Chinese companies drew attention such as the investment to the mass electronic retail outlet, LaOx, by Suning Electronics (US$15.6 million). Though in M&A data, it may not be counted as a Chinese M&A when the parent company is not a registered Chinese Mainland company, such as those in Hong Kong, M&As by Chinese companies to Japan in 2009 amounted to US$23 million with a composition ratio of 0.4%, which in contrast to U.S./Europe is quite small.

Balance of investment to Japan remain stagnant

The balance of inward direct investment of Japan increased steadily in the 2000's and in the year end of 2009 remained at the same level as the previous year with a slight 0.2% decrease to ¥18.4252 trillion. According to the flow statistics basis, there was an inflow of over ¥1,000 billion in 2009. The difference between the balance and flow statistics can be mainly explained, as previously noted, by the fact that the balance of fund procurement through public stock offerings by the Japanese major finance organizations are not reflected in the balance. By countries/industries, in the manufacturing industries, investment from Taiwan and Malaysia showed some increase, and in the non-manufacturing industries the U.S. and Singapore marked a slight increase. The GDP ratio (nominal) of inward FDI balance, being influenced by the decline in GDP, marked a slight growth to 3.9% (Figure I-73).

The U.S. and major European countries have long been the major supply source of FDI in Japan. As the balance shows, this trend has not changed much, but in direct investments from Asia, although its composition is still small at 8.7%, is on an upward trend. In Asia, investment from Singapore was the largest with 5.3% of the total. Besides the governmental funds in Singapore, private service businesses, and holding companies of multinational corporations are also a large source of investment from Singapore. On the other hand, the balance of domestic investment from China at the end of 2009 was ¥18.1 billion, covering only 0.1% of the total FDI stock. Looking at the single year of 2009, China and Taiwan posted an excess of outflows. However, looking at the fairly large numbers of buyout cases by Chinese corporations over the recent years, cases are not few in which M&A funds were routed through tax havens such as Cayman Islands (British) or the Virgin Islands. For example, in the case of the investment in the mass retail outlet Laox by Suning Electronics, because the investment was made via a special-purpose entity established by Suning Electronics in the Cayman Islands (British), there is a high possibility that this investment was not included in the direct investment from China. It is thought that the Chinese investment in Japan in actuality is larger than what the statistics show. Even coming into 2010, buyouts and investments by the Chinese companies such as BYD's buy out of the molding factory of Ogihara, an automotive parts manufacturer (M&A value not disclosed), and the acceptance of third party allotment of Renown Co. by Shandong Ruyi Group (¥4 billion), are noticeably outstanding.

Japan seeking status as hub of asia

There may be aspects in which Japan has lost its competitive power as the central base of Asia and has lost its attractiveness as a location for corporations in Asia. The Report on Survey of the Degree of Interest for Investment in Japan by Overseas Companies of Europe/U.S./Asia for 2009 by the Ministry of Trade and Industry showed Japan ranking 1st in 2007 with 23% as to how appealing it was as a Control Base for Asia but this time, in 2009, Japan fell behind China, Singapore and Hong Kong to end 4th in this survey. Japan gave way to China for 1st place as "R&D base" (research and development functions) also with a decrease in response in most items from companies in the last survey (Figure I-74).

In the Report of Consciousness Research on Overseas Corporations Regarding Investments to Japan for 2009 by the Ministry of Economy, Trade and Industry, 71.2% of respondents answered "high business costs" as and obstruction factor for overseas corporations to operate in Japan, which continuingly ranked top from the previous year in this survey. 81.9% of the companies that responded have noted personnel costs to be high, and 63.9% listed the tax burden to be heavy as compared to Asia and other countries.

Regarding such decline for Japan in its attractiveness as an investment destination, there is a sense of consciousness in the government that "Japan is fading out of the world map as an investment destination in the minds of investors of the world" (Vision of Industry Structure 2010). In the cabinet decision of June 18, 2010, for "New Strategy for Growth," "the objective is to double the flow to Japan of people/product/money" and in order to accomplish such objective, "lowering of corporate effective tax rates and progress to become the central base for Asia" were included among the national projects. Regarding corporate effective taxes it was "to gradually lower the level to that of major countries." As regards the progress to become the central base for Asia, "consideration will be given targeting to effect from 2011; an incentive system including taxation reforms."

II Recent Global Trade Issues Pose a Change in Priorities

1. Fewer New Trade-Restricting Measures, Time to Exit

(1) WTO Doha Round still cannot find a way to reach an agreement

Bilateral and plurilateral level trade negotiations are emerging

WTO Doha Round negotiation has not seen significant progress since July 2008 when the unofficial ministerial meeting was held in Geneva. In the meeting, member countries, in the area of agriculture and non-agricultural market access (NAMA), almost agreed on the modality, which is the overall formula on lowering the tariff and the reduction rate of subsidies. However, conflicts between the U.S., India, and China led to the collapse of the agreement because they could not compromise on the terms and conditions of Agriculture Special Safeguard Mechanism (emergency import restrictions) and sectoral tariff elimination of NAMA.

To update the progress since mid 2009, WTO Informal Ministerial Meeting was held in June 2009 at the occasion of OECD council meeting. In the meeting, the U.S. Trade Representative Kirk made a noteworthy proposal. Instead of the conventional negotiation style that all member countries aim for the agreement on a modality, he brought the idea of first negotiating market access bilaterally, thereafter share the result among all member countries under the most-favored nation principle .

In September 2009, Informal Ministerial Meeting was held in New Delhi under the initiative of India. The initiative may reflect the India's will to recover the leadership in the negotiation because the country was under severe criticism by the U.S. and other countries for the collapse of the negotiation in July 2008. After the meeting, as a chairperson's summary statement, Minister of Commerce and Industry Sharma stated that "while maintaining the transparency of the meeting with the multilateral negotiation as a primary process, enhancing the members recognition by other methods, through bilateral or plurilateral, is important." The statement implied that there may be a shift in the conventional negotiation method.

The 7th ministerial meeting, held in Geneva in November 2009, was the first official ministerial meeting held in the four years since the Hong Kong ministerial meeting in 2005. The meeting did not have a negotiation session, nor was a Ministerial Declaration adopted, unlike the previous meetings. The meeting discussed issues toward the recovery of the world economy, strengthening the monitoring by WTO, and the possible contribution of WTO towards climate change issues. Ministerial level negotiations, when successful, can be a breakthrough. However, when unsuccessful, as the 5th ministerial meeting in Cancun shows, it would be a loss by undermining the WTO credibility and causing uncertainty in multilateral trade. The meeting fortunately avoided those risks, but showed the stuck situation in the current WTO negotiations.

The informal ministerial meeting in Davos in January 2010 focused on trade and environmental issues, following the Conference of Parties of United Nations Framework Convention on Climate Change (COP15) in December 2009. In the meeting WTO confirmed the importance of continuing to implement the liberalization talks in areas such as trade and environment.

In the scheduled General Council meeting in February 2010, many member countries referred to the possibility of the Early Harvest, a preceding agreement of some parts of the Round, in issues related to least developed countries. So far, in the Doha Round Negotiations, as discussions have been made based on the "Single Undertaking," the possibility of Early Harvest is drawing attention as a way to break the deadlock.

In March 2010, WTO secretariat evaluated the progress on the overall Round talks in a so-called "stock-taking" process. At the meeting, Director General Lamy referred to the possible "Give and take" negotiations at a bilateral or plurilateral level across the trade issues and the importance of Director General himself attending each negotiation meeting. In a Trade Negotiations Committee in June, an upper-level committee that oversees various negotiation in each field, Director General Lamy indicated that it was not yet the timing to work on the deal. However, it is also true that there is a limit in the conventional method that aims for "Single Undertaking" in which all individual areas of negotiation reach an agreement. Some experts say the Round talks may need to change to include bilateral or plurilateral negotiations.

In April 2010, high-level officials in the main five countries (comprising the U.S., EU, China, India, and Brazil) discussed the measures toward reaching an agreement in the Round, and confirmed the necessity to converge the opinions within a framework of roughly 20 countries and regions.

Progress seen in "Trade and environment" and "Trade facilitation"

Amid circumstances where there is no political breakthrough in Agriculture and NAMA, procedural meetings are being held at working level in other areas. Particular attention has been paid to "Trade and Environment," as was focused on in the Davos Forum in January 2010 (Refer to 4. (2)).

Trade facilitation is an area which has probably advanced most in the past year because there are not many opinion conflicts. Trade facilitation, along with trade and investment, trade and competition policy, and the transparency of government procurement, its negotiation was behind the track. This is because developing countries got new obliga-

tions under the Uruguay Round in areas such as service and intellectual property, and were not inclined to discuss further obligations. As a result, though the negotiations on other three areas were postponed, trade facilitation was agreed on and negotiations begun in August 2004 under the condition that special attention is paid to developing countries, in areas such as aid on capacity-building and customs processing infrastructure were included in the negotiation modality. The aim of the negotiation was to clarify and develop three Articles of the GATT, the Article 5 "Freedom of Transit," Article 8 "Fees and Formalities connected with Importation and Exportation," and Article 10 "Publication and Administration of Trade Regulations." In December 2009, a draft of compiled text comprising 16 articles was announced under the consent of member countries (Figure II-1). Though many articles still had some remarks bracketed off, the work continued in 2010 and the second revised version was drafted in May 2010. Especially, the negotiation saw a convergence on the clarification work of Article 10, such as announcement on the Internet and introducing advance rulings procedure when implementing new regulations. These are few areas that have a possibility of reaching agreement.

To look back the Uruguay Round, in November 1992, seven years after negotiations started, countries reached an agreement by the political settlement between the U.S. and EU, so-called Blair House agreement. The Doha Round has been negotiated for nearly ten years, with the different stance between the U.S., which requests a high level liberalization of the developing countries in the areas such as NAMA and services, and emerging developing countries such as India and Brazil which are against such the U.S. proposals.

(2) Trade restrictive measures after the financial crisis

Fewer new trade restrictive measures, continuous surveillances needed though

With the financial crisis and recession thereafter, corporate sentiment for business worsened. As a result, some countries introduced trade restrictive measures, such as tariff increases, compulsory standards, and domestic products preference in the government procurement, in order to protect domestic industries and employment.

Even recently, some measures were newly introduced in addition to the extension of the existing ones and the expansion of targeted products. For example, Russia extended

Figure II-1 Main issues of the Doha Round

Sector	Points of contention
General trend	On agriculture and Non-Agricultural Market Access (NAMA), the two main areas of the negotiations, agreement on sectoral modalities is proving difficult to achieve, leading to a recognition of the need to undertake cross-sectoral negotiations on a bilateral and multilateral basis. Some member states are seeking for the possibility of achieving early harvest agreements in specific sectors regardless of the Doha Round's principle of a "single undertaking" on the results of all areas negotiated.
Agriculture	On the reduction of domestic supports (subsidies), there has been sufficient convergence on the establishment of a product-by-product ceiling on direct payments not directly premised on production limits, which is expected to be included in the scope of "blue box" payments. Currently, "blue box" payments are defined as direct payments remised on production limits. On market access (tariff reductions), the agreement has not been reached on the number of sensitive products to which the normal tariff-reduction formula would not be applied, rules on the establishment of new tariff quotas, and the applicable trigger for invoking the special safeguard mechanism (SSM), which is a newly introduced mechanism allowed only for developing countries. On export subsidies, there is general agreement that developed countries will eliminate all elements of export-subsidy by 2013 and that the developing countries will follow in 2016 (except for certain costs of international transport and freight in developing countries, based on agricultural agreements, which is exempt from elimination until 2021).
NAMA	There have been requirements from some developing countries for additional flexibilities on the tariff-reduction formula. Regarding sectoral tariff eliminations (with the exception of environmental goods, which are being handled as part of negotiations on trade and the environment), some member states have taken the lead in advancing bilateral and plurilateral sector-specific negotiations on a voluntary basis, though participation is not mandatory.
Services	Bilateral market-access negotiations on a request-and-offer basis have shown little progress since July 2008. Many serious differences of opinion remain under the GATS rules, including the introduction of service safeguards, and the rules of government procurement within the service sector.
Rules	The four areas under negotiation are: anti-dumping; subsidies and countervailing measures; fisheries subsidies; and regional trade agreements. On anti-dumping, issues such as zeroing (dumping margin calculation method), the causal link between the act of dumping and injury, and the sunset review (review of anti-dumping taxes levied) have made little progress toward confluence of opinions. On subsidies, there has been little progress on issues such as clarification of criteria for export subsidies and below-cost financing. On fisheries subsidies there has been conflicts on the scope of banned subsidies. On regional trade agreements, review mechanism of FTAs by the WTO and work on the clarification of GATT Article 24 are the major issues.
Environment	Proposals are being collected from nations regarding the specification of environmental goods. Discussions are still open, focusing on the list proposals and the method on a request-offer process, for the approach to tariff reductions and eliminations.
Trade-Related Aspects of Intellectual Property Rights (TRIPS)	Discussions continue on the contents of the system of notification and registration of geographical indications for wine and spirits, especially regarding the legal effect of registration and the balance of rights and responsibilities among member states.
Trade Facilitation	In December 2009, the consolidated text to form the basis of negotiations was published. There are 16 main items, including those related to GATT Article X ("Publication and Administration of Trade Regulations") such as publication and availability of information, prior publication and consultation, advance rulings and appeal procedures); those related to GATT Article VIII ("Fees and Formalities connected with Importation and Exportation") such as fees and charges connected with imports and exports, release and clearance of goods and formalities connected with importation and exportation; the scope of GATT Article V ("Freedom of Transit"); transitional provisions for developing countries, etc.

(Sources) WTO and "WTO Reporter"(BNA).

the tariff increase on automobiles for further nine months in October 2009, which had been a temporary measure for nine months from January 2009 to expire in July 2010. Russia also increased the tariff on iron rolled products in November 2009 and on polycarbonate in February 2010. MERCOSUR raised the common external tariffs on a number of products including textiles and bags. In terms of import license, Indonesia took a measure in April 2010, in its importer registration scheme introduced in December 2008, to add 41 items such as cosmetic products and traditional medicines. Since September 2009, the country introduces a pre shipping inspection when importing a specific glass sheet. In addition to the rule, since June 2010, the country mandated that the product complies with the national standard.

The WTO set up a task force in October 2008, and started the surveillance of the trade restriction by each country. In April 2009, a meeting of Trade Policy Review Body (TPRB) announced that the WTO would summarize the status of trade measure. Since then the report has been published periodically.

A joint report by three organizations (WTO, OECD, and UNTAD), announced in March 2010, pointed out that the number of trade restrictive measures introduced by G20 from September 2009 to February 2010 decreased. The report also estimated that such measures affected the G20 exports by only 0.7 percent at most, and the world trade by 0.4 percent. These figures dramatically decreased from the last survey between October 2008 and October 2009, with the number 1.3 percent of G20 exports and 0.8 percent of world trade. The report concluded that there was no serious protectionism trend that could pose a huge impact on trade.

Furthermore, the latest report released in June 2010 compiles trade restrictive measures newly introduced by member countries from November 2009 to May 2010. The WTO pointed out that, although there were some export restrictions on foods and raw materials, the number of the measures as a whole is on the decline.

As mentioned earlier, while some countries are placing higher tariffs, other countries took pro-trade measures. For instance, Canada eliminated tariffs on 1500 items including machinery in April 2010. Some trade restrictive measures introduced earlier were abolished or no more renewed. For instance, India in January 2010 decided to treat the heat coil as free-import items, which had been obliged to conform to the industry standard (BIS) since November 2009. China postponed for one year the implementation of the China Compulsory Certification (CCC) on some IT security products originally planned from May 2009, and narrowed the scope of items to be limited to government procurement items. Further, in March 2010, China announced that this measure does not apply to procurement by the Chinese government-owned companies. In May 2009, China also announced that the mandatory installation of censor-software to domestically produced and imported computers. However, the government announced the indefinite postponement of the measure in the next month. In November 2009, China also announced that they will put domestically developed technical products into a list and those products will be treated preferentially in government procurement, namely indigenous innovation. This announcement caused severe criticism from developed countries. As a result, in the revised plan in April 2010, China deleted the condition "the technology originated in China" and decided to permit if the technology has the intellectual property right in China, whether developed domestically or by technological transfer. Although the complaints of developed countries were partially relieved, there still remains the concern that it is unclear which technology applies and preferential procurement based on the list would be difficult to be administered. As a whole, there is a fundamental value to follow the WTO rule, such as the government repealing measures that were opposed by trading partners or giving consideration to WTO consistency.

Paying attention to WTO consistency and restraining trade restrictive measures were repeatedly emphasized at a various international meetings. APEC Trade Ministers Meeting, held at the beginning of June 2010, issued a statement to avoid protectionism. Also at the G20 summit, held in Toronto at the end of June 2010, member countries reached to a consensus to keep up to the pledge at the London Summit in 2008, that they will refrain from new trade and investment barrier for 3 years until the end of 2013.

As a whole, recent trade restrictive measures fall within WTO rules. In addition to the presence of the WTO, which has effective judicial functions as a dispute settlement, as each countries perceived to avoid the protectionism and took prompt reconciling measures, the emergence of the protectionism seen in 1930 has been avoided at the moment.

Trade remedy measures are also declining

Although trade remedy measures are considered to be put in place in times of economic downturn, the number of investigation recently is in a declining trend.

Trade remedy measures, such as antidumping (AD), countervailing duty (CVD), and safeguard (SG), are legitimate measures permitted under the WTO agreement. However, even if those measures are in accordance with the rules, the abuse of measure aiming at protecting the domestic industries can be deemed a hidden protectionism. This is because trade remedy measures hamper appetite of importing companies, and once implemented, the measures could seriously affect the trade of the targeted products. The number of investigations for trade remedy measures increased rapidly in the fourth quarter of 2008, and also in 2009, there was an increasing trend till the third quarter of the year (Figure II-2).

For AD, which is the most frequently used trade remedy measure, 195 investigations were conducted during 2009 according to the World Bank (219 conducted in 2008). With the recession becoming visible in many countries, developing countries such as India and Argentina aggressively used AD. The main target was China, which accounted for approximately 40 percent of the total investigations. This would probably be because many countries became sensi-

tive to the inexpensive Chinese products, due to decline in consumption. However, it is also pointed out that the number of investigation in 2008-2009 were not so exceptionally high, compared with the past case in which many ADs were imposed in economic downturn. According to the WTO, the number of AD investigations reached the record high of 366 in 2001, when the annual world trade decreased per previous year. However, as the number of AD investigation in 2007 was especially low compared with the past, it is difficult to say that the number was high in 2008-2009.

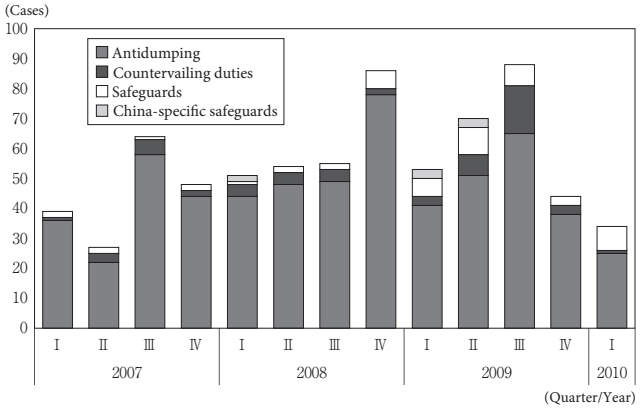
In 2009, it was distinctive that the CVD and SG investigations increased. The number of CVD investigations, which was only 14 in 2008, increased to 29 in 2009. SG investigations also began to increase in the fourth quarter of 2008, with the number jumping to 25 in 2009, though the average number since 1995 was 13. Moreover, six China-specific safeguards were conducted in 2009. Although general safeguard measures cannot be targeted at imports from a particular country, China-specific safeguards can target only Chinese products. This SG can be imposed by the end of 2013, and in 2009, the U.S. announced to invoke such investigations on tires, India on aluminum ware and soda ash.

There were many investigations on trade remedy measures since 2008; however, the number declined for the first time since the financial crisis in the fourth quarter of 2009 and the trend is the same in 2010. The average number of imposition in each quarter was 40 since the latter-half of 2008; this number declined to 15 in the first quarter of 2010. The WTO points out that a kind of pressure exists between the time when the investigation was initiated and the time when it is imposed. The number of case under investigation is decreasing, and it is unlikely that the number of invocation is rapidly going to grow.

As the declining of trade remedy investigations shows, it is estimated that the trade restrictive measures are in the processes of convergence. The world trade had a dip in 2009, but bottomed out in the first quarter of the year and has been recovering steadily since then. On the other hand, the employment data is stagnant for a while, and it is unlikely that the job situation improves dramatically. The job situation is a risk which could be lead to domestic pressure seeking trade restrictive measures. Some measures introduced in the past are still in place without a specific termination date. According to a report by the European Commission, among the 278 measures introduced after the financial crisis, only 18 were clearly repealed through November 2009 to April 2010. The WTO also says that, between November 2009 and May 2010, on average 3 trade restrictive measures were newly introduced while 2 existing ones were repealed, which means these measures are still in place. There is also a concern about the side effects of emergency economic package. If these assistance helped a company retain competitiveness, its trading partner could be motivated to impose trade restrictive measures.

In order to further weaken the trade restrictive measures and repeal the existing ones, countries are further committed to follow WTO rules in a stricter manner than before. Also, the successful conclusion of Doha Round negotiation is greatly expected in order to expand future trade without impeding the recovery trend.

Figure II – 2 Newly initiated trade remedy investigations



(Note) Where the same product is the target for multiple economies, they are counted separately.
(Source) World Bank.

2. FTA Trends in Japan and Asia Pacific

(1) Expanding FTA network around the world

The number of FTAs in the world is 187

As of June 1, 2010, there are 187 Free Trade Agreements (FTAs) in effect around the world (Note 1). This figure, based on WTO reports, includes custom unions. For a list of global FTAs, see the tables at the end of this report. Since the year 2000, the number of FTAs come into effect has been increasing and the 121 FTAs come into effect since 2000, accounting for 64.7 percent of the total FTAs in force (Figure II-3, II-4).

Even in the midst of worldwide economic recession since the second half of 2008, the number of FTAs increased, with 9 FTAs coming into effect in 2007, 15 in 2008, and 14 in 2009.

More FTAs are expected to go into effect in the future. FTAs between Hong Kong and New Zealand were signed in March 2009, and FTAs between China and Costa Rica were signed in April 2009. In recent years, Colombia is aggressively negotiating with other countries, and the country started negotiations with South Korea in December 2009 and with Panama in March 2010, also reaching a provisional signing with EU and Peru in May 2010. FTAs between Gulf Cooperation Council (GCC: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates) and Singapore were signed in December 2008, with some countries proceeding the ratification procedures. The FTA will come into effect when all countries complete the ratification. This will be the first FTA that the GCC will enter into with counties outside the region.

South Korean FTAs that affect the business of Japanese companies

The number of FTAs around the world is increasing. Figure II-5 shows the FTA coverage ratio in the major countries and regions. A country's FTA coverage ratio is the ratio of trade with countries and regions with which FTAs are in effect among the country's whole trade.

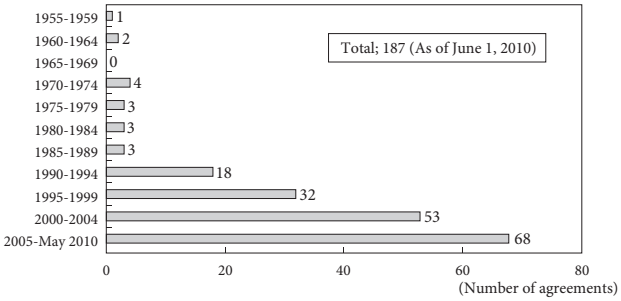
FTA coverage ratio of Japan is 16.5%, while, in the major advanced countries, the U.S. is 34.4%, Canada is 68.4%, EU is 25.0%, (extra-regional trade basis, which does not include intra-regional trade), Australia is 28.0%, and New Zealand is 45.0%. NAFTA contributes a lot to the trade in the U.S. and Canada, as those countries depend largely on the trade in the North America region. In terms of the FTA coverage ratio in developing countries, although China stands at 11.2%, the ratio is higher in Thailand (55.8%) and Peru (57.6%), countries which were aggressive on concluding FTAs. As of July 2010, Japan has FTAs in effect with 10 countries and a region; total 11 (Figure II-6).

(Note 1) In Japan, the term FTA generally refers to an agreement covering goods and services, while an agreement encompassing a broader range of topics including investment and government procurement is termed an Economic Partnership Agreement, or EPA. In this paper, the term FTA will be employed for both forms of agreement.

In 2009, Japan-Vietnam FTA and Japan-Switzerland FTA newly went into effect. Japan is negotiating 5 FTAs, including South Korea, the negotiations with which are being suspended, and if these go into effect, Japan's FTA coverage ratio becomes 36.5% (30.8% in terms of export, 42.5% in terms of import).

In recent years, South Korea has been active in signing FTAs with other countries. As Japan and South Korea are similar in the industry structure and their automobile and electrical equipment are in a competitive relationship, South Korea's FTA should affect the business of Japanese companies. When comparing FTAs in the case of Japan and South Korea, the countries with which they have FTAs in effect are almost the same. Although South Korea-India FTA came into effect in January 2010, Japan-India FTA is under negotiation. While both Japan and South Korea are negotiating with Australia, the South Korea-Australia FTA negotiation is developing rapidly. As for FTAs with the Americas, Japan has FTA in effect with Mexico, but South Korea is still negotiating. However, for the U.S., South Korea is already signed. Although the time when the U.S.-South Korea FTA will go into effect is unsure because the ratification by the U.S. congress is stalled, South Korea is a step ahead. With regard to the European region, although South Korea has already made a temporary signing with the EU, Japan is in the phase of consideration, with South Korea being step ahead. The

Figure II – 3 Number of FTAs Worldwide by Year



(Source) WTO list from website (http://www.wto.org/english/tratop_e/region_e/region_e.htm)(As of June 1, 2010).

Figure II-4 World FTAs by effective date and regions

(Number of agreements)

	Europe/Russia/ NIS/Middle East/ Africa	Americas	Asia Pacific	Inter-regional	Total
1955-59	1				1
1960-64	1	1			2
1965-69					0
1970-74	1	1		2	4
1975-79	1		2		3
1980-84		1	2		3
1985-89		1		2	3
1990-94	13	2	3		18
1995-99	27	4		1	32
2000-04	25	9	9	10	53
2005-May 2010	22	6	19	21	68
Total	91	25	35	36	187

(Source) WTO list from website (http://www.wto.org/english/tratop_e/region_e/region_e.htm)(as of June 1, 2010)

EU-South Korea FTA was provisionally signed in 2009, and expected to officially be signed during 2010. There is a possibility that the FTA could come into effect. Although FTA coverage ratio of South Korea is currently 14.4%, lower than Japan, in the case where the FTA with the U.S. (9.7%), which has already been signed, and the FTA with the EU (11.5%), which has already made a provisional signing, come into effect, South Korea's FTA coverage ratio will jump to 35.6%, making a great difference to Japan.

In particular, the EU-South Korea FTA may severely affect business activities of Japanese companies. As the EU imposes a high tariff on automobiles and some electric products, if the tariff is eliminated only to South Korea, that would cast an adverse effect to the Japan's export to the EU. In particular, a huge impact on the automobile industry is expected. The EU's total value of imports of automobiles from all over the world (2009) is US$ 30.7 billion, and Japan accounts for 37.0% and South Korea for 11.8%. As Japan's import volume accounts for a large portion, if the EU-South Korea FTA comes into effect, there is concern that South Korea could pick up a percentage of the market from Japanese automobiles.

Figure II-5 FTA coverage rate in major countries/regions

(%)

		FTA coverage rate			Top countries/regions for trade value(Exports + Imports)			
		Exports +Imports	Exports	Imports	First		Second	
Japan		16.5	16.3	16.6	ASEAN	(14.0)	Switzerland	(1.1)
U.S.		34.4	40.1	30.5	NAFTA	(28.1)	Singapore	(1.5)
Canada		68.4	77.7	59.2	NAFTA	(66.4)	EFTA	(1.4)
Mexico		81.5	93.0	70.2	NAFTA	(67.6)	EU	(8.4)
Chile		90.0	88.6	91.9	China	(18.8)	EU	(17.8)
Peru		57.6	51.8	64.6	U.S.	(18.3)	China	(15.1)
EU	Total	73.8	75.6	72.0	EU	(65.1)	EFTA	(4.1)
	Extra-regional trade	25.0	27.3	22.9	EFTA	(11.9)	Turkey	(3.5)
South Korea		14.4	14.6	14.2	ASEAN	(10.9)	India	(1.8)
China		11.2	10.1	12.6	ASEAN	(9.6)	Chile	(0.8)
Singapore		65.9	66.3	65.4	ASEAN	(27.3)	China	(10.1)
Thailand		55.8	52.2	59.8	ASEAN	(20.7)	Japan	(14.3)
Indonesia		63.9	63.4	64.6	ASEAN	(24.5)	Japan	(13.3)
Malaysia		60.2	59.5	61.1	ASEAN	(25.6)	China	(13.0)
The Philippines		51.5	45.2	57.2	ASEAN	(20.6)	Japan	(14.2)
Australia		28.0	20.1	35.7	ASEAN	(14.9)	Japan	(8.0)
NZ		45.0	43.2	46.8	Australia	(20.9)	China	(12.2)

(Notes) (1) "FTA coverage rate" shows how much a country's trade is done with trading partners with which the country has FTA.
(2) The figure for China excludes Hong Kong (7.9%) and Macau (0.1%). By including both, the figure is 19.2%
(3) The ASEAN-India FTA, ASEAN-Australia-New Zealand FTA include countries in which the FTA has not yet gone into effect, but all involving states' trade amounts have been added.
(4) The EFTA-EU coverage of 11.9% includes Switzerland: the sum total of EU-EFTA FTA (exclude Switzerland) and EU-Switzerland FTA.
(5) The EU total value includes the value of intra-regional trade.
(Sources) Documents from each government and international trade statistics.

Figure II-6 FTA coverage percentage of Japan and South Korea

(%)

		Japan	Coverage rate of Export+Import	South Korea	Coverage rate of Export+Import
Asia/Oceania	ASEAN	In effect	14.0	In effect	10.9
	Singapore	In effect	2.4	In effect	3.1
	Malaysia	In effect	2.6	In effect (ASEAN)	1.7
	Thailand	In effect	3.4	In effect (ASEAN)	1.1
	Indonesia	In effect	2.8	In effect (ASEAN)	2.2
	Brunei	In effect	0.3	In effect (ASEAN)	0.1
	The Philippines	In effect	1.3	In effect (ASEAN)	1.1
	Vietnam	In effect	1.2	In effect (ASEAN)	1.4
	India	Agreement in principle	0.9	In effect	1.8
	Australia	Under negotiation	4.1	Under negotiation	2.9
	New Zealand	–	0.3	Under negotiation	0.3
	Japan-South Korea	Negotiations suspended	6.1	Negotiations suspended	10.4
North America and Central and South America	U.S.	–	13.5	Signed	9.7
	Canada	–	1.5	Under negotiation	1.0
	Mexico	In effect	0.9	Under negotiation	1.2
	Chile	In effect	0.6	In effect	0.8
	Peru	Under negotiation	0.2	Agreement in principle	0.2
	Colombia	–	0.1	Under negotiation	0.1
Europe	EU	Joint study completed	11.6	Agreement signed	11.5
	EFTA	–	1.4	In effect	0.9
	Switzerland	In effect	1.1	In effect (EFTA)	0.3
Other	Turkey	–	0.2	Under negotiation	0.5
	Gulf Cooperation Council (GCC)	Under negotiation	8.7	Under negotiation	9.0
FTA cover percentage		Total in effect	16.5	Total in effect	14.4

(Note) Calculated from trade statistics of 2009.
(Sources) Japan's Ministry of Foreign Affairs, Japan's Ministry of Economics, Trade and Industry, South Korea's Ministry of Foreign Affairs and Trade and the Asian Development Bank.

(2) Asia Pacific puts FTAs into full effect

AFTA virtually becomes tariff-free, FTAs among the ASEAN+1 are all in effect

Asia Pacific FTA has entered the age of full utilization. The reasons are that 1) since January 2010, tariff-free trade has progressed in major FTAs, and 2) FTAs in ASEAN+1 (FTAs between Japan, China, South Korea, Australia, New Zealand, and India) have all come into effect.

Regarding tariff-free trade, in the ASEAN free trade area, original ASEAN member countries (Thailand, Indonesia, Malaysia, The Philippines, Singapore, and Brunei) made almost all the items (99% of the total number of items) tariff-free since January 2010. In 2009, the ratio of tariff-free items was up to 80%. Since 2010, Vietnam also has increased the ratio to 80% from 60%. It can be concluded that the year 2010 is the year when trade on items has become virtually tariff-free. According to the ASEAN secretariat, the average tariff rate in original ASEAN member countries has dropped to 0.9% in 2009; down from 12.8% in 1993 when AFTA came into effect,

and in 2010, most of the trade items have become tariff-free. Regarding ASEAN-China FTA, ASEAN-South Korea FTA, since January 2010, original ASEAN member countries made 90% of items tariff-free, which advanced tariff-free trade as well as AFTA.

Regarding ASEAN+1, in addition to ASEAN-China FTA (went into effect in 2004), ASEAN-South Korea FTA (went into effect in 2007), and ASEAN-Japan FTA (went into effect in 2008), ASEAN-Australia and New Zealand FTAs and ASEAN-India FTA newly came into effect in January 2010.

Since FTA comes into effect country-by-country when each country completes the ratification procedure within the country, it is noteworthy that the FTAs are not taken into effect in all the signatory countries simultaneously. However, it can be concluded that the year 2010 is the year when all the ASEAN+1 FTAs came into effect.

In the future, regarding the major FTAs, CLMV (Cambodia, Laos, Myanmar, and Vietnam) will eliminate tariffs on almost all of the itemsunder AFTA and ASEAN-China FTA in 2015. In ASEAN-Australia and New Zealand FTA (AANZFTA), Australia and New Zealand made about 90% of trade items tariff-free when in effect. In 2013, original ASEAN member countries will make about 90% of trade items tariff-free under AANZFTA, and in ASEAN-India FTA, India and original ASEAN member countries (excluding the Philippines) will make trade items categorized into normal truck trade-free in two stages, one at the end of 2013 and the second at the end of 2016. tariff-free trade will be enhanced among countries in Asia Pacific region by around 2015.

In addition, in the Asia Pacific region, wide-area FTA is also advancing gradually. Wide-area FTA concept in the Asia Pacific region consists of four: ASEAN+3, ASEAN+6, APEC and Trans-Pacific Strategic Economic Partnership Agreement (TPP). These FTAs were under consideration by the related countries and regions, government-to-government talks have also started in some countries.

Regarding ASEAN+3 and ASEAN+6, government-to-government talks started in 2009 on the rule of origin, tariff classification, customs procedure, and economic cooperation. In the Asia Pacific region, a different rule of origin is applied depending on the FTA. Therefore, participating countries of wide-area FTA concept are seeking to harmonize the rule of origin. In standards for certifying the origin, different standards are applied in the Asia Pacific region, depending on the FTA. These standards include 1) value-added content criterion, 2) change in tariff classification criterion, 3) co-equal type, which is chosen from value-added content criterion, or change in tariff classification criterion, or 4) dual-type, which satisfies both criteria. How much the co-equal type, which companies consider the most useful, will be adopted has attracted attention. While, the third party certificate system for certification of origin has been adopted for many FTAs, it has also brought to attention the introduction of the approved exporter system and self-certificate system.

APEC, which comprises 21 countries, has been studying the conception of the APEC FTA since 2006. Eight countries, the U.S., Australia, New Zealand, Singapore, Vietnam, Brunei, Chile, Peru which are all APEC member countries, are involved in the TPP, and the government-to-government negotiations have started since March 2010. TPP could lead to the whole APEC FTA, and therefore has a very close relationship.

Within the Asia Pacific region, there is also a concept of a Japan-China-South Korea FTA. The Japan, China, and

Figure II-7 Updates of AFTA and ASEAN+1 FTAs

FTA		Effective Date	FTA Status and Tariff Reductions Schedule
ASEAN(AFTA)		1993	○ Average tariff rates among original ASEAN members (Thailand, Malaysia, Indonesia, The Philippines, Brunei and Singapore) have dropped from 12.8% in 1993, when the FTA came into effect, to 0.9% in 2009. ○ Starting January 2010, Original ASEAN member eliminated tariffs on 99% of items. ○ CLMV (Cambodia, Laos, Myanmar, Vietnam) are scheduled to eliminate tariffs on almost all items in 2015.
ASEAN	China	2004	○ January 2004: Early Harvest (EH) began on agricultural and fisheries products (HS01-08). ○ July 2005: Tariff reduction began on non-agricultural/fisheries and other agricultural/fisheries products. ○ From 2010, China and the original ASEAN members eliminate tariffs on 90% of items. ○ From 2015, CLMV will eliminate tariffs on most items.
	South Korea	2007	○ From 2010, South Korea and the original ASEAN member states eliminate tariffs on 90% of items. ○ From 2016, Vietnam is to eliminate tariffs on nearly all items. ○ From 2018, CLMV is slated to eliminate tariffs on nearly all items.
	Japan	2008	○ ASEAN-Japan FTA already in force for Japan, Singapore, Laos, Vietnam, Myanmar, Brunei, Malaysia, Thailand, Cambodia and the Philippines. Scheduled to come into effect in other countries. ○ Japan has separate bilateral FTAs in place with Singapore, Malaysia, Thailand, Indonesia, Brunei, the Philippines and Vietnam.
	Australia, NZ	2010	○ AANZFTA Comes into force in January 2010(in force for Australia, New Zealand, Singapore, Thailand, Malaysia, the Philippines, Vietnam, Brunei and Myanmar). ○ Upon entering into force, Australia (96.4%) and New Zealand (84.7%) will eliminate tariffs on nearly all items. The original ASEAN members will eliminate tariffs on approximately 90% of items beginning in 2013. After 2020, CLMV will eliminate tariffs on approximately 90% of items.
	India	2010	○ Effective January 2010, in effect for India, Singapore, Malaysia, Thailand and Vietnam. ○ India and the original member states (excluding the Philippines) eliminate tariffs on "normal track" (NT1) items by the end of 2013 and onNT2 items by the end of 2016. India and the Philippines will eliminate NT1 tariffs between them by the end of 2018, and NT2 tariffs by the end of 2019. ○ CLMV will eliminate tariffs on NT1 by the end of 2018 and NT2 by the end of 2021.

(Source) Each trade agreement and government document.

South Korea summit that held in May 2010, agreed that these countries would closely cooperate each other on joint research aimed at regional economic integration. It is also confirmed that Japan and South Korea would strengthen the working-level talks to resume the negotiation for the Japan-South Korea FTA, whose negotiation has been suspended since 2004.

In the Asia Pacific region of ASEAN+6, 25 FTAs have come into effect to date. Trade between the countries that have FTA in effect now accounts for 53.6% of the total trade value in the ASEAN+6 regions (US$1,334.5 billion, 2009). The percentage as of 2005 was 35.2%. This means that in recent years FTAs have come into effect rapidly, and thus the percentage is also increasing sharply. In the Asia Pacific region, trade between Japan, China, and South Korea accounts for 33.4%, and if Japan-China-South Korea FTA is done, liberalization of trade items in the Asia Pacific region is almost completed.

China-Taiwan FTA signed, FTA trend spreads to Northeast Asia

The FTAs signed by Hong Kong and Taiwan from 2009 to 2010 were remarkable. Hong Kong signed FTA with New Zealand in March 2010. The Hong Kong-New Zealand FTA was the second FTA that New Zealand entered into with China. In January 2010, Hong Kong started FTA negotiations with the European Free Trade Association (EFTA; comprising Switzerland, Norway, Iceland, and Liechtenstein).

Taiwan concluded the Economic Cooperation Framework Agreement (ECFA) with China in June 2010. Taiwan concluded FTAs with Middle and South American countries, but ECFA was the first FTA that Taiwan concluded within the Asia Pacific region. Under the Framework Agreement, it was agreed that tariffs on early harvest items would be eliminated and, targeted toward chemical products, automobile parts, and fiber products, China would eliminate tariffs on 539 items and Taiwan would dp tariffs on 267 items in 3 years. Although the targeted items are still limited, the ECFA means the FTA trend has started to spread to the North East Asia region. Although FTAs have not been concluded between Japan, China, South Korea, and Taiwan, the ECFA sets a precedent for them. Inspired by this, FTA negotiations between South Korea and China show the sign of acceleration.

Increasing utilization of FTAs

Amid increasing number of FTAs in effect, more and more companies use or considers utilizing FTAs. According the survey) conducted by JETRO from November to December 2009 on Japanese companies overseas business updates, 36.2% of Japanese companies (total 511 companies) that trade with countries covered by Japan's major FTAs (between Japan and Mexico, Malaysia, Chile, Thailand, Indonesia, the Philippines, ASEAN, Switzerland, and Vietnam) use these FTAs.Half of the companies (49.7%) consider using the FTAs already in effect. In terms of types of businesses, many chemical, transport equipment, and iron and steel companies use FTAs for export, while food and drink and fiber product companies use FTAs for import.

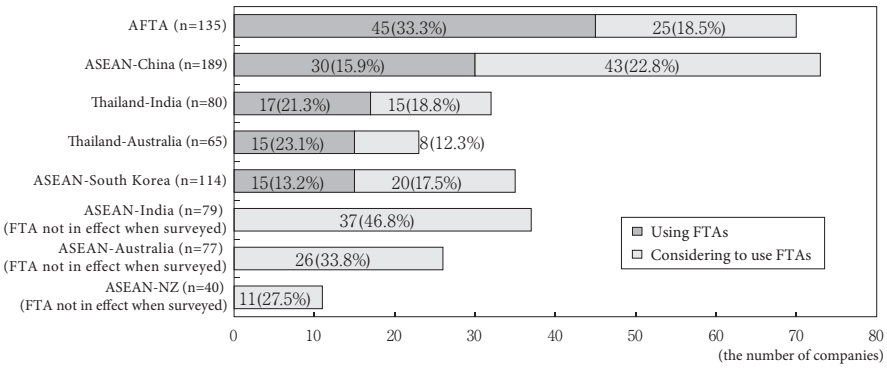
The fact that utilization of FTAs is expanding in Japan can also be found from the number of issuing certificates of origin. According to the report of Ministry of Economy, Trade and Industry, the number of issuing certificates of origin for Japan's FTAs increased to 54,641 in 2009 from 6,194 in 2006. The Japan-Thailand FTA accounts for 43% of the total issues, followed by Japan-Indonesia FTA (23.4%), and Japan-Malaysia FTA (10.3%). As the number of FTAs in effect increases and according to the tariffs reduction, it is expected that utilization of FTAs in Japan will enhance further.

Many Japanese companies also use or consider using FTAs in effect between third countries in the Asia Pacific region (Each FTA between ASEAN+1, Thailand-India and Thailand-Australia FTA).

The most-used FTA is AFTA, and among the 135 companies which trade within the AFTA region, 45 companies (33.3%) use AFTA. When companies which "consider to utilize AFTA" are included, the number comes to 70 companies (51.9%). The number of companies which use ASEAN-China FTA is 30, accounting for 15.9% of the companies which trade within the region. Regarding the ASEAN-India FTA which was not in effect at the time of survey, among 79 companies which has trade within the region, 37 companies (46.8%) answered that "they consider using the FTA," which attracted attention. Many companies from ASEAN expect that the new FTA will create a business environment suitable for exploring the Indian market, which has attracted attention as an emerging market.

The status of utilization of FTA is visible from statistics on utilization rates of FTA that is disclosed by the government of Thailand and Malaysia. Figure II-9 and Figure II-10 show statistics on export values and utilization rates of

Figure II – 8 Companies' plan to utilize ASEAN plus 1 FTAs



(Notes) (1) (n) is the number of companies that have trade with countries with which FTA is in effect. The % in brackets indicates the ratio to (n).
(2) ASEAN-India, ASEAN-Australia, and ASEAN-New Zealand FTAs were not in effect at the timing of survey in November 2009. Each of the 3 FTAs went into effect in January 2010.
(Source) "FY 2009 Survey on International Operations of Japanese Firms" (JETRO).

FTA for Thailand and Malaysia, ratio to total export value, total value of exports includes items for which tariffs have been eliminated on a MFN basis by the export destination country. From these statistics, it can be found that FTA utilization rates in Thailand and Malaysia have been expanding as the reduction and elimination of tariffs advances.

The total value of export in Thailand and Malaysia through FTAs is US$ 14.9 billion (2009) in both countries. The share to total export value to ASEAN is 33.2%, increasing 4.6 points from 28.6% in 2008, excluding Singapore in which almost all the tariffs are tariff free from the beginning and also where re-exports exist a lot.

Although AFTA utilization rate in 1998 was 5.6%, the utilization rate increases year by year as the average tariff of AFTA decreases. Thailand and Malaysia use AFTA, for exports to Vietnam, The Philippines, and Indonesia in partivular. Export value to Vietnam alone through FTA was US$ 4.5 billion, accounting for 64.6% of the total export value of the two countries to Vietnam.

Together with AFTA, utilization of the ASEAN-China FTA is also expanding. The total export value of Thailand and Malaysia to China through the FTA is US$ 6.4 billion. The share to total export value to China was 18.1%, increasing 7.9 points from 10.2% in 2008. Since tariff rates on the majority of items were lowered to less than 5% in 2009 through the FTA, this increased the utilization value of the FTA. The export value of Thailand and Malaysia to Japan through FTAs, including both ASEAN-Japan FTA and FTAs Thailand and Malaysia signed with Japan bilaterally was US$ 6.6 billion, and the composition to total export value to Japan of the two countries increased 4.4% from the previous year to 21.3%. Thailand has FTAs in effect with Australia and India, with early harvest 82 items only. The export value of Thailand to Australia and India is US$ 4.3 billion and US$ 400 million re-

Figure II-9 FTA utilization rate by Thailand and Malaysia (exports)

(US$ million, %)

	FTA	Total value of exports using FTAs					FTA utilization percentage				
		2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Thailand	AFTA	5,146	5,509	7,865	10,735	9,671	21.5	20.2	22.6	26.8	29.9
	AFTA (excluding Singapore)	4,942	5,299	7,609	10,343	9,393	30.0	28.2	30.9	34.4	37.8
	ASEAN-China	614	1,450	1,769	1,691	3,990	6.7	12.3	11.1	10.4	24.8
	Thailand-India	267	328	399	418	352	17.6	18.1	14.0	12.3	11.0
	Thailand-Australia	2,122	2,746	4,067	4,944	4,316	67.3	62.6	66.3	61.9	50.5
	Japan-Thailand, ASEAN-Japan	–	–	642	4,507	4,281	–	–	18.1	22.4	27.3
Malaysia	AFTA	2,918	3,069	3,922	4,809	5,186	7.9	7.4	8.7	9.4	12.8
	AFTA (excluding Singapore)	2,729	2,897	3,733	4,555	4,999	18.5	16.9	19.3	20.7	27.0
	ASEAN-China	274	1,042	1,628	1,896	2,381	3.0	9.0	10.6	10.0	12.5
	Japan-Malaysia, ASEAN-Japan	–	850	1,948	2,503	2,344	–	10.4	12.0	11.6	15.2
Total	AFTA	8,064	8,578	11,787	15,544	14,856	13.3	12.4	14.8	17.0	20.4
	AFTA (excluding Singapore)	7,671	8,196	11,342	14,898	14,392	24.6	22.8	25.8	28.6	33.2
	ASEAN-China	887	2,492	3,397	3,587	6,371	4.8	10.6	10.8	10.2	18.1
	To Japan	–	–	–	7,011	6,624	–	–	–	16.9	21.3

(Notes) (1) "FTA utilization percentage" is (Total value of exports using FTAs)/(Total value of exports).
(2) 2007 data for "Japan-Thailand" is from Nov-Dec; 2006 data for "Japan-Malaysia" is from Sept-Dec.
(Sources) Thailand's Ministry of Commerce, Malaysia's Ministry of International Trade and Industry and international trade statistics.

Figure II-10 AFTA utilization rate by Thailand and Malaysia (exports)

(US$ million, %)

		Trading partners	Total value of exports using AFTA						AFTA utilization percentage					
			1998	2003	2006	2007	2008	2009	1998	2003	2006	2007	2008	2009
Thailand and Malaysia together		Vietnam	7	632	1,762	2,771	3,328	4,507	0.8	30.3	36.3	43.3	44.7	64.6
		The Philippines	179	748	1,529	1,928	2,410	2,308	9.3	24.9	32.0	34.1	37.5	46.3
		Indonesia	99	913	2,231	3,529	5,127	3,924	5.0	20.6	30.1	34.5	40.9	41.0
		Malaysia	212	801	1,363	1,850	2,465	2,198	11.9	20.7	20.5	22.1	24.9	28.8
		Thailand	91	594	1,269	1,206	1,412	1,288	3.9	13.0	15.0	14.0	14.9	15.2
		Laos	0	4	23	30	46	65	0.0	0.9	2.3	2.1	2.6	4.0
		Brunei	0	2	14	15	23	21	0.1	0.7	3.3	3.0	4.0	3.8
		Myanmar	0	2	4	13	74	41	0.0	0.4	0.4	1.0	4.5	2.4
		Cambodia	0	0	1	1	14	39	0.0	0.0	0.1	0.1	0.6	2.2
		Singapore	17	247	382	444	646	465	0.1	1.1	1.2	1.2	1.6	1.6
		Total	606	3,942	8,578	11,787	15,544	14,856	2.2	9.3	12.4	14.8	17.0	20.4
		Total (excluding Singapore)	589	3,696	8,196	11,342	14,898	14,392	5.6	18.4	22.8	25.8	28.6	33.2
	Thailand	Total	391	2,561	5,509	7,865	10,735	9,671	4.0	15.5	20.2	22.6	26.8	29.9
		Total (excluding Singapore)	383	2,454	5,299	7,609	10,343	9,393	7.4	23.0	28.2	30.9	34.4	37.8
	Malaysia	Total	215	1,382	3,069	3,922	4,809	5,186	1.2	5.3	7.4	8.7	9.4	12.8
		Total (excluding Singapore)	206	1,242	2,897	3,733	4,555	4,999	3.8	13.2	16.9	19.3	20.7	27.0

(Notes) (1) Data is sum of AFTA's tariff-lowering scheme, the Common Effective Preferential Tariff (CEPT).
(2) "AFTA utilization percentage" is (Total value of exports using AFTA)/(Total value of exports).
(Sources) Thailand's Ministry of Commerce, Malaysia's Ministry of International Trade and Industry, and international trade statistics.

spectively, which means that those FTAs are used mainly for exports to Australia and India from Thailand.

The Thai government has also released statistics on import values using the FTA.

Import value utilizing AFTA is US$ 4.1 billion, and AFTA utilization ratio to the total import value from ASEAN was 15.1%. ASEAN-China FTA was US$ 1.5 billion (8.7%), and import value from Japan was US$ 2.1 billion (8.5%). In general, importing countries are also increasing the utilization of FTAs as the reduction and elimination of tariffs advances.

In terms of status of utilization of FTA by the item, according to the Thai government, AFTA is mainly used to export automobiles and automotive parts from Thailand and is used to import coals, copper products, and automobiles to Thailand, while ASEAN-China FTA is used when Thailand exports cassava, organic chemical products and when it imports machineries, iron and steel products, and fruit in particular. The FTA with Japan is used when Thailand exports chicken meat and fish and when it imports iron and steel products and automotive parts.

The Thailand-Australia FTA is mainly used when Thailand exports commercial vehicles, passenger vehicles, and air-conditioners and when it imports malt, aluminum products, zinc, etc. Finally, the Thailand-India FTA is used when Thailand exports air-conditioners and TV monitors in partivular, and when it imports gearboxes, etc.

ASEAN-China FTA trend

Since 2010, the impact of the ASEAN-China FTA has attracted special attention. As mentioned earlier, under the FTA, tariffs on around 90% of trade items were eliminated from 2010 and therefore the utilization of the FTA is expected to rise.

In fact,the export value utilizing ASEAN-China FTA was US$ 1.6 billion, accounting for 31.0% of the total export value of Thailand to China. The utilization ratio of the ASEAN-China increased by 6.2% from 24.8% in 2009.

As the trade liberalization of the ASAN-China FTA advances, it has become obvious that some countries are paying particular attention to the FTA. In particular, there were cases where Indonesia and Malaysia raised concerns about the inflow of Chinese products. After receiving the requests from industries, Indonesia asked China to place a certain period of moratorium on the elimination of tariffs on 228 items centering on iron and steel products and fiber products. In the end, as the smooth implementation of the ASEAN-China FTA was confirmed in the commercial minister meeting of the two countries held in April 2010, Indonesia declined the request. In the meeting, China agreed to cooperate with Indonesia on the acceleration of exports to China and development of the infrastructure. In Malaysia as well, there were cases where some industries requested the government control the total volume of imports from China.

With regard to the ASEAN-China FTA, the rule on intermediate trades has become a focal point within the rule of origin. Intermediary trade is a trade form in which trade is conducted via a third country's company that differs from the production country and the countries to which export is made. Since the ASEAN-China FTA does not yet specify whether or not intermediary trade is permitted, there is a possibility that preferential tax rate might not be applied in cases of using intermediary trade. The utilization of intermediary trade is not permitted in the ASEAN-China FTA, and some companies do not utilize FTA. On the other hand, in other major FTAs, utilization of intermediary trade is permitted, so whether or not the agreement will be amended to permit intermediary trade in the case of the ASEAN-China FTA warrants attention.

Figure II-11 FTA utilization rate by Thailand (imports)

(US$ million, %)

Agreements	Total value of imports using FTAs					FTA utilization percentage to the total import value				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
AFTA	3,546	3,106	3,053	4,439	4,069	15.4	12.3	11.2	13.8	15.1
ASEAN-China	21	99	378	649	1,487	0.2	0.7	2.3	3.2	8.7
Thailand-India	37	45	35	37	39	2.9	2.8	1.7	1.4	2.2
Thailand-Australia	476	474	437	457	409	14.7	13.8	11.4	8.9	10.7
Japan-Thailand ASEAN-Japan	–	–	48	2,121	2,144	–	–	0.9	6.4	8.5

(Notes) (1)FTA utilization percentage to the total import value includes the items treated as tariff free on a MFN basis.
(2)2007 data for Japan-Thailand is from Nov to Dec.
(Sources) Thailand's Ministry of Commerce and Thailand trade statistics.

Figure II-12 Main items for which Thailand uses FTA

Agreements	Export	Import
AFTA	Passenger vehicles, commercial vehicles, and automotive parts	Coals, copper products, paper, cigarettes, passenger cars
ASEAN-China	Rubber, cassava, organic chemical products, and Plastics	Combineharvester, ceramic products, fruit, and iron and steel products
Thailand-India	Aluminum alloy, air-conditioners, TV monitors, polycarbonate, and precious metals	Gearboxes, salt, plywoods, engine products, iron and steel products, fruit, and plastics
Thailand-Australia	Commercial vehicles, passenger vehicles, and air-conditioners	Malt, Aluminum products, zinc, copper products, sheep wool, feedstuff, and wheat
Japan-Thailand ASEAN-Japan	Pourtry, shrimp, iron and steel products, fish, and styrene	Automobiles, iron and steel products, automotive parts, and office equipment

(Sources) Thailand's Ministry of Commerce data.

Consolidation proceeds, Need to pay attention to the market development from ASEAN

In the Asia Pacific, where the FTA network of ASEAN+1 FTA has completed, the tariff free system has progressed and barriers to tariffs have been further abolished since 2010.

Progress in making trade items tariff-free will affect supply chains of Japanese companies operating businesses within the region. Largely, it is expected that 1) ASEAN-based business will continue to develop and 2) production bases will be consolidated in

the region. The fact that ASEAN has FTAs in effect with neighboring countries has improved market access in terms of the export from ASEAN, which gives an advantage to businesses located in ASEAN. Regarding development of the emerging Indian market, the number of items allowed for export to Indian market from the ASEAN production base will increase through the ASEAN-India FTA. After the Thailand-India FTA went into effect, the export of household electric appliances, such as TVs and air conditioners, from Thailand to India increased. Being able to export to India by means of the ASEAN-India FTA from any country in ASEAN will bring new business opportunities to the Japanese companies stationing in ASEAN.

Some Japanese companies actually reorganized their production base in the region after 2003, when the intraregional tariff rate within AFTA in the ASEAN was drastically lowered. When high tariffs are imposed in each country, an incentive is created to build assembling factories in order to avoid the tariff. Eliminating the intraregional tariff creates incentive to produce in the country in which most effective production is available and export to the neighboring countries. For instance, regarding the export of automobiles within the ASEAN region, since 2003 while Thailand and Indonesia increased their shares, Malaysia and the Philippines reduced their shares. This is because Japanese companies reviewed their production base in Thailand and Indonesia to a certain degree. Since 2010, tariff free system is considerably progressing in the Asia Pacific region, and this kind of consolidation of production bases could increase.

Intra-regional trade rate in the Asia Pacific region rises to 43.8%

Despite the sign that reduction and tariff elimination in the Asia Pacific region through FTAs increases, intraregional trade is continuously enhancing. The intraregional trade rate of ASEAN+6 (re-export adjustment) increased by 0.7 points from 43.1% in 2008 to 43.8% in 2009. When compared with the year 2000 (41.9%), the rate has increased 1.9 points.

Within the Asia Pacific region, intraregional trade is consistently expanding, and integration of the intra-regional economy has been further progressing.

Column II - 1

◉ How much FTAs are used by countries having FTA with the U.S.

The U.S. International Trade Committee (ITC) releases statistics on import value using trade agreement programs, including FTAs. Data is accessible by trading partners and HS codes, thereby FTA utilization rate analysis is available not only by total but also by product items. Dividing import value using FTA by total import, the ratio explains how much FTA with the U.S. is used by the country when exporting to the U.S.

Comparing the FTAs utilization rate, the rate varies between the U.S.-Chile FTA, the highest of 56.2%, and the U.S.-Singapore FTA, the lowest of 5.3%.

The average FTAs utilization rate of the 17 countries with which the U.S. already has FTAs in effect was 46.4%in 2009. In the U.S.-Chile FTA, FTA utilization rate was high in the Chile's main items of fruit, 66.4%, and copper, 99.7%, and brings about the high utilization rate of the FTA. These items can be exported to the U.S. tariff-free using the FTA. The reason for the low utilization rate of the U.S.-Singapore FTA is that most of the trade items are tariff-free without the FTA, such as IT products, organic chemicals, and pharmaceutical and medical supplies. 91.0% of the Singapore export to the U.S. is already tariff-free.

In terms of import from countries with which FTAs are in effect, 3 items typically records high FTA utilization.; 1) agricultural products, such as vegetables (HS07: 99.4%) and fruits (HS08: 64.5%), 2) textile products (HS62: 87.2%, HS61: 82.4%), and 3) dutiable industrial products, such as automobiles (HS87: 93.2%) and plastic. Since the U.S. generally imposes a 2.5% tariff on automobiles and a 6.5% tariff on plastic, it is worth using the FTA to benefit from tariff-free. On the other hand, items like paper, iron and steel, and furniture are almost tariff-free, and the FTA are used among 0 to 20% of the imports.

Figure FTA utilization status in the U.S. (Import)

(US$ million, %)

Trading partners	Effective Date	Import value using FTA					Utilization percentage in the total import value				
		2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Israel	September 1985	2,789	2,768	2,750	3,162	2,493	16.6	14.4	13.2	14.2	13.3
Canada (NAFTA)	January 1994	146,222	159,062	157,284	159,892	108,905	50.4	52.6	49.6	47.1	48.4
Mexico (NAFTA)	January 1994	104,159	117,820	120,757	115,587	91,604	61.2	59.4	57.3	53.5	51.9
Jordan	December 2001	246	309	313	280	240	19.5	21.7	23.5	24.6	26.0
Singapore	January 2004	789	869	903	972	824	5.2	4.9	4.9	6.1	5.3
Chile	January 2004	3,574	5,486	4,988	4,443	3,345	53.6	57.4	55.4	54.2	56.2
Australia	January 2005	2,563	3,134	3,117	3,902	2,712	34.9	38.2	36.2	36.9	33.8
Morocco	January 2006	—	116	136	161	114	—	22.2	22.3	18.3	24.5
Dominican Republic and Central America countries (DR-CAFTA)	March 2006-January 2009	—	3,929	8,112	9,326	8,923	—	21.1	43.3	48.2	47.4
Bahrain	August 2006	—	47	199	288	258	—	7.4	31.9	53.4	55.6
Oman	January 2009	—	—	—	—	456	—	—	—	—	50.3
Peru	February 2009	—	—	—	—	976	—	—	—	—	23.3
Total		260,341	293,539	298,559	298,013	220,850	51.3	51.7	49.6	47.3	46.4

(Note) Regarding the utilization percentage in the total import value (import value using FTA / the total import value), the denominator total import value includes the items which are treated as tariff free on a MFN basis.

(Source) Prepared based on the U.S. International Trade committee (ITC) and trade statistics of the U.S.

3. New Trends in Trade Policies of the Unites States and Europe

(1) The Obama administration trade policy with emphasis on export promotion

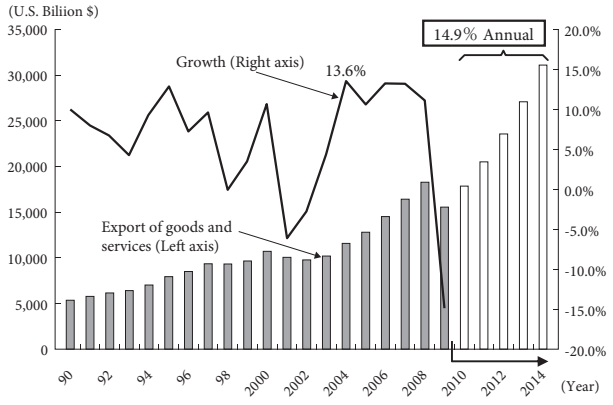
Although trade policy in the U.S. is a generally low priority, President Obama announced a plan to double the exports in the next five years. This announcement was made at the State of the Union Address delivered in January 2010 and trade has been attracting attention from the viewpoint of export promotion. The consequence of export promotion leads to job creation, the U.S. expects, in the domestic economic recovery process.

Doubling the export in the next five years means the average gain of 15 % every year (Figure II-14). The U.S. exports in the last 20 years had the largest annual increase of 13.6 % in 2004. Since the announcement of the plan, the U.S. goods and service exports from January 2010 to April 2010 increased 16.9 % over last year, which the administration welcomes as a good start. Office of the U.S. Trade Representative (USTR) explains that doubling explores will creates two million jobs.

Not a specific product or market is given as a target, but summarizing the Congress priority and the administration's supporting area, likely target could be environmental equipment, such as power plant, water waste management and air pollution management, and medical field, such as equipments, medicine and bio-related products. Japan would not be the main target of demand for market access, but Japanese companies in emerging countries may face the competition with American companies. The Obama administration is allocating a lot more resource on its supporting program. For example, commerce secretary Gary Locke led the Green Energy Mission and made a round of visits in China and Indonesia together with the occasion of the U.S.-China Strategic Economic Dialogue (S&ED) in May.

In addition to the U.S., other developed nations are promoting exports. The French Trade Commission (UBIFRANCE) set a goal of supporting additional 10,000 exporting companies by 2011. Germany also has an interest in the emerging markets. The government in 2009 established Germany Trade and Invest (GTAI) as a limited company to provide intensive support for trade and investment.

Figure II – 14 The U.S. milestone to doubling the export



(Source) Department of Commerce.

Commerce Department strengthens the support scheme by the National Export Initiative

After the State of the Union Address, President Obama announced in March a National Export Initiative (NEI), which is the basic idea for the plan to doubling exports. The NEI has 8 functions, as shown in Figure II-15.

The export credit expansion raises the limit of loans to small and medium-sized companies by the U.S. Export and Import bank from 4 billion dollars to 6 billion dollars. The Commerce Department International Trade Administration (ITA) newly will dispatch 325 trade advisors around the world, with high priority on emerging countries such as China, India, and Brazil. These measures are positioned as the expansion of existing tools.

The first Export Promotion Cabinet was held in April 2010, and the comprehensive plan will be agreed upon in autumn. The functions of this commission will be similar to the existing Trade Promotion Coordinating Committee (TPCC) in which the Commerce department coordinates the policy between agencies. The cabinet directly involves the secretary-level as the member, differentiate itself from bureaucrats-level TPCC.

Review of the export control is a long-term issue

Although it is not included in the NEI, the administrations started the review of export control, which is expected

Figure II-15 Supporting schemes under National Export Initiative

Item	Principals	Specific contents
(a) Exports by small and medium-sized enterprises	Export Promotion Cabinet	Improving information to first-time exporters and technical assistance; assist currentexporters in identifying new export opportunities.
(b) Federal export assistance	Export Promotion Cabinet	Promote federal resources currently available to assist exports.
(c) Trade missions	Secretary of Commerce	Ensure US government-led trade missions effectively promote exports, in consultations with state and local government.
(d) Commercial advocacy	Export Promotion Cabinet	Ensure that the federal government's commercial advocacy effectively promotes exports.
(e) Increasing export credit	President of the US Export-Import Bank	Take steps to increase the availability of credit to SMEs.
(f) Macroeconomic Rebalancing	Secretary of the Treasury	Promote balanced and strong growth in the global economy through the G20 Financial Ministers' process or other appropriate mechanisms.
(g) Reducing barriers to trade	US Trade Representative	Improve market access overseas for our manufacturers, farmers, and service providers by actively opening new markets, reducing significant trade barriers, and robustly enforcing trade agreements
(h) Export promotion of services	Export Promotion Cabinet	Develop a framework for promoting services trade, including the necessary policy and export promotion tools.

(Note) "Export Promotion Cabinet" consists of Secretary of State, Treasury Secretary, Agriculture Secretary, Commerce Secretary, Labor Secretary, Director for Office of Management and Budget, Trade Representative, Assistant to the President for Economic Policy, Assistant to the President for National Security Affairs, Chairman of the Council of Economic Advisers, President of the Export-Import Bank of the United States, Director General of the Small and Medium Enterprise Agency, President of Overseas Private Investment Corporation, Director of U.S. Trade and Development Agency, these 14 members and the directors of U.S. Government Agencies appointed by the President.

(Source) US Executive Order 13534.

to bring about the dramatic export increase. The core of the review includes dual-use goods which can also be used for military purpose, obtaining licenses would not be necessary in exporting to 40 to 60 allied countries. The procedures for issuing the license aims to be accelerated from the current 30-60 days to several hours.

The department currently is planning to integrate the licensing management by the Commerce Department and the State Department by unifing all 1) product lists, 2) license issuing organizations, 3) organizations administrating the new rules. However, the approval of congress is necessary to establish a new organization, and it will not be achieved in 2010. In addition, the current two product lists have very different formats, and integrating the list will require time to complete. The momentum for the reform is the highest in last 20 years, but the reform will not bring the immediate effect.

TPP is the only FTA under negotiation, pending FTAs still waiting for Congressional approval

In contrast to Asia and Oceania where new FTAs are coming into effect, there are not many updates for FTAs in the U.S. The administration is focusing on strengthening the enforcement of the existing trade act, which is reflected in frequent WTO dispute settlement filing and trade remedy measures like anti-dumping (AD) duty and countervailing duty (CVD). There are not many updates towards concluding a new agreement. President Obama has been expected to position the trade policy in the broad context, which is yet to occur.

There are pending FTAs (Colombia, Panama, Korea) concluded under the Bush administration and waiting for Congressional approval. Although three years have passed since the conclusion, there are few indications that Congress moves. In ahead of midterm election, the prospects are quite doomed for the year 2010. The administration promotes export, but FTA, which accompanies with import together and thereby possible job losses, is another story and Washington showing less positive.

The Trans-Pacific Partnership Agreement (TPP) is positioned as an evidence of the U.S. trade engagement with Asia. President Obama announced to start the engagement when he visited Japan in November 2009, and negotiations have started since then. The U.S. is worried that trade block created among only Asian nations will increase China's presence, and expects that the U.S. joining TPP will prevent the China's dominance. The eight countries participating in the negotiation are the U.S., Australia, Brunei, Chile, New Zealand, Peru, Singapore, and Vietnam. Malaysia joined the negotiation in October 2010. Canada, currently observer status, may join in the near future.

Negotiations in 2010 are scheduled to be held four times. The U.S. is the chair of 2011 APEC, and a slight hope exist that they finish negotiations by the APEC Trade Ministers meeting in May 2011. However, many suspect whether the negotiations could be concluded that early, as there are sensitive items for the U.S. such as sugar and dairy goods. The U.S. already has existing bilateral FTAs with some of TPP countries, including Australia, Chile, Peru, and Singapore. The U.S.-Australia FTA does not contain the provision in the dispute settlement procedure between investors and nations, and also, sugar is excluded from the market access. It is a controversial point over how to deal with these exception of the existing bilateral FTAs.

Maintaining the relationship with Congress often at the expense of the retaliatory measures from other countries

Other updates on trade are often related to some kind of trade-restricting measures. In order to keep a good relationship with Congress, the Obama administration chose to sign the protectionist measures which Congress sometimes included. Many of these measures are originally coming from labor unions requests.

The typical example is the Buy American clauses included in the Economic stimulus package in February 2009, which United Steelworkers of America (USW) demanded. Also, on the truck program with Mexico based on NAFTA, the U.S. Congress acted to freeze the program at the request from the truck drivers' union Teamsters, and the administration after all endorsed the decision by signing the bill. As a result, the U.S. has been imposed a retaliatory tax (abolition of NAFTA tax) from Mexico on 89 products since March 2009 because of this breach of NAFTA. In addition, the special safeguard against tire imports from China in September 2009 was the administration's decision, not Congress, also spurred by union's request. The decision antagonized China, the trade relationship was sacrificed to gain the momentum for the domestic reform such as healthcare act.

Even though the U.S. lost a dispute settlement at the WTO, some measures show no signs to be revised. Brazil filed a complaint regarding cotton subsidies with the WTO in 2002 and the U.S. lost this case. Brazil is intending to impose a retaliatory tax if the U.S. Congress does not take actions for repealing the subsidy at issue.

As a partial solution, the U.S. agreed to provide assistance and cooperation to producers in Brazil in April. This is an exceptional measure to provide aid to the producers of the partner country in exchange for the continuation of own country's WTO inconsistent measure, often severely criticized. Also, zeroing dispute of the calculation method of AD duty is in a similar situation. WTO judged that Zeroing is WTO inconsistent in that it unfairly boosts the calculated tax rate, but the U.S. persistently uses this calculation method when Japan or EU are considering products for the retaliatory tax.

In this way, the U.S. is hesitant to reform the domestic system to be consistent with international rules such as WTO. As a result, there are many cases that the U.S. loses export opportunities at the time when its priority is in export promotion.

The U.S.-China trade tension will not invite retaliatory measures

Many analysts point that the U.S.-China trade tension will intensify in 2010 given the econimic environment. The U.S. is mindful of the "10 and 10" situation, in which China resumes 10% growth at the time when the U.S. unemployment rate is around 10%. Also, the U.S. will have mid-term elections in 2010, and there are concerns in general how the administra-

tion can control the voice of the Congress motivated for the trade restriction measures in order to attract voters.

However, when looking at the specific details about what will happen, it is unlikely that measures which will raise the tension between the countries will be taken. Possible bilateral measures by the U.S. itself would have several constraints when considering consistencies with the WTO. Although there are many complaints from Congress, they seem to have no intention of taking countermeasures by breaking consistencies with the WTO. The U.S. priority is to first raise issues through multilateral consultation or bilateral dialogue, S&ED, and to use both carrot and stick strategies accordingly.

Regarding individual measures, the invocation of AD and CVD against China has been increasing in recent years. There are 82 AD measures and 13 CVD measures invoked against China as of May, 2010. There are also 10 CVD measures which are under investigation and waiting for the final decision by Commerce department. Targeted products mainly consist of steel and chemical products, but recently, there are also secondary products using steels, such as lawnmowers and trays for refrigerators. However, these kinds of remedy measures will not raise the tension between the U.S. and China. Meanwhile, the special safeguards targeting only China caused fierce opposition from China, although this is also a legitimate trade remedy. The U.S. will be cautious about initiating any further investigations.

The U.S. has filed 9 complaints with the WTO against China since 2004, and all of them with the U.S. victory, measures repealed or revised (Figure II-16). There are many cases settled by China's revised measures before the panel was established, which means WTO rules work as a guideline. Intellectual property rights issue is the highest priority for the U.S. industry and is also an example of cases settled in the multilateral consultation. China's compliance plan following WTO ruling in favor of the U.S. complaint is now being observed.

The U.S. perceives that filing a WTO complaint means that mutual trade relation is equal, and does not intend such filing to raise tension. The U.S. in the near future may file complaints in areas of where the U.S. has industry interests, such as China's financial service area (credit service), postal service, and internet censorship.

There are other several issues under criticism by the U.S. industry. China announced its own system, and the U.S. protests against China that involve other countries. The policy to oblige the obtaining of China Compulsory Certification (CCC) for information security products narrowed to cover only the government procurement because the U.S. expressed concerns, and China further modified this policy so it does not apply to state companies or other opportunities. Also, Indigenous Innovation which is the policy under which China

Figure II-16 List of cases which the United States filed a complaint with WTO against China

Case	Overview	Process	Status
VAT refund on semiconductor (DS309)	China's VAT of 17% on the domestic sales of semiconductor was partially refunded for the products designed and produced domestically. The U. S. semiconductor manufactures insisted that it would conflict with the national treatment.	March 18, 2004 Challenged by the U.S. July 8, 04 settled	Settled before the establishment of the panel.
Tariff on imported auto-parts (DS340)	Imported parts incorporated in the assembled vehicles which do not meet a certain level of the local contents, were levied a higher tariff to the equal level with the assembled vehicles.	March 30, 06 Challenged by the U.S. October 26, 06 Establishment of the panel July 18, 08 Panel report circulated December 15, 08 Appeal by China August 29, 09 Repeal of the challenged measure announced by China	The panel decision in favor of the U.S., and China once applealed, but after all announced that China would repeal the challenged measures.
Various subsidy program (DS358)	Tax benefits, such as refund, rate reduction, deduction, etc., for the products such as iron and steel, wood, paper would be considered as the export subsidy.	February 2, 07 Challenged by the U.S. August 31, 07 Establishment of the panel November 29, 07 Agreed to the corrective measure	China agreed to repeal the subsidy, and the United States agreed to suspend the panel.
Intellectual property rights (DS362)	Insisted that the law enforcement of China for the protection of copyright and trademark is insufficient with the lack of enforcement, and the threshold of the climinal penalty is not low enough to deter the violation. It was considered as the breach of the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS).	April 10, 07 Challenged by the U.S. September 25, 07 Establishment of the panel January 26, 09 Panel report circulated May 8, 09 China announced to comply with the report	China didn't appeal and the U.S. is monitoring the China's compliance.
Market access of the publication, audio and visual products (DS363)	The distribution right was only granted to the national import companies for the copyright products in which the piracy was devastating, like book, DVD, CD and video game, and that it would be inconsistent with China's WTO commitment.	April 10, 07 Challenged by the U.S. November 27, 07 Establishment of the panel August 12, 09 Panel report circulated December 21, 09 Appellate Body decision February 18, 10 China announced to comply with the report	Appellate Body endorsed the panel decision, and the U.S. is monitoring the China's compliance.
Financial information services (DS373)	The financial service regulation which obliges the use of the companies designated by Xinhua was hindering the market access, such as Bloomberg.	March 3, 08 Challenged by the U.S. December 4, 08 Conclusion of the memorandum of the understanding (MOU)	Settled before the establishment of the panel.
Industrial policy related to national brand through export subsidies (DS387)	The support for the products such as home electrical appliances and textiles for developing China brand would be considered as the export subsidy, in that it was provided depending on the export performance.	December 19, 08 Challenged by the U.S. December 18, 09 settled	Settled before the establishment of the panel.
Export restriction of raw materials inputs of steel, alminium and chemicals (DS394)	Export restriction measures such as the quantity quota for the export of steel raw materials such as coke, bauxite are considered WTO-inconsistent.	June 23, 09 Challenged by the U.S. December 21, 09 Establishment of the panel	The Panel has started the dispute settlement process.

(Note) In addition, there is a case which China retracted the imposition of the tax while the United States considering to file a complaint with WTO against the anti-dumping tax measure for the craft paper made in the United States (settled in January, 06).
(Source) Office of the United States Trade Representative (USTR), WTO.

provides benefits for technical products developed in China by government procurement also received strong opposition from industry organizations in developed countries who pressured China for modifications.

An announcement in April says, the technology which is "permitted to use license in China by foreign countries" is included in the technology "developed in China," and concerns of the industry were partially alleviated.

Renminbi attracts high interest, but existing tools has limited impact

Outside trade issues, the U.S. has the most interest in the Chinese Renminbi. In the bi-annual exchange policy reports by the U.S. Treasury Department, a lot of attentions are paid to whether the report labels China as a currency manipulator. There is a consensus among the U.S. Congress and the administration that the currency is undervalued, but dissent views exist whether the report should designate China's policy as a currency manipulation or not. The release of the first report in 2010 was delayed from original deadline of April 15 to buy time, the report after all did not label China, so the frustration in Congress increased.

Even if the repot label China as a manipulator, the U.S. cannot take any sanctions under the existing law. Current law directs the Treasury department to , by involving IMF or bilaterally, consult on adjusting the exchange policy against the dollar. To change this situation, some bills in Congress purposes to authorize the new countermeasures to the administration. The second report this year is due on October 15.

The Democratic Party focuses on leveling the playing field

These disputes come from the ideas of "leveling the playing field," if the fields are not fair, the dispute arises as a means to balance them. This is especially true for the Democratic Party, expressed in various issues.

The foundation of the idea is that unfairly keeping the value of Renminbi low is not leveling the playing fields. In the global climate change issue, some request an additional burden for the import from the countries which has a lax emission-reduction regulation, so-called border measures. This is also based on the belief that it is not acceptable for domestic products to lose market share to import products when the playing fields are not equal. The frequent initiation of trade remedy measures such as AD and CVD, is also an extension of seeking for the equal playing fields.

(2) Lisbon Treaty in force and the EU

Two big changes brought by the Lisbon Treaty

The Lisbon Treaty, the new basic agreement of the EU, came into effect on December 2009. The Lisbon Treaty brings big changes to the EU in terms of the selection of the President of the European Council, and also brings big changes in trade. In particular, the Lisbon Treaty brings expansion of exclusive rights of the EU in trade policy, and expansion of the rights of the European Parliament. This has led to the expectation that, investment provisions which have been considered previously as rights of each member countries will be covered now EU trade policy. In addition, the European Parliament has high interest in stronger involvement in non-trade concerns such as human rights and environmental activities.

Investment provisions under the FTA became the exclusive rights of the EU

Firstly, the Lisbon Treaty strengthens the EU trade policy authority. Under EU law, for the EU to conclude a treaty, it will be necessary for the EU to have a jurisdiction for the area. In addition, in cases where the EU has the exclusive rights for the area, only the EU can conclude the treaty. In contrast, regarding the treaty in areas which the member countries and the EU have the shared rights, the EU and the member countries will jointly conclude the treaty (parallel agreements).

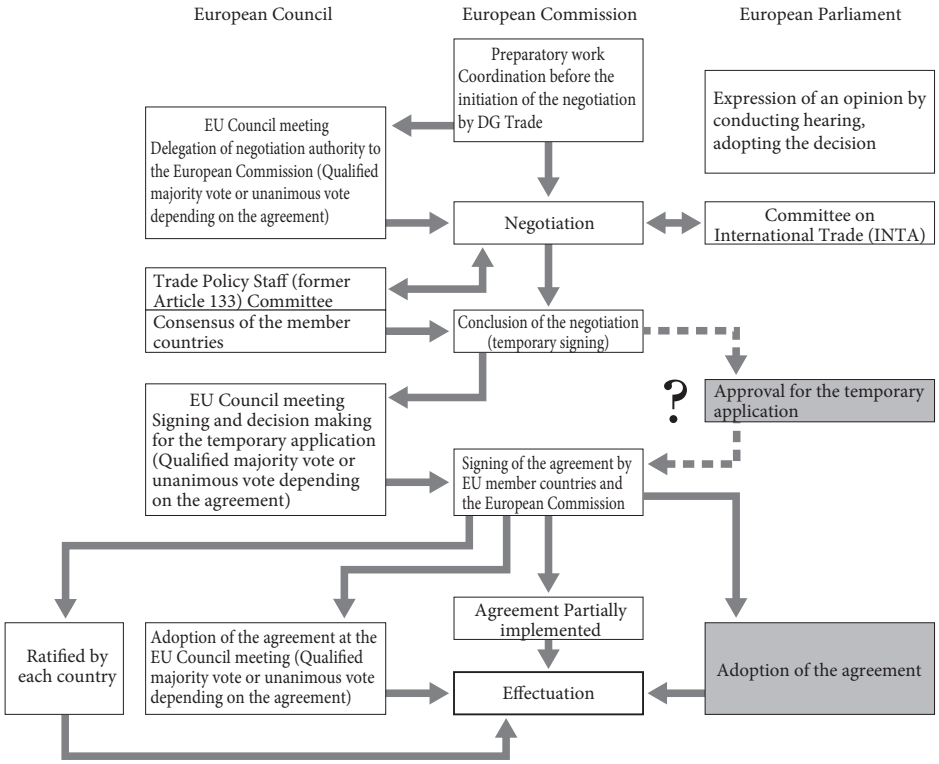
Before the Lisbon Treaty, the EU had exclusive rights in the area such as tariffs and competition, but among the specific areas under the FTA, most of the services and intellectual property rights were shared rights in which the exclusive rights of the member countries depend on the area. And investment provisions were exclusive rights of the member countries. For services and intellectual property rights, there were judicial cases whether they belong to the EU, or to member countries. The 1/08 opinion of the European Court of Justice (ECJ) in November 30, 2009, judged who has the right to modify the Schedule of Commitments of GATS of the WTO following the expansion of the EU. The ruling confirmed that negotiation for the modification of the Schedule of Commitments of GATS were shared rights, as certain service areas are not the exclusive right of the EU.

Following the Lisbon Treaty in effect, trade areas such as investment provisions, service trade, and intellectual property rights are included in common trade policy. The treaty also confirmed that common trade policy is an exclusive right of the EU. However, when trade area such as investment provisions, service trade, and intellectual property rights are included in an FTA, the unanimous approval of the Council of the EU will be necessary.

Strengthening of trade rights of the EU by expanding its exclusive rights is significant in two practical reasons. First, expansion and deepening of the targets of the EU's FTA is expected. So far, under the EU's FTA, the European Commission is in charge of negotiations for the matters which the EU has any rights. The European Commission is delegated negotiation rights by the Council, and conducts the negotiations within its rights (Figure II-17) while reporting to the Trade Policy Staff Committee (former Article 133 Committee), which consists of representatives of each country. This negotiation process has also been applied to services and intellectual property rights, which are shared rights.

The European Commission cannot conduct negotiations in the areas which the EU does not have the rights. Under the FTA signed by the EU so far, investment protection provisions such as the terms of dispute settlement between investors and countries are not included. Also under the FTA with Korea, which became the most comprehensive and high standard among all EU FTAs, investment protection provisions were not mentioned. This is because investment rights belong

Figure II – 17 Decision making process of EU's FTA negotiation



(Note) Colored areas are the newly established sections by the Lisbon Treaty.
(Source) Compiled from H.Wallace, W.Wallace, and M. A. Pollack, "Policy-Making in the European Union 5th ed.", 2005, p.384, etc.

to member countries and the EU does not have the negotiation rights in this area. Direct investment jurisdiction belongs to the member countries, and in the EU, each member country has previously concluded large number of bilateral investment treaties (BIT) with third countries separately.

Also, when the European Commission negotiates, the limits of the rights may not be clear for matters falling under the jurisdiction of shared rights, so the scope of negotiations is limited.

There are reasons why EU has not adopted the negative list, with its high degree of liberalization, used by the U.S. Instead, the EU uses the positive list for liberalization of services because the EU's rights have limitations. By expanding the rights of the EU, the EU's FTA will expand and be more comprehensive in the target areas hereafter.

The other significance of strengthening the EU's trade rights is that it may bring quicker process in the ratification. Tariffs elimination should be conducted as soon as possible to receive the benefits of the FTA. In order for the parallel agreements to go into effect, however, the procedures for the ratification will be necessary by each country in addition to the EU procedures. Ratification by all member countries will take a long time, as the number of EU member countries has reached 27. So, when governments aim for an immediate implement of agreements, it is separated into sections discussing shared rights, for which the ratifications of member countries are necessary, and sections dealing with exclusive rights, for which the ratifications of member countries are not necessary. For sections that do not need the ratification of member countries, temporary application begins after procedures within the EU are completed, without waiting for the ratifications of member countries. This method was adopted in the EU-Chile association agreement, where the sections regarding tariffs, government procurement, and competition were regarded as targets for temporary application. Although the temporary application began in February 2003, the whole association agreement which includes the services, political dialogue, and development cooperation went into effect in March 2005. There are also cases in which the sections falling under the exclusive right of the EU are separated, and concluded as a separate interim agreement.

This kind of separation is necessary because each agreement includes sections which are not under the exclusive right of the EU.

If the exclusive rights of the EU are expanded, this procedure will be either not necessary, or the scope of the temporary application will expand. So far, temporary applications or interim agreements have been limited to the sections mainly relating to tariffs, but immediate implementation of the liberalizations of services and investment, and of the protection provisions for the intellectual property rights will be possible.

Global Europe was the turning point

The European Commission originally stated its intention to emphasize FTAs in the new trade strategy entitled "Global Europe" announced in October 2006. In this strategy, the

Figure II – 18 Intellectual Property Right provisions of EU's FTA improved drastically

EU-Chile Association Agreement	EU-Korea FTA
• Obligation to join the major agreements • Protection of the geographical indication of wine and spirits	• Obligation to abide by the substantive provisions of the main agreements • Concrete provisions for the protection of copyright, trademark, geographical indication, design, patent, such as the extension of the copyright protection period • Provisions regarding civil execution such as the preservation of the evidence • Provisions regarding criminal execution such as the adoption of the penalty provisions in case the infringement of trademark and copyright is conducted intentionally • Responsibility of the onilne service provider

(Source) EU-Chile Association Agreement and EU-Korea FTA.

European Commission clarified its approach to seek comprehensive FTAs by pursuing the importance of rules in new areas such as nontariff barriers, intellectual property rights, services, investment, government procurement, and competition, in addition to tariffs.

Regarding intellectual property rights, under the previous the EU's FTAs, provisions stipulating the protection of intellectual property rights were limited to geographical indication. For example, with the EU-Chile association agreement, a side agreement obliges the protection of the geographical indication of wine and spirits. However, these contents are limited compared to NAFTA, and the U.S.-Chile FTA. The most inclusive intellectual property provisions (Figure II-18) are included in the EU-Korea FTA initialed in October 2009. In quantity alone, the EU-Korea FTA has 69 sections on intellectual property rights, compared to the EU-Chile Association Agreement which has only four sections.

The EU's authority regarding the enforcement of intellectual property rights was confirmed by the precedent of ECJ. Also, the EU-Korea FTA has provisions for liberalization of investment for the manufacturing industry in addition to service industry. In this way, the EU's FTA has already dramatically expanded and deepened based on "Global Europe", and the expansion of the EU authority by the Lisbon Treaty will accelerate the change.

Regarding investment provisions, implementing EU's integrated policy and coordinating with the existing BIT by each member countries have been already named as important issues in the trade policy of the European Commission, which will propose the required law amendments by the end of 2010. The probable proposal is likely to mention that member countries maintain negotiation rights for the time being, that initiation of negotiations needs prior permission from the EU, and that a gradual transition of authority is planned. There are some countries interested in the investment agreements with the EU. Mexico has already concluded FTA with the EU in its association agreement, and at the EU-Mexico Joint Council in November 2009, the government showed an intention to negotiate the comprehensive investment provisions with the EU after the Lisbon Treaty went into effect. The EU-Korea FTA also has provisions which suggest future negotiations of investment protection provisions. However, there are several interpretations about what to include in the investment provisions, and opinion conflicts over issues of authority may occur between the European Commission and member countries.

The involvement of the European Parliament was strengthened by the Lisbon Treaty

The second difference brought by Lisbon Treaty strengthened the authority of the European Parliament on trade policy. So far, only the European Council has the authority to determine common trade policy. However, the Lisbon Treaty introduced the normal legislative procedure in which the European Parliament has equal rights. Under normal legislative procedure, the European Parliament has the right to modify and consent to any bill on an equal footing with the European Council. In addition, consent of the European Parliament is necessary for the conclusion of agreements for areas in which the ordinary legislative procedure is required. Therefore, consent of the European Parliament is also required for the conclusion of an FTA which belongs to the common trade policy.

However, as mentioned above, the EU's FTA has the provision which enables temporary application. There is a dispute whether the consent of the European Parliament is required even for temporary application under the Lisbon Treaty.

The decision of the European Council for temporary implementation of the EU-Korea FTA, which European Commission announced in April, was to move forward with temporary application "after enough time has passed for the European Parliament to be able to announce its opinion regarding the FTA" by the consideration for European Parliament. In addition, as the provisions regarding bilateral safeguards for steep import increase in trade are stipulated under the EU-Korea FTA, regulations for enforcement will be established. Although regulations are now being discussed at the European Council and European Parliament, temporary application of the EU-Korea FTA actually cannot be initiated without the consent of the European Parliament, since this is necessary for the establishment of the regulations. At first, the FTA was scheduled to be signed in April, but because the European Commission is proceeding with consideration for the European Parliament, the FTA is not signed yet as of July 1, 2010. The Committee on International Trade (INTA) of the European Parliament adopted the amended report by the European Parliament regarding safeguard regulations in June 23, 2010. The report proposed that conditions for the invocation of the safeguard would be softened, and that rights to begin the investigation would be given to the European Parliament and the industry. Regarding the EU-Korea FTA, organizations such as the European Automobile Manufacture's Association (ACEA) are lobbying strongly against the European Parliament, and some experts points that strengthening of the power of the European Parliament can lead to a protectionist trend.

In this way, the authority of the European Parliament is not yet clear, but its influence is certainly expanding. And the EU, based on the European Parliament priority, may strengthen involvement in non-tariff issues of trade policy, such as human rights, labor, and the environment. The European Parliament has stressed these non-trading concerns along with the influence on the industry within the EU.

Human rights violation can lead to suspension of the agreement under the FTA with Colombia

The EU has so far placed importance not only on the trading issues such as tariffs, but also on non-tariff concerns such as the environment, labor, and human rights within its trade policy. The EU has regarded FTAs with countries outside the EU as the part of this framework, which is the association agreement seeking comprehensive strengthening of the bilateral relationships in politics and the economy based on historical and geographical background. For example, the EU-Chile Association Agreement consists of three parts, which are political dialogue, bilateral cooperation, and tariff cuts which is part of the FTA.

These three parts mention various issues such as environmental cooperation, social cooperation regarding human rights and labor, and cooperation for gender equality policy under the framework of bilateral cooperation. The EU tried to be involved in the improvement of environmental and labor problems of its partner country through the framework of this agreement, such as conducting periodical discussions by established joint boards and committees.

In addition, the EU adopts provisions for cooperation under the association agreement with Mexico, Mediterranean countries, and the Stabilization and Association Agreement (SAA) with Southeast European countries which aim to join the EU.

However, only "cooperation" was stipulated under these provisions which mainly consist of dialogue and ODA support. As these countries are not connected to liberalization of trade, partner countries are not necessarily strongly motivated to engage in improvement of the environment, labor, and human rights problems, except for within SAA, where such improvements are preconditions for joining the EU in the future.

However, the presence of non-tariff issues in the EU's FTAs is increasing because of anticipated power balance changes caused by Lisbon Treaty. The EU-Korea FTA contains an independent section entitled "Trade and the sustainable development." It stipulates the international treaties compliance on the environment and labor, the domestic environment protection, the obligation to implement labor regulations, and the establishment of a regular council by the permanent committee, as well as an intergovernmental council by in case the issues arise and procedures to solve the disputes by the expert panel.

In addition, the EU-Colombia FTA which was initialed at the summit between the EU and Latin American and Caribbean countries in May included a provision which enables suspension of the agreement in case of breaches in human rights.

The European Parliament also adopted a resolution regarding the Gulf Cooperation Council (GCC) in April 2008, and an FTA with India in March 2009. In each resolution, it was emphasized that "provisions regarding the human rights and democracy are the essential parts of the FTA." The European Commission aims to conclude an FTA with India by the end of 2010, but insertion of human rights compliance and environmental protection provisions could complicate negotiations.

Relationship with Asia continuously high priority, does not change

In this way, the EU's trade strategy changed largely on the premise by the Lisbon Treaty, and it reaches a turning point. The EU announced a new strategy "Europe 2020" a succession to the Lisbon Treaty, and the EU plans to review "Global Europe" as part of its strategy. TheEU started public consultations in June 2010. The June European Council meeting (EU summit), emphasized trade policy as part of the growth strategy for the adoption of "Europe 2020." The European Commission is scheduled to announce the trade policy as part of its growth strategy before the end of the year. Due to the big changes created by the Lisbon Treaty, the EU's trade strategy needs to be reviewed.

The stance to emphasize the relationship with Asia shown in "Global Europe" has not changed. De Gucht, the commis-

Figure II-19 Conflict between EU and China for AD measures against fasteners (carbon steel screw, etc.)

Data	Subject	Action
9-Nov-07	EU	Started the investigation for AD against China.
Dec-08	EU	AD Council passed the recommendation for the invocation of AD tax 14 to 11.
29-Dec-08	China	Started the investigation for AD against the same products made in EU.
26-Jan-09	EU	Decided the invocation of AD tax of up to 85%.
31-Jul-09	China	Filed a complaint with WTO against EU (first case against EU).
12-Oct-09	China	Demanded the formation of the panel to WTO; the panel was formed.
23-Dec-09	China	Invoked the temporary measures against EU.
7-May-10	EU	Filed a complaint with WTO for the temporary measures of China.

(Sources) EU Official Journal, China's Ministry of Commerce website, WTO website.

Figure II-20 EU's AD/CVD measures against China after 2008

	Case	AD/CVD	Public announcement date for the initiation of the investigation	Public announcement date for the temporary measure	Public announcement date for the fixed measure
1	Ferrosilicon	AD	November 30, 2006	August 29, 2007	February 28, 2008
2	Coke (over 80mm)	AD	December 20, 2006	September 19, 2007	March 18, 2008
3	Monosodium Glutamate	AD	September 5, 2007	June 4, 2008	December 2, 2008
4	Citrate	AD	September 4, 2007	June 3, 2008	December 3, 2008
5	Welded steel pipe	AD	September 26, 2007	—	December 19, 2008
6	Citrus	AD	October 20, 2007	July 5, 2008	December 30, 2008
7	Fasteners (carbon steel screw, etc.)	AD	November 9, 2007	—	January 31, 2009
8	PC wire	AD	February 16, 2008	November 15, 2008	May 13, 2009
9	Candle	AD	February 16, 2008	November 15, 2008	May 14, 2009
10	Wire rod (except stainless steel wire)	AD	May 8, 2008	February 7, 2009	August 5, 2009
11	Seamless iron and steel pipe	AD	July 9, 2008	April 8, 2009	October 6, 2009
12	Aluminum foil	AD	July 12, 2008	April 8, 2009	October 6, 2009
13	Cargo scanning system	AD	March 18, 2009	December 17, 2009	June 16, 2010
14	Molybdenum wire	AD	April 8, 2009	December 18, 2009	June 16, 2010
15	Sodium gluconate	AD	August 11, 2009	May 4, 2010	—
16	Aluminum wheel	AD	August 13, 2009	May 11, 2010	—
17	Polyester high-tenacity yarn	AD	September 8, 2009	June 2, 2010	—
18	Glass continuous fiber	AD	December 17, 2009	—	—
19	Melamine	AD	February 17, 2010	—	—
20	Coated paper	AD	February 18, 2010	—	—
21	Coated paper	CVD	April 17, 2010	—	—
22	Glass fiber (open mesh)	AD	May 20, 2010	—	—

(Source) European Commission DG Trade website.

sioner for trade in the European Commission successively visited Singapore, Vietnam, and India in March 2010 soon after taking the position, and tried to improve FTA negotiations with ASEAN and India. After all EU officially started individual negotiation with Singapore, and also agreed with Vietnam on the launch of negotiations shortly. In addition, he agreed with India to aim for the conclusion of FTA before the summit meeting in October, with negotiations that started in June 2007, even though a conclusion before the end of this year would be difficult. Under the current situation with WTO negotiations stalled, the EU's remains intent on to using FTAs to actively develop the Asian emerging market.

Trade relation with China requires the new strategy. The EU positioned China as a special presence in "Global Europe", and announced a trade strategy separately on China. The strategy asks China for reasonable and responsible acts on an equal footing, and it positions dialogue mechanism as an important tool for solving trade issues. Based on this, the EU and China launched High-Level Economic (HED) and Trade Dialogue in April 2008.

However, under the current conditions, the dialogue is not necessarily in conformity. In addition to the problem of Renminbi, which is also important issue for the U.S., there are also huge numbers of issues involving China, such as export regulations on natural resources. The imposition of AD against China by the EU is also a big issue. The project involving carbon steel screws, etc., became the biggest concern, and led to AD and filing of complaints with the WTO one after another from both sides with somewhat messy disputes (Figure II-19). Regarding AD measures against leather shoes, on which opinions are divided in the EU, the EU decided to extend the measure by 15 months in December 2009. China objected to this decision and filed a complaint with the WTO in February 2010.

China is overwhelmingly the main target of the EU's AD measures. After the EU invocated four AD measures against China consecutively in December 2008, the EU invocated a total of six AD measures against China in 2009 (Figure II-20). This accounts for the two-thirds of the whole number (by country, by product) of the EU ADs, and it is not an exaggeration to say that the EU's AD measures exist only to stop Chinese products under the current conditions.

On the other hand, China's market presence for the EU export is increasing year after year. China's percentage of exports of the EU (including all the countries both within the EU and outside of the EU) is still 2.5%, but the export amount to China increased from the previous year among major countries, even though the export amount to all the other countries fell due to the financial crisis. The EU has to rely on trade with emerging economies like China in its economic recovery, so the European Commission cannot take a too tough stance. The European Commission is trying to improve dialogue with China, Commission President Barroso and Trade Commissioner De Gucht visited China in May 2010 and tried to strengthen HED.

4. Emerging Discussions on "Trade and Environment"

As developed countries strengthening climate change measures, discussions on "trade and environment" have been attracting attentions. Under the current situation in which international agreements have no common framework for the greenhouse gases reduction, there are two ways in which developed countries are focusing on maintaining competitiveness, amid increasing costs triggered by the full introduction of measures to reduce greenhouse gas (GHG) emissions.

One is a "carbon leakage" concern raised by several developed countries. In order to reduce GHG as represented by carbon dioxide, companies in developed countries have a huge economic burden on capital investment. As a result, there is a concern that imports will increase from countries where GHG emission regulations are lax. This could result in the overseas relocation of the domestic production facility. Import increase and outflow of the production base, thus resulting in a GHG increase on a global basis is called "carbon leakage." There are many points at issue like "if the leakage itself will occur or not, first of all," "what types of systems can be built," and "whether WTO consistency is guaranteed." At present, the U.S. and the EU are considering introducing the measure (described in detail in (1) 2-4).

The other point at issue is a measure under which member countries lower or eliminate the tariff on environmental technologies and goods. The original purpose of this idea was to reduce the technology introduction cost by removing the tariff barrier and to make climate change measure easily achieved, but developed countries have taken this as an opportunity to export their environmental goods in achieving emissions reduction in the emerging countries. This discussion has been one of the main agendas on trade and environmental negotiation, which is one of the negotiation groups of WTO Doha Round. Each country is proposing items that should be covered (described in detail in (2)).

Discussions on the linkage between multilateral environmental treaty and WTO rules (refer to 2009 JETRO WHITE PAPER ON "INTERNATIONAL TRADE AND FOREIGN DIRECT INVESTMENT") has not progressed. The lack of progress is due to the fact that while the negotiation scope is limited to environmental treaties, such as the Basel Convention, that includes such trade obligations, each country pays more attention to the measures to tackle carbon leakage rather than the above-mentioned treaty.

(1) Border measures involving the climate change measures

1) Emerging countries also submit action plans in the wake of COP15

During the 15th Conference of Parties of the United Nations Framework Convention on Climate Change (COP15), held in December 2009, countries did not agree on an emission reduction target of GHG, but member countries concluded they will "take note of" the "Copenhagen accord." In the wake of the meeting, the developed countries

included in appendix 1 submitted reduction targets to climate change treaty bureau in January 2010. As an emission target value in 2020, Japan will aim to reduce 25% compared with 1990, the U.S. will aim 17% (3-5% reduction compared with 1990), and the EU 20% compared with 1990. The EU is poised to raise the target to 30% reduction depending on other countries' efforts.

On the other hand, emerging countries submitted "actions for alleviation that are appropriate domestically." China submitted a target proposal that the country will reduce the amount of CO2 emission per GDP in 2020 by 40 to 45% compared with 2005, will reduce the ratio of non-fossil energy in the energy consumption to 15% by 2020, and will increase the forest area by 40 million hectares by 2020 compared with 2005. India submitted a target proposal that it will reduce the emission amount per GDP in 2020 by 20 to 25% compared with 2005 (excluding agricultural sector). Since these figures are set in accordance with the economic growth size that is expected to continue to increase, the emissions amount that will satisfy these targets could be higher than the one presently set depending on the growth rate. Nonetheless, some progress has been achieved in terms of developing countries, including emerging countries, taking action to reduce emissions.

Also, in the Copenhagen accord, developed countries promised to newly provide US$ 30 billion economic assistance to developing countries during the year from 2010 to 2012 and US$ 100 billion by 2020, to be used for measures against global warming. The assistance comprises official assistance, private assistance, bilateral assistance, and assistance granted by multilateral countries. Developed countries consider that considerable emission reduction will be achieved by the economic assistance. If reduction targets are not achieved, discussion on introducing carbon leakage measures may accelerate.

2) WTO consistency of border measures

The interpretation of border measures under the WTO rules

Developed countries frequently discuss taking measures against possible decline in future competitiveness by carbon leakage. These measures are border measures that add cost at the time of import by imposing taxes on imports from countries in which emission regulations are lax. Countries are examining whether or not implementing GHG reduction measures causes a competitiveness change in the industry and whether or not introducing border measures causes any effect in maintaining the competitiveness, using economic analysis method. From the view point of the trade law, the WTO consistency of border measures is a focal point.

There exist mainly three types of border measures that member countries can use under the WTO rules, as well as an increase of applied tariff rate within the range of bound tariff rate.

Firstly, countries can impose charges corresponding to the internal tax at the time of import or border tax adjustment (BTA) refunded at the time of export. GATT Article 2, paragraph 2 (a) permits the imposition of "a charge equivalent to an internal tax imposed consistently with the provisions of paragraph 2 of Article III in respect of the like domestic product or in respect of an article from which the imported product has been manufactured or produced in whole or in part," therefore BTA at the time of import is construed to be permitted. Further, based on the definitions of BTA that OECD adopted, paragraph 4 of the Working Group Report concerning BTA under GATT permits not only the imposition of taxes on imports corresponding to a part or all of the internal taxes that are imposed on the like domestic goods (BTA on imports), but also the exemption of part or all of the internal taxes at the time of export (BTA on exports). According to the report, internal taxes subject to BTA are limited to indirect taxation such as sales tax and value-added tax. This is because the price shift of the goods corresponding to the tax is clear in the case of indirect taxes, compared with the direct taxes like income tax.

Secondly, under domestic law there could be cases where a border measure is not simply imposing charges but a particular action is required at the time of import or export. In this case, it becomes a problem of domestic regulations, therefore it is not a BTA, but is an application of GATT Article 3, paragraph 4. Such domestic measures will be in conformity with the WTO rules only if the conditions applied to imports, such as the condition that the imported goods are not treated less favorable than the like domestic goods, are fully met. Article 3 of the GATT stipulates the principle of national treatment, therefore it seems prima facie that the Article is not a ruling on import measures. However, according to the Annex I of the GATT, conditions which are applied to imported products "at the time of point of importation" in a equal manner with the like domestic products are subject to the provisions of Article 3.

Thirdly, there are cases in which the border measure is accepted as an exception of the stipulations in GATT Article 20, even when the measure violates the principle of national treatment and the most-favored-nation treatment. Exceptions to WTO rules are only permitted when the case falls within all the conditions of measures "necessary to protect human, animal or plant life or health" (GATT Article 20 (b)), and measures "relating to the conservation of exhaustible natural resources" (GATT Article 20 (g)).

In other words, in order for the border measure to function as a measure against carbon leakage and to be permitted under WTO rules, it needs to be 1) a BTA that is compliant on GATT Article 2, paragraph 2 (a), 2) a domestic regulation that is compliant on GATT Article 3, paragraph 4, or 3) a measure that is permitted exceptionally under GATT Article 20 although it is not in conformity with the GATT sections above.

The main forms of border measure currently discussed in developed countries are "border carbon taxes" and "purchase obligation of emissions quota on imports in emissions trading." Border carbon tax is a tax system under which tax-equivalent charges are imposed on imports when there are internal taxes corresponding to GHG emissions involving the domestic production. France and other countries show interest in this system. Purchase obligation of emissions

allowance is a system which obliges imports to obtain emissions allowance corresponding to GHG emission burden cost imposed on the domestically produced goods.

Consistency of border carbon tax and carbon tax export refund with WTO rules

Border carbon taxes, in the context of report of the GATT Working Group, could be a target of import BTA under the condition that the carbon tax imposed on goods is related to GATT Article 2, paragraph 2 (a) and Article 3, paragraph 2. GATT Article 3, paragraph 2 permits charges imposed on imports that do not exceed the standard of internal taxes, in other words, charges that do not violate the principle of national treatment. For instance, when a carbon tax is imposed domestically on end products or parts, such as industrial machines and large engines, it is theoretically possible to impose the same level of border carbon tax on the same kind of import goods.

However, it is not easy to find a border carbon tax consistent with the GATT. Firstly, it is difficult to calculate charges of border tax accurately corresponding to the internal tax when goods targeted by carbon tax are include as a part of the imported goods. Secondly, tax rules need to accord with the principle of most-favored nation treatment of GATT Article 1, paragraph 1, and may not be applied discriminatorily depending on the country of origins. Thirdly, the imposition of tax based on the usage amount of fuel and amount of emissions of GHG is not permitted definitely as an import BTA at least under the GATT.

In particular, on the third point mentioned above, GATT Article 2, paragraph 2 (a) assumes imposition of tax on "goods." In cases where "inputs" are subject to carbon tax, such as coal that is consumed as fuel in the production process and not left in the end products, imposition of tax of import BTA is not permitted explicitly. The dominant view is that imposition of tax on importing goods corresponding to the internal tax that is levied on inputted items like fuel should also be permitted as import BTA as an analogical interpretation of GATT Article 2, paragraph 2 (a), the report of the GATT Working Group, and later mentioned Agreement on Subsidies and Countervailing Measures (hereinafter referred to as Agreement on Subsidies). However, there are also negative views which strictly interpret the GATT. Further, in cases where the goods targeted for imposed taxes are neither goods to be produced nor inputs like fuel, but a "byproduct" of GHG like carbon dioxide that is produced in the production process, the majority view is that it is not permitted even if the GATT is widely interpreted.

Next, we consider the refund of carbon tax at the time of export. According to the definition of OECD, BTA is based on the destination principle from the viewpoint of tax law. In other words, the destination country, which is the location of end consumers, has the right to impose a tax on goods exported, not a producing country. When the destination principle is carried out thoroughly, in order to avoid double taxation at the country goods from which the goods are exported, indirect tax imposed on goods by the producing county must be refunded at the time of export, unless implementation of such tax is exempted in advance. For this reason, when the introduction of border carbon tax is to be discussed in the future, a policy to introduce export refund of carbon tax, which is imposed as an internal tax, as an export tax will also probably be considered.

Whether or not the refund of carbon tax applies to export BTA directly relates to the subsidies. An annex of GATT Article 16 says "the exemption of an exported product from duties or taxes borne by the like product when destined for domestic consumption, or the remission of such duties or taxes in amounts not in excess of those which have accrued, shall not be deemed to be a subsidy." As a condition, Agreement on Subsidies Annex I does not permit the exemption or reduction of direct tax like income tax, section (e). Even in the case of indirect tax, exemption or reduction that exceeds the amount of internal tax imposed on the production or circulation when goods are sold directed to domestic consumers is precluded, because this applies to export subsidies that are banned in the Agreement on Subsidies Article 3.

Export BTAs are more widely applied than import BTAs. Import BTAs are limited to the imposition of taxes on "product(s which) has been manufactured or produced," based on the GATT Article 2, paragraph 2 (a). On the other hand, Annex I (g) of the Agreement on Subsidies includes "distribution" in the target that is exempt from taxation. Also, since the Annex (h) stipulates the exemption of tax on "inputs that are consumed in the production," differing from the case of import BTA, it is interpreted that the imposition of tax on inputs like fuel has also become a target of export BTA. Among border measures, border carbon tax and refund of carbon tax at the time of export can come into effect as border tax adjustment, even though they have strict conditions that they need to apply to GATT Article 3, paragraph 2 and GATT Article 1, paragraph 1, depending on the design of the regulation. When they violate GATT Article 1 or Article 3, as later mentioned under the GATT Article 20, a problem arises that whether or not they are permissible as exceptions.

WTO consistency of mandating emission allowance acquisition

Concerning measures that oblige purchase of emissions allowance to importers, there are views that the context of border carbon tax may also be applied. In such a view, the above point at issue must be followed as described previously. On the other hand, many experts view such measures are not regarded as import BTA. The target of emissions allowance acquisition may be seen as an exhausted "byproduct" of carbon dioxide, as earlier mentioned, and there is a high possibility that it is not covered in GATT Article 2, paragraph 2 (a). In addition, this measure might not apply to the "charges equivalent to internal taxes," stipulated in the GATT Article 2, paragraph 1, because the importers need to purchase the emissions quota and submit it to the government, instead of simply shouldering a financial burden.

With introduction of the measure, if importers cannot import without acquiring the emission allowance, this would constitute a certain import restriction, not a tax or

charges. Tariffs and other import restrictions other than charges, at first sight, seems to violate the GATT Article 11, paragraph 1, which stipulates that "no prohibitions or restrictions other than duties, taxes or other charges, … , shall be instituted or maintained by any contracting party on the importation of any product." However, even in the case of import restrictions, laws or conditions that are applied to import goods in the same condition as domestic products are subject to the Article 3, not the Article 11 in principle based on the GATT Article 3 Annex. This is because if the Article 11 is given precedence, a contradiction arises that domestic regulations that are consistent with Article 3 will not be applied to importing goods and will be applied only to domestic goods. Depending on the content of the measure, there are some views that the Article 11 may take precedence. Nevertheless, imposing the acquisition of emissions allowance is considered to be subject to GATT Article 3, paragraph 4 which stipulates that imported goods need to be granted the same the treatment that is given to the like domestic goods.

As a conclusion, although there are many views on how the obligation to purchase emissions quotas should be treated under the WTO in the case of imports, many experts believe that it is a measure subject to GATT Article 3, paragraph 4 as a domestic regulation, rather than the import border tax adjustment measure of GATT Article 2, paragraph 2 (a), and the consistency with the principle of national treatment will be the main issue. Also, just as in the case of border carbon tax, it is also subject to the principle of most-favored-nation treatment found in GATT Article 1, paragraph 1.

Then the standard of "like products" in GATT will be an issue. If imported goods are not a like product of the domestic goods, they are not targeted for national treatment and the most-favored-nation treatment. According to the WTO rulings so far, the difference of production process that does not affect to physical property of the end products does not affect its likeness. In other word, the probability is extremely high that goods produced under strict emission regulations and the goods produced under lax emission regulations will be treated as like products. Therefore GATT Article 1, paragraph 3 does not permit discriminative treatment based on whether emission regulations exist or not. When purchase obligation measures necessitate the purchase of emissions allowance only for imported goods from the countries where emission regulations are lax, it is probably inconsistent with the most-favored-nation treatment when imported goods from the countries with strict emission regulations are not equally treated. Also, there is a high possibility that in such conditions it is against the national treatment compared with domestic products. In either case, it will be subject to the consideration for GATT Article 20 of general exceptions.

Possibility that environmental protection purpose measures are permitted as exceptions

Both in the cases of border tax adjustments or domestic regulations, when the measures are not consistent with the related WTO rules such as GATT Article 1 and 3, a problem arises as to whether it is permissible as an exception under the GATT Article 20 "general exceptions." Although under the WTO agreement there are no definite regulations on environmental protection, precedents on environmental protection have been created based on interpretation of GATT Article 20.

Regulations on environmental protection are found in the Article 20 (b) and (g). In the WTO gasoline case, the Appellate Body ruled that "clean air" falls within the Article 20 (g) as "relating to the conservation of exhaustible natural resources." In this context, the measures to reduce GHG might be interpreted to satisfy the condition of (g) because they are also necessary import restrictions for preserving limited natural resources that less affects to the global warming.

However, consistency with GATT Article 20 (g) can be questioned when the border measure includes not only the measure against importing goods, but also a system to refund taxes and charges imposed at the time of export on the goods. If the border measure is a measure concerning the protection of limited natural resources, it must be effective in controlling total emissions. If a border measure is imposed only at the time of import, countries that are lax on emission regulations have an incentive to introduce stricter emission standards. However, if a refund system at the time of export is added, companies will have no incentive to constrain GHG emissions and actual emission effects are also damaged, because the policy seems to protect export industries rather than the environment. When applying GATT Article 20 (g), such a measure must be substantially related to the policy goal of conservation of exhaustible natural resources. The introduction of the refund could mean that these causal links will not work out. As stated above, when the actual purpose of the border measure is considered to be the protection of domestic industry rather than the reduction of GHG, it is highly probable that such measure would be against Article 20.

Even if such a measure is recognized as relating to the conservation of exhaustible natural resources that applies to GATT Article 20 (g), it is permitted as an exception only when the conditions of the chapeau of the Article are fully satisfied. The chapeau of the Article says that only when such a measure does not include arbitrary or unjustifiable discrimination and is not applied as a disguised restriction on international trade, an adoption of such measure cannot be prevented, even if it violates general rules of the GATT such as national treatment. To determine whether or not the conditions of the chapeau are satisfied, verification is needed, and based on precedents, the requirements are strict.

Depending on the design, border measures can sometimes be discriminatory and therefore be unjustifiable. For instance, if in a scheme of compulsory purchase of emissions allowance, importers must purchase the same average value of GHG volume that foreign companies emit in the production process of the products in question when calculating the emissions quota, some importers would be requested purchase of emissions allowance in excess of the standard of emissions when actually producing the imported goods. On the other hand if the emissions allowance for domestic producers is calculated company by company, this

could be discriminatory against importers.

To sum up, WTO-consistent border measures are divided into two categories. One is permitted as border tax adjustment or a domestic regulation, on conditions that the measure is compatible with the GATT's general principles of most favored nation and national treatment. The second is a measure permissible under GATT Article 20 of general exceptions, although it primarily violates the principle of WTO. Neither measure is clearly consistent with the WTO rules, therefore each system will need to be assessed in details.

Consistency in granting emissions quotas to particular industries with WTO rules

In addition to the fact that it is not easy to design a system of border measures consistent with WTO rules, there is strong criticism from developing countries over introducing border measures. Indian Environment and Forest Minister Ramesh stated that if any kind of border measure is introduced, India will not hesitate to bring the case to the WTO's dispute settlement. A Chinese Commerce Department spokesperson also stated that proposals made by some developed countries to impose tax on importing goods are protectionism in the name of environment protection. One measure considered to be a measure against carbon leakage is a "grant of free emissions allowance" to specific industries that are said to have a huge threat of carbon leakage. This is a scheme under which a company can maintain competitiveness in regards to importing goods by granting a part or whole allowance free to companies within the region in specific industries, under the emissions trading system where companies are supposed to purchase emissions allowance through auction. Since such a measure is not a border measure that directly influences imports and exports, it is a domestic measure.

Under WTO rules, consistency with the Agreement on Subsidies will be a point of concern.

According to the Agreement on Subsidies Article 1, subsidies will exist only when there are financial contributions by the government and when an entity receives a benefit by the measure in question. Article 1 (a) (ii) cites that a subsidy shall be deemed to exist if "government revenue that is otherwise due is foregone or not collected," as one of the examples of financial contributions. A grant of free allowance means that it does not raise the revenue of the emissions allowance by selling it, which could be government revenue. It is probable to interpret that the grant is a financial contribution by the government. Furthermore, as it is obvious that targeted companies receive a benefit from free allowance, the granting should be regarded as subsidies.

The Agreement on Subsidies Article 2 defines the conditions under which "specificity" exists. In other words, whether subsidies are issued only to particular companies, industries, or the related groups, and whether such specificity will actually be permitted. If the WTO Dispute Settlement Body rules that a subsidy with specificity adversely affects the industry of member countries, the government is requested to take appropriate actions, such as abolishing such subsidies. When appropriate measures cannot be taken, countries which have incurred damage are allowed to invoke a countervailing duty as a countermeasure. In this

Figure II-21 Summary of carbon-leakage countermeasures by type

Measure	Border measure for imports		Border measure for exports	
	Summary and points of contention	Principal related provisions	Summary and points of contention	Principal related provisions
Border carbon tax	A border tax adjustment whereby a charge is levied upon import that corresponds to the domestic tax imposed on the like domestic products. Allows for imposition of a charge equivalent to the domestic carbon tax on the like imported manufactured items (final products) which cause large GHG emissions. Opinions diverge on whether charges can be levied on inputs during the manufacturing process, such as coal.	GATT Article I, para. 1; GATT Article II, para. 2(a); and GATT Article III, para. 2	Under a framework in which a domestic carbon tax has been introduced, domestically manufactured export articles are exempt from the tax, or articles manufactured domestically are eligible for a refund when exported. Any exempted or reduced amount that exceeds the domestic tax therefore will be regarded as an export subsidy.	GATT Article I, para. 1; GATT Annex I Ad Article XVI; greement on Subsidies and Countervailing Measures (SCM) Article III, para. 1; Agreement on SCM Annex I para. (g) and (h)
Mandatory purchase of emissions allowances	Within a region that has introduced an emission-trading scheme, import of specific articles that do not meet its regulatory standard for emission amounts requires purchase and submission to the government of a GHG emission allowance that is equivalent to the emissions cost borne by the domestic industry. Opinion differs on whether this constitutes a "tax." The most likely outcome is that it will be judged as a domestic regulation and not as a border tax adjustment.	GATT Article I, para. 1; GATT Article III, para. 4	For the framework under which the import border measure (on the left of this table) has been introduced, when domestically manufactured articles are exported, expenses equivalent to the cost of an emission allowance is rebated at the time of export. Since there is no clear stipulation under the GATT rules, in order for such rebate to be justifiable, either of the following conditions must be met: 1) the cost of purchasing an emission allowance falls into the category of "tax" or 2) the related provisions may analogously be applied.	GATT Article I, para. 1; GATT Annex I Ad Article XVI; greement on SCM Article III, para. 1; Agreement on SCM Annex I para. (h)
Free allocation of emissions allowances	Regarding a framework under which a regional emission-trading scheme has been introduced and under which a purchase of an emission allowance for a fee has been implemented, designated industries may acquire emissions allowances for free or at reduced price. It is probable that such conduct constitutes a subsidy and is specific to a targeted corporation or industrial group, and thus corresponds to a subsidy which is subject to remedies such as countervailing measures. Some analysis says that it may even constitute a de facto export subsidy.			Agreement on SCM Article I, para. 1; Agreement on SCM Article II, para. 1; Agreement on SCM Article III para. 1

(Note) Measures in violation of GATT's associated rules will be accepted as exceptions to the WTO's rules only if they fulfill all requirements of GATT Article XX.
(Sources) "Trade and Climate Change" (WTO-UNEP 2009), Japan's Ministry of Foreign Affairs, Japan's Ministry of Finance and hearing results.

respect, the grant of free allocation can be considered to have specificity in cases where targeted industry is easy to be specified because of oligopoly or geographic reason that particular companies and industries receive benefits.

Further, the Agreement on Subsidies Article 3 cites export subsidies and subsidies contingent upon the use of domestic over imported goods as prohibited subsidies. The grant of free allowance itself is not a measure primarily related to exports. If the grant is given to companies within certain areas regardless of the company's nationality, it cannot to be said to be preferential to domestic products. However, some industries are specialized in export as industry characteristics, and this could correspond to the type of de facto export subsidy that the Agreement of Subsidies Article 3, paragraph 1 (a) note 1 stipulates.

In conclusion, there is a high possibility that granting free allowance to some industries under the emissions allocation system is regarded as a subsidy and has specificity. If it adversely affects other countries, it could result in the invocation of remedy measures, such as countervailing duties. Primarily, although the grant, under the WTO rules, does not fall into prohibited subsidies, it cannot be denied that it could fall into a de facto export subsidy depending on its architecture. For these reason, the individual assessment would be needed for determining the WTO consistency of such grant systems. Although the grant is considered to be a realistic measure in that, unlike border measures its influence on imported goods is indirect, such a measure could still have some problems under the WTO rules.

3) Congress leads the discussion of border measure in the U.S.

Economic concerns commonly seen in the U.S. over climate change measures are categorized into 1) Manufacturing industries will reduce domestic productions because of high costs, and in some cases production will flow out to other countries, and 2) The volume of import of energy intensive goods increases production in countries where climate change measures are lax compared with the U.S., diminishing the domestic share.

In the U.S., border measures are discussed as a way to address point 2), above. To alleviate the import of intensive goods from countries where emissions reduction are lax, an adjustment measure is proposed as a plan that imposed the acquisition of emission allowance.

Emissions reduction measures in the U.S. presume the introduction of an emissions trading system. Although carbon tax can also be considered as another emissions reduction measure, there is no room politically for the U.S. Congress to discuss a introduction of a new tax because it could give a negative image with constituencies. The tax rate, if introduced, is not flexibly amendable, and with fixed rates it is difficult to foresee the amount to which emissions reduction effects can be expected. It is also not realistic to change the tax rate often to achieve reduction aims once the tax rate is set. Hence, when border measures are considered, it's not BTA, but "acquisition emissions allowance" in emissions trading system.

These adjustment measures represent the commitment of the U.S. to the fair competition with other countries. In terms of foreign policy, measures are taken as to urge emissions reduction to China and India under the negotiation of Framework Convention on Climate Change. In terms of domestic policy, such measures are regarded as countermeasure to job losses caused by cheap import goods seizing the domestic share. It is said that EU originally conceived of a border measure when the U.S. withdrew from Kyoto Protocol. Currently they are target of discussion as a measure often used by developed countries to deal with emerging countries.

The Climate Change Bill is stalled in the Senate; Enacting the bill in 2010 is uncertain

The most deliberated bill in the U.S. House of Representatives is the "American Clean Energy and Security Bill 2009 (H.R.2454)," whose main pillar is to introduce an emissions trading system. The bill is also generally called the Waxman-Markey Bill (WM bill), named after the sponsors of the bill. Although the Bill passed the House of Representatives in June 2009, consideration in the Senate is stalled. It seems unlikely that the climate change bill is signed into law in 2010.

Even if the Senate passes the bill by the end of the year, conference process is needed to reconcile the different versions of the bill passed by both houses. The bill is not enacted unless both houses agree on the same bill and signed by the President. Since it is difficult for the Senate to take a vote before the midterm election, the Senate may consider, if it occurs, during the post-election term, sometimes referred to as the lame duck session. As the Senate does not have enough Democratic votes to pass the bill, it has to garner support from Republican lawmakers. To date, it has not obtained the necessary 60 votes. In the summer of 2009, the Senate could count on about 45 votes. Partisanship is not necessarily the obstacle to support, but is joined by issues of the Senators' home states. For instance, it would be difficult for Senators from West Virginia or Arkansas to support the bill, because West Virginia heavily depends on coal and is concerned with the influence on this industry. Arkansas has a very low income population that is concerned with the increase in electric cost caused by emissions trade. Further, in some states, energy-related measures included in a bill influence the Senators' votes. For instance, states like Arizona may support the bill depending on how the bill promotes nuclear power generation. Support of states along the Gulf of Mexico, such as Virginia and Louisiana, depends on whether domestic drilling of oil and gas is permitted. In addition, the oil spill disaster at the mining field in the Gulf of Mexico off the south Louisiana coast led to questions on the expansion of domestic mining, causing a backlash against the bill.

In May, Senators Kerry and Lieberman announced the American Power Act. Although it is the same as WM bill in terms of aiming to reduce the exhaust gas in the whole economy by 17% in 2020 compared with 2005, both senators are confident that this bill will be able to respond emission controls by sector-based approach. Emissions quota in the electric field are to be imposed starting in 2013, and in 2016 in the industrial field. Some revenues from auctions

in the transportation field will be provided to the highway fund. In addition, incentives are included in terms of nuclear power plant and clean coal, which has resulted in better support from the industry, especially compared with previous bills. The U.S. Chamber of Commerce, which opposed the House proposal, also is neutral to this bill. On the other hand, organizations that support environment protection express the concern that this bill is weighted too much in oil and nuclear power companies. Despite all this, the bill has not attracted support, and the Senators consider of narrowing the content of the bill to focus only on electricity.

The Congress session ends at the end of this year, meaning those bills that are not passed are dead. If the WM bill, which passed the House, is not enacted this year, the bill is out of consideration, resulting in the need to submit the bill again and take a vote from scratch. Although it is possible to submit the exact same bill and take the vote in 2011, it would be hard to enact the bill because it is unlikely that Democrats has a more favorable political environment next year. The ruling party generally loses the seats in the first midterm election after the start of the administration. Although it is said that 16 seats may be lost in general in the House, even if the Democratic loses such number of seats in the midterm election in 2011 and yet still maintain the majority of seats, it is unclear whether the party will have the number of the seats that can pass the bill. In the House Demorats, the Congressional Caucus called "Blue dogs," which values fiscal discipline, is expanding its power. If the bill becomes focused on emissions reduction and does not raise enough revenues, the caucus is likely to vote against the bill because of fears of financial concern. In fact, in the vote in June 2009, 44 Democratic Representatives voted the WM bill, which passed the House narrowly with 219 pros and 212 cons.

If the climate change legislation is not enacted in the Congress within the year; the Environment Protection Agency (EPA) will enact regulations in January 2011 to restrict air pollution caused by power plants and factories.

Both the Senate and the House proposals contain border measures when submitted

The WM bill, which has already passed the House, includes so-called border measures among the provisions. The summary is "under the international emissions program," to 1) promote GHG reduction on a global level, and to prevent emissions increases in other countries, and 2) for cases where a binding international agreement does not require the reduction of greenhouse gases by the beginning of 2018, 3) in terms of imports in the U.S. after 2020, 4) for items that applies to a certain condition based on the index such as energy intensity and trade exposure, 5) the purchase of emissions quota is mandatory. The purchase of the emissions allowances is regarded as border measures.

The emissions quota is set to equal the same sale price as in the domestic auction. Least developed countries (LDC) are exempted from the system, and the items are reviewed every four years. Although the assumed items are not designated specifically, in the past bill, items "that could highly be placed under unfavorable conditions in competition in the international market" were "iron and steel, aluminum, paper, cement, and chemical products." These items are considered to be energy intensive goods in general.

In the U.S., six items including glass are generally concerned with the decline in competitiveness because of emissions reduction measures at home.

Although the Senate is generally negative about the introduction of the border measures, the American Power Act submitted in May included these measures. Some Senators object to the bill because it is difficult to impose border measures that are consistent with WTO and, therefore, border measures could trigger filing suits and retaliation, making the U.S. situation worse. However, both Kerry and Lieberman explained that "If there are no global level agreements, we will implement border measures that are consistent with the WTO rules. Imports from countries that do not take emissions reduction measures shall be obliged to bear the enough burdens to prevent carbon leakage."

Border measures proposed in the draft of the bill are similar to the border measures in the WM bill by the House, whose consistency with WTO is often questioned. The basic structure of the measures is the same. Purchasing the emissions allowance is mandatory and the cost of compliance is refunded to the domestic industry as a kickback, which could also be considered a subsidy. The provisions are included in the chapter on "employment protection and progress," thus raising questions about whether the main purpose of border measures is as "a measure to achieve emissions reduction." Border measures are also used as tools to collect support for climate change legislation. As lawmakers from the Midwest have a power base in the manufacturing industry, they tend to request border measures as a way to stop import increase. From a financial viewpoint, border measures could be a revenue source in the long term. As more and more lawmakers value fiscal discipline regardless of party affiliation, border measures appeal to those lawmakers. Therefore, in the deliberation process, the provision might be deleted at the time when the bill receives enough support or the clauses may be weakened by giving the right the President the waiver authority, for example.

The U.S. industries praise free emissions allowances more than border measures

In general, labor unions support the introduction of border measures and industries oppose it. Supporters insist that border measures are necessary in order to protect employment and level the playing field to the partner country, and that otherwise domestic job would be lost. United Steelworkers (USW) continue to make efforts to both tackle climate change measures and maintain domestic job.

On the other hand, industries oppose the border measures in general. The U.S. Chamber of Commerce insists that "measures should not be taken that could damage free trade even if international agreements are not formed." Many other organizations believe border measures will be blamed as protectionism and lead to being countermeasures against the U.S. Therefore, border measures in the WM bill do not enjoy support from, yet are viewed as "an adverse ef-

fect" from the U.S. industries.

Some industries, when considering the framework of welfare grants to companies, request broader grant of free emissions allowances or offsets for a portion of production costs, instead of border measures. Although there is a possibility that free emissions allowances may not be consistent with Subsidies and Countervailing Measures (SCM) Agreement, they are more unlikely to disrupt the world trade system or cause a problem with trade partner countries. Moreover, the chance of the issue to be brought to WTO is low. In other words, there is a speculation that although "border measures" are obviously likely to invite opposition under the WTO, "lessening the burden based on domestic emissions" could be permitted.

Whether carbon leakage can really occur or not

In general, there is no clear consensus in the U.S. about what influence climate change measures will have on the U.S. industries and whether or not carbon leakage can really occur. Although the report compiled in July 2009 by the Government Accountability Office (GAO), a neutral organization of the U.S. government, points out that in general "in many industries, production costs will increase and production, revenues, and employment will decrease" because of the introduction of emissions trading, it concluded that as the details, such as "to what extent" and "if the level is the same in all industries," are measured on the assumption of some settings of variable, "the influence brought to the competitiveness is uncertain." In other words, the variables are the carbon dioxide emissions price in the future, the extent of emissions reduction measures in the U.S. compared with other countries, and the extent to which the industries need to be segmented in the analysis.

According to a research by Pew Center on Global Climate Change, when based on the assumption that carbon dioxide price per ton hovers at US$ 15 in 2012, domestic production in the U.S. will decrease by 1.3% and domestic consumption will decrease by 0.6%. The difference of 0.7% will flow abroad, but this is small enough that "as the whole manufacturing industry, there is little influence that can raise concern about competitiveness." Therefore, modifying competitiveness is effective only in items with high energy intensity, rather than throughout the whole manufacturing industry. The price setting in which carbon dioxide price per ton is US$ 15 is rather high compared with the transaction price in the Chicago Climate Exchange (CCX) where carbon dioxide price per ton is US$ 4 to 5. The price setting also assumes a huge price hike by emissions trading.

It is uncertain whether the border measures limiting energy-intensive goods are effective or not. Even if an adjustment at the material, which is energy-intensive, is imposed, there will be an increase in the cost by using those raw materials. For instance, if an adjustment is made to the import of iron and steel but not to imported cars, the U.S. automobile industry, which manufactures at home, will only experience disadvantage in the competition by using the more expensive imported iron.

Items "that could be placed under disadvantageous conditions in competition with the international market" by the emissions reduction measure are iron and steel, aluminum, paper, cement, chemical products and glass. In the U.S., particularly in discussions in the U.S. congress, concerns about China dominate discussions and many fears that imports from China, where emissions reduction measures are not progressing, will increase and the U.S. domestic production will decrease. As a result, domestic employment will also drop.

There is an strong concern with China, but the actual level of imports from China may proves to be obsession (Figure II-22).

With regard to iron and steel products, China occupies the top share of the U.S. imports since 2006. For other items, however, Canada and the EU are high on the list. More than half of the imports of iron and steel are from Annex 1 countries, which have emissions reduction targets similar to the

Figure II-22 Import share of energy-intensive goods in the U.S. (as of 2009)

	Basic Chemical products (US$ 4.03 billion)		Cement (US$ 511.12 million)		Paper (US$ 14.74 billion)		Aluminum (US$ 11.71 billion)		Glass (US$ 4.36 billion)		Iron and steel (US$ 36.68 billion)	
	Trading partners	Share	Trading partners	Share	Trading partners	Share	Trading partners	Share	Trading partners	Share	Trading partners	Share
1	Republic of Torinidad and Tobago	34.9%	Canada	53.4%	Canada	52.1%	Canada	48.6%	EU	27.8%	**China**	21.8%
2	Canada	23.6%	EU	10.4%	EU	16.1%	**China**	13.3%	**China**	27.7%	EU	18.0%
3	South Korea	8.1%	Columbia	7.9%	**China**	14.0%	Russia	5.5%	Mexico	20.7%	Canada	17.1%
4	Brazil	7.6%	Mexico	7.2%	Mexico	5.3%	Mexico	5.1%	Canada	8.6%	Mexico	9.0%
5	EU	5.2%	South Korea	7.1%	Japan	2.6%	Germany	4.1%	Japan	3.5%	Japan	7.0%
6	Russia	3.8%	**China**	6.9%	South Korea	1.9%	Venezuela	2.7%	Taiwan	2.9%	South Korea	4.8%
7	Venezuela	3.7%	Taiwan	2.2%	Indonesia	1.9%	Argentina	2.7%	South Korea	1.1%	Taiwan	4.7%
8	The Republic of South Africa	2.9%	Turkey	1.5%	Brazil	1.6%	Brazil	2.4%	Columbia	1.0%	India	3.6%
9	Republic of Equatorial Guinea	1.6%	Egypt	1.2%	Norway	0.7%	The Republic of South Africa	1.5%	India	0.9%	Brazil	3.1%
10	Japan	1.1%	Croatia	1.1%	Taiwan	0.6%	Thailand	1.2%	Switzerland	0.8%	Russia	2.1%
12	**China**	0.8%										

(Note) The value below the items name is import value in 2009.
HS codes: Basic Chemical products - 2801.10, 2803.00, 2814.10, 2814.20, 2836.20, 2901.21, 2901.22, 2901.23, 2901.29, 2902.20, 2902.30, 2902.41, 2902.42, 2902.43, 2902.44, 2905.11
Cement - 2523, Paper - 48, Aluminum - 76, Glass - 70, Iron and steel - 72, 73
(Source)Department of Commerce.

U.S. The report, "Leveling the Carbon Playing Field," which was compiled by Trevor Houser of the Peterson Institute for International Economics in the U.S. in 2008, used such numbers to determine that "border measures do not have much influence in achieving emissions reduction of the partner countries."

The report concludes that it is necessary to make a system that gives companies an incentive to make efforts to reduce emissions. In general, apart from consistency with the WTO agreement, as the adjustment level of border measures is decided at a country or product level, all companies and products are to be imposed the same adjustment level at the border, regardless of how much they emit. This undermines emissions reduction incentives by companies. In order for this not to happen, the report points out that "the most important thing is to give emissions reduction incentives at each company level, and then build a structure to measure the emissions."

4) Discussions over free emissions allowances in the EU

The EU introduced the EU Emissions Trading System (EU-ETS) in 2005, and the system is now entering the stage of full operation. In Europe, setting free emissions allowances precedes discussions over border measures because these procedures are closely associated with an emissions allocation. Discussions are on reducing the burden, and the focus is on how the free emissions allowances should be granted. There are not many in-depth discussions about details of the border measures, in the form of tax burden or acquisition of emissions allowance. The premise for these burden alleviating measures is that it "depends on the result of the negotiations for international agreement," same as the U.S.

EU-ETS is now in Phase II (2008-2012), after the trial Phase I (2005-2007). In preparation for entering the phase III (2013-2020) in 2013, EU-ETS is stepping up design of the system. At the beginning of July, European Commission provisionally set the emissions quota in 2013 at 1.92688 billion tons. The quota considers the fact that the area covered by EU-ETS expands after 2013. The point of phase III is 1) an EU integrated emissions allowances system: to abolish the conventional emissions plan by member country, 2) total emissions: to reduce the limit by 1.74% every year so that GHG emissions will be reduced 21% in 2020 compared with 2005, and 3) allocating emissions allowance: introducing the auction in the allocation, 95% of total emissions were allocated free in Phase I and 90% in Phase II. However, for sectors in which there is concern about carbon leakage, free emissions allowances corresponding to a reference value by item (benchmark) are preferentially allocated. It is possible to receive the free grant equal to benchmark emissions. This benchmark is established on the basis of the top 10 percent of agents that are excellent in emissions efficiency. Therefore, the European Commission estimates that only a few efficient emissions entities should receive free emissions allowances. In the case of most entities, since their emissions are expected to exceed the free emissions allowances, the difference will be purchased by auction.

The selection of items that are to be preferentially allocated free emissions allowances was announced in December 2009. 164 industry items were adopted by the European Commission, and they will be used in Phase III. The benchmark is to be set by the end of 2010; emissions quota of each agent (auction and free allowances) is decided in 2011. By the end of 2011, the auction will begin for the emissions for 2013, when Phase III starts. The items are reviewed every five years. The current items are effective until 2014, and the next items are applicable during 2015 and 2019.

The 164 industry items cover almost all of the manufacturing industries. It is estimated that in total those items will account for one-fourth of GHG under the EU-ETS system and will cover 77% of GHG that manufacturing industries emission under the system. A wide range of items are included, such as aluminum, sugar, paper, glass, cement, wine, crude oil, plastics (the ones in primary formation), fiber, footwear, engines, televisions, general machines, clocks, aircrafts, bicycles, and games. Automobiles, plastics (processed products), and refined oil are not included.

Items need to qualify the following criteria, whose general cost ratio in rough added value is expected to increase 5%（by implementing the phase guidelines） and the items need to be the ones that have the risk of carbon leakage when trade intensity (Export and import value / market size) exceeds 10%. Even If both above conditions are not satisfied, it is also possible to include either if cost ratio is expected to increase more than 30% or if trade intensity exceeds 30%. Among those items, 70% of the 164 items qualify the condition of trade intensity exceeds 30%. Some argue that "Among 164 items, for instance, music instrument manufacturing industry is included, it is difficult to understand that they are manufactured using energy." However, the European Commission explains that "although they are not energy intensive goods, but their trade intensity is high."

Under the U.S. WM bill, items that can be targeted for border measures have to have more than 15% trade intensity. Although it is difficult to compare, as far as the trade intensity is concerned, 10% in EU is set rather low compared with 15%.

Items that are not included in the above 164 items are deemed to increase the auction rate. In general, the auction rate starts at 20% in 2013, reaches at 70% in 2020, and increases to 100%, which means complete auction, zero free emissions allowances, in 2027. The electricity industry will start with 100% auction in 2013 on principle. Power plants in former Eastern Europe member countries start at 30% and will increase to 100% by 2020.

Aiming to announce in 2011, the European Commission is conducting research to verify whether carbon leakage can really happen and, if so, what on what scale. As far as evidence shows, even if the production base is transferred to other countries from the EU in order to escape the emissions constraint, that does not necessarily cause carbon leakage. The EU has a difference in energy intensity depending on the intraregional countries. For instance, Poland and Czech Republic have high energy intensity, just as China does. In this case, if companies in Poland and Czech Republic make overseas relocation to China to escape the EU

emissions reduction, GHG emissions do not necessarily increase. When a certain industry transfers outside the EU, whether carbon leakage will occur or not and the scale depends on the country to which a country transfers.

Border measures used as trump cards for emerging countries

Among the EU countries, France has insisted on introducing border measures. France has tried to introduce this system in the past. The comprehensive proposal on global warming countermeasures announced in January 2008 by the European Commission proposed that border measures mandating obtaining emissions should be introduced from the phase III. However, the proposal was deleted in the end after opposition from the U.S. government. The proposal may have been temporarily deleted to see the research results to be announced in 2011, which verify whether carbon leakage really occurs or not. Although the U.S. government opposed the proposal, the U.S. Congress is considering introducing the system.

The former European Commission in charge of Trade Mandelson warns that "if the input price in the EU increases with border measures, the export price will also increase and, as a result, competitiveness of the EU countries deteriorates." He also worries that the operation of the system will be extremely complex to administer. His successor De Gucht also expressed his opinion that "he cannot agree with [border measures] because they could lead to trade retaliation."

France sees border measures at the European level as preconditions for introducing a carbon tax in the country. Until recently, France was aiming for implementation by July 2010 in order to aggressively introduce carbon tax. However, after receiving criticism that only France will be placed in a disadvantaged competitive position, President Sarkozy was forced to change the policy. As a result, France announced the policy in April that the country would not introduce the carbon tax at the national level and instead EU level shall be the basis in introducing the measure. However, to introducing the measure in the EU, all the member countries need to agree to it. Therefore, under the current situation in which the UK and other countries oppose the plan, it will be difficult to approve the system.

In Australia, the Carbon Pollution Reduction Scheme (CPRS), which aims to introduce emissions trading, was voted down in the Parliament. The government announced in April that they will postpone introduction of this measure until after 2013. As seen above, as moves to introduce emissions reduction measures by each country stalls, discussions on border measures also stall. However, developed countries also have an intention to use border measures as a leverage to urge emerging countries to reduce emissions. Regardless of whether the measure is seriously considered or not, discussions on introducing border measures continue as a deterrent.

(2) Discussion on the reduction of the tariff for environmental goods

1) The current negotiations at the WTO

Negotiation on trade and environment is one of the few areas among of the Doha Round which have seen movements in the past year, as climate change measures gathered high attention at COP15. There are two main aspects of negotiations on trade and environment. The first is improvement of market access, which is liberalization of trade of environmental goods (such as products which have little minus impact on the environment). The second aspect other is the clarification of the relationship between the WTO rule and the multilateral environmental treaty. Negotiation of tariff reduction and elimination (hereinafter mentioned as the tariff elimination) on environmental goods see some progress.

The tariff elimination for environmental goods is related to the discussion of the sectoral tariff elimination at NAMA negotiations. Sectoral negotiation is the framework under which tariffs reduction exceeding the tariff reduction formula applied to general non-agricultural goods are applied for specific products by arbitrary decision of member countries. Participation in sectoral negotiations for goods such as medical products or chemical products is not mandatory. Only the tariffs elimination for environmental goods is mandatory for all member countries in the Doha Ministerial Declaration. The specification of products that are subject to sectoral tariff elimination is an important issue during negotiations on trade and environment, which means the definition of the environmental goods is crucial. Consensus for the definition is not yet formed and countries are making their own proposals.

Developed countries want a clear list of target products. A mainstream proposal provided a list of 12 product areas containing 153 products, based on HS number 2002 with 6-digit, jointly submitted by 9 countries and regions including Japan, the U.S. and the EU in October 2009. In addition to this joint proposal, Japan submitted an additional list in February 2010 (Figure II-23). In November 2007, the U.S. and the EU also proposed a two-stage approach that 43 products which are obviously environmental goods based on the report of the World Bank should be subject to the tariff elimination by all WTO member countries, and the 153 products of the joint proposal above should be applied only to the major member countries except the least developed countries. The 153 products list contains all of 43 products. In contrast, many developing countries are negative about the list approach because the number of environmental products can be too broad. They believe that making a list based on the HS classification will include products which are not necessarily be used for the environmental purpose, so-called dual-use products. Among alternative proposals of developing countries, Brazil in December 2009 proposed the request-offer approach, and Argentina submitted the project approach in November 2009. Under the request-offer approach, member countries mutually request products which they accept to liberalize, and only products offered by the trading partner will be liberalized. This approach is adopted for services negotiations. Under the project approach, the target environmentally-relevant projects are certified internationally in advance, and import of the products relating to the project will be tariff-free. Specifically, Argentina proposes that products used for the projects

based on the "Clean Development Mechanism" of the Kyoto Protocol will be targeted. On the other hand, countries such as Saudi Arabia, Qatar, and the Philippines, among developing countries, submitted the original list of environmental goods. Japan's additional proposal is a list of 53 products, HS2002 6-digit base, which includes products emitting less greenhouse gas, such as hybrid automobiles and energy-saving home electronics. Environmental goods which have been proposed so far mainly included products relating to the renewable energy plants, air pollution control, water treatment, or waste disposal. Japan's proposal is a trial for adding low-carbon related products to the definition of environmental goods.

Chairman of the negotiations currently unifies the product lists proposals so far, which include Japan's proposal, and request-offer based proposals from developing countries which do not support listing the environmental products, and looks for common parts. When the products are ultimately specified and the tariff rate reaches an agreement, the results will be reflected on tariff concession list of each country, prevailing the NAMA reduction formula. Other issues regarding improving market access include the definition and liberalization of environment-related services, eliminating the non-tariff barrier for environmental goods trade. So far, however, discussions have been focused on the specification of environmental goods.

2) Global trade of environmental goods

Then how much is the world environmental goods trade, what is the portion among world trade, which countries are exporting and what type of products are the majority.

This section examines 43 products world trade based on the report of the World Bank's definition of environmental goods (refer to FigureII-24 for the definition). Based on the classification method of 12 areas used in the abovementioned proposals of 9 developed countries, the 43 products are divided into seven categories: (1) Air pollution control (e.g. production of gas generator with purifier, etc.), (2) Management of solid and hazardous waste and recycling systems (e.g. incinerator), (3) Renewable energy plant (e.g. solar water heater), (4) Heat and energy management (e.g. heat-transfer equipment), (5) Waste water management and portable water treatment (e.g. nonwoven fabric), (6) Cleaner or more resource efficient technologies and products (e.g. fuel battery), (7) Environmental monitoring, analysis and assessment equipment (e.g. flow meter).

There are several constraints with organizing trade statistics based on the above definition. Two major problems are the overvaluation of the trade amount due to the HS 6 digit classification, and the limited time series analysis due to the HS code revision.

First, regarding the overvaluation, it should be noted that even when the products are classified as environmental goods under the HS 6 digit level, it may contain non-environmental goods below the HS 7 digit level. In addition, dual use products are problematic. Often, products classified as environmental goods can be both environmental and un-environmental. Also, the goods classification will be less predictable, as products which incorporate new functions are added have to rely on existing HS code classifications. Due to these reasons, the environmental goods trade will be inflated under the HS 6 digit classification. At the same time, the code classification are different by country below the HS 7 digit, making comparison between countries impossible. Therefore, the environmental goods trade mentioned in this section are regarded as an overview of a rough trend with some overvaluation. 43 products are used because 153 products may even more overvalue the amount.

On the issue of time-series comparison, the 43 products listed by the World Bank are based on HS 2002. However, due to the fundamental revision of HS code in 2007, target products increase to 48 products under HS 2007. In addition to the problem of the dual-use, there is a possibility that the

Figure II-23 List of additional environmental goods proposed by Japan

Item	HS code (HS2002)
Environmentally friendly car (hybrid car, clean diesel car, etc.)	8702 (large-size motor vehicles), 8703 (cars), 8704 (trucks), 8705 (special-purpose motor vehicles)
Accumulator (Nickel accumulator, etc.)	850680 (other primary batteries), 850740 (nickel, iron battery), 850780 (other accumulators)
LED light	940510 (electric light), 940520 (electric lamp), 940540 (other lights), others are decided by the consensus among member countries
Inverter freezer and refrigerator	841810-841840
Inverter air conditioner	841510, 841581
Office equipment with less heat consumption	847170 (data storage device)
Energy-saving PC	847130 (under 10kg)
LCD	Decided by the consensus among member countries
Power efficient printer, FAX, etc.	847160 (input, output device), 851711 (phone), 851721*, 851730*, 851750*, 852210 (cartridge for DVD recorder)
Power efficient video/audio equipment	851840 (audio amplifier), 852090*, 852190 (video equipment), 852390*, 852540*, 852691 (wireless applications for navigation), 852812*, 852821*, 852830*

(Notes) * marks are HS numbers not corresponding to HS2007. 4-digit notations include all 6-digit levels.
(Sources) WTO documents TN/TE/W/75/Add.1and "Customs Tariff Schedules 2010" (Japan Tariff Association).

Figure II-24 Product category definitions of the environmental goods (Based on HS2002)

Classification	HS code (HS2002)
Environmental goods (43 products)	
1.Air pollution control	840490, 840510, 841989
2.Management of solid and hazardous waste and recycling systems	392010, 761290, 840219, 840290, 840410, 841940
3.Renewable energy plant	730820, 761100, 840681, 841011, 841090, 841181, 841182, 841581, 841861, 841869, 841919, 841990, 848340, 848360, 850161, 850162, 850163, 850164, 850231, 850720, 853710, 854140, 900190, 900290
4.Heat and energy management	701931, 841950
5.Waste water management and portable water treatment	560314, 730900, 732490
6.Cleaner or more resource efficient technologies and products	732111, 732190, 850680
7.Environmental monitoring, analysis and assessment equipment	903210, 903220

(Sources) World Bank and WTO.

overvaluation could be even larger due to the increase of products in the HS code revision. To avoid this situation, HS 2002, which is the foundation of the traditional classification system, is used for the time-series comparison, even though the list of products did experience change during the transitional period of the classification system from 2006 to 2007.

Global environmental goods trade doubled in 5 years

JETRO estimates that the global trade of environmental goods in 2009 (export basis) was US$ 182.5 billion, which was a 16.5 % decrease over the previous year, accounting for 1.5% of the world trade (FigureII-25). Meanwhile, the trade amount of the 153 products was estimated as US$ 685.7 billion, or 5.6% of world trade. Although the world environmental goods trade in 2009 decreased due to the financial crisis, it is expanding every year, at a pace that outstrips world's total exports, and almost doubled since 2004. When broken down by specific category, trade in renewable energy plants was US$ 128.4 billion and accounted for 70.3% of the total. The category includes solar water heater, generator turbines and solar power generating equipments. Second largest category is management of solid and hazardous waste and recycling systems which accounted for 11.7% (US$ 21.3 billion), followed by air pollution control, which accounted for 5.2% (US$ 9.4 billion).

At 14.7% of the total, Germany is the largest exporter of environmental goods, followed by China (13.4%) and the U.S. (9.7%) (FigureII-26). The top 10 exporting countries accounted for about 70% of the world exports. While the share of the developed countries is dropping, the presence of the developing countries like China and Taiwan is increasing. In particular, the export share of China in 2009 increased threefold in these five years.

Three quarters of China's ex-

Figure II-25 Global exports of environmental goods

(Unit: US$ million, %)

	2005	2006	2007	2008	2009	Growth rate	Share
Total	117,852	138,430	173,780	218,530	182,513	-16.5	100.0
Renewable energy plant	80,294	95,351	120,556	154,981	128,395	-17.2	70.3
Management of solid and hazardous waste and recycling systems	13,638	15,313	19,369	24,647	21,356	-13.4	11.7
Air pollution control	6,256	7,200	8,190	9,752	9,419	-3.4	5.2
Heat and energy management	5,499	6,754	9,353	11,465	8,959	-21.9	4.9
Waste water management and portable water treatment	4,193	5,129	6,585	7,503	5,915	-21.2	3.2
Cleaner or more resource efficient technologies and products	4,095	4,527	5,265	5,534	4,698	-15.1	2.6
Environ-mental monitoring, analysis and assessment equipment	3,877	4,156	4,461	4,648	3,771	-18.9	2.1

(Sources) National trade statistics.

Figure II-26 Global exports of environmental goods

(Unit: US$ million, %)

	2006			2007			2008			2009		
	Value	Growth Rate	Share	Value	Growth Rate	Share	Value	Growth Rate	Share	Value	Growth Rate	Share
NAFTA	21,528	15.0	15.6	24,895	15.6	14.3	27,608	10.9	12.6	25,645	-7.1	14.1
U.S.	14,818	13.7	10.7	17,119	15.5	9.9	18,630	8.8	8.5	17,645	-5.3	9.7
EU15	59,622	17.9	43.1	76,096	27.6	43.8	94,526	24.2	43.3	73,627	-22.1	40.3
Germany	22,279	22.8	16.1	28,796	29.2	16.6	36,792	27.8	16.8	26,885	-26.9	14.7
France	6,401	11.9	4.6	8,008	25.1	4.6	9,284	15.9	4.2	7,211	-22.3	4.0
Italy	8,445	21.0	6.1	10,497	24.3	6.0	12,456	18.7	5.7	9,970	-20.0	5.5
UK	4,257	0.1	3.1	5,017	17.9	2.9	5,833	16.3	2.7	4,783	-18.0	2.6
Japan	16,675	3.4	12.0	17,440	4.6	10.0	19,750	13.2	9.0	15,854	-19.7	8.7
East Asia	25,657	25.5	18.5	36,020	40.4	20.7	50,721	40.8	23.2	46,279	-8.8	25.4
China	10,070	49.4	7.3	16,174	60.6	9.3	27,371	69.2	12.5	24,397	-10.9	13.4
South Korea	3,121	27.3	2.3	4,389	40.6	2.5	5,744	30.9	2.6	6,738	17.3	3.7
Taiwan	2,988	9.6	2.2	4,141	38.6	2.4	5,820	40.5	2.7	5,145	-11.6	2.8
ASEAN	6,636	8.1	4.8	8,214	23.8	4.7	8,632	5.1	3.9	7,219	-16.4	4.0
World	138,430	17.5	100.0	173,780	25.5	100.0	218,530	25.8	100.0	182,513	-16.5	100.0
Developed countries	105,657	14.9	76.3	128,691	21.8	74.1	155,345	20.7	71.1	127,682	-17.8	70.0
Developing countries	32,772	26.6	23.7	45,089	37.6	25.9	63,185	40.1	28.9	54,831	-13.2	30.0

(Notes) (1) ASEAN here includes Singapore, Thailand, Malaysia, Indonesia and The Philippines.
(2) East Asia here includes China, South Korea, Hong Kong, Taiwan and ASEAN.
(3) Figures for the world, developed and developing countries are estimates. The definitions are based on DOT (IMF).
(Source) Same as Figure II-26.

Figure II-27 Global Imports of environmental goods

(Unit: US$ million, %)

	2006			2007			2008			2009		
	Value	Growth Rate	Share	Value	Growth Rate	Share	Value	Growth Rate	Share	Value	Growth Rate	Share
NAFTA	26,042	22.0	18.7	30,457	17.0	17.5	35,137	15.4	16.0	29,922	-14.8	16.2
U.S.	18,015	21.1	13.0	22,000	22.1	12.6	25,401	15.5	11.6	21,617	-14.9	11.7
Canada	4,581	23.1	3.3	4,766	4.1	2.7	5,641	18.4	2.6	4,909	-13.0	2.7
EU15	43,671	14.9	31.4	56,876	30.2	32.7	75,509	32.8	34.4	59,346	-21.4	32.1
Germany	12,431	21.9	8.9	15,035	20.9	8.6	20,173	34.2	9.2	17,745	-12.0	9.6
France	5,037	15.8	3.6	6,375	26.6	3.7	7,400	16.1	3.4	6,479	-12.4	3.5
Italy	3,706	12.0	2.7	5,416	46.1	3.1	6,656	22.9	3.0	6,087	-8.5	3.3
Netherlands	2,966	1.7	2.1	3,934	32.6	2.3	5,091	29.4	2.3	5,557	9.1	3.0
Japan	5,217	12.8	3.8	4,963	-4.9	2.9	5,860	18.1	2.7	4,774	-18.5	2.6
East Asia	29,700	12.1	21.4	34,968	17.7	20.1	42,564	21.7	19.4	37,682	-11.5	20.4
China	13,073	15.0	9.4	16,014	22.5	9.2	18,701	16.8	8.5	16,453	-12.0	8.9
South Korea	4,176	18.0	3.0	5,153	23.4	3.0	6,425	24.7	2.9	6,180	-3.8	3.3
ASEAN	5,877	9.7	4.2	7,208	22.6	4.1	10,055	39.5	4.6	9,185	-8.7	5.0
World	139,023	16.8	100.0	174,081	25.2	100.0	219,496	26.1	100.0	184,731	-15.8	100.0
Developed countries	87,178	16.4	62.7	107,180	22.9	61.6	135,439	26.4	61.7	111,706	-17.5	60.5
Developing countries	51,845	17.6	37.3	66,902	29.0	38.4	84,058	25.6	38.3	73,025	-13.1	39.5

(Note) Same as Figure II-26.
(Source) Same as Figure II-26.

ports fall under the category of renewable energy plant, and solar power generating devices (HS854140) accounted for 60% of the category. On this point, Europe and the U.S. accounted for more than 80% of the sales amount of companies such as Suntech Power or Yingli Solar, which have large share of solar battery production, and this feature is considered to be reflected in export statistics.

Japan's exports were US$ 15.9 billion, and it accounted for 8.7% of the total. Japan was the largest exporting country in 2000, accounting for 16.0% of total trade, but has gradually lost its share since 2001. Japan was behind China in 2008, behind the U.S. in 2009 to come in 4th place. The category of renewable energy plant in Japan's exports accounted for the largest percentage, worth US$ 13 billion. While the total export dropped in 2009, only the category of air pollution control expanded, reaching US$ 0.7 billion which was an increase of 28.9% although the value is comparatively small. The export of the device reacting to the temperature change (HS841989) increased for Korea and the U.S. The major countries to which Japan exported products were China (US$ 3.2 billion, 20% of the total), the U.S. (US$ 2.6 billion, 16.5% of the total), and Korea (US$ 1.7 billion, 10.7% of the total). Japan's exports to these three countries continue to expand, outpacing exports to others.

Global imports of environmental goods are estimated to be US$ 184.7 billion. The U.S. is the largest importing country, accounting for 11.7% of the world (FigureII-27). Germany (9.6%) and China (8.9%) follow the U.S., and these 3 countries account for about 30% of the world import. Germany became the second largest importer by overtaking China in 2008, and the share of other European countries generally continues to be unchanged.

Tariff rates for environmental goods are relatively high in developing countries

Some developing countries are facing serious environmental pollution along with their rapid economic growth and the demand for environmental goods is likely to rise. Developing countries are expected to be the emerging markets particularly for products related to air pollution control, which Japan expanded its exports in 2009.

At the moment, import statistics show that developed countries are the main destination. However, developing countries also account for much as 40% of the total imports. Furthermore, some countries raised their import share, when broken down into product categories. For example, Russia has already become the second largest importing country after China of air pollution control, with its share expanding from 3% in 2004 to 6% in 2009. Indonesia (from 0.8% to 3.4%) and India (from 0.7% to 2.6%) has also become one of the major destinations. Other countries more than doubled their share of world imports since 2004, including India, Indonesia, Thai, and Argentina (in management of solid and hazardous waste and recycling systems), Czech and India (in Renewable energy plant), Thai and Brazil (in of Heat and energy management), India and Thai (in waste water management and portable water treatment), India, Indonesia, Venezuela (in cleaner or more resource efficient technologies and products), and Russia (in the category of Environ-mental monitoring, analysis and assessment equipment).

Meanwhile, high tariffs will be an obstacle to expand exports to developing markets where consumption is expected to grow. Tariff rates of environmental goods are relatively low compared to those of non-agricultural products. However, developing countries set relatively higher tariff than developed countries (FigureII-28). For example, the average tariff rate for electric control panel and distribution panel (under 1,000 WV) (HS853710) is 2.7% in the U.S., and 0% in Japan, while it is 6.1% in China, 8.1% in Mexico, and 7.5% in India. Lower the tariffs is the better in order to expand exports to developing countries. In the U.S., there is an argument to create a plurilateral agreement within the WTO to reduce trade barriers to environmental goods. A good example is the Information Technology Agreement (ITA), which eliminates the tariff for IT-related product. If a similar framework comes true for environmental goods, the effect will be considerable even if the agreement does not contain every WTO member. For the tariff elimination as well as a better grasp of the world trade, it is hoped that discussions at the WTO to define environmental products will advance and that international statistics by product will improve.

Figure II-28 Applied tariff rates on environmental goods (2009)

(Unit: %)

	Non agricultural products	Environmental goods	Air pollution control	Management of solid and hazardous waste and recycling systems	Renewable energy plant	Heat and energy management	Waste water management and portable water treatment	Cleaner or more resource efficient technologies and products	Environmental monitoring, analysis and assessment equipment
U.S.	3.3	1.7	1.6	3.3	1.4	2.9	0.0	1.5	0.9
Canada	3.7	3.0	0.0	3.4	2.3	2.4	5.6	5.7	1.3
Mexico	11.1	9.7	7.1	7.0	10.1	5.3	14.2	9.2	15.0
EU	4.0	3.0	2.2	3.0	3.0	4.4	3.2	3.0	2.6
Norway	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Japan	2.6	0.5	0.0	1.3	0.1	0.0	2.3	0.0	0.0
China	8.7	9.9	7.5	8.6	9.8	7.5	15.2	13.7	7.0
South Korea	6.6	7.7	8.0	7.8	6.3	8.0	8.0	8.0	7.6
India	10.1	8.5	7.3	8.3	7.8	8.8	10.0	10.0	7.5
Australia	3.9	4.1	4.2	4.9	3.5	6.3	5.0	5.0	0.0
Brazil	14.1	14.0	13.3	12.3	12.5	13.0	13.6	15.3	18.0

(Sources) "World Tariff Profiles 2009" and the Tariff Data Base (WTO).

5. Maximizing the use of FTAs and "Trade and Environment"

(1) The Doha Round at a critical stage

Although concerns over introduction of trade restriction measures were heightened worldwide during the recession in the second half of 2008, the movement generally calmed after the second half of 2009. Newly initiated investigations of trade remedies notably decreased after the fourth quarter of 2009.

The reasons for the calming of trade restriction measures are that the policy of avoiding protectionism was confirmed many times at top-level summits such as the G20, along with the recovery of the world economies and the observation that the WTO continued to function properly. Most of the trade restriction measures adopted fall within the WTO rules. The existence of the WTO therefore worked as a brake on the expansion of protectionist measure, confirming its strong judicial function once again. Meanwhile, in the legislative function, the WTO is now at a critical stage for trade liberalization. The Doha Round is under continuous negotiation for the last 9 years since its inception in 2001, with no clues as to what conclusions can be reached.

Among various areas, progress has been made in negotiations on trade and environment and trade facilitation within the past year. For other areas such as non-agricultural market access and agricultural negotiation, however, there have been no significant advances after the collapse of informal Ministerial Conference in July 2008. Trade liberalization at the WTO will lead to liberalization worldwide, and an early conclusion of the Doha Round is expected.

Meanwhile, each country and area has placed an emphasis on FTAs as a means for trade negotiation if the Doha Round becomes stagnant, and the number of effectuations is increasing year by year. The number of the effectuations (including customs union, based on the WTO report) of FTA sin the world on June 1, 2010 is 187.Within this group, 53 effectuations took place from 2000 to 2004, and 68 took place after 2005, showing that the number is rapidly increasing.

(2) The Asia Pacific enters the era of full-scale operation of FTAs

As countries are working on concluding FTAs, the Asia Pacific, where Japanese companies are expanding their production networks, faces the era of full-scale operation of FTAs, many of which come into effect in 2010. Among FTAs already in effect, such as AFTA or the ASEAN-China FTA, the tariff-free on almost all products has come as of January 2010. Also, since the ASEAN-Australia-NZ FTA and the ASEAN-India FTA came into effect in January 2010, all the ASEAN+1 FTAs (ASEAN and Japan, China, Korea, Australia, New Zealand, India) are now in effect.

By advancing the tariff-free movement and expanding the FTA network, the Asia Pacific is becoming a more integrated market. This is an important change in the business environment for Japanese companies which want to expand business in the Asia Pacific.

The Asia Pacific boosts its presence as a consuming market from a manufacturing base. Although the economy of developed countries shows a trend of recovery, its strength is still limited. On the other hand, China, India, and the Asian countries are rising as leading forces of the world economy in the Asia Pacific due to increased domestic demand. In the future, companies increasingly will be producing in Asia and selling in Asia. The trade liberalization by FTA, by capturing the domestic demand in Asia, will enhance the business activities of companies, including Japanese companies.

In the Asia Pacific where integration of the market is progressing, countries must develop an effective supply chain utilizing FTAs for production, and also develop domestic demand by utilizing FTAs. The Asia Pacific is now entering the era of maximizing FTA potential.

(3) "Trade and environment" is the new area of trade policy

As environmental issues, especially approaches to climate change measures are considered important worldwide, "Trade and environment" is one of the key on-going discussions in trade policy.

Under the present Doha Round, negotiation targets for trade and environment are set forth thusly: 1. Clarification of the relationship between the trade obligations stipulated under existing multilateral environmental agreements and the rules of the WTO, and 2. the specification of environmental goods and elimination of tariffs on them.

If agreed to at the Doha Round, the tariffs elimination is expected to bring new business chances to Japanese companies. According to JETRO estimates, the global trade volume of environmental goods reached US$ 182.5 billion in 2009, providing there is a large market for these products. On the other hand, there are many cases that high tariffs are imposed mainly in developing countries, and it is expected that the tariff elimination will lead to more exports by Japan.

In addition, discussions on border measures for climate change measures have been rapidly attracting attention in developed countries since 2009. In developed countries, an emissions trading system for greenhouse gas (GHG) is expected to be officially introduced in each country. Meanwhile, the obligation to reduce GHG is not imposed on developing countries. At COP15 held in December 2009, the conflict between developed countries and developing countries was visible, and now there is no prospect for developing an international framework for reducing obligation of GHG to developing countries. Therefore if obligations to reduce GHG emissions are introduced in developed countries, "carbon leakage" may occur. If tough GHG-reducing obligations are imposed on a specific country or area, products might be outsourced in countries with lax regulations. Therefore global amounts of GHG emissions will not be reduced—and may, in fact, increase, resulting in carbon leakage.

Developed countries are discussing countermeasures against carbon leakage such as an obligation to buy emission rights or the imposition of a border carbon tax for products imported from regions without GHG reduction effort. For

exports, refund measure of the carbon tax which companies would pay for the reduction of greenhouse gas and of the necessary cost will probably be considered in the future. Furthermore, although it is not a border measure, measures to give free emissions rights and to reduce the carbon tax for some specific industries in which the large increase in the cost by the introduction of the reduction obligation of GHG is expected, such as energy-intensive industry, is currently being considered.

These kind of measures have many problems due to its questionable consistency with the WTO rules and after all, border measures may not be introduced. However, since the emissions trading system of GHG is expected to be officially adopted in developed countries, "Trade and environment" will become the critical aspects of trade policy. Climate change measures will greatly affect business activities and its future trend deserves attention.

III Exploring New Frontiers in Business Overseas

1. Japanese Companies Broaden Business Targets

(1) Change in international consumption market after the financial crisis

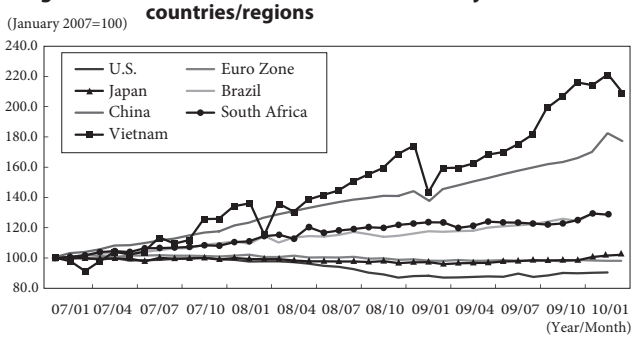
Damage to consumption in emerging countries is slight on the whole

What has changed since the world-wide consumption market underwent the financial crisis and simultaneous global depression? Retail sales of main countries (nominal value) are recovering from the rock-bottom point of mid-2009. However, by countries/regions, most developed countries/regions such as the U.S. and EU zones did not reach the level before the financial crisis. On the contrary, some of the emerging countries such as China and Vietnam declined from the latter half of 2008 to the beginning of 2009 but then robustly recovered and grew, so that we can conclude that the damage of the financial crisis to them was slight on the whole (Figure III-1).

Using World Bank estimates to calculate the growth rate of real private sector consumption expenditures in middle- and low-income countries yields 0.7% growth for 2009, but growth of 4.5% and 5.1% in 2010 and 2011, respectively. These figures far surpass IMF estimates for growth rates of 1.6% and 1.9% for 33 developed countries and regions in the same two-year period. Regarding the sum of estimates of World Bank and that of IMF as global consumption expenditure, contrary to a decrease by 0.5% in 2009, global consumption expenditure is estimated to increase by 2.3% and 2.6% in 2010 and 2011, respectively, yet middle- and low-income countries account for only 20% of the global market yet account for 40% of the growth in global consumption expenditure. Asia is estimated to be a leading region in this regard (Figure III-2).

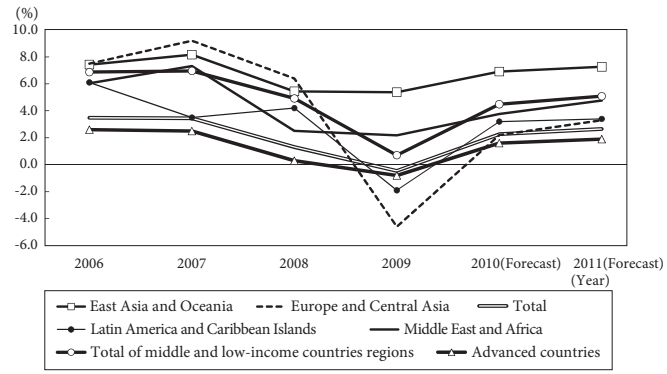
The main reasons why Asian consumption appears to be in a relatively bullish trends among middle- and low-income countries are: 1) represented by China, the stimulus policies to push up consumption of electrical appliances and cars enacted after the financial crisis achieved a certain results; 2) supported by Chinese domestic demands, exports that had dropped sharply for a period of time have steadily recovered; 3) moderation after the financial crisis improved the state of family finances; and 4) in Asian countries that depend heavily upon overseas natural resources, lowered natural resources prices improved trade terms and increased trade profit brought GDP growth.

Figure III – 1 Trends in retail sales volume of major countries/regions



(Note) For Vietnam, monthly volume is calculated with the cumulative volume.
(Sources) OECD Statistics, General Statitics Office of Vietnam.

Figure III – 2 Growth rates in real consumption expenditure by major regions



(Notes) (1) All of each regional value are middle and low-income countries' (GDP per capita 11,905 dollars or less (2008 Atlas method)).
(2) Regional classification compiled based on the classification of "Global Monitoring Report 2010"(April 2010).
(3) Data of advanced countries/regions from that of IMF.
(Sources) "National Accounts Main Aggregate Database"(United Nations), "Global Economic Prospects" (the World Bank), WEO(IMF).

(2) Leading "next middle class" and its actual conditions

The population of the "global middle class" will reach 30 billion by 2030

What are the characteristics of consumption markets in emerging countries that are expected to grow robustly? As a preliminary step for investigation, let us confirm consumers' income levels and distributions. Based on available statistics (conducted on a total population of approximately 4,153 million from 73 countries and regions), population distribution, consumption structures and the characteristics of the global middle class are examined.

The population distribution by income level shows the 67.7% (2,811 million) of the total population belongs to the class of yearly nominal gross income US$ 5,000 or less, and the 52.2% (2,167 million) of the total population belongs to the class of (nominal) yearly gross income US$ 501-5,000. For developing countries and regions (note 1) (conducted on 44 countries with a total population approximately 3,317

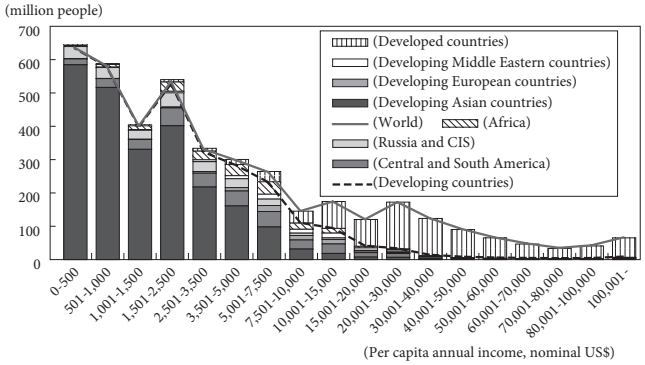
(Note 1) Classification of developing countries and regions follows that of "World Economic Outlook" (IMF, April 2010) unless specified otherwise.

million), 64.2% (approximately 2,130 million) belong to this class (Figure III-3).

Defining the global middle class in terms of spending per day at US$ 10-100 (in 2005 PPP), in the working paper,"The Emerging Middle Class in Developing Countries" (Homi Kharas, January 2010), OECD estimates that the global middle class population of 1,845 million in 2009 (27.0% of the total population (6,829.36 million) by the estimates of the United Nations) could reach 3,249 million by 2020. The global middle class will reach approximately 4,884 billion people by 2030. This means than the there will be the "next middle class" among the low-income class (note 2). During this period, consumption expenditures of the global middle class are estimated to be 13,767 billion (in 2005 PPP) from 2009 to 2020, and will increase to US$ 34,402 billion by 2030. The market that scale will be approximately 3.6 times Japan's GDP (in 2005) US$ 3,870.3 billion (in 2005 PPP) in ten years from now, and will be 8.9 times in twenty years from now will come to fore as the middle layer (Figure III-4).

Besides, the definition of the middle class are various depending on institution or researcher, for instance, pertain to developing countries, some defines the middle class that is a class that person who spends from US$ 2 to US$ 10 (at PPP) a day belongs to (note 3), and other defines that the global middle class is a class a person with annual income approximately US$ 4,000 to US$ 17,000 (at PPP) that is equal to the annual income per person in Brazil and Italia (note 4).

Figure III – 3 Population (regional) by total global income level



(Sources) WEO (IMF), "World Income Distribution" (Euromonitor International).

Figure III-4 Population and consumption expenditure of global middle-income earners

	Population (million people)			Growth rate (Annualized rate,%)	
	2009	2020 (Forecast)	2030 (Forecast)	2009 -2020	2020 -2030
North America	338	333	322	-0.1	-0.3
Europe	664	703	680	0.5	-0.3
Central and South America	181	251	313	3.0	2.2
Asia and Oceania	554	1,740	3,228	11.0	6.4
Sub-Saharan Africa	32	57	107	5.4	6.5
Middle East and North Africa	105	165	234	4.2	3.6
World	1,845	3,249	4,884	5.3	4.2
	Consumption expenditure (US$ billion)			Growth rate (Annualized rate,%)	
	2009	2020 (Forecast)	2030 (Forecast)	2009 -2020	2020 -2030
North America	5,602	5,863	5,837	0.4	-0.0
Europe	8,138	10,301	11,337	2.2	1.0
Central and South America	1,534	2,315	3,117	3.8	3.0
Asia and Oceania	4,952	14,798	32,596	10.5	8.2
Sub-Saharan Africa	256	448	827	5.2	6.3
Middle East and North Africa	796	1,321	1,966	4.7	4.1
World	21,278	35,045	55,680	4.6	4.7

(Note) Consumption expenditure is based on PPP in 2005.
(Source) Homi Kharas,"The Emerging Middle Class in Developing Countries", OECD Development Cetnre Working Paper, No.285, January 2010.

Alternative consumption expenditures increased in the middle- and low-income countries

What are consumption structures, characteristics, and trends in recent years of these middle- and low-income people? Figure III-5 illustrates the consumption structure by income level based on the statistics of respective countries. According to the correlation between income level and consumption structure, known as "Engel's coefficient," as income level improves, the percentage of overall expenditures spent on fundamental needs (food, clothing, and shelter) decreases while the percentage of expenditures spent on luxury goods (selective consumption) increases. In the category of fundamental needs/fundamental expenditures are food, furniture and household utensils including domestic durables (rice cookers, refrigerators) and domestic non-durables (toilet paper, detergent), clothes and footwear, and culture and recreation (television). Examples of selective consumption are transport and communication (expenditures related to cars, cellular phones, computers, video games, travel, lessons, and admission fees for movies). In addition, as income level rises, the development of motorization and the diffusion of durable consumer goods are observed.

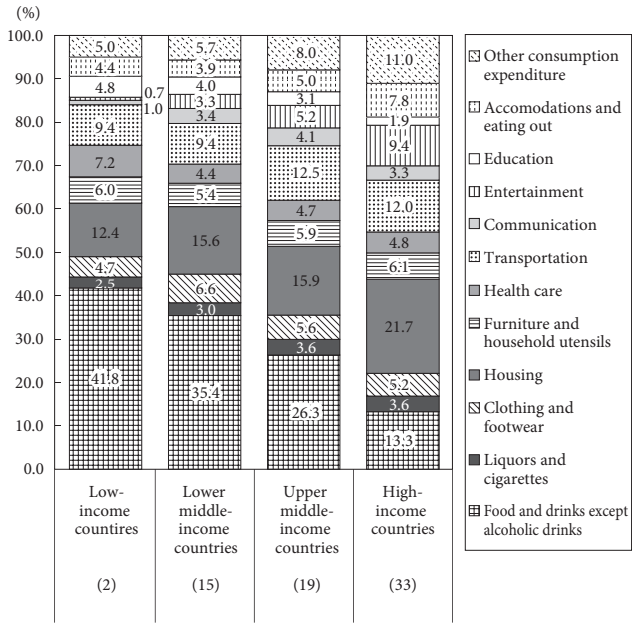
Lower middle-income countries (GDP per capita US$ 976-3,855) and low-income countries (US$ 975 or less) have the highest growth of expenditure (Figure III-6). The rise in overall consumption was impacted by rising grain and energy costs, and expenditures for communication needs (cellular telephones), education, culture and recreation (home electronics), and accommodation and eating out particularly contributed to the rise in overall consumption (Figure III-7).

These items fall into the category of selective consumption expenditures; as income level improves, the consumption structure gradually gets closer to that of developed countries. Furthermore, items that increase expenditures among the middle and low-income classes are service expenditures such as books and other reading materials, clothes, cultural and recreational durable goods, and travel (Figure III-8).

(Note 2) The working paper makes its estimates on certain hypotheses on the structure of income distribution. Therefore the paper does not put into consideration some aspects such as polarization of income distribution which is a result of transition from the middle-income class to the low-income class.

(Note 3) Abhijit V. Banerjee and Esther Duflo, "What is middle class about the middle classes around the world?" Journal of Economic Perspectives, Vol. 22, No. 2, Spring 2008.
(Note 4) "Global Economic Prospects 2007" (World Bank).

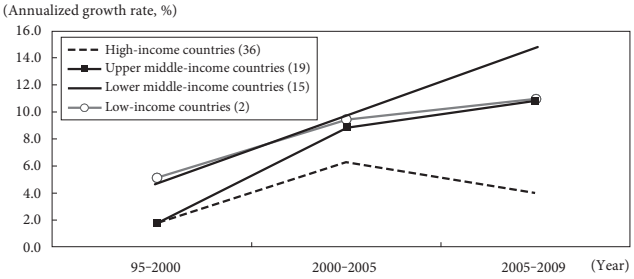
Figure III – 5 Consumption structures by income levels (2009)



(Notes) (1) Based on the definition of the World Bank, the classification of income level is defined as follows:
High-income countries: GDP per capita(Atlas Method)is not less than US$ 11,906.
Upper middle-income countries: US$ 3,856-11,905 same as above
(Brazil, Malaysia, Mexico, Russia, Turkey, South Africa etc.)
Lower middle-income countries: US$ 976-3,855 same as above
(China, India, Indonesia, Philippines, Thai, etc.)
Low-income countries: US$ 975 or less same as above
(Pakistan, Vietnam, etc.)
(2) The number in parentheses in legends is the number of countries subject to a survey.

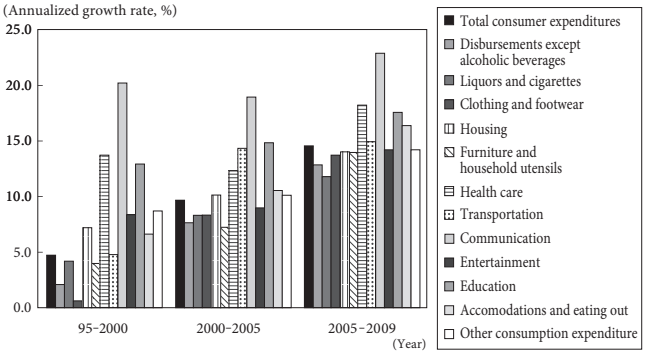
(Sources) Prepared based on "Global Economic Prospects"(the World Bank, 2008), "World Consumer Spending"(Euromonitor International). Same for Figures III-6, 7 and 8.

Figure III – 6 Consumption expenditure growth rate by income level



(Note) the number of sample is in parentheses.

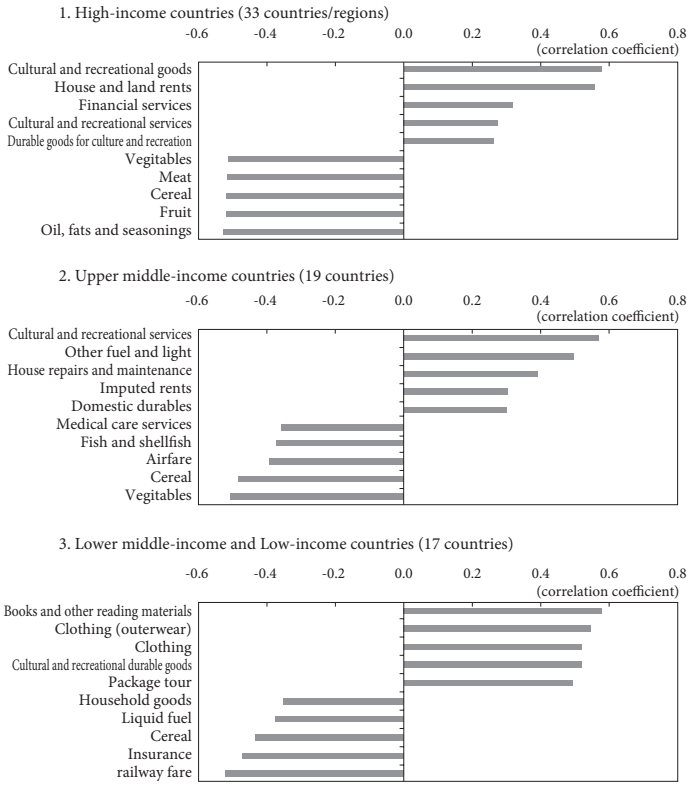
Figure III – 7 Consumption expenditure growth rate in lower middle-income countries and low-income countries (17 countries) by item



Well-selling goods depend on income level and region

On the other hand, the consumption structure in each country is impacted not only by income level but also by industrial structure and household composition, the rate of savings, social security systems, cultural background, and family structure. Moreover, regional characteristics of well-selling goods and services and the range of prices are different even within the same country. JETRO conducted a price survey of 14 items, such as electrical appliances, foods and beverages, services, etc., in 22 major cities in 16 countries in Asia and Oceania in March 2010. The results show various price ranges and characteristics of products depending on income level and region. Regarding liquid crystal televisions, 32-inch televisions are the best sellers in most countries, but the price range varies from JPY 28,752 (Hanoi) to JPY 88,000 (Colombo). The results also show that South Korean and Chinese products are chosen due to price, while Japanese products are chosen due to quality, durability, and satisfactory after-sales service, etc. Regarding household electrical appliances, large and luxury goods are well-sold in most metropolitan areas with high-income levels; one-door refrigerators in the JPY 18,000 to JPY 33,000 price range are well-sold in most cities, yet the three-door is popular in Hanoi. Regional characteristics are observed even in the same products, for instance, full-automatic type refrigerators price range from JPY 27,000 to JPY 37,000 have popularity, but there are differences in the capacity that varies from 6.5

Figure III – 8 Items that change the rate of expenditure as income level improves



(Note) Correlation coefficient, five higher-ranking and lower-ranking items that account for a disribution ratio of GNI per capita of individual countiry/region as of 2008. Items subject to research follow middle and smaller classification of respective countries' available the family income and expenditure suvey.

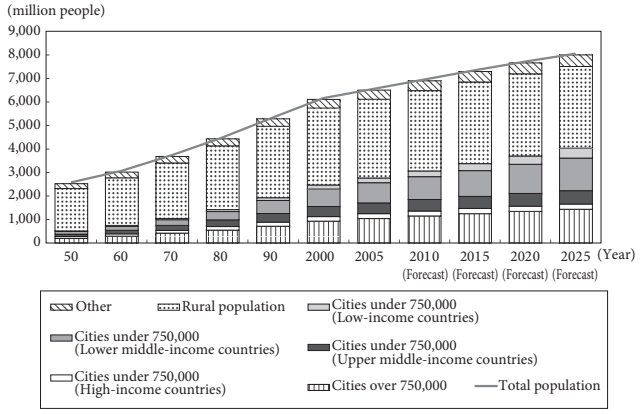
kg to 12 kg, and ultra low-cost refrigerator approximately 7,000 yen is well-sold in Karachi.

Middle-sized and regional cities as next targets

Social segments that could be targeted by Japanese companies live not only in large metropolitan areas or coastal areas, but also largely in mid-sized and regional cities. Along with this concentration of populations in metropolitan areas, the population growth rate in middle-sized cities under 750 thousand people is on the rise, and this trend is more clearly observed in middle- and low-income countries (Figure III-9).

As large urban areas become increasingly overcrowded, problems with infrastructure constraints and worsening living environments will surface, while in mid-sized cities that attract new companies, there could be an increased demand for labor, and income levels could rise. With sufficient infrastructure in place and improved residential environments, mid-sized cities could displace large cities as a workforce destination for , which could be a major factor helping to push mid-sized cities' population growth rates above those of large cities. According to population estimates by the United Nations, in the 15 years between 2010 and 2025, the world's population will increase by 1.10 billion people. Some 96% of this increase (1.05 billion people) will come from growing populations in cities, of which 68% (or 712 million people) will live in metropolitan areas of less than 750,000 people (based on population figures from 2009). Especially, populations of lower middle-income countries and low-income countries are estimated to increase by 589 million. This growth is expected to contribute to powerful purchasing power in those countries. Actually, it is observed that population growth rates of local areas are higher than those of major metropolitan areas (Figure III-10).

Figure III – 9 Change in population by income level and inhabited area



(Notes) Of the countries/regions whose population was estimated or forecast by the United Nations, statistics were compiled for countries for which data on income level is available. Countries/regions for which such data is not available are included in "other."

(Sources) "World Population Prospects: The 2008 Revision," "World Urbanization Prospects: The 2009 Revision" (United Nations), "Gross national income per capita 2008, Atlas method and PPP" (World Bank).

(3) Japan's presence in emerging markets

Japan's share in the trade and investment arena has fallen

With the above in mind, how is Japan's presence in emerging markets, especially in middle and low-income countries?

In the trade arena, Japan's share of the total value of global exports was about 9% to 10% in the late 1980s, but by 2009 that number had fallen to 4.7%. In order to measure the extent to which Japanese products have penetrated overseas markets, countries were categorized by income level and the Japanese share of overall imports was observed. Results clearly showed that while Japan had a relatively high share in lower and middle-income countries (including China), its share was falling in all income levels. In developed countries, while U.S. follows almost the same trend as Japan, Germany constantly secures an approximately 10% share.

Figure III-10 Growing regional cities in major emerging countries

1.Economic growth rate for China and India national-capital regions and rapidly growing regional cities (Annualized growth rate; %)

China (2005-2009)		India (22004-2008)	
*Beijing	14.2	*National Capital Territory	16.0
Inner Mongolia Autonomous Republic (west)	25.6	Chhattisgarh State	19.6
Ningxia Autonomous Republic (west)	21.5	Chandigarh Union Territory	17.6
Shaanxi Province (west)	20.1	Pondicherry Union Territory	17.3
Qinghai Province (west)	18.8	Goa State	16.6
Jilin Province (northeast)	18.8	Haryana State	16.6

2.Economic growth rate by region for Indonesia, Russia and the Republic of South Africa (Annualized growth rate; %)

Indonesia (2004-2008)		Russia (2004-2008)		Republic of South Africa (2004-2008)	
*Jakarta	15.9	*Moscow	28.9	*Gauteng State	12.1
Sumatra	18.5	*Central Federal District	27.2	Western Cape State	11.8
*Java	16.6	North-West Federal District	24.7	Northern Cape State	14.4
Bali	14.6	South Federal District	24.7	Eastern Cape State	10.9
Kalimantan	20.4	Volga Federal District	22.3	Kwazulu-Natal State	12.6
Sulawesi	17.8	Ural Federal District	24.5	Free State	11.9
Nusa Tenggara/Maluku and Papua	16.5	Siberia Federal District	24.4	North West State	13.9
		Far East Federal District	22.1	Mpumalanga State	16.1
				Limpopo State	15.4

(Notes) (1) An asterisk (*) indicates the region in which the national capital is located.
(2) For China and India, the top five high-growth-rate regions are ranked.

(Sources) National statistics, CEIC database and Thomson Reuters.

On the other hand, China is steadily increasing its share at most income levels, most noteworthy being its 14.8% (yearly average 2005-2009) share in low-income countries. South Korea's gross export amount (US$ 580.8 billion, year 2009) is two-thirds of that of Japan, yet Korea is steadily increasing its share in middle and low-income countries, and its share in low-income countries is almost the same as Japan's (Figure III-11).

In the realm of FDI as well, Japan's share in the total worldwide outward FDI position had been more than 10% since the second half of the 1980's until the beginning of the 1990's, second to the U.S. as an individual country. In 2009, however, that dropped to 3.9%, with Japan playing second fiddle not only to the U.S. but also to other developed economies such as Hong Kong. The outward FDI position by region of each country shows that Japan's FDI position is approximately 20% of that of the U.S., yet approximately four times that of China, and more than five times that of Korea. This means that Japan's international expansion in the realm of FDI runs far ahead of China and Korea on the whole (Figure III-12). Regarding the breakdown by country, while 70% of Japan's overall investment goes to developed countries and regions such as North America and Western Europe, more than half of South Korea's FDI goes to emerging countries. Hong Kong accounts for 63.3% of FDI by China. Excluding Hong Kong, most of China's FDI is directed at emerging countries in Asia and Central and South America, rather than toward North America or Western Europe. It is difficult to make a simple comparison, because there is no standardized method for calculation, yet Japan's forays into emerging markets comes somewhat late in the realm of direct investment.

Figure III-11 Major economies' share of importing country/region by income level

(%)

Exporter	1980s	1990s	2000-2004	2005-2009
High-income countries (52)				
Japan	8.5	8.1	5.9	4.3
U.S.	11.5	11.4	9.3	7.2
China	1.7	5.0	8.2	11.3
South Korea	1.6	1.9	2.0	1.9
Germany	9.9	9.9	9.8	9.9
Upper middle-income countries (40)				
Japan	6.9	7.1	5.4	4.4
U.S.	22.2	28.7	26.5	17.0
China	1.4	1.6	4.2	8.8
South Korea	0.5	1.8	2.2	2.8
Germany	7.3	8.7	8.6	9.5
Lower middle-income countries (47)				
Japan	15.4	15.6	13.3	10.2
U.S.	12.1	11.7	9.8	7.7
China	1.1	1.6	2.6	4.6
South Korea	1.1	4.3	6.6	6.9
Germany	8.0	6.6	5.1	4.7
Low-income countries (41)				
Japan	10.8	10.2	7.4	4.7
U.S.	9.2	6.0	4.3	4.2
China	3.4	5.0	8.4	14.8
South Korea	1.2	6.2	6.2	5.0
Germany	6.7	5.0	3.5	2.6

(Notes) (1) Income-level classification follows the World Bank's 2008 standard.
(2) Numbers in parentheses show the number of countries/regions for which figures were compiled.
(Sources) DOT(IMF), "Gross national income per capita 2008, Atlas method and PPP"(World Bank).

(4) Japanese firms' strategies for breaking into "volume zones"

What kinds of strategies are effective for breaking into middle-sized cities and local areas with the aforementioned emerging markets where potential demand among the middle and low-income classes is high? First of all, let us look for clues from examples of Japanese and foreign firms.

Suntory became the company with the highest share of Shanghai's market by price setting and reducing distribution costs

Suntory's brewery business in Shanghai is an example of success in the low-price range market in China. Suntory became the first foreign company to set up a joint venture in beer when it set up operations in Lianyungang, Jiangsu Province in 1984. Suntory acquired Chinese business know-how and experience there, and expanded the brewing business in Shanghai. Suntory established Suntory Brewing Co., Ltd (now Suntory [Shanghai] Brewing Co., Ltd.) and launched sales of the "Suntory Beer Qing Shuang" and "Suntory Beer Chao Shuang" products. "Its performance was rapidly improved by audacious advertisements and television commercials using airships, providing "refreshing" beer suited to the taste of people in Shanghai, and its unique sales operations and approach to distribution. Consequently, Suntory Beer became the company with highest share of the Shanghai market" (Suntory's web-site). Since then, it continued to expand, for instance, becoming the first draft beer brewery and seller in the Shanghai area, acquiring Shanghai Foster's Brewery Co., Ltd, and launching sales in Suzhou and Wuxi in Jiangsu Province.

Price ranges of beer in the Chinese market are categorized into 1) premium beer: 4 to 6 yuan, 2) popular beer: 2 to 3 yuan, 3) low price beer: under 2 yuan. Suntory targeted 2) and broke into the Shanghai market, yet actual sales volume in the first year, 1996, was 2,000 tons. This was only 10% of the estimation. Suntory then conducted market research and reviewed its strategies.

The main factors of success that some researchers pointed out were that Chinese local beer generally tastes mild, its color is yellow, and it is highly carbonated. In consideration of this, Suntory 1) changed the taste and color from European-style taste and brownish coloring to a less-bitter, lemon-colored brew, 2) decreased the price to 2.5 yuan per can from the initial price range, from 3.5 to 4 yuan, because that was too expensive for the majority, and 3) regarding distribution, circumvented the first and third wholesaler in the three step wholesaler system (the first wholesale → second wholesale → third wholesale), and started dealing directly only with selected second wholesalers. As a result, Suntory succeeded in simplifying the distribution process.

Professor Tomoo Marukawa, Institute of Social Science, Tokyo University, pointed out that the keys to break into

Figure III-12 Outward FDI position of Japan, U.S., China and South Korea by country/region

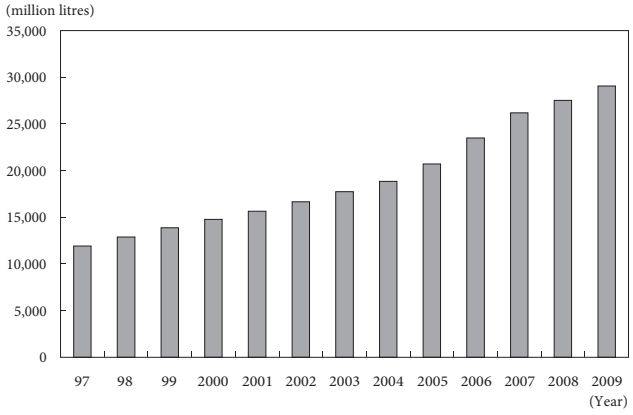
(US$ million, %)

	Outward FDI position				Share				
	Japan 2009	U.S. 2009	China 2009	South Korea 2009	Japan	U.S.	China	China (excluding Hong Kong)	South Korea
Total	740,364	3,508,142	183,971	142,986	100.0	100.0	100.0	100.0	100.0
Asia	175,645	399,169	128,007	63,739	23.7	11.4	69.6	17.9	44.6
China	55,045	49,403	–	29,913	7.4	1.4	–	–	20.9
Japan	–	103,643	510	3,178	–	3.0	0.3	0.7	2.2
Asia NIEs	58,607	173,808	120,030	12,790	7.9	5.0	65.2	6.1	8.9
Hong Kong	13,048	50,459	115,845	9,316	1.8	1.4	63.0	–	6.5
ASEAN 4	48,441	45,506	1,428	7,525	6.5	1.3	0.8	2.1	5.3
Vietnam	3,353	–	522	5,730	0.5	–	0.3	0.8	4.0
India	8,982	18,610	222	1,839	1.2	0.5	0.1	0.3	1.3
North America	240,246	259,792	3,659	34,539	32.4	7.4	2.0	5.4	24.2
U.S.	230,948	–	2,390	30,110	31.2	–	1.3	3.5	21.1
Central & South America	99,056	678,956	32,242	10,827	13.4	19.4	17.5	47.3	7.6
Brazil	21,337	56,692	217	1,182	2.9	1.6	0.1	0.3	0.8
Oceania	36,175	112,186	3,816	3,437	4.9	3.2	2.1	5.6	2.4
Western Europe	174,939	1,925,781	2,882	18,119	23.6	54.9	1.6	4.2	12.7
Eastern Europe, Russia, etc.	4,112	50,443	4,217	8,074	0.6	1.4	2.3	6.2	5.6
Russia	954	21,328	1,838	1,470	0.1	0.6	1.0	2.7	1.0
Middle East	4,453	46,839	1,476	2,576	0.6	1.3	0.8	2.2	1.8
Africa	5,734	34,979	7,672	1,675	0.8	1.0	4.2	11.3	1.2
Republic of South Africa	1,730	5,922	3,049	169	0.2	0.2	1.7	4.5	0.1
(Reference) Developed countries/regions	509,968	2,575,210	130,897	72,062	68.9	73.4	71.2	22.1	50.4

(Notes) (1) The geographic classification for country/region follows the Japanese Ministry of Finance and the Bank of Japan's "Balance of Payments Statistics."
(2) Figures for Japan, the U.S. and China are international balance-of-payments basis. For South Korea, the figures are for the cumulative amount of remittances by investors since 1960.
(3) Figures for Japan are values originally published in yen. Converted to U.S. dollars by applying the Bank of Japan's interbank and end-of-quarter exchange rates.
(4) For the purposes of this figure, the developed countries/regions are Japan, Asian NIEs, North America, Oceania and Western Europe.
(Sources) Japan: "Japan's International Investment Position" (Bank of Japan, May 2010).
U.S.: "U.S. Direct Investment Position Abroad on a Historical-Cost Basis"(Department of Commerce, June 2010).
China: "2008 Statistical Bulletin on China's Outward Foreign Direct Investment" (Ministry of Commerce, September 2009).
South Korea: "Overseas Investment Statistics" (Export-Import Bank of Korea, May 2010).

the volume zones are 1) reasonable price to consumers, 2) supply products that suit consumers' tastes obviously or potentially, and 3) finding sales routes. Chinese development is remarkable, though the GDP per capita is approximately just US$ 3,000. Affordable price setting to the majority of Chinese is crucial. On the grounds that affordable pricing could limit manufacturing and sales costs, it is difficult to pursue absolute high quality. In this case, finding potential needs and approaching them is the key to break into volume zones (Figure III-13).

Figure III – 13 Beer sales in China



(Source) "Internatinal Marketing Forecasts" (Euromonitor International).

Successful Japanese firms in Chinese inland markets and their tasks

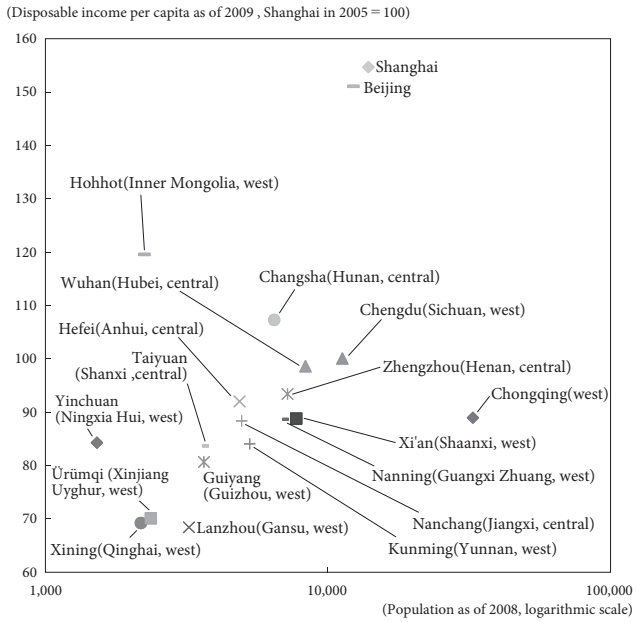
The Chinese economy had recorded two-digit GDP growth rate for five consecutive years since 2005, yet due to the financial crisis it dropped to 6.2%. In this regard, the government announced a 4 trillion yuan (1 yuan = approx. 13.3 yen) stimulation measure in November 2008. Approximately 80% of the total amount was invested in infrastructure. The breakdown of this is 37.5% to setting in place the infrastructure, such as roads, railways, airports, and electricity; 25.0% for Sichuan earthquake reconstruction; 10.0% for low-cost house building; and 9.3% for infrastructure construction in agricultural areas. This measure took effect and the growth rate immediately recovered and the real GDP growth rate was 9.1% in 2009, reaching 11.9% in the first quarter in 2010.

Regarding gross regional product (GRP) growth, while coastal regions such as Shanghai, Zhejiang Province, and Guangdong Province, heavily dependent on exports, recorded one-digit growth, inland regions recorded two-digit growth. This is because as a part of the stimulus measure infrastructure investment was targeted on the mid-eastern region, and investment in fixed assets showed rapid growth. In addition to this, strategies of regional development in China took effect.

Midwestern regions classified as inland regions (12 provinces, 5 autonomous regions, and 1 direct-controlled municipality) cover 7,900 thousand sq km and account for 82% of gross area; with a population of 720 million inland regions account for 55% of the total population, yet excluding Inner Mongolia autonomous region, the GRP per capita of each is below the national average. This area opened late to overseas and developed relatively developed late. Initially, the nation prospered based on Deng Xiaoping' propaganda "well-off first theory" (policy of Chinese economic reform), yet the government changed tacks in order to assist less developed of regions because "well-off first theory" had brought harmful effects that is regional economic gap. In 1999 the "China Western Development" policy was introduced and the "Revitalize Northeast China" policy was introduced in 2003. Regarding the central region, the only region left, the "Rise of Central China Plan" was announced in 2006. At present, the disposable income of inland regions is below the national average, yet the income level of provincial cities reached the level of Shanghai from 2003 to 2005 (Figure III-14).

Although most Japanese companies have focused on coastal regions with higher income levels to develop the Chinese market, examples of companies making inroads in Midwestern markets are increasingly observed at present. Ito-Yokado opened its first branch store in Chengdu, the capital of Sichuan Province, in 1997; currently it has four branch stores. Isetan also opened a branch store in 2007. Furthermore, with China as a manufacturing base the automobile sector is expanding business. As joint ventures with domestic companies, Toyota established a local factory in Chengdu, Sichuan Province; Nissan in Wuhan, Hubei Province and in Zhengzhou, Henan Province; and Suzuki in Chongqing and Jingdezhen, Jiangxi Province. Heiwado, a general supermarket chain headquartered in Shiga prefecture, is a remarkably successful example of a Japanese company developing a consumer market in regional cities. At the request of Hunan Provincial government, a "friendly city" of Shiga prefecture, Heiwado opened its first branch in Changsha, the capital of the province, in 1998, and now has two branches in Changsha and one in Zhuzhou, in the same province. The reasons why it decided to open the branches in Changsha, a city with unfavorable purchasing power compared to the purchasing power in coastal cities such as Shanghai, are as follows: 1) there is sufficient number of population (approximately 1.8 million) that offset individual's low income level, 2)no competition with other foreign companies, and 3) introducing Japanese service would enable Heiwado to differentiate themselves from local companies. Moreover, regarding the location, it chose the conventional business hub "Wuyi Square," targeted at the business category not of supermarkets but of department stores, expecting to attract larger numbers of customers. Heiwado's strategy was not to bring Japanese values to Changsha but to focused on products that would suit consumers in Changsha; by grasping the forefront trends and reflect that into their line of products, they met the demands of the local consumers. To put this into practice, it opened positions to local personnel and most Chinese employees are from local areas. Basically, buyers are all local personnel, and local employees also take charge of product lines, and arrangement in stores, and manage community-based stores. On other hand, Japanese management philosophy is followed, and service in regard to customers is emphasized. The practice of greeting customers with "Irasshaimase" made headlines and contributes to the establishment of brands. Heiwado suggests the following for Japanese companies hoping to enter the Chinese market: 1)sufficient planning so as to localize thoroughly, including making the best use of local personnel, and 2)it is possible to improve presence by establishing brands through differentiation from competitive companies owing to Japanese management philosophy and service that regards customers as important. In other words, this is a successful pattern of adapting the strong points of localization and of Japanese ways. However, there is a pile of tasks left in order to break into inland districts in China. First of all, the distribution infrastructure is underdeveloped, channels of distribution and sales are complicated, and there is a large gap between the purchasing power of large provincial cities and that of small cities. Taking into account the difference between the distribution costs of coastal lines and of inland regions, and the gap of purchasing power, it is difficult to set prices. Moreover, complicated distribution and sales channels could become obstacles in communicating with local partners, wholesale and retail traders. Inland regions in China have high potential for growth and are markets that allow the first comer to gain profits easily, and overcoming the aforementioned tasks will be the key to success.

Figure III – 14 Population of major cities in middle western part of China and level of disposable income per capita



(Sources) China Statistics Yearbook, data from CEIC.

Detailed marketing is the key—Regional development of Maruchan Mexico

Toyo Suisan established a factory in Irvine, California, U.S., and started manufacturing and sales in the U.S. The

beginning of the popularity of Toyo Suisan in Mexico was through a Mexican who had come to California to work and ate the noodles at a bus terminal on his way back to Mexico, or brought it back to his home (Figure III-15). Toyo Suisan started exporting in 1989, and established its sales company, Maruchan de Mexico S.S. de C.V., hereafter referred to as "Maruchan Mexico," to reinforce sales in Mexico.

The sales volume in the North American market (U.S. and Mexico) in March 2010 yielded 63.8 billion yen and reached approximately 20% of the company's total operating profits (approximately 319.9 billion yen), and operating profits (approximately 12.4 billion yen) accounts for more than 40% of the company's total operating profits.

According to research by AC Nielsen, cup noodles "Maruchan" made by Toyo Suisan are quite a popular brand and account for 70% of the cup noodle market in Mexico. It is called "Sopa Maruchan" (Maruchan soup) and is especially loved by young generations, from the ages of 10 to 35. More than three fourths of consumers are categorized in the middle and low-income classes ("C" and "D+" within the socioeconomic levels defined by AMAI, Mexican Association of Market Research Agencies) that account for more than 50% of total number of household in Mexico. Maruchan is a one of a few companies that mainly targets at volume zones and thusly expands business.

Maruchan's sales network expands to the whole country, excluding the Republic of Guatemala, and is sold in almost all regional cities. Sales in the Mexico City area account for nearly 40% of sales, and the combined sales of the three metropolitan cities (in and around Mexico City; in and around Guadalajara, the second largest city; and in and around Monterrey, the third largest city) account for 70%. The remaining 30% is sales in provinces. Maruchan's share is especially high in northern Mexico, and that accounts for more than 90% of the market in Baja California.

The reason why Maruchan products steadily established presences are as follows: 1)taking into account the regional characteristics, it designed marketability and packages etc., 2)it takes into practice detailed marketing in respects of both distribution and sales promotion.

Regarding the products, since Mexican food includes shrimp and spicy flavorings, approximately 80% of the sales of cup noodles are shrimp flavored and two-thirds of that is spicy. Popular tastes depend upon regions, such as cheese flavors are frequently ordered in Monterrey. Grasping these tastes through consumers' participation in social events and through writing on the company's homepage, the company incorporated these into new product development. For packages, since the literacy rate is low in regional cities, it uses a picture of shrimp and beef etc., so that illiterate consumers can easily know the contents.

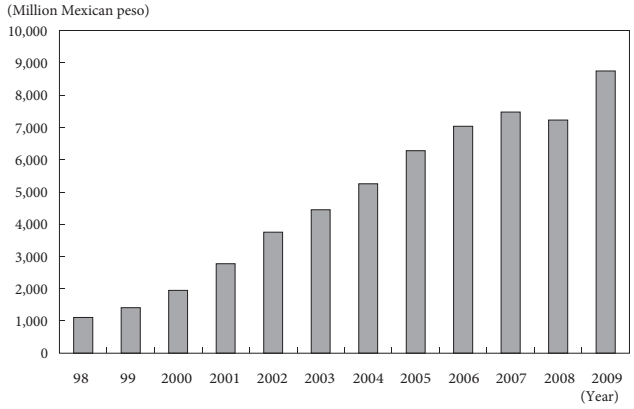
Grappling with distribution and sales promotions, it can be pointed out that the company does not rely on distributors, but working with local wholesalers Japanese representatives of Maruchan conduct route sales and based on that, they work on detailed marketing from information about distribution and sales to promotions.

Approximately 80% of the products sells at wholesale through Mexico-affiliated distributors (7 companies), and approximately 80% of that sells at retail stores called Abarroteria, and the remaining 20% sells at supermarkets. Especially in rural areas, markets using wholesalers are the mainstream, and some distribution processes have four steps (the fourth wholesale). Based on sales reports, retail stores minutely check inventory control, displays (whether dust is on products or not), expiration dates, and so on. Regarding research on actual consumers' conditions, a contract agent of Maruchan goes around to approximately thirty retail stores a day and checks the condition of display and inventory control, and advises on methods of sales promotion to the retail stores.

On the other hand, there are particular difficulties in rural areas. For instance, wholesalers have strength and channels of distribution are complicated. In remote corners of the country, it is difficult to monitor a sales promotion and to collect debts. Concerning these, Maruchan Mexico periodically goes to the field, acting with a wholesale sales person, and makes efforts to deepen mutual understanding and to frequently confirm the state of sales in retail stores.

Moreover, local areas are sensitive to rumors and damage caused by rumors there is more serious than in metropolitan areas. In rural areas, if a well-known authorized person such as a school teacher shows a critical view to cup noodles, sales tend to drop. Also, it is easily believed that if one eats cup noodles they will not be digested and will remain in the stomach for three months. Maruchan Mexico appeals to considerations of health, for instance, "the 100% use of wheat" and "low-calorie" on the home page and at consumer social events, and added the catch phrase "nutritious" to the conventional, "delicious" and "quick."

Figure III – 15 Market sizes of instant noodles in Mexico



(Sources) "Consumer International" and "International Marketing Forecasts" (Euromonitor International).

Development in agricultural villages of Ebara Vietnam—keywords are people and the scene

A Japanese company that obtained excellent results in business for local agricultural villages is Ebara Company Ltd. (hereinafter referred to as Ebara). In 1995, Ebara received permission to build a factory in Vietnam. In 1999, the Ebara Hai Duong factory was established. Through Overseas Development Aid, Ebara was able to develop its

business and raise its profile in Vietnam. It now receives orders for equipment to treat waste water and for pump facilities in major cities in Vietnam. It has started to manufacture customized pumps and to export to ASEAN countries, and customized pump sales (in irrigation and in the 4,000-cubic-meter-per-hour flow-rate class of water-discharge pumps) has held a 30% to 50% share since 1999.

Ebara pumps that sell in Vietnam are wide-use pumps for households/buildings and apartments (caliber of 100mm diameter or less, 100-cubic-meter-per-hour flow-rate class) and customized pumps that are completely made to order for agriculture and industry (in irrigation and in the 4,000-cubic-meter-per-hour flow-rate class of water-discharge pumps).

All wide-use pumps are made in foreign factories, and imported to Vietnam by preparatory orders of distributors (two stores in the country). After this, through some sub-dealers, many community-based retails stores sell them to general consumers. Regarding customized pumps, Ebara Hai Duong makes to order to sell in Vietnam, and Ebara Vietnam sells the pumps. The main clients are financial aid institutions such as the Ministry of Agriculture and Rural Development (MARD) and the Department of Agriculture and Rural Development (DARD), and basically decide on a contractor by competitive bidding.

Ebara has been selling wide-use pumps more than ten years and aggressively develop customized pumps to agricultural areas.

Ministry of Vietnam budgeted several billion yen a year limited (including funds from the Asian development bank and the World Bank) for irrigation and drainage pumps. On the other hand, the percentage of people who engage in agriculture and fisheries in local agricultural areas is as high as 66.2% (based on population census, General Statistic Office of Vietnam, December 2009), and equipments become deteriorated. This is a field that expected to expand in the future. However, competition between makers is fierce; not only Chinese and Indian companies take advantages of low-price range, but also the famous European pump maker Grundfos, KBS etc., and South Korean makers that are influential in the field of construction and electrical appliances enter the market.

How can Ebara be chosen in a bidding system that focuses on price and come to hold a high share in the field of agricultural pumps in this competitive circumstance? This is enabled by steady technical proposal activities, and by emphasizing the differences between their own products and those of Chinese or overseas famous makers. Ebara has thusly achieved a high overall rating for competitive bidding.

Vietnamese engineers are key when Ebara conducts technical proposal activities to the issuer of competitive bids. Ebara employs multiple engineers who have experience of all aspects of project management including field surveys, the planning of the pump field, technical proposals, bidding, contracting, design, instructing installation, and delivery. To encourage these people, Ebara aims at the stability of the workforce by making them understand the meaning of the business philosophy, "solution business," and let them find the value in a sense of satisfaction in their work more than in wages. The strength of Ebara lies in its employment of local staff, thus allowing them to actively contribute to his or her own country; in other words, making the best use of local personnel.

Vietnamese engineers grasp existing problems by going around and researching existing local pump stations and local organizations all over the country, and by interviewing operators. Based on this they plan a pump system to suit each location and conduct technical proposal activities (optimization). It seems that clients trust Ebara because they have a reputation in long-term ODA business and has the only full-scale pump manufacturing factory. Entering the market at the early stage brought these favorable results.

Moreover, Ebara adopted a strategy of maintaining cost efficiency by specializing in a field where it can display its strength. For instance, Ebara has decided not to become involved in prospective deals of pumps with 4,000-cubic-meter-per-hour flow-rate or below or with low pressure areas, where technical difficulty and price ranges are fairly low or where differentiation with competitors is not possible. It concentrates on achieving cost effectiveness by applying its business strategy where it can make the most difference.

Ebara Vietnam grapples with the problems of analyzing its own strength on the spot. This could be called a business model that made the best use of a solution-based business system, integrating manufacture and sales on the spot. In fierce price competition with other makers, this result is achieved today by constant activities to gain client satisfaction.

Opening up an emerging market through a company of a third country

A case in which a company found a foothold in opening up a new market through a company of a third country is as follows.

In December 2009, Daiichi Sankyo announced its business cooperation with the Indian company Ranbaxy Laboratories Limited (shortened as Ranbaxy hereafter), which had been consolidated and became a subsidiary in 2008. The main product of Daiichi Sankyo, Olmesartan, an anti-hypertensive that recorded sales of 240 billion yen in 2009, will be sold in Africa. Sales will be launched under the name "Olvance" in six African countries: Kenya, Mozambique, Nigeria, Tanzania, Uganda, and Zambia, as soon as it receives the permission of the respective countries and prepares a suitable environment for sales.

Ranbaxy has outlets in 48 countries and its sales network spreads over 125 countries. This is not the first time that Daiichi Sankyo and Ranbaxy have cooperated; they launched sales of Olmesartan, the dominant anti-hypertensive product in India, in April 2009, and sales of Evista, an osteoporosis medication, in Rumania in October. In February 2010, Daiichi Sankyo started to develop in Mexico and announced sales of Olmesartan and Prasugrel, an antiplatelet agent (sales promotion cooperated with U.S. Eli Lilly) through subsidiaries of Ranbaxy.

Similarly, another Japanese company that has entered new frontiers in emerging markets by utilizing a company in a third country is the case of Sumitomo Mitsui Banking Corporation, who tied up with Barclays PLC. In June 2008, Sumitomo Mitsui Banking Corp. invested 5 hundred million pounds in the capital of Barclays and they reached a joint venture agreement. Using the tie-up of Barclays, with a substantial number of clients and a store network in Africa, Sumitomo Mitsui Banking Corp. decided to reinforce its activities in this area, and reached a basic agreement with Absa Bank Limited, a subsidiary of Barclays, that has 1,062 branches in Africa.

(5) Strategies of U.S. companies in emerging markets

Compared with Japanese companies that show the aforementioned developments, what sort of strategies do foreign companies such as those from the U.S. adopt? After going over the views of think-tanks and intellectuals in the U.S., examples of U.S. companies are shown here.

Emerging markets have great potential but many issues are unsolved

According to the University of Pennsylvania's Wharton School, multinational companies in the U.S. regard emerging countries not only as a source of cheap and excellent human resources but also as markets with a future, and Professor Jagmohan Raju, Wharton School, views that "it is a virtuous circle in which a the number of companies that use excellent human resources in emerging markets is increasing, and those same employees could become the new purchasing power."

McKinsey Global Institute estimates that the number of middle class citizens in India, 50 million at present, could increase to 583 million by 2030. The scale of the Indian consumer market, ranking 12nd at present, may rise to 5th in 2030. China will be the third largest consumer market by 2025. The middle class accounts for 43% of the total population in China, though that could expand to 76% by 2025. Bill Amelio, CEO of Lenovo, shows a representative view that the "strategies of U.S. companies could be wrong if it does not reinforce overseas markets more than U.S. market in the future."

On the other hand, the following points should be considered because the quantitative expansion of the middle class does not necessarily connect to business. The first point is that the middle class is not increasing evenly in emerging countries. According to Professor John Kimberly, Wharton School, "there are both regions where the number of people categorized into the middle class increases and where it decreases. Total number of people of middle class is increased though, that have to be observed carefully because that is changing depending on county and region." A second point is that some experts are concerned about the Chinese and Indian tendency to save. Dian Farrel, Director of McKinsey Global Institute, said that both countries "yield high savings rate and it will take a long time to change from an investment dependent market to a consumption dependent market." Furthermore, some experts point out the possibility in which the expansion of the middle class leads to increased commodity and energy prices that discourage consumerist inclinations.

The expansion of the service industry is slow; Dian Farrel has said that "the strength of U.S. companies is in the service industry. However, people of middle income class in developing countries frequently purchase consumer products, but a level of their using of service is low. Restriction of respective government is tight. The restriction to retail trades in India is a large obstacle."

Delays in the improvement of infrastructure are another point that is frequently emphasized. According to the Wharton School, "underdeveloped infrastructure such as roads and airports in India hinder the distribution of goods considerably. However, if one is able to construct a distribution system going ahead of others, and be able to dominate that, this can be a big business chance."

According to the consulting firm, A.T. Kearney, 75% of the global middle class, not categorized into the first group cities (first tier) at present, will be categorized in small-scale second or third tier by 2017. Even small cities or villages, for example in China, the population in Wuhu city in East is 2.3 million and the population in Maoming city is 6.8 million. Major retail companies such as Starbucks and Carrefour are reinforcing the development in inland districts (following Wal-Mart, Carrefour ranks second in the foreign retail sector in China). In addition, it is pointed out that many issues are still unsolved regarding development in local areas, such as difficulty in yielding profits due to low consumer income, the difficulty of maintaining good local suppliers, and concerns with respect to safety and sanitation.

Know-how to capture the middle class markets in emerging countries

What sorts of strategies do the companies of each country adopt? Some points are described as follows.

1) Management—Employment and diversity of local personnel are the keys

Accenture insists that it is necessary to employ local personnel in managerial positions in order to be successful in emerging markets. Although it is an actual condition of most companies that human resources are managed through the coordination of home country offices and local offices, employment and human resource development are largely dependent on local culture, and it is necessary to leave authority to local managers. The promise of "prompt promotion" causes a scramble for talented persons among companies. Regarding this, Accenture insists that each company should have a retention strategy to stabilize talented personnel, and especially for small and medium-sized enterprises, reviewing human resources strategies flexibly according to circumstances is the key to maintaining talented personnel.

Bill Amelio, CEO of Lenovo Group, has said "the important thing in entering markets in emerging countries is a wide variety of the management personnel. One of the standards is to appoint employees from various countries to management positions at the same level." Currently, employ-

ees from different 10 countries constitute the management team of Lenovo. There is no idea of a headquarters but a hub system connects each area instead. Each area is responsible for its own decision making.

2) Own resources or M&A?

There are two means to entering markets in emerging countries. The one is to enter gradually by using the company's own resources. The other is entering them by M&As. Both have strong points and weak points. When entering markets by using one's own resources, the time consuming tasks are improving name value and understanding, constructing sales channels, adjusting to local regulations, and creating continuous management that is includes local personnel. If these issues are solved, controlled growth in own system can be expected. In the case of M&A, the priority is to find the most suitable company with which to enter into an M&A, but this is not an easy task. Companies with favorable conditions have many buyers but few sellers, and companies that want to be sold generally have some problems. However, once one is able to secure the company to acquire, one is able to capture the existing infrastructure and clients, and penetrate markets deeply and quickly (Accenture).

In this respect, the way in which Carrefour (French retailer) entered the market in Brazil provides useful information. Carrefour made inroads into the market in Brazil in 1975. Brazil at that time was experiencing inflation and consumers tended to spend before the value of money would drop. In this environment Carrefour's hypermarket model, with a wide range of goods and large scale stores, achieved good deal of success. Supported by this success, it expanded its scale and strengthened its base by mergers with local retail stores such as Planaltan and Roncetti in the 1980's. On the other hand, Carrefour faced difficulty in controlling its many acquired companies because some of those evaded tax or dealt pirated goods, and a low efficiency problem surfaced due to the mixture of various forms of management and multiple distribution systems. To improve these conditions, it adopted a strategy to reform management, to reduce costs and the number of stores simultaneously with the employment of local personnel in executive positions. Carrefour, became the largest retailer by acquisition of Atacadão, a major local supermarket, in 2007.

Since consumers in Brazil spend not only in large scale chain stores but also in small scale stores, competition with these small scale stores is inevitable. Carrefour is trying to capture middle and low-income consumers by developing a store that has an area of 400-500 square meters named "Zia" and by improving its low-priced private brand (PB).

3) Sales Channels

Although urbanization is going on in emerging countries such as China, India, and Brazil, a large percentage of products and services are sold in agricultural areas. The distribution and sales channels in these countries are improving but are still far from those of the U.S. It is necessary to increase efficiency but it is not able to leave them to make "brand." For instance, having one's own sales channels is becoming the mainstream in the cellar phone industry. This is because relationship with clients and brand establishment are easy.

On the contrary, some newly-entered companies use the distribution channels of top-ranking company that do not compete in the same market. In this case, top-ranking companies collect capital by the use of existing infrastructure and newly-entered companies are able to use the existing infrastructure efficiently (Accenture).

4) Price setting

Professor John Zang, Wharton School, points out that "income level of the middle class in developing countries differs from that of developed countries, and a company has to supply goods at competitive price." However, as described below, one has to be careful when one degrades facilities or quality. In most cases, global standard quality is required even products are aimed at the middle class in emerging countries. This is not "excessive quality," but rather, proper quality has to be sold consistently at the appropriate price.

Examples in which U.S. companies capture the emerging market

1) Coca-Cola adopted the new values of consumers

Coca-Cola set its sales target to double by 2020 (US$ 200 billion = JPY 18 trillion) and the center of this target is the new middles class that is estimated to be more than a billion in the near future. Coca-Cola CEO Muhtar Kent asserts that the middle class in emerging countries is indispensable to its growth strategy. He confidently said: "a new market the same size as that of New York emerges every three months. Sales of Coca-Cola doubled after 1997 and this vigor will continue 10 years in the future." Coca cola turned its eyes to strong markets in developed countries and reflects that it was "inattentive to markets in emerging countries from 2000 to 2004." He said "the future 10 years are different from the past ten years. The middle class will expand and populate cities. While Coca-Cola targets the young generations, they tend to connect corporate brand and own value; for instance, whether a product is eco-friendly or not," and insisted on the necessity of adopting a new strategy. For example, Coca Cola plans to produce a new product, PlantBottle, literally a bottle made from plants.

Joe Tripodi (marketing executive) also pointed out that "consumers will strengthen their own identities, values, and faith, and will demand companies with similar behavioral patterns."

According to "Knowledge Wharton" (July 9, 2008), Coca-cola slightly reduced prices but gave priority to branding strategies to attract consumers who like something new. On the other hand, in agricultural areas, it reduced prices so that consumers can more easily buy Coca-cola, but also set up a system in which consumers have to return the bottle on the spot. This prevents the resale of products purchased cheaply at higher prices in metropolitan areas. Furthermore, bottles were made slightly smaller than usual, partly compensating for the lower price. (Professor John Zang, Wharton School).

2) Development of Walmart in China - local centered development

Walmart has 30 outlets in China, of which only three—Shanghai and Beijing and Shenzhen—are located in the

largest metropolitan areas. All other stores are located in smaller cities. Terrence Cullen, Vice President of Walmart China Development, said "the growth potential of China is higher than that of U.S. from the long-term perspective. All markets involve risks though land issues, costs and competition risks are high in metropolitan areas in China.

Walmart has two stores in Loudi, a center of China's steel and coal industry. The population of Loudi is 4 million. At first glance, the interior of the store is not at all different from that of Walmart in the U.S. But looking at products, differences are found in the "everyday low prices" product line-up, which fits the Chinese market. A wide variety of famous American brands and local Chinese products are on sale. A customer who visited a store said "the price range is almost the same as local stores but the quality level is high."

However, adjusting to local preference involves risks with respect to quality management. Security must be maintained in the time of procurement. "If some serious trouble rises, the reputation drops immediately" in China (Professor Dean Xu, School of Business, University of Hong Kong).

3) Pfizer—Development in China in full swing, recruiting a large number of physicians

Pfizer, the world' largest pharmaceutical maker, will reinforce its collaboration with companies and universities in China. Jean-Michael Halfon, Pfizer President and General Manager, Emerging Markets Business Units, said "the expansion of the middle class in China is remarkable. Chinese governments' health care reform pushes the sales of medical supplies." According to Pfizer, Brazil, India, Russia, and Turkey, and especially China could be the key emerging countries. This is based on expectation for the strong growth. The medical supply (prescription drug) market in China was ninth-ranking in 2003, though that will have take place of third by 2011 (data from IMH Health Inc). Pfizer predicts that the sales in China will increase by 25% to 28% year on year.

However, there are 6,000 domestic pharmaceutical companies in the Chinese pharmaceutical market and Pfizer shares only 2.2% of the market. It plans to increase the number of employees who manage medical supplies, mainly physicians, to strengthen development in China. It plans to increase its current 2,300 employee in 177 cities (2009) to 3,200 in 252 cities by 2011. Its own products, such as vaccines, remedies for cancer, the anti-cholesterol drug Lipitor, the blood-pressure medication Norvasc, and the antibiotic Zithoromax, etc. are sold in China. Allan Gabor, Pfizer General Manager and Chairman responsible for Northern Asia, Pakistan and Indonesia, announced, "as experts of medical information and bio-technology, they are responsible to let people understand their knowledge easily."

(6) South Korean companies developing in suburban cities in China

Under the circumstances in which many companies crowd into the small domestic market and into one sector, South Korean companies find the way to overseas markets earlier than Japanese companies and are making equal or surpassing strides in the consumer appliances and electronics sectors.

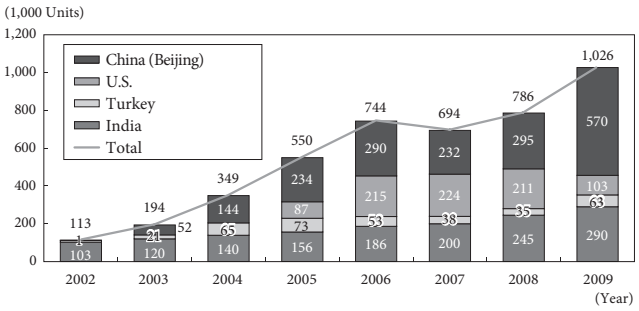
Hyundai Motors expanded sales of passenger cars in inland districts in China, and earlier announced plans to produce commercial cars in Inner Mongolia. Similarly, Samsung electronics and LG electronics are reinforcing the tackling sales in inland districts.

Hyundai Motors aggressively develops in local cities in China

Hyundai Motors established a joint company with Beijing Automobile Works in China, and launched sales of its Sonata passenger car in December 2002. Thereafter, the number of units sold steadily increased, almost without any slackening. In 2003 Hyundai sold 52,128 Sonatas, and by 2008 sales were up considerably, with 93.6% year-on-year growth to 570,309 units. Hyundai Motors sales increased from 126 billion won in 2005 to 8,897.8 billion won in 2009, with net income growing from 170 billion won to 607.8 billion won, and the percentage to whole company is 27.9% and 20.5%, respectively. Chinese sales as one of main sources of profits, Hyundai Motors is building up its presence steadily (Figures III-16, 17).

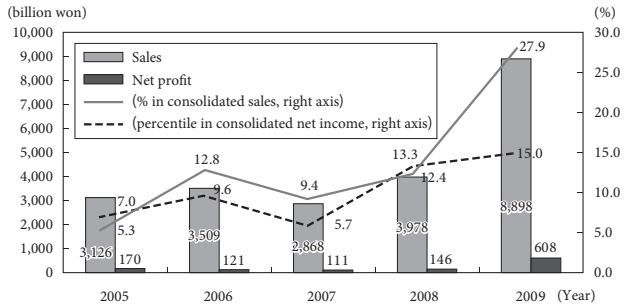
The main factor why sales grew so much in 2009 is that, in addition to vehicle purchase tax cuts for passenger cars of 1600cc and below, sales of the Elantra Yuedong, a semi-middle sized passenger car (called Avante in South Korea) were launched in China in April 2008. The Elantra Yuedong was very-well received in China. The sales of this model rapidly increased to 239,449 units, or by 2.8 times, year on year. This is well over the sales of conventional Elantra, 171,605 units (increased by 45.7% year on year), which is sold side

Figure III – 16 Number of car sold by Hyundai overseas subsidiaries



(Source) Data from Hyundai Motor Company.

Figure III – 17 Hyundai Motor Company's performance trend



(Source) Audit report of Hyndai Motor Company (non-consolidated and consolidated).

by side with Elantra Yuedong. In-depth localization was implemented for the Elantra Yuedong model, from development to sales. The design reflects trends in the Chinese market. Regarding the interior, Chinese vehicle owners tend to sit in the back seat, so the back-seat area was made roomier and was equipped with luxurious features.

Hyundai also reinforced and expanded after-sales service and its sales network, and achieves constant results by motivating dealers based on saels volume, rather than on quotas. Regarding Hyundai's sales trends, representatives say that "the demand is high in the first class cities on the coast, but demand in the second and third class cites will grow thereafter."

It aims at expansion of its presence in the Chinese market and announced plans to construct a third factory in Beijing in November 2009. The production scale will be 300 thousand units per year, and is planned to operate for 12 years. Together with Hyundai's existing first and second factories, total production capacity of 600 thousand units at present is estimated to be nearly one million units. Furthermore, it announced a new business plan to produce trucks in Inner Mongolia, and reached and signed an agreement with Baotou Bei Ben Heavy-Duty Truck to set up a 50:50 joint venture to cover production, sales, research and development, after-sales service, and distributions of trucks and engines.

Major electronics companies attracted by inland districts

Samsung Electronics and LG Electronics, representatives of South Korean electrics companies, launched expansion in overseas markets, and both are largely involved in inland parts of China (Figure III-18).

According to a Samsung representative, "the ratio of exports and Chinese domestic demand in sales is 6:4 at present, but Samsung is planning to increase this ratio by increasing domestic demand in China." Prospective markets in inland districts are Sichuan, Chongqing, and Xian. However, the representative also noted that "agricultural areas on the outskirts of cities are underdeveloped. Leaving these areas, it is difficult to develop in inland, showing concern about inland areas and a careful stance regarding expansion of sales.

Samsung announced that its own color television, air-conditioner, refrigerator, washing machine, and cellular phone are the items subject to its Household Appliance Trade-in Policy on February 12th, 2010. This is because the upper price limit for items subject to the Policy was increased from 3,500 yuan in 2009 to 7,000 yuan in 2010, and the price of a Samsung TV was under this upper limit price. Regarding color television, 40-inch LCD televisions and 42-inch PDP televisions are targeted, and Samsung showed positive stance for domestic sales such as planning to sell them in 21 provinces by means of new methods.

LG Electronics is also trying to expand sales. It said "prospective cities are Chengdu and Wuhan. We are conducting sales to distributors such as mass retailers, and plan to emphasize successful area." A Chinese researcher said, "someone good at sales took the top position of Chinese LG Electronics at the beginning of 2010. An executive, responsible for distribution, clearly showed the intention to target inland districts in the future." Since coastal markets are being saturated, LG will give high priority to reinforcing the expansion of sales channels in inlands regions thereafter.

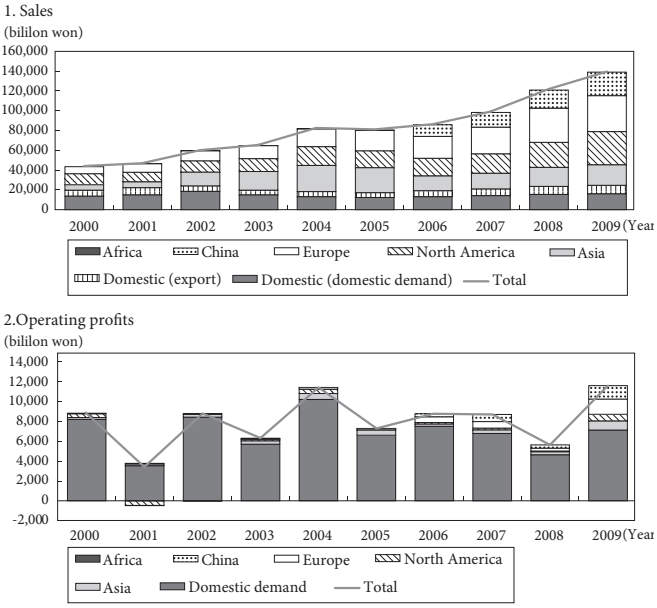
(7) Issues unsolved in opening up emerging markets and strategies of Japanese companies

Issues unsolved in opening up emerging markets

On the other hand, there are some unresolved risks and issues in capturing volume zones. In the aforementioned cases, following issues were pointed out: underdeveloped infrastructure, distribution and distribution networks, the difficulty of retaining influential partners and talented personnel, restrictions specific to local areas such as dispersion of targeted consuming areas, and difficulty of collecting debts.

In a survey of Japanese companies conducted by JETRO between November and December 2009, respondents replied that they were going to target medium- and low-priced products and services in local markets in emerging and developing countries at that time or in the future. Regarding the question about the issues companies face at present, nearly half of them answered "the price competition in the range of medium and low-price is harsh" (141 companies out of 288, 49.0%), "the deficit of own personnel who has detailed knowledge of local market" (109 companies, 37.8%), and ""the difficulty to structure a system to produce and supply low-cost products and services (108 companies, 37.5%).

Figure III – 18 Samsung electronics' performance trend by location



(Notes) (1) Sales indicate sales to external customers (total sales - intra-company sales).
(2) Total of operating profit is value before consolidation adjustments.
(Source) Samsung electronics consolidated audit report.

The rising presence of Chinese and South Korean companies in emerging markets and correspondence of Japanese companies

Respondents were also asked about their most formidable rivals; nearly half of the companies replied that Chinese companies were the top competitors, followed by other Japanese and then South Korean companies (Figure III-19).

Notably, South Korean firms were ahead of Japanese companies in making forays not only into China, but also into Asia, Central and South America, Eastern Europe and the Middle East and Africa. At the beginning, South Korean companies penetrated into the market by focusing on the low-price range, but in recent years, their quality level is approaching the level of Japanese products. Thus they are becoming formidable rivals.

JETRO overseas offices reported remarkable appraisals that describe the strengths of South Korean companies as "the speed of decision making is exceedingly fast," "excellent skill in penetrating and stabilizing in local areas" (Hong Kong), "they entered the market earlier than Japan, and they deepen the business based on long experience" (Poland), "they have been building brand since 10 years ago" (South Africa), "marketing strategies that make full use of mass-media," and "they apply their brand name value that built in volume zones to high-end" (China, Mexico, Brazil, Egypt etc.). On the contrary, their weaknesses, such as lack of original technology, accuracy of products and durability, were also pointed out.

How then can Japanese and other foreign companies make profits in overseas markets including emerging markets? Figure III-20, compiled from available data of Japanese, U.S., and South Korean companies, illustrates the comparison between them. The figure for the U.S. is the latest obtainable value (in FY 2007); FY 2007 values were used for Japan and Korea as subjects of comparison. This is because Japan and Korea officially announced values in FY 2008, but these were affected by the financial crisis and are difficult to compare with U.S. Pertaining to profits, they are compared based on the current net income officially announced by all three countries.

Comparing companies in respective countries by overseas sales volume and distribution ratio of current net income by region, Japanese companies account for one-third of sales and operating profits in Asia, followed by North America and Europe. U.S. sales volume and operating profits rely more than 50% on Europe. On the other hand, nearly 60%-80% of Korean sales volume and operating profits were made in Asia.

The most remarkable difference among the three countries is overseas sales margin (net profits/sales). Although they are not able to be compared simply because they are based on different accounting standard, the U.S. earning rate is the highest in almost all regions, followed by Japan and South Korea. While U.S. companies made profits by widening a margin through competitive products and supplying service, Korean companies made profits by adopting the strategy to set relatively thin margin and lower the price, and penetrate into markets deeply.

Regarding Korean companies, there is a remarkable point: while they narrow the margin in regions where the competition among Europeans, North Americans, and Japanese is fierce, in other regions, Korean companies' earning rates in almost all industries surpass the earning rates in other regions (Figures III-21, 22).

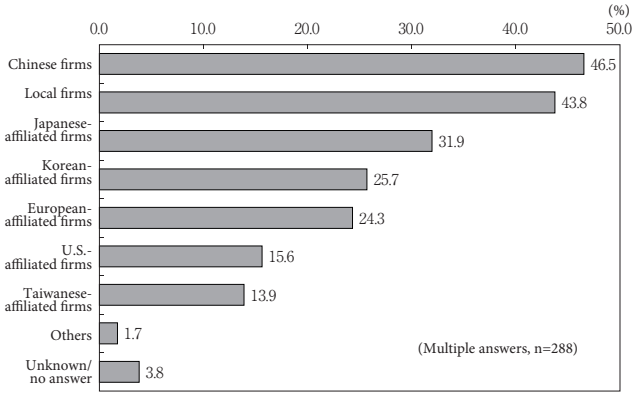
What does this imply? One hypothesis is that Korean companies possibly are now making profits based on earlier investments than Japan. Actually, in the middle of the 1990's when the domestic market was saturated and competition was fierce among European, North American and Japanese companies in developed countries, Korean companies entered the emerging markets to find new sources of revenue. This prior investment is coming to fruition now. Generally, the level of income in these areas is low, and this is the place where Japanese companies' high-end products fell behind. In the aforementioned survey, not a few respondents answered that there is a bottleneck in supply system. It is necessary to review supply system including development of products and of services, and after-sales service.

Key words in opening up emerging markets

Japanese and foreign companies' examples and tasks they face regarding development in volume zones and local areas were described. Products, services and strategies that respective companies adopted vary depending on country and region, and choices of strategies are multifarious. However, allowing generalization and finding key words in common, that can be summarized as follows;

1) Retain profits from early investment based on assessment of M&A, duration of effective use of own resources
2) Reduce costs by localization of human resources and product development, production, and marketing, and establish presence in local market
3) Transfer discretionary power to locals and quick business decision-making

Figure III – 19 Main competitors in the middle- and low-price ranges in newly emerging markets



(Note) Conducted between November 27 and December 25, 2009. Target of the survey: 3,110 corporate members of JETRO.
Replies received from 935 firms. Valid responses to the questions (multiple answers) received from 288 firms.
(Source) "FY 2009 Survey on International Operations of Japanese Firms" (JETRO).

Figure III-20 Earnings of Japanese, American and Korean firms' overseas subsidiaries by countries and regions (FY 2007)

(US$ million)

	Japan					U.S.					South Korea				
	Sales		Net profits			Sales		Net profits			Sales		Net profits		
		(Share)		(Share)	(% in sales)		(Share)		(Share)	(% in sales)		(Share)		(Share)	(% in sales)
Total	2,006,014	(100.0)	65,634	(100.0)	(3.3)	5,517,143	(100.0)	846,753	(100.0)	(15.3)	275,100	(100.0)	3,447	(100.0)	(1.3)
North America	671,362	(33.5)	14,642	(22.3)	(2.2)	557,756	(10.1)	49,556	(5.9)	(8.9)	36,971	(13.4)	-143	(-4.1)	(-0.4)
Central and South America	92,422	(4.6)	7,851	(12.0)	(8.5)	627,995	(11.4)	161,979	(19.1)	(25.8)	7,499	(2.7)	130	(3.8)	(1.7)
Asia	727,958	(36.3)	25,887	(39.4)	(3.6)	1,129,437	(20.5)	94,577	(11.2)	(8.4)	164,007	(59.6)	2,746	(79.6)	(1.7)
China	185,113	(9.2)	8,255	(12.6)	(4.5)	146,172	(2.6)	11,619	(1.4)	(7.9)	62,089	(22.6)	1,696	(49.2)	(2.7)
Middle East	14,941	(0.7)	1,327	(2.0)	(8.9)	93,966	(1.7)	22,005	(2.6)	(23.4)	—	—	—	—	—
Europe	430,686	(21.5)	11,122	(16.9)	(2.6)	2,837,736	(51.4)	480,600	(56.8)	(16.9)	56,470	(20.5)	292	(8.5)	(0.5)
Africa	16,341	(0.8)	936	(1.4)	(5.7)	97,627	(1.8)	22,380	(2.6)	(22.9)	—	—	—	—	—
BRICs	271,220	(13.5)	15,620	(23.8)	(5.8)	315,098	(5.7)	25,284	(3.0)	(8.0)	—	—	—	—	—

(Notes) (1) Values of Japan are converted at average exchange rate in 2007 (1US$ =117.75yen). A overseas subsidiary in which a Japanese corporation(s) has invested capital of 10% or more and a overseas sub-subsidiary in which a subsidiary funded more than 50% by a Japanese corporation(s) have invested capital of more than 50%.

(2) Values of the U.S. are the percentage of a U.S. parent corporation invested capital of more than 10%. Net sales of U.S. include investment income. "North America" to the U.S. is only Canada. BRICs excludes Russia.

(3) Values of South Korea are of local susbsidiaries that invest capital of more than one million US$.

(Sources) Japan: "The 2007 (38th) Survey of Overseas Business Activities"(Ministry of economy, trade and industry, May 2009, valid response (local subsidiaries): 16,732 firms)

U.S.: "U.S. Multinational Companies Operations in the United States and Abroad" (United States Department of Commerce, August 2009, conducted on only non-banks)

South Korea: "FY 2007 Analysis of Foreign Direct Investment" (The Export-Import Bank of Korea, October 2008, object of study: 2,710 firms. Value of Central and South America based on 787 firms available with detailed regional values.)

4) Invest in products and services that suit the characteristics of specific regions
5) Strategized price-settings and packaging
6) Specialize in strength of own products and services
7) Find volume zones where growth rate is high rather than metropolitan areas or coastal large cities
8) Secure debt collection techniques
9) Utilize not only resources and network of its own or of local companies, but also that of third companies
10) Gain recognition in the market by effective use of CSR (corporate social responsibility) and mass media

Fully capitalizing on Japan's strengths

Does Japan, following North American, European, Chinese and Korean companies' forays into emerging markets, which have already captured especially middle and low- income class, have any chance of winning?

Taking stock of Japan's strengths, the following characteristics, among others, can be singled out: 1)technological superiority in delivering high quality and durability, 2)consumers associate Japanese brands and products with safety and reliability, and 3)have capital to spare, etc. For example, in the industrial sewing machine market in Turkey, low-priced Chinese products threatened the share of Japanese products for a period of time, but the system of after-sales service made clients return to Japanese products. Not only in this example, Japanese products are totally superior in the aspect of costs also, because they are durable and come with repair service. In the aspect of "safety and reliability," Japanese companies maintain superiority to South Korean and Chinese companies, and especially give full play to their strength in the sphere relating to peoples' bodies, health and lives, such as foods, clothing and medical supplies.

According to statistics of flow of funds in respective countries (March 2010), while the percentage of cash and savings in non-financial private companies' total financial assets (debts) is 10.0% in the U.S. and 12.7% in South Korea, that in Japan is 25.1%. Compared with the U.S. and South Korea, Japan holds a dominant position in sphere of funds to take new measures in the future. Taking advantage of this, Japanese companies are able to select the strategy to make up for their lateness. If Japanese companies are able to make use of these assets that they have cultivated for a long time, it is possible to find a chance of winning in emerging markets.

What is necessary to put this into practice? In order to strengthen cost competitiveness and further penetrate local markets, local needs as they relate to product development and production, as well as marketing, should be assessed and reflected into products and services. Actually, it has been pointed out that one of the main ways in which South Korean companies built presence and penetrated into emerging countries prior to Japanese companies was that

Figure III-21 Major industries and percentage of operating profits among South Korean firms' local subsidiaries by region (Operating profits/sales, FY 2007)

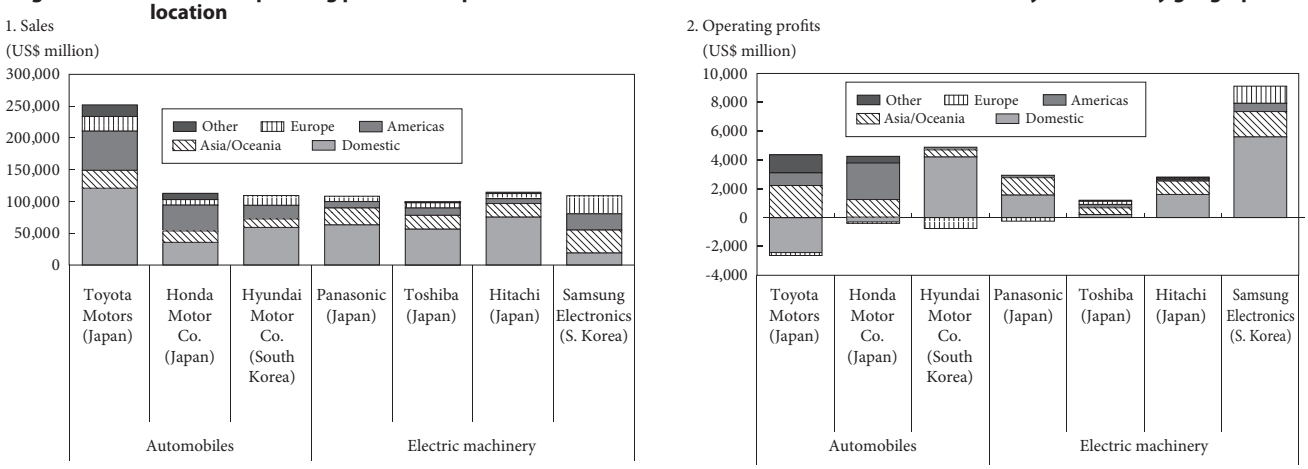
(%)

	Asia	North America	Europe	Others	Total
Manufacturing	2.3	0.7	-0.9	3.2	1.9
Whole and retail trade	0.5	0.5	1.3	1.9	0.8
Construction	3.9	-3.0	—	3.4	3.2
Transportation	6.5	0.5	3.6	10.9	3.2
Mining	23.8	-6.6	—	46.2	29.7
Total	1.9	0.5	0.9	5.4	1.7

(Note) This table is compiled from selected industries.

(Source) "FY2007 Analysis of Foreign Direct Investment" (The Export-Import Bank of Korea, October 2008, number of sample: 2,710 firms).

Figure III – 22 Sales and operating profits for Japanese and South Korean automobile and electric-machinery industries by geographical location



(Notes) (1) Each company's nationality is in parentheses.
(2) Fiscal year end for Japanese companies is March 2010 and for Korean companies is December 2009.
(3) The exchange rate is the mean value of the monthly average rate for the relevant closing date.
(Sources) Consolidated financial statements of each company and IFS (IMF).

they adopted positive image strategies such as CSR (corporate social responsibility). Furthermore, proactive presentation of convincing information to consumers about Japan's strengths could prove an effective way to promote the safety, reliability and high quality of the "Japanese standard." Needless to say, the Japanese government must also work together with the private sector to promote sales because the private sector has its limits.

Column III - 1

◉ BOP business and the measures taken by JETRO

In recent years, BOP (Base of Pyramid) business has received attention as business targeted at middle and low-income consumers. BOP business is the business that supplies products and service at the price range affordable to low income consumers whose yearly income is US$ 3,000 or less (PPP base). The impetus of this business is the views that the number of low income consumers is 4 billion, accounting for 72% of the total population, and the market size of this could be US$ 5 trillion. Furthermore, there are huge potential needs in the low-income layer that were not thought to be the target of business, as discussed in "The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits," C.K. Prahald, Professor of Michigan University, (Wharton School Publishing, 2005), and "The Next 4 Billion, Market Size and Business Strategy at the Base of the Pyramid," IFC (International Finance Corporation) and WRI (World Resources Institute). Since low-income consumers are not able to access the market sufficiently, they are not able to draw an income corresponding to products, services and labor. On the demand side, although they are ready to purchase necessary products and services, they are sold unnecessarily expensive products or low-quality products (BOP penalty). Some European, North American, and Japanese companies reap profits by solving the issue of BOP penalty by taking measures as follows: 1)effective sales strategy to make full use of low-income consumers that leads to improvement of their access and simultaneously create jobs for them (Unilever, Danone, etc.), and 2)facilitate access to the products by packing small quantity so that low-income consumers can easily buy them (Ajinomoto). However, generally speaking, the entrance of Japanese companies is late.

JETRO has supported the entrance to BOP business since 2009 by 1)case studies 2)potential needs research, and 3)promotion and educational activities. For case studies, aimed at leading European and North American companies in BOP business, company structure for the entrance and developments of products and services such as portable lanterns, water filters, cookware, footwear, spectacles, mosquito nets, gardening, agricultural developments, and remittance by banks, were studied. Moreover, the ways in which international institutions and aid agencies of individual countries support BOP business, and the actual conditions of NGO and NPO that participate in BOP business as the partners of companies, were researched.

The research on potential needs targeted specific sites in developing countries and clarified the potential needs in order to propose specifications and business models of services and products corresponding to the needs based on living conditions. At present, three Asian countries and four African countries were subjects of research to propose business plan to solve social issues in the fields of healthcare, sanitation, nutrition, education, job training and so on.

Pertaining to promotion and educational activities, JETRO held business seminars in domestic eight cities from 2009 to January 2010, providing basic information regarding BOP business, introducing cases in which European and North American companies improved social issues by sustainable ways of entering the market, and reporting potential for Japanese companies to take measures.

2. Business Opportunities Abroad in Japan's Service Industries

(1) Business opportunities a wait in Asian emerging countries

There is potential for growth in both supply and demand

Lead by the manufacturing industry, which can easily make full use of cheap labor costs, companies in major developed countries entered the emerging countries. Overseas business units made profits by utilizing cheap labor on the spot, assembling finished goods, and exporting to developed countries (mainly the U.S.). Due to the burst of the housing bubble and balance sheet adjustments, the structure in which the surplus consumption of U.S. supports the exports of emerging countries is becoming a thing of the past. The economic forecast by IMF illustrates that Asia is the central figure and emerging countries will lead the global economy. The U.S. will have to consolidate or discharge excessive debts, and will not be the country that attracts goods and services from all over the world as much as it used to be.

Under these circumstances, it seems to be a natural trend that Japanese companies regard emerging countries that continue to grow not only as the "world's factory" but also as a consumption market. From this perspective, it could be a great advantage for service industry to find ways into these areas not only by sales on the spot or export of goods, but also by meeting consumers' various needs in emerging countries.

First of all, potential for growth of service industries in emerging countries must be examined from the supply side. Figure III-23 illustrates GDP of service industries and its percentage in total GDP. Looking at the GDP of service industries in China, it amounts to US$ 914.8 billion, far exceeding that of others. However, compared with the U.S., the GDP of Chinese service industries accounts for one sixth, and compared with Japan, the scale is only half. The GDP of the service industry in Vietnam, which currently attracts Japanese companies after China, accounts for one forty seventh of that of China, amounting to US$ 40.5 billion.

GDP of service industries accounts for 80% in the U.S. Obviously, the U.S. is a country where service industries are the driving force behind the country. The level of Japan exceeds 75%.

Compared to developed countries, service industries in emerging countries make up only a limited portion of GDP. This is particularly evident in Asian emerging countries such as Vietnam, Malaysia, and China, where the percentage of service industries in total GDP is below 50%. As the Petty-Clark Law suggests, a driving force of economic growth tends to shift from the manufacturing sector to the service industry as a country develops. Thus, the service industries of emerging Asian countries have a great potential to thrive, since these countries are on the track of rapid economic growth. Especially, Asian emerging countries where the rate accounts for less than 50% have great potential for growth.

Asian service industries have a potential for growth with respect to supply, but how about with respect to demand? Figure III-24 illustrates the comparison between developed countries' and Asian expenditure on service (average annual growth rate) from 1995 to 2009, and divide this period in three. U.S. and UK expenditure on service is slowing down or decreasing. Lead by expenditure in the communication sector, Japanese expenditure on service increased by 4.2%. On the other hand, that of Asian emerging countries are continuing to grow by 10.3%, 13.7%, 18.5% in the three periods, demonstrating that expenditure on service is becoming powerful there. The average annual growth rates during the 4 years 2005 to 2009 in China and Vietnam, with their great potential for growth with respect to supply, rapidly increased by 22.5% and 19.8%, respectively.

While demand for service is saturated in developed countries, in Asian emerging countries demand is still developing. Taking into account that these areas will be the driving force to lead global economics hereafter, the de-

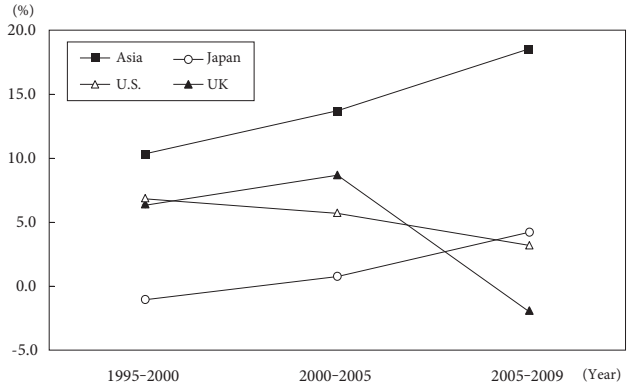
Figure III-23 Degree of development of the service industry in leading emerging economies

(US$ million, %)

	GDP : Service Industry	Service industry percentage of nominal GDP
India	701,034	60.0
Indonesia	241,974	47.4
Thailand	128,153	46.8
China	1,914,796	45.6
Philippines	97,406	57.8
Vietnam	40,470	44.6
Malaysia	101,117	44.9
Argentina	185,578	60.1
Brazil	942,410	69.9
Mexico	715,479	68.2
Egypt	93,717	53.8
Republic of South Africa	164,231	66.1
Turkey	458,304	69.6
Russia	960,695	65.5
U.S.	11,556,298	82.0
Japan	3,843,803	75.8

(Note) Based on 2008 data.
(Source) "National Accounts Main Aggregate Database" (United Nations).

Figure III – 24 Expenditures on services expenditure in Japan, the U.S., the UK and Asia (annual average growth rate)



(Note) "Asia" includes China, Thailand, Indonesia, Malaysia, the Philippines, Vietnam and India.
(Sources) "Consumer Asia," "Consumer Europe," "Consumer USA" (Euromonitor International).

mand for service in these areas could expand in the future. As mentioned above, service industries have potential for growth in both supply and demand. Accordingly, there is plenty of room for Japanese companies to move into Asian markets where the demand for services is rising.

(2) Fierce competition among companies from developed countries in Asian service market

Japan's service industry lags behind

Compared with other countries' service industry or Japan's manufacturing industry, Japan's service industry lags behind in expanding to Asia, where great business opportunities await. Figure III-25 illustrates the comparison between manufacturing and service industries by accumulated amount (balance) that Japanese companies invested in Asia and the U.S. Direct investment from Japan to the U.S. in the service industry amounts to US$ 119.8 billion, larger than investments in manufacturing industries, which amount to US$ 98.6 billion. On the other hand, investment in the service industry in Asia amounts to US$ 27.2 billion, approximately one thirds of that in manufacturing industries.

Among Asian countries, the largest amount of investment was US$ 13.6 billion in China, followed by US$ 4.7 billion in Thailand. Classified by industry, the largest investment was US$ 11.1 billion in the finance and insurance industries, followed by wholesale and retail trade at US$ 9.7 billion. Service industries in the narrow sense, such as food service and education, account for only 4% of balance of direct investment in service industries in Asia.

How did companies from other countries make inroads into Asian markets? U.S. companies forayed aggressively into markets of service industries in Asia. Unlike Japan, the U.S. invested in service industries more than in manufacturing industries in Asia. Classified by industry, like Japan the U.S. invested US$ 24.5 billion in the financial industry, accounting for more than 40%.

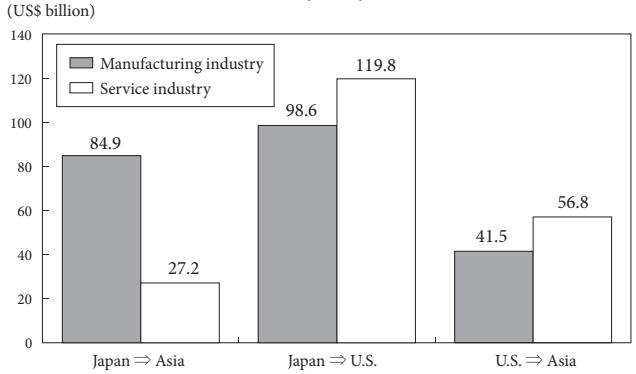
U.S. and UK companies found Asian service market earlier

How about companies from developed countries other than the U.S.? Figures for the direct investment balance classified by region and industry in respective countries cannot be acquired due to limitation of statistics, therefore the following comparison ofthe degree of overseas expansion is based on M&A statistics. Figure III-26 illustrates the cumulative amount of M&As in which service companies in Japan, U.S., UK, France and Germany invested in Asia from 2000 to the end of May 2010. This figure suggests that U.S. companies aggressively foray into local markets (US$ 42.5 billion, 270 cases). While Japan forayed into Asian markets (US$ 11.1 billion, 156 cases) (Column III-2) ahead of Germany and France, there is still a large gap between Japan and the U.S. and the UK. Since there is a space for growth in Asian service industry, it is expected the Japanese companies will recovering from this setback.

China and South Korea both strive for overseas development in the manufacturing industry; their M&As in the service industry in Asia amount to US$ 0.6 billion (in 11 cases) and US$ 1.3 billion (in 43 cases), respectively, subordinate to Japan, U.S., and UK.

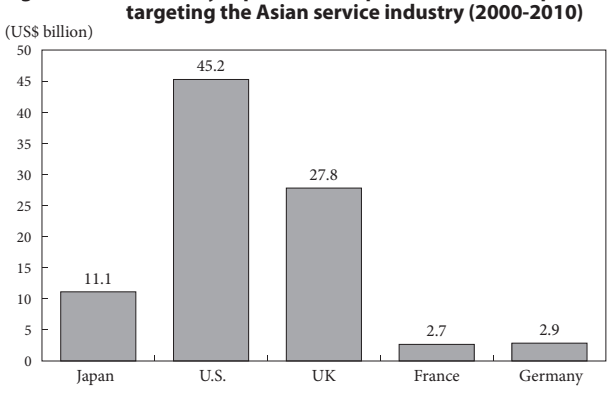
The U.S. invested a large amount in the Chinese financial sector. For example, a major U.S. bank, Bank of America, invested 19.1% (US$ 7.1 billion) in capital of the major Chinese commercial bank, China Construction Bank. The U.S. have also aimed at IT services in India and have sought for chances of large-scale M&As. From 2005 to 2007, the major software company Oracle successively invested in India's i-flex Solutions, which produces software for banking. In the UK, the major cellular service company Vodafone invested US$ 12.7 billion in the major Indian operator, Hutchison Essar, and acquired 67% of Essar's share in May 2007. In Japan, NTT docomo aimed at the communication market in India and invested US$ 2.7 billion in Tata Teleservices, a subsidiary of Tata group.

Figure III – 25 Japanese companies' FDI position by industry in Asia and the U.S. (2009)



(Notes) (1) Japan to Asia is China, Thailand, Indonesia, Malaysia, The Philippines, Vietnam and India.
(2) U.S. to Asia includes China, Thailand, Indonesia, Malaysia, The Philippines and India.
(3) Statistics for the U.S. and Japan include partially-disclosed figures, which could not be totalled.
(Sources) "Direct Investment Balance" (Bank of Japan and U.S. Department of Commerce).

Figure III – 26 M&As by Japanese, European and U.S. companies targeting the Asian service industry (2000-2010)



(Notes) (1) Asia is China, Thailand, Indonesia, Malaysia, the Philippines, Vietnam and India.
(2) Based on data from January 1, 2000 through May 31, 2010.
(3) Sum for the period, does not include withdrawals thereafter.
(Source) Thomson Reuters.

One characteristic of investment in the finance and telecommunication industries is that the amount of acquisition and investment tends to be large because of the large scale of business in these industries. In the case of school education services, strongly related to consumers' daily lives among service industries, there were 11 M&As in the U.S., 4 in the UK, and none in Japan. The U.S. is widely developed in Asian service markets, for instance, U.S. healthcare service industries have found a new market there.

Among service industries, it is considered that markets for services to individuals have space for Japanese companies to enter because those markets are expected to expand, upgrade, and diversify as income levels rise.

Japanese companies that aims at volume zones

Although not yet large in number, there are Japanese companies which conduct business related to services for individuals and aggresively developed in Asia. Three cases are illustrated below.

In all three cases the keys to be successful in the overseas service industries are, in addition to the general need to motivate local employees, the three following points: (1) retaining strength of Japanese-style service, (2) developing service that suits local culture and lifestyles, and (3) price setting conscious of volume zones.

1) Leaving the core of Japanese-style service as it is—
Kyariko (beauty salon, China)

Beauty industries are services related to subjective views of both providers and clients. A successful case of changing Japanese-style service to suit the needs of Chinese local consumers in this specialized field is illustrated as follows.

Beauty salon "Kyariko" is located on a quiet street that brings back the old days, but is just a 5 minute walk from a busy area in Qingdao. This salon consists of a manager, one (Chinese) stylist, and three (Chinese) staff. The latest issues of various Japanese magazines are displayed in the waiting room. The salon also serves as place for Japanese information exchange.

The menu of "Kyariko" is 150 yuan (approximately 2,100 yen) for a haircut, and 420-1,000 yuan for a permanent. Prices of a Korean-affiliated beauty salon are 50 yuan and 250 yuan, respectively, and those of a Chinese luxury salon are 50-80 yuan, and 300 yuan, respectively. Therefore, Kyariko is relatively an expensive salon. However, 70% of its clients are Chinese. The mainstream of its clients are wealthy class people and mainly career women in their forties. It is a status symbol to have a hair cut by a Japanese beautician or to go to a Japanese-affiliated salon. Owing to word-of-mouth communication, this salon became popular.

The driving force of Kyariko's success was a client's recommendation to start a business when the shop where the owner was previously working was about to close down. The reasons why this location was chosen were: its reasonable rent due to the distance from the bustling area, and a store facing a street is convenient for clients.

There were two tasks to tackle in developing a business. One was the clients' lateness. Although the beauty salon operated on an appointment basis, many customers were one or two hours late without any contact. In such a cases, a customers were kept waiting for them to understand that lateness will inflict a loss to themselves. The other was a style. The manager feels that the image of Japanese is "cute" and "lovely," and that Chinese accept Japanese-style. Yet, counseling clients is indispensable. For instance, many Chinese people do not style their hair. Many of them believe that if they have their hair permed, they can keep their hair style as they like even if they do not style their hair after taking bath. In such a case, it is necessary to explain them how to keep their hairstyle in a way so that they can understand. The communication at the first appointment is important.

The requirements for employment are "ability of speaking Japanese" and "a good smile," without regard to experience and skill. Employee training is basically OJT (on-the-job training). With respect to styling, the individuality and sensibility of each staff member are not completely denied, but the salon prefers staff to share the same sense of "cute" and "lovely."

2) Careful consideration of local culture and life habit—
AEON Malaysia (retailing, Malaysia)

AEON Malaysia is a company that successfully localized in Malaysia among Japanese affiliated service industries. Currently, it conducts shopping center business and department store business in the country. At the strong request of the former prime minister, Mahathir, who wanted to modernize the retail trade industry in Malaysia, AEON made inroads there. According to Takuya Okada, honorary chairman of AEON, overseas expansion is necessary for the future. AEON established a local subsidiary in September 1984. It adopted strategies to locate in the suburbs in Malaysia, the same strategy it follows in Japan. Since the traffic infrastructure in Malaysia is prominent among Asian countries, it focused on areas along the loop road that was fixed through urban development in Kuala Lumpur.

AEON is now making profits based on its early investment in Malaysia. Price competition in Japan is fierce, but it is not very fierce in Malaysia. Jusco, a shopping center brand of AEON, targets middle-income consumers whose monthly income is around 3,500 ringgits (approximately 96,000 yen). Since hypermarkets target consumers with a monthly income 2,500 ringgits, the target of AEON is a layer above that. Its ethnic composition of clients is 60% Chinese, 30% Malayans, and 10% Indians.

The point AEON worked-out for development in Malaysia is to follow the local culture. Since three ethnic groups (Malayans, Chinese, and Indians) coexist in the country, it is important to let consumers to buy safe products such as Halal (the foods that follow Islamic precepts) food corner. Personnel management is the most difficult point for the management side. "Equality" is the one of five basic principles of AEON human resources. Regardless of race, gender, and age, it follows the policy of promoting employees who have ability and training those who lack enough ability. It tries to understand the popular mind and not to treat its employees unfairly.

3) Aim at Volume zones—The Sushi Bar (food-service industry, Vietnam)

The restaurant "The Sushi Bar" in Vietnam has four

Column III - 2

◉ BIG C opens up Vietnam market

Although French companies rarely develop in Asia, "BIG C," a subsidiary of "CASINO group," made inroads into Asian markets and has wielded a strong presence in Vietnam.

Expansion before Vietnam seated in WTO

Vietnam joined the WTO in January 2007 and was thus enabled foreign retail distribution industry to enter its market, and 100 % foreign-owned companies were approved in 2009. Based on the prediction in which a consumer market will continue to grow in the country where half of population is under 30 years of age, the number of foreign companies that have considered developing in the retail distribution industry, such as super market and department stores, is increasing. On the other hand, the foreign-affiliated retail distribution company "BIG C" developed many stores in Vietnam before the country joined the WTO and now is increasingly gathering strength.

Before joining the WTO, the entrance of a foreign-affiliated company was applicable to the field of investment with conditions attached and was required to achieve the approval of the prime minister. "BIG C" is the one of retail distribution companies that entered before Vietnam's membership in the WTO. "BIG C" stemmed from "Bourbon group," which established the supermarket "CORA" in Dong Nai Province in 1998. After that, the aforementioned group opened 3 stores in the country. In 2005 it sold its capital to CASINO group and became "BIG C." The group has massive distribution chains and owns approximately 100 stores in France and approximately 1,000 stores worldwide as of 2009. It has various names of retail distribution stores such as, "Super," "Jumbo," "Legal Price," "BIG C," etc. It develops only "Legal Price (54 stores)" and "BIG C (4 stores)" in Thailand and only "BIG C" in Vietnam. The origin of the brand name "BIG C" is that the group sent out questionnaires regarding a brand name to 50 thousand Vietnamese before opening the store, and according to the results "BIG C" was most fit to the image of a supermarket.

"BIG C" is the largest foreign owned retail distribution company in Vietnam, with11 stores (2 stores in Hanoi, 1 store in Hai Phong City, 1 store in Huế City, 2 stores in Danang City, 4 stores in Ho Chi Minh City, and 1 store in Đồng Nai Province). It is growing steadily; the number of visiting customers was 3 million in 2007, 3.5 million in 2008, and 3.6 million in 2009, and annual sales amounted to 3,228 billion dong (US$ 184.4 million) in 2008 and 4 trillion dong (US$ 195.6 million) in 2009, which is said to be the top in the foreign retail distribution industry.

Wide range of goods in large store

There are roughly two keys for the success of "BIG C". One is its wider range of goods and more spacious stores than local supermarkets. For instance, "BIG C" in Thang Long, Hanoi City, has an area of 8,860 square meters, much larger than traditional markets and local supermarkets. While traditional markets and local supermarkets sell foods exclusively, "BIG C" enables consumers to buy foods, convenience goods, stationery, and electric appliances in a single place and stocks approximately 50 thousands kinds of goods at present.

The second is that stocking up on large quantities of goods enabled the company to reduce sales costs. Before 2005 or 2006, the price range of "BIG C" was higher than that of traditional markets and local supermarkets. However "BIG C" found many suppliers and purchased large quantities of goods. "BIG C" asked suppliers to reduce costs and to guarantee quality, and from 2007 sales prices were lowered, becoming cheaper than traditional markets and local supermarkets. Compared with the annual sales of small and medium-sales retail stores (average 20 billion dong, US$ 110 thousand), sales of "BIG C" (4 billion dong, US$ 195.6 million) differs greatly, and suppliers prefer to deal with "BIG C." For users of "BIG C": 1) the sales price for one person, per visit, is US$ 15-20, 2) frequency of use is 1-2 times/week, and 3) average monthly income of users is US$ 250-300. It targets middle-income consumers.

Will the opening of stores after the first go well?

Both attracting customers and sales of "BIG C" go well, yet it is concerned that it cannot develop a large number of stores. This is because although the commitment to WTO enabled foreign capital to enter retail distribution business, taking the "Economic Needs Test (ENT)" is now a requirement to open second and subsequent stores. While local supermarkets are able to open stores in the center of Hanoi city, foreign-owned stores are not allowed to do so. "BIG C" is a joint venture company with a local company, but still it is not easy to open additional stores. Moreover, regulations are not concrete; rather, they are subjective and unclear. The government is enforcing the law as the commitment to WTO but other than the national laws, the government intends to hold its regulatory powers. In Vietnam "BIG C" has successfully established its brand image and therefore it is a chance for the company to develop a large number of stores, yet ENT act as a barrier.

branches in Ho Chi Minh City, and the number of employee is approximately 250. 80% of visiting customers are Vietnamese and the average cost of dinner for one customer is 3-4 hundred thousand dong (approximately 1,400-1,900 yen).

More than half of the population in Vietnam is under 30 years old, and this young labor force leads Vietnam. In recent years, as the wage level has risen, consumption motivation has become active especially in metropolitan areas. Sushi is popular among this young generation. This could be said to be a locational strategy that hit volume zones. Some link the popularity of sushi to the economic revolution of 10 years ago when many Vietnamese went to overseas to work. They tasted sushi in Western countries and came back to Vietnam.

The concept of the restaurant is "casual restaurant that allows casual and safe dining," which has remained unchanged since establishment. It differentiates itself from the expensive Japanese restaurants in the city, places that are difficult to visit. This fascinates the young generations.

The other factor of success is that, unlike other Japanese restaurants, it reduced price by local production for local consumption. However, Sushi bar is competitive with other Japanese sushi restaurants. Although seafood for sushi is based on traditional Japanese tastes, it makes full use of Vietnamese foodstuffs. Taking local consumers into consideration, it introduced sushi rolls that use rice paper (wrapping for spring rolls).

Business partner's presence in local area is a key to success

What sorts of strategy did foreign companies advanced in Asian service market adopt to lay their solid foundation? Comparison between a Japanese convenience store, Seven-Eleven, and a hypermarket and retail seller, Tesco which are both successful in highly potential Thailand is illustrated as follows.

1) Details of market entry

Taking advantage of Baht nosedive in 1997, a global retailer, Tesco acquired 36.75% of equity of Ek-Chai Distribution System Co., Ltd., which the largest agriculture and livestock processor conglomerate in Thailand, Charoen Pokphand Group (CP, head quartered Bangkok) established in 1993 and named the store "Tesco Lotus." Tesco regarded that the economic downturn lowered advanced companies' entrance cost. In the case of Seven-Eleven, the CP group contracted with U.S. Southland Corporation to franchise "Seven-Eleven" and decided to develop convenience stores in Thailand. Thai Seven-Eleven opened the first store in an entertainment district, Patpong in Silom area. At that time, the second economic boom had just begun in Thailand. Thailanders' life style shifts to urbanization and optimization. In such a circumstance, CP group, a parent company of CP All Plc. that currently manages Seven-Eleven predicted the rapid growth of convenience store that sells "easiness."

2) Clientele

Dividing Tesco Lotus' clientele by the number of people basis, low-income earners account for 30%, middle-income earners do for 65%, and high-income earners do for 5%. Due to recent manufacturing industry's recession, middle- and low-income earners' purchasing power dropped by approximately 10%, yet Tesco Lotus tries to recover from setback by promotion that emphasizes "beneficial." Aiming at the expansion of sales network, Tesco Lotus is accelerating development of small sized stores such as Talat Lotus and Tesco Lotus Express.

On the other hand, Seven-eleven basically targets at all income layers. Clientele varies depending on the location of store. Accordingly, assortment of products in a store has distinctive characteristics because hot-selling products are different depending on store by store.

3) Understanding consumer needs

Tesco Lotus conducts direct consumer survey to develop new products and services. The introduction of a point card with free joining fee enabled Tesco Lotus to collect data such as attributes of clientele and products purchased. Differing from a point card of other hypermarkets, that of Tesco Lotus allows approximately 600 stores including a convenience store, Tesco Lotus Express to add points.

Seven-Eleven gathers opinion from the wide range of external monitors with various ages, gender, and lifestyle and carries out modification and improvement before releasing new products. Seven-Eleven sensitively corresponds to voice of customers and trend of other companies and focuses on human resources development.

4) Development and production of Private Brands

Tesco Lotus develops PB products with "TESCO" and cheaper "TESCO KUMKA." The range of products reaches 10 thousand items such as foods, commodities, stationeries, clothing and bed clothing, and kitchenware and interior goods. Tesco Lotus develops its own products and a contracted maker takes charge of manufacturing. Tesco Lotus strictly requires contractors to follow its standard and stringently conducts quality check and evaluations. Moreover, it demands contractors to comply with legal obligations such as ingredient labeling that Ministry of Public Health prescribed and labeling that Consumer Protection Commission requires. If a manufacturer is in accordance with the standard of Tesco Lotus and is able to offer products at reasonable price, Tesco Lotus may change a contractor.

Seven-Eleven's PB products have a range of over 1,000 items. Seven-Eleven develops products and there are two cases regarding manufacturing, the one is the case where Seven-Eleven consigns manufacturing to a maker and the other case is the case where Seven-Eleven attaches its own logo on products that a contracted maker developed and deals that as a PB products. Top priory to choose a contractor is quality of products, followed by locational condition and production capacity. Although there is a possibility that Seven-Eleven changes a contractor with better condition, there is a little possibility that the company steps away from the CP group.

5) Marketing and building a brand image

Tesco Lotus tries to attract customers with TV and radio commercial, news and magazine advertisements, leaflet distribution, web-site, holding sales events for new products

and services, seasonal events (season of entrance ceremony, Christmas, Chinese Christmas, Songkran, Father's day and mother's day etc.), clients participating events, mini motor shows, and mini concerts.

Seven-Eleven leverages TV commercial (with singers, bands and group of idle unit that belong to the True Academy and Fantasia Project, a talent agency and a subsidiary of CP group for the most part), radio commercial, advertising display, news and magazine advertisement, holding sales events for new products and services, and websites.

6) Developing a channel for sales

Tesco Lotus specializes in store selling and does not conduct catalog sales. On the other hand, Seven-Eleven uses "7 catalogue" that is sold over the counter (at 10 baht, approximately 29 yen) by which home electrical appliances, kitchen and interior goods, bed clothing and clothing are sold through web-sites. Seven-Eleven intimately exchanges information with manufacturers of mail-order products. To meet clients' needs, changing cycle of products is fast. Seven-Eleven announced sales expansion scheme for small-and-medium-sized companies' products through "7 catalogue" at Thailand SME Expo 2010 in late January, 2010.

Tesco Lotus is a hypermarket and Seven-Eleven is a convenience store. They belong to different industries. However, both companies place importance on relationship with major homegrown conglomerates, to keep their competitiveness towards local companies and other foreign companies in emerging countries, which differs in commercial culture from developed countries. Innovative service that both companies provide must be a main factor that pushed both companies to the present position in Thailand. Additionally, both companies strive for understanding consumers' needs as much as possible even after achieving high-profile. Both companies' tenacity for expansion of market share could be the key to success.

Figure III-27 Main factors for successful entrance to Thai retail markets

Tesco Lotus	• Since the large number of European hypermarkets including Tesco Lotus such as, BIG C, Carrefour, and Macro that entered the market around 1993, hypermarkets enjoyed a boom at its height. • Unprecedented store design of hypermarkets, such as large store interior, displays righted up to the ceiling and a bulk of merchandises had a strong impact to Thailanders. • Consumers had an image of high quality products for European brands. • As opening the first store, it focused on sales promotion to appeal "good quality but cheap = profitable," such as price reduction and distribution of gifts attracted customers.
Seven-Eleven	• Since it was the first convenience store chain, there were no competitors. • The company made full use of CP group's know-how, and connection regarding management, store expansion, and purchasing. • A store that open 24 hours was not common at that time • The company concentrated in employee education such as working ethics and service attitudes. • Based on market research, the company opened stores in busy areas such as a block of office buildings and shopping areas. • Systematic distribution system was estabiched in order for products not to be stockout even in peak business hours.

(Source) Reports from Jetro Bangkok Center .

(3) Japan's service has new potential

There seems to be a business chance for services in Japanese-style or operations in Japanese methods in the global consumer market, including developed countries, in addition to Asia. Based on the lives and experiences of employees of JETRO overseas offices, competitive unique services in Japanese-style are illustrated below. Services referred here include currently inappropriate and premature services by reason of public security in addition to the restriction of income levels and infrastructures. However, some Japanese companies in the service industry stepped forward to enter the market and succeeded in creating local demands.

Possibility for ordinary services to have enormous profits overseas

There are two patterns for Japanese services that seem to spread overseas (Figure III-28); one is for services common in both developed and developing countries and the other differs depending on developed or developing countries. One service that appears to be popular in all countries in the world is the value of Japanese service added convenience stores. They are expected to expand not only in Europe and North America, but also in Asia, the Middle East and Africa. In addition to selling the usual goods, additional services such as to pay public bills and to receive parcels is specific to Japanese convenience stores. Associated with this, some say that demands for "kiosk" service areas could be expected. Since they provide a wide range of goods at low prices, vending machines and 100 yen shop might also thrive overseas. Especially, vending machines that keep suitable temperatures (not only refrigerated, but also warmed) are rarely seen overseas.

A desire for beauty appears to be common to all countries in the world. In addition to beauty salons, this includes aesthetic clinics (facial, body), spas, bathhouses, simple massages etc. Skillful and cheap barber shops could also be popular. Focusing on even the finest details, massages offered in beauty salons and barber shops should be a valued-added service.

Facilities for drivers to rest are rare abroad. It is not rare to hear voices that demand a station on a road like railway stations.

Opportunities to use public transportation systems are universal. The Japanese service that is thought to be convenient is the use of "electronic money" for public transport facilities. Regarding foods, Japanese-style fast food such as beef-rice bowls and ramen (soup noodles) are in demand all over the world. However, the concern still remains that generally Europeans do not eat fast foods, that could be a gap between the service that Japanese receive and Europeans receive. Similarly, demands for restaurants are high. Some said that restaurants that allow casual dining and the expansion of local family restaurants are necessary. It is a determining factor for this respondent that the threshold of restaurants abroad is too high, especially in developed countries.

For recreational activities, the needs for rental-related services are high. In addition to video and CD rental, rental service of big-name brand products and photo studio where

Figure III-28 Hoped for market entries by the Japanese service industry

Expected services	Note
Convenience store	• Ready-to-eat prodcuts • Available for paying bills and receiving parcels, in addition to selling usual goods • High expectations for other value added services besides product sales
Parcel delivery	• Luggage delivery between Airport and residence • Refrigerated parcel delivery • Fixed time delivery • Strong desires for overseas expansion of Japanese-style parcel delivery
Substitute Driving Service	• A service in which someone drives a customer home in the customer's car when he/she drinks alchohol. • Punishment for drunk driving becoming stricter in both developed and developing countries.
Security service	• 24-hour surveillance system • Large demand, especially from JETRO offices in developing countries.
Restaurants	• 24-hour restaurants • Comfortable for single diners • Many expectations especially from JETRO offices in developed countries.
Cosmetic services (including relaxation)	• Beauty salons • Spas • Aesthetic clinics (facial, body) • Natural-foods restaurants • Many expectations from around the world for Japanese cosmetic services to expand overseas.
(Luxury) Japanese-style inn	• Desire for restorative relaxation • Many expectations especially from JETRO offices in developed countries.

(Source) Prepared based on survey answers from JETRO overseas offices.

one can borrow costumes were mentioned.

The service that employees in overseas offices need most is parcel delivery service. Common services in Japan such as refrigerated parcel delivery service for foods, and luggage delivery service between the airport and residence, are in demand all over the world.

Needs for security, healthcare, and infrastructure are high in developed countries

Luxury Japanese-style inns "ryokan" were mentioned as a service that could be popular in developed countries. This voice of expectation was heard in the U.S. and Canada. Japanese-style "ryokan" are Japan's original therefore it seems to be difficult to operate them overseas, but it is not impracticable to take into consideration that there are people who like Japanese-style and seeking for restorative relaxation all over the world. From the point of supplying high value-added services, "ryokan" style is expected to develop in developed countries with high-income levels.

Recently, substitute driving services have been commercialized in Japan and the need for such services overseas has been remarkably noted. Punishment for drunk driving is becoming stricter in both developed and developing countries.

In developing countries, needs for securities, healthcare, and infrastructure are high. For instance, the voice for safe taxis and home security services was raised. To secure credit for clients, consulting companies and credit research companies are also expected.

From the perspective of infrastructure, in addition to a stable supply of electricity and gas, the development of services related to housing, such as companies that manage apartments with high level services in developed countries, moving companies, and housing improvement companies are expected.

As a minor opinion, voices for day-care centers and long term care services was raised. Given that aging is proceeding in developed countries in some Asian countries, the business opportunities in that could be great.

Expand the pride of professionals in consumer service abroad

Staying abroad makes one aware that value-added services of Japanese company that are deemed to be natural in Japan are evaluated as fresh. These can be categorized into convenience, courteous interaction with customers, craftsmanship, speediness and being eco-friendly.

For convenience, the voice for fixed-time parcel delivery service, membership rewards, and automated withdrawals from bank accounts is raised. Especially, services related to parcel delivery are evaluated to be high value-added services, such as cash on delivery service and receiving parcels at home. Some evaluate clothing alterations. For the field of convenience, not a few voices were raised to point out the needs for detailed information, for instance, route maps and traffic information, regardless of developed or developing country. These services are common in Japan yet seem to be uncommon overseas.

Japanese courteous manner to customers is a strong point that is thought to be needed overseas. For instance, staff in Japanese restaurants quickly response to customers' requests, yet that is not often the case in restaurants in other countries. Free hot towels are uncommon overseas, even though they are a kind of hospitality that can make customers relax. Some raised voices for service manuals because there is no consistent service level among stores or restaurants, and some pointed out the inappropriate manner to customers in some areas, such as not returning the correct amount of change in worst cases. Wrapping service for clients in retail store is also not usual overseas.

Craftsmanship represented by outstanding skills is one of the factors to be evaluated overseas. The pride of professionals, such as outstanding skills in automobile repair and goods maintenance and repair, have a high reputation all over the world. As a similar opinion, some miss the punctuality in meeting deadline which is often not the case overseas.

The speediness of Japanese service enjoys a high reputation also. It often takes time to purchase goods in overseas countries because inventory control and quick service at cash registers are not conducted thoroughly in retail industry. As a similar opinion, some expect the introduction of automatic ticket gates for railway transit.

Lastly, the fields of environment and sanitary should be mentioned here. Demands for clean service are deep-rooted, especially in developing countries. Opinions that urge the necessity of tackling problems regarding the pro-

Figure III-29 Uniquely Japanese service elements that are highly valued

	Example of a related service
Convenience	Redelivery of parcel packages, fixed-time deliveries, membership reward, automated withdrawals from bank accounts, size adjustment of clothes, maps in public-transportation facilities, information boards showing road/highway traffic situation
Interaction with the customer	Quick response to customers' requests, free hot towels, consistent service level between stores with a service manual, wrapping, hearty welcome words
Craftsmanship	Sufficient after-sales service, outstanding skill at repairs, punctuality in meeting deadline
Enjoyable, pleasant	Store cleanliness, attentiveness to customers (example: detailed product knowledge and explanation)
Speediness	Strict inventory control in retail business, quick service at cash registers, automatic ticket gate
Environmental protection mindset	Sensitivity to wastefulness ("Mottainai"), separation of garbage, recycle of plates and silverware, lightly air-conditioned train car or office

(Source) Prepared based on survey answers from JETRO overseas offices.

tection of the environment are heard in both developed and developing countries. For instance, some commented that restaurants lack the sensitivity to wastefulness, "mottainai." For example, garbage is not separated thoroughly, and the introduction of low-power air conditioning is not in progress. Developed countries seem to be highly aware of the environment, yet the opinions of employees in overseas offices are not necessarily as such.

(4) Issues to overcome in developing service industries overseas

1) Regulations in entering the services market

Since the service industry involves a lot of business opportunity, respective countries impose various regulatory controls as barriers to foreign capital entering, from the point of view of protection and promotion of its own industry.

Some Asian emerging countries gradually ease the regulations to raise the standards of economics and industry. On the other hand, some countries are inclined to protect their own industries. Several examples are illustrated below.

Malaysia—a change of government relaxed regulations

Malaysia imposes strict regulations on investment in the service industry. In 2009, while foreign investment in the manufacturing industry shared the greater part of the total investment amount, it was only 10% of the total in the service industry. This is because the government strictly limited the foreign capital ratio in service industries (non-manufacturing fields) under the Bumiputra Policy.

However, after the Najib was appointed as prime minister in April 2009, annulments of capital regulations in non-manufacturing fields were announced one after another and markets are opening gradually. Firstly, the immediate annulment of foreign capital regulations in 27 fields in the service industry was announced. This enabled the establishment of 100% foreign-owned companies in many areas. Following this, liberalization in the field of finance was announced, and the limit of foreign capital ratio in investment banking, Islam banking, insurance companies, and Islam insurance was raised from 49% to 70% in June 2009. Moreover, new issuance of licenses were announced (licensed Islam banking and the field of commerce to foreign capital and new issuance of licenses regarding Islam retail insurance business).

Furthermore, the Ministry of Domestic Trade, Cooperative and Consumerism (MDTCC) announced on May 12th 2010, the amendment of "the guidelines on foreign participation in the distributive trade services." According to the new guidelines, excluding hypermarkets, 30% of capital restriction rule was removed, enabling 100% foreign capital. The new guidelines retroactively came into effect from January 6th, 2010.

Indonesia—Foreign capital for growth

"Fields of business that are closed to foreign investments and fields of business that are open to foreign investments only with certain conditions" (the negative list) determines the possibility for foreign capital to flow into markets in Indonesia. Precedents prove that easing regulations on foreign capital flow raises economic standards. For example, after the approval of foreign capital flow in domestic passenger service in 2000, the number of passengers and passenger planes doubled in five years and lead to infrastructure improvement and tourism developments.

Internal investments (cross border) remained low in 2009. Investments are expected to recover as the second Yudhoyono regime targets growth above 7% in 2014. It is necessary to amend the negative list and to reinforce preferential treatments to investments. Amendment of the negative list is in progress for the official announcement in 2010 and some fields will open to foreign capital after the amendment. Practical and transparent amendments will improve the investment climate and will promote investments.

India—eases intricacy while partly strengthening regulations

In India, a number of rules and regulations regarding internal foreign direct investments (FDI) were integrated into a single document. This is a correspondence of the government to internal and external voices that it is difficult to understand the amendments to the rules on the whole since they are announced only as notifications. However, the point was to draw documents together, and reinvestment rules, a controversial issue for interpretation, is not explained and remains unclear.

Regarding the wholesale trade industry, which allows 100% of foreign capital, some of the conditions for entrance are reinforced. Clients' business licenses and confirmation of tax payment certificates, and obligations to record transactions in a report are clarified as requirements. Also a new regulation that sales to companies or persons in the same group should not exceed 25% of the gross volume of business was added. In light of the previous rule, such rules were limited to exports and the requirement was to sell 75% or more to a company or person in the same group. The new amendment intends to prevent retail trade from being affected by foreign wholesale trades.

In India, business aims at small-sized traders and restaurants, such as stores called cash and carry (C&C) and

Figure III-30 Regulations on foreign capital shares in service industries in Asian emerging countries (China, the Philippines, and Thailand)

	General principle	Regulated types of business		Investment ratio
		Types of business under complete prohibition	Types of business under restriction	
China	Types of business that are subject of prohibitions or restrictions are specified in "Catalogue for the Guidance of Foreign Investment Industries"(implemented and amended on December 1st, 2007). Besides, to avoid repetition of industrial and commercial investments, the list of prohibited foreign investments is announced (from September 1999). Taking a form of partnership, foreign comapany or individual is not allow to invest in projects recommended or restricted that are noted as "limited to joint ventures," "limited to contructual and equity joint ventures," "limited to equity and contructural joint ventures," "Chinese party shall hold the majority of shares," "Chinese party shall hold the relative majority of shares," "Chinese partner shall hold the majority of shares" and "the percentage of foreign capital" in "Catalogue for the Guidance of Foreign Investment Industries."	a. Production and supply of power, gas and water (except areas within the small power grid such as Tibet, Xizang, Xinjiang, Hainan province etc.) b. Transportation, storage, and postal services (companies of air traffic control and companies of postal services) c. Leasing and business service industry (Social investigation) d. Scientific research and technical service industries, and geological prospecting e. Irrigation, environment and public utilities management (such as nature reserves) f. Institution of compulsory education g. Art, sports and entertainment industries (news agencies, business of publishing books and newspaper, radio andTV stations, companies of publishing and playing of broadcast and TV programs, companies of films making, publishing business, news website, video screening companies, construction and management of golf course, gambling industry, etc.) h. Other idustries (Projects that endanger the safety and performance of military facilities) i. Other industries restricted by the State or international treaties that China has concluded or taken part in	a. Production and supply of power, gas and water (except areas within the small power grid such as Tibet, Xizang, Xinjiang, Hainan province etc.) b. Transportation, storage, and postal services (railway freight transportation companies, railway passenger transportation companies, corporate of highway passenger transport, and telecommunication companies etc.) c. Wholesale and retail trade industries d. Banking and insurance industries e. Real estate industry f. Leasing and commercial service industry g. Scientific research and technical services industries, geological prospecting h. Irrigation, environment and public utilities management (construction and management of fuel gas in big city, heating power and water supply and sewage net) i. Education j. Public health, social walfare industries k. Art, sports and entertainment industries (construction and operation of cinemas and large theme park) l. Other industries restricted by the State or international treaties that China has concluded or taken part in	There are two types of restrictions in specific industries; the one does not allow foreign party to have 100% share, and the other allow certain amount of share depending upon investment ratio. a. Regulations regarding "investment share" of foreign investors provided in "Catalogue of the Guidance of Foreign Investment Industries" b. Regulation in a special law Concrete restrictions regarding "investment ratio"of foreign investors are prescribed in special laws that are enacted for each industry separately by State Council of the People's Republic of China and authorities of respective industries c. Based on China's WTO accession commitments, China is gradually easing the regurations regarding foreign investments, and expanding the sphere of investments.
Philippines	Regulated or prohibited industries are stipulated in The Foreign Investment Act of 1991 (Commonwealth Act No.7042, amended in 1996), and the negative list that is revised periodically when necessary. The negative list is categorized into the list A and the list B. List A: Industries in which foreign investment and ownership is prohibited or limited by mandate of the constitution and specific laws. List B: Industries in which foreign investment and ownership is limited (up to 40% foreign equity) for reasons of security, defence, risks to health and morals and protection of small and medium-scale enterprises.	[Negative List A](items of which foreign ownership is limited by madate of the cnstitution and specific laws) a. Mass Media b. The practice of licensed professionals: all sorts of engineerings, medical and allied professions, accountancy, and law etc. c. Retail trade (paid-up capital amount under US$ 2.5 million) d. Cooperatives e. Private security agencies f. Small-scale mining g. Utilization of marine resources h. Ownership, operation, and management of cockpits i. Manufacture of nuclear weapons etc. j. Manufacture of biological and chemical weapons etc. k. Manufacture of firecrackers etc.	[Negative list A] <Up to 20% foreign equity> ・Radio broadcasting <Up to 25% foreign equity> ・Private recruitment, whether for local or overseas employment, the construction and repair of locally-funded works, the construction and repair for national defence <Up to 30% foreign equity> ・Advertising <Up to 40% foreign equity> ・Exploration, development and utilizationof natural resources, ownership of private lands, operation and manaegement of public utilities, establishment and administration of educational institutions etc. <Up to 60% foreign equity> ・Financing and investment companies regulated by the Securities and Exchange Commission (SEC) [Negative list B](Limits for reasons of security, defense, morals, health and protection of small and medium-scale enterprises) <Up to 40% foreign equity> a. Sauna and steam bathhouses b. Gambling (except economic zones specified by Philippine Economic Zone Authority)	Regulated industries in which foreign ownership is prohibited 100% and limited up to 20%, 25%, 30%, 40%, 60% are listed respectively on the negative list. If a industy does not come under the negative list, there is no uppoer limit of foreign investment ratio (100% foreign ownership is possible). However, this is necessary to be confirmed in advance because some case of industry that requires the lisence such as the construction industry, is subject to the limitation.
Thailand	In accordance with the Foreign Business Act (amended in 1999 and implemented in March 2000), industries are divided into 3 large categories and 43 small categories in order to restrict foreign investments (50% and more foreign share) in the categorized industries.	a. Newspaper publication, radio broadcasting or television station business b. Trading and auctioning of antiques c. Real estate (land) business	1. The business related to the national safety or affecting culture, tradition, folk handicraft or natural resource and environment (without approval of the Minister of Commerce and the Cabinet) a. The national safety or security: inland, sea and air transportation and domestic airline business b. The protection of culture and folk handicrafts: sales of antiques and folk handicrafts 2. Industries which lachs competitive against foreingers (without the approval of the chief of bureau and the foreign business committee) Accounting service, legal service, architectural design service, engineering service, retailing with the minimum capital under 2,000 bahts, wholesaling with minimum capital under a hundred million bahts, advertising business, hotel business (except management), tourist trading, selling foods and beverages, and other service industries (except the industries that are prescribed in a ministrial ordinance) etc.	A capital of 50% or more by foreigners are prohibited or restricted in the mentioned industries according to the Foreign Business Act. However, there are some exceptions.

(Note) Regulated types of business are examples and do not necessarily cover all industries.
(Sources) Based on reports from Jetro overseas offices.

Figure III-31 Regulations on foreign capital shares in service industries in Asian emerging countries (Indonesia, Vietnam, and India)

	General principle	Regulated types of business		Investment ratio
		Types of business under complete prohibition	Types of business under restriction	
Indonesia	The fields, subject of foreign investment regulation, are "The business fields that are not approved to foreign capital or approved under certain conditions" based on a negative list basis. The negative list is divided into two large categories; the one is "the field that prohibit all private investments" and the other is "the field that is open with conditions." "The field that is open with conditions" is divided into small categories such as "the field to be reserved to protect middle, small and very small sized enterprises," "the field that obligate a form of partnership," and "the field that limit foreign investment ratio."	1. All private investments are prohibited Gambling, casino, operation of wireless monitoring station and satellite business, public broadcasting of TV and radio, maintenance and administration of terminals, automobile inspection, maritime communications, navigation support facilities, air traffic controls, etc. 2. Limited to 100% domestic capital Film making, distribution, movie theatre; recording studio; utilization of water environmental service in forest area, wholesale trade of medical supplies, general hospital and clinic, maternity hospital, pharmacy, pension fund, foreign trade, private and broadcasting station for regular clients, press, specific consutruction consulting and business service, retail trade other than supermarkets and department stores, distributor, wholesale and retail trade of alcohole beverages, supermarket with floor space less than 1,200 square meters, and department store with floor space less than 2,000 square meters, commercial survey service, real estate broker, rent of land transport equipment, cleaning service, overseas dispatching of Indonesian workers, outsourcing, etc.	1. The field that obligates a form of partnership Internet access provider etc. 2. Limit of investment ratio up to 99% : banking up to 95% : business related to generation and supply of electricity, test of communication equipments up to 85% : leasing and venture capital up to 80% : insurance companies of every kind up to 55% : non smallscale construction work service, construction consulting, and business service up to 50% : art gallery up to 49% : educational insutitutions of every kind, products transportations of every kind, terminal support, service related to airport and air transportation, domestic and international marine transport, supply of port facilities, car repair, recruitment service and job training, etc. 49% and up to 65% (depending on business): communication network 3. The field in which investiment ratio is limited and obligated to be approved Administration of natural tourist resort other than preservation districts : foreign investment up to 50% is obligated to obtain recommendation of competent authority of ecotourism.	In case of which foreign enterprisechoose joint venture, investment is allowed up to 95%. For the case it selected 100% foreign owned capital, it is obligated to transfer a part of share directly or to transfer that to individual or corporation of Indonesia within 15 years from the startup.
Vietnam	Regulation on foreign investment is prescribed in "Law on foreign investment," implemented on July 1st, 2006 and its detailed regulations No.108/2006/NDCP.	a. Investment business that involves the risks to damage national defence, security, and public welfare (example: investment in private detective agency and survey service business) b. Investment business that involves the risk to damage historic heritage, custom, and trandition in Vietnam (exampl: ebusiness related to construction that involves the risk to damage the outskirt, exterior, and view of historical architectural structure and cultural heritage) c. Investment business that involves the risk to damage the health of the people and ecology of Vietnam d. Business related to disposal of hazardous wastes e. Other investment business prohibited by law	Conditional field of investment a. Broadcasting industry and telecast b. Production, publication and distribution of cultural works c. Building, installation, operation, and maintenance of transmission equipments d. Public postal networks, postal services, and delivery service e. Construction and administration of river port, seaport, and airport f. Transportation of goods and passenger by rail, air, road, sea, and inland waterway g. Real estate business h. Import-export business and distribution business i. Education j. Hospital and clinic k. The field of investment that international treaty restricts to opening of market to foreign companies In this law, "Condition"shall have the meanings ascribed hereunder a. Subjct of Prime Minister's approval under investment law b. Business laws of every kind c. WTO Document,"Schedule of Specific Commitments in Services" etc.	Business that does not allow 100% foreign investment such as conditional field of investment, the investment ratio shall be decided depending on the type of business.
India	Negative list prescribes industry and form of foreign investment that are prohibited or restricted, industry that has upper limit of investment ratio, and industry that requires single-window approval by the Foreign Investment Promotion Board (FIPB).	Gambling, lottery, and some business related to real estate, nuclear energy, railroad, and retail trade (excluding sales of single brand).	a. Banking (permitted to invest up to 74%) b. Nonbank financial institution (minimum capital is prescribed) c. Insurance (permitted to invest up to 26%) d. Private airline (domestic line) e. Airport (permitted to invest up to 74%) f. Communication service (telephone related industry is permitted to invest up to 74%) g. Housing and real estate business (resale is not permitted) h. Venture capital i. Commerce j. Business related to nuclear power (permitted to invest up to 74%) k. Courier service (excluding delivery of letter) l. Retail trade (eprmitted to invest up to 51%) m. Printing and publishing (newspaper and periodical are permitted to invest up to 26%)	If a foreign direct investment does not fall under the negative list, direct investment is automatically approved investment of ratio up to 100%. Regarding the acquisition of stock of Indian company by foreign institutional investor (FII), in principle, investment ratio up to 24% and each investor up to 10% (conditionally permitted up to 100%) are automatically approved on the condition that the company register itself to the Securities and Exchange Board of India (SEBI).

(Note) Same as notes on Figure III-30.
(Sources) Based on report from Jetro overseas offices.

restaurants are regarded as wholesale trade in which foreign capital is approved to flow. By utilizing such a route, German Metro developed 5 stores in the country, U.S. Walmart (a business partner of Bharti group) developed 2 stores, and French Carrefour (a business partner of Future group) and UK Tesco (a business partner of Tata group) will open stores shortly. Thus, foreign companies concern the reinforcement of regulation.

2) Issues to overcome in business operations

Introduction and amendment of policies without prior notification

Sometimes, sudden changes of policy have unexpected effects on the development of service industries in Asia. Figure III-32 illustrates risks and issues that non-manufacturing industries face on the spot when they develop business in Asia. In particular, many companies operating in China have faced challenges in almost all areas regarding the legal system and intellectual property rights, etc. Regarding participation in government procurement, in November 2009 the Chinese government suddenly announced the introduction of a system (Indigenous Innovation) that imposes a condition to hold intellectual property right in China and favors products that are registered in China at an early stage. Such sudden introductions and changes that affect advanced companies are the clouds on the horizon not only for Japanese companies but also for Western companies in developing business.

Regarding India, many companies entering India have been dissatisfied with the country's handling of legal-system issues, yet the most serious issue is its underdeveloped infrastructure. The issue of a stable supply of electricity is still unsolved and distribution system is underdeveloped which are threats to companies entering India. On distribution, the Delhi Mumbai Industrial Corridor Project, joint project of Japan and India to improve infrastructure such as industrial parks, is a key to the solution of the issue. If this project succeeds in smoothing distribution issues, risks involved in non-manufacturing industries will be eased dramatically.

Vietnam also has problems to solve which are similar to China and India. Vietnam announced the introduction of new rules on gaining import licenses for certain steel products. The Vietnamese government took such measures from the fear of trade deficit being accumulated. Since Japanese-affiliated construction businesses rely entirely on imported steel products, they expressed serious anxiety. Infrastructure in Vietnam also faces issues similar to India on infrastructure, and the Vietnamese government started to give high priority to developing the infrastructure for business. For instance, it came up with a mega-infrastructure project to improve coal power plants, oil factories, harbors, and real estate developments.

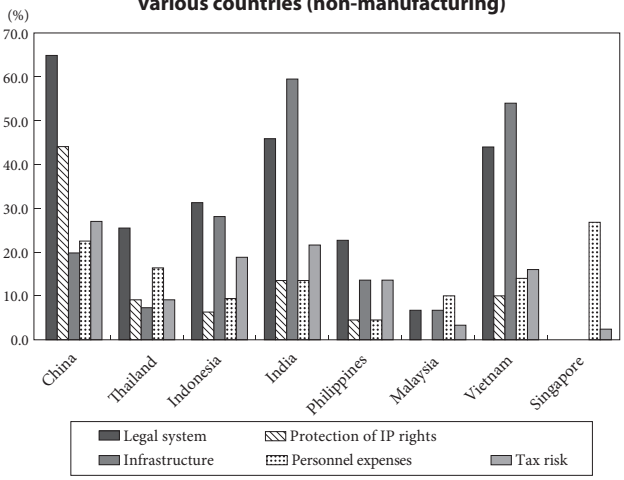
There must be a space for Japanese companies to play an active part in tackling risks involving in the infrastructure in emerging countries.

(5) Can't see the forest for the trees - the multiplier effects within and outside the country

There is a plenty of space for service industries to develop supply and demand especially in Asia. Needs exist, including potential needs for Japanese-style service, and there seems to be scenes in which Japanese companies can be highly competitive. It is needless to say that there are obstacles, such as insufficient income levels, restrictions regarding public security and infrastructure, and lagging market liberalization. On the other hand, Japanese companies are in general inferior to European and North American companies from the view points of profitability and scale, which stem from reasons such as not making effective use of local personnel, and the relatively infrequent use of M&As in services.

Regarding regulations on foreign investments, in addition to watching policies of countries where companies have entered, consulting experts and lawyers who know local information well could be beneficial. For earnings, finding a niche industry that local companies or foreign-affiliated companies have not entered yet, construction of a human resources system that will increase the productivity of local personnel, and M&A strategies for expansion could provide breakthrough solutions. This point is learned by observation not only of successful Japanese companies but also of the strategies of European and North American companies. From different perspectives, the initiative of Korea, whose manufacturing industry often competes with Japan, draws attention. Overseas development of South Korean service industries lags behind more than Japan. Corresponding to such a situation, the Ministry of Knowledge Economy (Minister Choi Kyunghwan) and the Korea Trade-Investment Promotion Agency (KOTRA) declared a policy to support overseas development of service industries throughout the country in April 2010. Korea supports 13 domestic companies in the food-service, retail trade, and dry cleaning industries. Respective companies receive KOTRA coupons equivalent to 20 million won (approximately 1.6 million

Figure III – 32 Business risks and challenges by category for various countries (non-manufacturing)



(Notes) (1) Parameters are: China 111, Thailand 55, Indonesia 32, Malaysia 30, Philippines 22, Singapore 41, Vietnam 50 and India 37.
(2) Paramenters are: Corporations currently in a business relationship or corporations contemplating new business.
(3) Multiple answers permitted.
(Source) "FY 2009 Survey on International Operations of Japanese Firms" (JETRO).

Figure III-33 Degree of development of the service industry in major developed countries

(US$ million, %)

	GDP (Service Industry)	Service industry percentage of nominal GDP
U.S.	11,556,298	82.0
UK	1,949,582	81.4
Germany	2,394,786	73.2
Italy	1,596,655	77.1
France	2,162,312	84.2
Japan	3,843,803	75.8

(Note) Based on 2008 data.
(Source) "National Accounts Main Aggregate Database" (United Nations).

yen), and support depending on the conditions of overseas development. Taking into consideration that many companies in service industries are small-scale, it could be a nation-lead strategy that the country supports a company whose scale is not large enough to develop overseas.

In addition, Japanese service industries are expected to develop both within and outside the country. Figure III-33 illustrates the degree of development of service industries. The figure suggests that compared to the U.S., UK, and France, Japan has room for service industries to grow.

Moreover, the productivity of the Japanese service industry is low. For instance, the level of productivity of Japanese retail trade industries after 2000 is lower than the average productivity of U.S. and UK from 1995 to 2000 (Figure III-34).

This trend is observed in hotel and restaurant industries. In other words, Japanese service industries have potential to pull up their productivity and competitiveness depending on further management strategy.

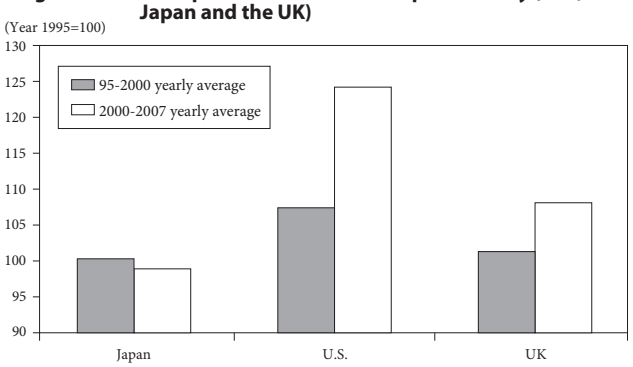
The government worked out a growth strategy that aims to be a "healthy country," to make Japan a travel destination, and to invigorate local areas by means of life innovations; that was decided by cabinet in June 2010. Since fewer people pay attention to both medical care and tourist trade industries than they do to retail trade and financial industries, the former two industries are expected to grow in the future. There is space for demand growth because there are ample supplies and every possibility of improvement in many service industries, and both industries focus at the aging society and increasing numbers of Chinese tourists.

Medical care adopts the strategy of promoting the growth of health care service industries and acceptance of foreign patients. The government carries out strategies by easing regulations such as expansion of the fields in which medical practitioners work.

Regarding the tourism, the number of foreigners who visit Japan is estimated to be 25 million by 2020, and Japan aims to achieve 30 million visitors in the future by easing conditions for Chinese to get entry visas and promoting tourism in cooperation with growing fields such as medical care. It is necessary to increase the number of foreigners who visit Japan to expand tourism industries under the circumstances where the Japanese population is decreasing.

Steady implementation of these growth strategies will expand related service industries and raise the overall standard of the Japanese economy.

Figure III – 34 Comparison of retail-sector productivity (U.S., Japan and the UK)



(Notes) (1) Sales of automobiles and motorcycles are not included in retail figures.
(2) Figures for Japan only through 2006.
(3) Productivity figures are total factor productivity (TPF).
(Source) EU KLEMS.

These developments in service industries in Japan could be a driving force to develop overseas. For instance, famous domestic inn "Kagaya" (Ishikawa prefecture) plans to develop in Taiwan. Kagaya hopes to attract Taiwanese who visited Kagaya in Taiwan and make this opportunity a motivation to visit the original Kagaya in Japan.

Business opportunities await in emerging countries with Asia as the center, yet since there is a space for growth in the Japanese domestic market, it is expected that Japanese companies make full use of both markets.

3. Infrastructure and Environment Business

(1) Big business opportunities in infrastructure and environment

We mainly focused on the consumer market (B2C, business to consumer) in the preceding two sections for the areas which Japanese companies should target; the volume zone and service industry. Big changes have been happening not only in these consumer markets, but also in B2B (business to business) and B2G (business to government) markets. Especially, infrastructure business and environment business have attracted a lot of attention. These two areas have many similarities: both markets are heavily affected by government regulations and interventions, and a size of each project tends to be large. There are also many projects that relate to the both markets such as a high-speed railway and LRT as low-carbon transportation means. So, in this section, we will deal with these two areas together, and consider how Japanese companies could entered into the markets where Western companies have exerted their strength and Chinese and Korean companies expanded rapidly.

After taking a brief look at overall pictures of global infrastructure and environment business, we will closely examine water business, transportation infrastructure, and renewable energy, which could bring big business opportunities to Japanese companies.

Substantial potential in infrastructure business

There are many cases in which the underdevelopment of infrastructure, such as road or electricity, becomes an obstacle when Japanese companies start their business in emerging market and other foreign countries. In the questionnaire survey about the business environment in Asian countries conducted at the end of 2009 on JETRO members, shown on Figure III-32 in the previous section, many Japanese companies pointed out the lack of proper infrastructure as a risk for their operations. This trend is more prominent when manufacturing industries are included as questionees, in which the underdevelopment of infrastructure is listed as the biggest problem in Indonesia and the Philippines, in addition to India and Vietnam. When considering in a different view point, it indicates that there are big business opportunities for Japanese companies, as emerging markets have huge needs for infrastructure development.

In fact, in the BRICs and other emerging markets, where economic growth and urbanization is progressing, the infrastructure has been developed at a rapid pace, but the development is still insufficient (Figure III-35). For the transportation infrastructure, some countries such as Thailand and China had expanded its road network significantly from 1995 to 2005, but other countries remain virtually unchanged. In China and Vietnam, where the total road length expanded by 2.5 and 1.5 times, respectively, in 10 years from 1995, there are signs of room for further improvement in quality as the low pavement ratio of each country suggets (China 49.6%, Vietnam 47.6%, in 2007). As for electricity, although improvements are under way, such as the increase in the electrification ratio in India from 43% (2000) to 64.5%(2008), many countries still have low levels of energy production per capita. Access to safe water and sanitation facilities, although showing a trend for significant expansion, needs more improvement as a basic requirement for healthy livelihood.

Under these circumstances, it is expected that the infrastructure development will be a huge market in the future. In the estimate by OECD in 2006, an annual investment amount of US$ 1,626 billion to US$ 1,897 billion will be needed until 2030 in the areas of water, electricity (only transmission and distribution, excluding generation), communications, railways, and roads (Figure III-36). In Asia alone, US$ 7,991.7 billion in total will be necessary for 11

Figure III-35 Selected indicators of the infrastructure in the BRICs and Asian countries

	Nominal GNI per capita (US$)		Urban population(1) (%)		Total road network (1,000 km)		Paved roads (%)		Total railway length (1,000 km)		Electrification rate (%)		Power generation per capita (kWh)		Access to a improved water source (%)		Access to a improved sanitation facility (%)	
	1998	2008	1995	2007	1995	2003-07(2)	1995	2002-07(2)	1997	2008	2000	2008	1997	2007	1995	2006	1995	2006
Brazil	4,880	7,300	34.6	38.8	1,658	1,752	8.9	5.5	4.2	29.8	94.9	97.8	1,849	2,341	86	91	73	77
Russia	2,140	9,660	17.9	17.9	479	933	n.a.	80.9	86.7	84.2	100	n.a.	5,656	7,132	95	97	87	87
India	420	1,040	10.2	11.5	2,173	3,316	55.4	47.4	62.7	63.3	43.0	64.5	482	714	77	89	18	28
China	790	2,940	14.3	18.4	1,463	3,584	n.a.	49.6	57.6	60.8	98.6	99.4	922	2,488	74	88	53	65
Bangladesh	330	520	9.2	12.4	204	239	7.9	9.5	2.7	2.8	20.4	41.0	89	155	78	80	28	36
Cambodia	280	640	7.3	10.2	36	38	7.5	6.3	0.6	0.7	15.8	24.0	27	94	19	65	8	28
Indonesia	680	1,880	9.5	9.1	327	391	52.4	55.4	5.3	3.4	53.4	64.5	388	633	74	80	51	52
Malaysia	3,630	7,250	5.9	5.4	61	93	73.9	79.8	1.6	1.7	96.9	99.4	2,671	3,816	98	99	n.a.	94
Myanmar	126	578	7.4	8.3	28	27	12.1	11.9	3.3	n.a.	5.0	13.0	99	132	61	80	34	82
Pakistan	470	950	16.6	17.7	214	260	45.0	65.4	7.8	7.8	52.9	57.6	484	589	87	90	40	58
Philippines	1,060	1,890	14.9	14.1	161	200	16.7	9.9	0.5	0.5	87.4	86.0	545	672	87	93	66	78
Singapore	23,490	34,760	98.7	100	3	3	97.3	100	n.a.	n.a.	100	100	7,086	8,964	100	100	100	100
Sri Lanka	820	1,780	n.a.	n.a.	98	97	40.0	81.0	1.5	1.5	62.0	76.6	280	495	71	82	76	86
Thailand	2,050	3,670	10.2	10.0	62	180	97.4	98.5	4.0	4.4	82.1	99.3	1,528	2,141	96	98	85	96
Vietnam	350	890	12.8	13.3	106	160	25.9	47.6	2.8	3.1	75.8	89.0	254	816	64	92	40	65
OECD Countries	24,603	39,688	32.9	33.9	n.a.	n.a.	85.8	79.0	401.5	495.6	99.2	99.8	9,262	10,396	99	100	100	100

(Note) (1) "Urban population" is the percentage of the population living in cities that have a population of more than 1 million.
(2) In columns marked "2003-07", the most recent data is used, except paved roads in Brazil and Thailand which use 2000 data.
(3) For GNI per capita, only Myanmar is based on the data of the United Nations Statistics Division, and other countries are based on WDI.
(Sources) "World Development Indicators"(World Bank), "World Energy Outlook" (IEA) and United Nations.

years from 2010 to 2020 according to the report announced by Asian Development Bank (ADB) and Asian Development Bank Institute (ADBI) in 2009 (Figure III-37). The annual market size of over US$ 750 billion is expected by adding the transnational local infrastructure.

The further development of infrastructure in emerging countries would be the basis for more industrial development and economic growth of each country. It would also enable to deliver more social services such as health and education. So, the infrastructure development is not only a promising business opportunity but an important and meaningful area of business, as it could expand markets for Japanese industries through improving living standards and business environment.

Way toward a low carbon society

Although a new framework of the post Kyoto Protocol was not agreed upon at the COP15 in Copenhagen in December 2009, emerging countries like China, India, and Brazil are on their way to expand the use of renewable energy. Other countries will also take necessary steps to proceed a way toward a low carbon society. Indeed, many countries have announced policies trying to attain economic growth through promoting environmental measures. The typical policy is the stimulus package of the United States after the financial crisis to promote clean-energy related businesses using about US$ 90 billion. In June 2009, the ministerial meeting of OECD stated that "green and growth can go hand-in-hand" and adopted the Green Growth Declaration which encourages green investment and the sustainable control of natural resources. OECD Secretariat submitted the interim report for formulating the Green Growth Strategy in June 2010.

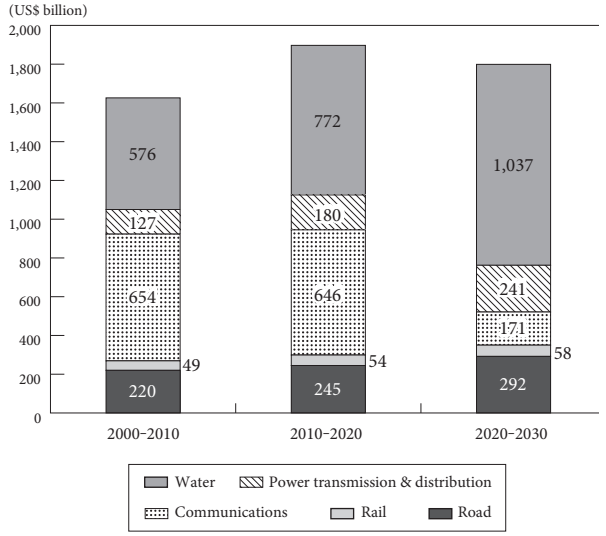
Against this background, environment-related business is expanding steadily. As reported in details in "2009 JETRO White Paper on International Trade and Foreign Direct Investment," the March 2009 report by the Department for Business, Enterprise and Regulatory Reform (BERR) estimated that the size of the environment business market in the world in 2007/08 was 3,046 billion pounds.

The Department for Business, Innovation and Skills (BIS, established by the consolidation of BERR with other departments in June 2009) announced the update of the report in March 2010, in which it estimated that the market size in 2008/09 increased by about 5% from the previous year, and reached about 3,200 billion pounds.

The market size and growth rate of the top 10 countries are shown in Figure III-38, and these 10 countries account for about two thirds of the global market. Please note that the estimated amount by BIS is considerably larger than others as BIS defines broadly for the market size of environment business, by incluging, for example, the supply chain of environmental goods.

In any estimation, the United States is considered to be the world's biggest market for the environment business. The U.S. Department of Commerce published the first report on "Green Economy" in May 2010. In this report, the goods and services of the following 5 purposes are categoried as "green" products ant services : 1. Energy conservation (mass transportation, alternative fuel vehicles, green building construction, energy efficient appliances, etc.), 2. Pollution control (nonhazardous and hazardous waste collection and disposal, air and water filters and purification equipment, etc.), 3. Resource conservation (recycled, used, rebuilt or metal scrap products, etc.), 4. Environmental assessment (environmental engineering, consulting and law services, environmental testing laboratories, etc.), 5. Renewable/Alternative energy (hydro, solar, wind, geothermal, and cogeneration electricity generation, etc.). While the products and services for which objections are relatively few regarding their "greenness" are included in narrow definition of green, the products and services whose green status is rather controversial, such as nuclear power generation and biofuel are categorized as green in a broad sense. Among five groups, energy conservation related products and services account for one third of the green economy in terms of sales amount (Figure III-39). Especially, the amount of green building construction is estimated at US$ 36 billion

Figure III – 36 Estimated annual world infrastructure expenditure (2000-2030)



(Note) "Water" includes only the OECD countries, Russia, China, India and Brazil.
(Source) "Infrastructure to 2030"(OECD).

Figure III-37 Estimated total investment needs for infrastructure in Asia (2010-2020)

(US$ million)

Sector	New Capacity	Replacement	Total
Energy (Electricity)	3,176,437	912,202	4,088,639
Telecommunications	325,353	730,304	1,055,657
Mobile Phones	181,763	509,151	690,914
Landlines	143,590	221,153	364,743
Transport	1,761,666	704,457	2,466,123
Airports	6,533	4,728	11,260
Ports	50,275	25,416	75,691
Railways	2,692	35,947	38,639
Roads	1,702,166	638,366	2,340,532
Water and Sanitationanitation	155,493	225,797	381,290
Sanitation	107,925	119,573	227,498
Water	47,568	106,224	153,792
Total	5,418,949	2,572,760	7,991,709

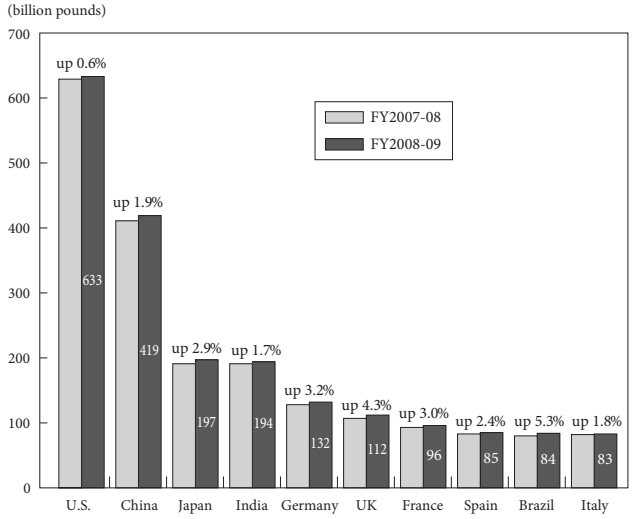
(Source) "Infrastructure for a Seamless Asia"2009 (ADB, ADBI).

(in the narrow definition) to US$ 49 billion (in the broad definition), and it accounts for a little under 10% for the sales amount, and over 12% for the number of employees in the green market. This green building construction attracts attention as a strong employment measure in the housing industry, which is facing the unemployment rate as high as 25%. The support measures conducted by the federal and states government are expected to expand in the future.

Environmental awareness is growing in Asia as well. According to the Global HABIT survey (2009) conducted by Hakuhodo for 14 Aisian cities and Moscow, 84.9% on average replied that they are "very interested" or "interested" in environmental issues such as waste reduction, water and air pollution, and energy consumption. The percentage of people who answered "very interested in" is high in Jakarta (77.4%), Metro Manila (75.4%), Mumbai (69.9%), Ho Chi Minh City (54.4%), and Delhi (48.8%). Many people, 76.4% on average in 15 cities, answered "purchasing energy saving products" as the measures they practice to protect environment. For other measures, "using products that can be refilled (66.6%)" and "bringing shopping bags (63.9%)" are prefered. These figures show that the environmental issues are considered as a serious problems by the people in big cities in Asia with rapid economic growth and urbanization, and the perception actually affect their consumption behavior.

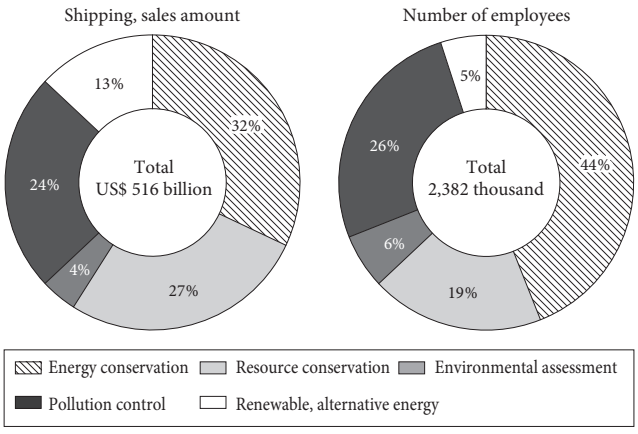
Renewable energies and other environmental business markets are expanding rapidly in China and India, and expected to expand in other Asian countries in the future. According to the BIS 2009 report, eight Asian countries in addition to Japan ranked in top thirty countries in the scale of environmental business in 2007/08 (Figure III-40).

Figure III – 38 Top 10 eco-business markets in the world



(Source) The Department for Business, Innovation and Skills, UK.

Figure III – 39 Scale of "Green economy (broad definition)" in the United States (2007)



(Source) U.S. Department of Commerce.

(2) Sectors with high potentials: Water, transportation and renewable energy

Against this background, many large-scale infrastructure projects and environment related projects are proceeding in BRIC and other emerging countries which are growing rapidly, and in Europe and the United States which pursue low carbon society with economic growth. Countries such as France and South Korea are competing fiercely for these projects, especially in emerging countries. Japan also puts a priority on the infrastructure "export" in Asia in the New Growth Strategy approved at a cabinet meeting in June 2010, and have already taken various measures to promote it.

Out of many sectors in which overseas deployments by Japanese firms are expected, this section picks up the water treatment system, high-speed railway and urban transportation among transportation infrastructure, and renewable energy, considering the market size and the growth potential overseas, and Japan's advanced technology. We will discuss market and industrial trends and introduce several cases of Japanese companies working in these sectors overseas, and consider how business opportunities can be seized.

Water business is expected to expand

The water demand in the world is expected to increase significantly in the future. The 2030 Water Resources Group, in which Coca-Cola, Nestle and other private companies participated along with International Finance Corporation (IFC), estimated that if efficiency of the water use remain as it is, water withdrawal demand in the world will increase by more than 1.5 times from the present 4.5 trillion cubic meters to 6.9 trillion cubic meters in 2030. About 53% of the increase will be by Asian countries such as China and India.

Although most of the water demand is for agricultural water, the business scale of water treatment will expand rapidly as the demand for household and industrial water

Figure III-40 The market size of eco-business in Asian countries (2007/08)

	Amount (100 million pound)	Share
China	4,112	13.5%
India	1,908	6.3%
South Korea	498	1.6%
Indonesia	439	1.4%
Taiwan	351	1.2%
Thailand	271	0.9%
Philippines	218	0.7%
Pakistan	194	0.6%

(Source) Same as Figure III-38.

will increase due to the population increase, industrialization, and economic growth. According to Working Group on the Global Development of Water Business organized by the Ministry of Economy, Trade and Industry, 36.2 trillion yen was spent for drinking water, seawater desalination, industrial water and wastewater, recycled water, and sewerage in 2007 worldwide. The size is expected to expand by about 2.4 times to 86.5 trillion yen in 2025. By sector, drinking water and sewerage have the large share of about 85% in the market size in 2025, but the total amount of seawater desalination, industrial water and wastewater, and recycled water is expected to increase by more than 3 times to 12.2 trillion yen (Figure III-41). Drinking water and sewerage services in Japan are directly operated by local authorities with a few excepttion, but privatization is advancing globally especially in Europe. The rate of privatization in 2009 (the rate of population that receive the privatized services of drinking water and/or sewerage) is 12% in the world, and it is expected to increase to 16% in 2015 and to 20% in 2025. The rate of privatization of Western Europe, which was 45% in 2009, is predicted to continuously increase to 55%. In East and Southeast Asia, privatization are also expected to expand, from 15% in 2007 to 26% in 2025 (Figure III-42). With the population increase, East and Southeast Asia are the largest market in population size. Especially, China has accounted for about half of the world population delivered water service by the newly privatized companies since 2001, and continuous growth is expected.

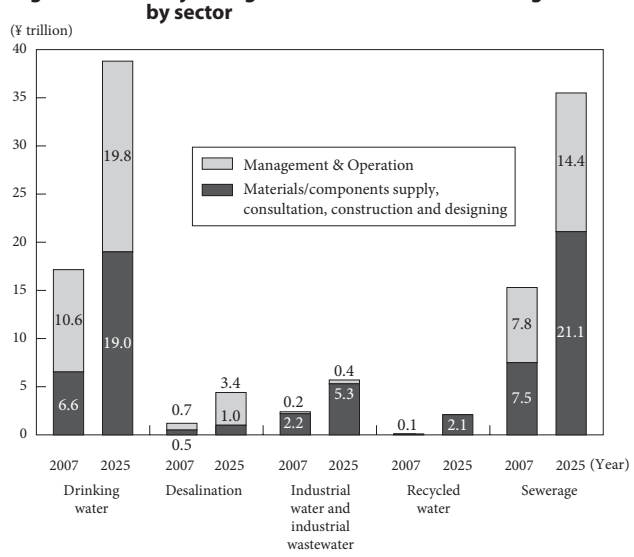
The "Water Barons", such as Suez and Veolia, emerged in Europe which has advanced privatization for long time and has provided opportunities for private firms to involve in a comprehensive service of facility design, construction, maintenance, and operation. They dominated the private water market in the world for long time as they used their know-how accumulated especially in the operations areas such as operation and maintenance. However, the dominance of these European companies has been weaken in recent years. The market share of the 5 major companies, Suez (France), Veolia (France), SAUR (France), Agbar (Spain), RWE (Germany), was 73% in 2001, but dropped to 34% in 2009. Pinsent Masons, a law firm in the UK, analyzed that many European companies employ a strategy to withdraw from the markets of emerging countries except China and Middle East, and to concentrate their resources in Europe. Increasingly, local companies receive orders instead of these European companies (49% of the water supplied population for the contracts from 2005 to 2009). Even in cases in which other companies receive orders, the companies of emerging countries like Singapore or Malaysia increase their shares.

Especially, Singapore Government applies a strategy to promote public and private collaboration and to become a global hub for water business . With the supports from the Government, Hyflux, the largest water treatment company in Singapore, is aggressively advancing into the Middle East, North Africa region and China, and earned a contract for the world's largest desalination plant in Algeria among other projects.

Meanwhile, Japanese companies have a large share in the water treatment membrane technology for seawater desalination or wastewater treatment. In fact, the share of Japanese companies of the reverse osmosis membrane is about 50%. Many Japanese companies, especially those using the membrane technology, are expanding into China and the Middle East where the market is expanding rapidly (Figure III-43).

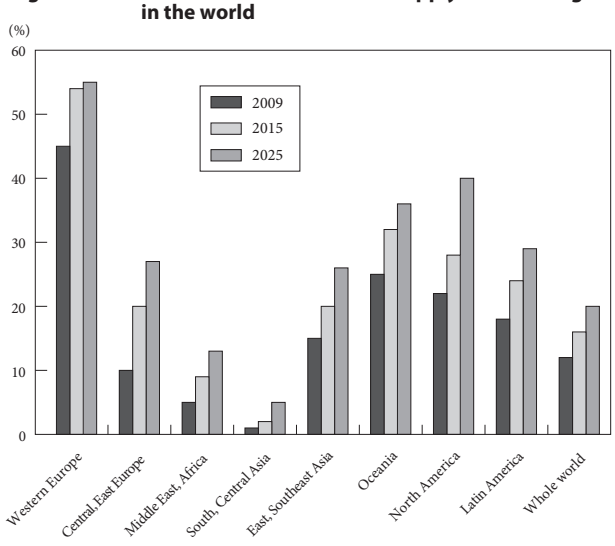
However, the market size of the equipment such as water treatment membrane is limited: the total amount of the equipments and chemicals for industrial water and drainage is only 6.4% of the water-related market (2008 White Paper on International Economy and Trade). Using the advanced technology including the water treatment membrane, Japanese companies are expected to advance into the market in

Figure III – 41 Projected global water-business market growth by sector



(Source) "Study Group for International Development of the Water Business" report, 2010 (Ministry of Economics, Trade and Investment).

Figure III – 42 Privatization rate of water supply and sewerage in the world



(Source) "Pinsent Masons Water Yearbook 2009-2010."

Figure III-43 Japanese companies' water-business in China and Middle East etc.

Sector	Name of Company	Country	Outline of business
General	Mitsubishi Corporation and others	Australia	In May 2010, Mitsubishi Corporation, the Innovation Network Corporation of Japan, JGC, and Manila Water Company reached agreement to acquire United Utilities Australia (UUA) and related companies from United Utilities (UU), a water business company in UK. Amount of stocks acquired is AUD 176 million. Tokyo Suido Services, a third secor company of Tokyo Metropolitan Government, also takes part in its consulting business. It undertakes 14 businesses such as, water and sewerage, desalination, treatment of industrial waste water, and water recycling, and distributes water to approximately 3 million people.
Equipments and materials	Sekisui Chemical (Pipe)	China	In April 2005, by accepting 60% of issued stock of top reinforced plastic pipes' manufacture in China, it acquired management participation right and established "Xinjiang Yongchang-Sekisui Composites." It became the first Japanese plastic pipe manufacturer in infrastructure market in China.
	Toray (Water treatment membrane)	China	In July 2008, it established a water treatment joint venture called "Toray BlueStar Membrane Co.,Ltd.(TBMC)" in Beijing. Amount of capital investment is approximately 5 hundred million yuan (approximately 7.5 billion yen) and plans to product reverse osmosis membrane and assemble membrane elements that is expected to commence operations in June 2010. It supplies water-treatment membrane to wastewater recycling and seawater desalination projects in China.
		Bahrain	In December 2009, it took order of reverse osmosis membrane for Al Dur Desalination Plant. Capacity of this plant is 218,000 cubic metres per day that is the biggest in the Middle East using Toray membranes.
	Mitsubishi Electric (Ozone generator)	China	In November 2009, it took the order of "Ozonizer"for water and sewerage treatment facilities (two orders for water treatment facility in Beijing and one order for a water treatment facilities in Suzhou, Jiangsu Province.) Ozone has strong sterilizing power but the burden to environment is light because it returns to harmless oxygen after the treatment, thus it enables to build eco-friendly water treatment facility.
	Torishima Pump Mfg. (Pump)		It plans to establish a local subsidiary in Tianjin to construct a factory to produce high-technology and high-efficiency pumps such as boiler circulating pumps and boiler drainage pumps to meet rising demands in China. It is expected to commence operations in November 2010. It strives to reduce costs by local production and offers prompt after-sales services on the spot.
Desalination	JGC	China	In December 2009, regarding desalination business under development in Tianjin, as a joint contribution with Hiflux in Singapore, it established a holding company and reached agreement to operate a joint venture. As the desalination plant will have been completed in the third quater of 2011, it is estimated to produce 150 thousands tons/day and will be the largest desalination plant of resverse osmosis membrane in the China.
Independent Water and Power Producers (IWPP)	Marubeni	UAE	It invested in four out of eight independent water and power producers (IWPP) that Abu Dhabi Water and Electricity Authority in United Arab Emerates (UAE) implements. The power generation and water supply of four projects totaled 6,210 thousands kW and 440 million gallons.
	Others	Middle Eastern countries	Examples of investment in IWPP projects in other Middle Eastern countries Sumitomo: Abu Dhabi, Bahrain. Mitusi & Co., Ltd: Abu Dhabi, Qatar. Chubu, Tokyo, and Shikoku Electric Power: Abu Dhabi, Qatar. JGC: Abu chabi, Saudi Arabia.
Water and sewer services	Mitsui & Co., Ltd	Mexico	In January 2010, it contracted to build and operate (BOT) a sewage plant in the state of Hidalgo through its consolidated subsidiary, Atlatec. In cooperation with IDEAL, a leading construction company in Mexico, joint company will supply the waste water treatment service with a capacity of 3,600,000 tons/day that will be the world largest wastewater treatment plant as a single facility. Total project cost will be 80 billion yen.
	Sumitomo Corporation		In May 2009, through a local project company jointly invested with Degrémont in France, it contracted BOT to provide Wastewater Treatment Services Expansion Project (Total project cost: approximately 6 billion yen) for a public water service agency in Juarez City, Chihuahua State. After the completion, the new facilities expected to treat 390,000 cubic meter/day.
	Marubeni	China	In November 2009, it reached agreement to have 30% equity of Anhui Guozhen Environmental Protection Science and Technology (Anhui Guozhen Environment). By utilizing the accumulated know-how of wastewater treatment projects in China learned from aforementioned company, Marubeni actively tackles with further new wastewater treatment projects.
	Torishima Pump Mfg.	UAE	In November, not only it received orders for pumps but also it made a full turn-key contruct including engineering, construction, machinery, and electrical machinery to build a pumping plant that supplies water a million tons /day to peple in Al Ain, Abu Dhabi.
Drainage services	Asahi Kasei Chemicals	China	In April 2008, it received first order from "Sony Chemicals (Suzhou)"in Suzhou, Jiangsu to develop wastewater recycling service to recyle industrial wastewater to industrial water through the outstanding filtration performance high-technology membranes and supply industrial water. It built wastewater recycling plant in its premises and started operating from February 2009.
	Kiyomoto		It winned the order of industrial waste water drainage from the government of Jinzhou District, Dalian, Liaoning and signed the letters of intention in August 2008. The sewage teatment plant started operating in November 2009. Capacity of treatment is 5,000 tons/day. The capacity of the plant will raise to 40 thousand tons/day eventually. It adopts the advanced treatment method of Asahi Chemicals that utilizes the technology of membrane filters.
	Kurita Water Industries		In December 2008, it delivered a "wastewater to recovery and reuse system" to a factory of Guangzhou Toyota Motor. This system reclamate and recycle 70% of the total amount handled at its treatment facilities (3,000 tons per day). The treated water is used as industrial water. Moreover, the factory is making effective use of the remaining 30% (concentrated wastewater, such as that flowing from the RO membrane equipment) within its premises after removing COD (organic matter contained in the wastewater).
	Sojitz		In November 2009, it has signed for joint venture with Tangshan City, Heibei Province to recycle industrial water. This project to treat wastewater from Caofeidian industrial area and supply that as industrial water will be commenced in 2010. It plans to build a wastewater treatment plant that adopts Nitto Denko's reverse osmosis and nano membrane filter, and Asahi Chemicals' a membrane bioreactor system that treats 50 thousand tons/day and supplies 35 thousand tons of recycled water.
	Teijin		In April 2010, in cooperation with Membrane-Tec Co., Ltd., a manufacturer of membrane filtration units for water treatment, it has signed a business collaboration agreement with Yixing City Water Works & Construction Investment Co., Ltd., which manages water supply and sewage systems for the city of Yixing, Jiangsu Province, to co-develop wastewater treatment systems for rural communities. The system will be tested in the village of Dagang aiming at full-scale operation sometime during fiscal year 2010. The agreement marks the first time that private companies from Japan and China will collaborate to improve wastewater treatment in rural communities.
	Itochu		In April 2010, in partnership with Suez Environnement (France), it received order to provide operation and maintenance service at the North-South Sewage Treatment Facility that has a processing capacity of 40,000 tons/day in Dalian Changxing Island Harbor Industrial Zone, Liaoning Province from the Changxing Island Harbor Industrial Zone Commission. This is the first venture business with Suez in China.
	Hitachi Plant Technologies	UAE	In April 2010, commitioned by New Energy and Industrial Technology Development Organization (NEDO), it launched demostrative business of wastewater treatment and recycling at the Al Ghail Industrial Park in Ras Al Khaimah. In 2008, it and the Al Ghurair Group cofounded the recycled water joint venture Hi Star Water Solutions.

(Sources) Prepared based on press releases and hearing from respective companies.

the operation and maintenance area, which will produce long-term profit.

To accomplish this, it will be necessary for several firms with different expertise to form a consortium and to provide the integrated service. In Japan, as shown in Figure III-44, various entities have covered each area of "production of equipment and parts," "EPC (engineering, procurement and construction)," "operation, maintenance and management," and each company's scope of business is smaller than foreign companies which usually cover much wider areas. The privatization has been limited so far especially in the area of operation, maintenance, management, so the private companies couldn't accumulate their know-how in these areas.

In the circumstances, the case that Mitsubishi Corporation, Innovation Network Corporation of Japan, JGC Corporation and Manila Water Company acquired Australian water company in May 2010 deserves attention. Mitsubishi Corporation and other companies acquired the water company from United Utilities in the UK, which owned the company providing 14 services inculding drinking water, sewerage, seawater desalination, industrial wastewater treatment, recycled water with serving water to as many as about 3 million people. Tokyo Suido Services Co., Ltd., a quasi-public corporation partnering with Tokyo Metropolitan Government, will participate for a consulting work. It is expected that this case will present a good example of effective business models of public-private collaboration by utilizing their respective expertise.

Collaborating with foreign firms with proven track records as well as with local firms is another effective way for entering into infrastructure business market and accumulating know-how. There are several cases of such types of collaboration like Itochu Corporation with Suez and JGC Corporation with Hyflux.

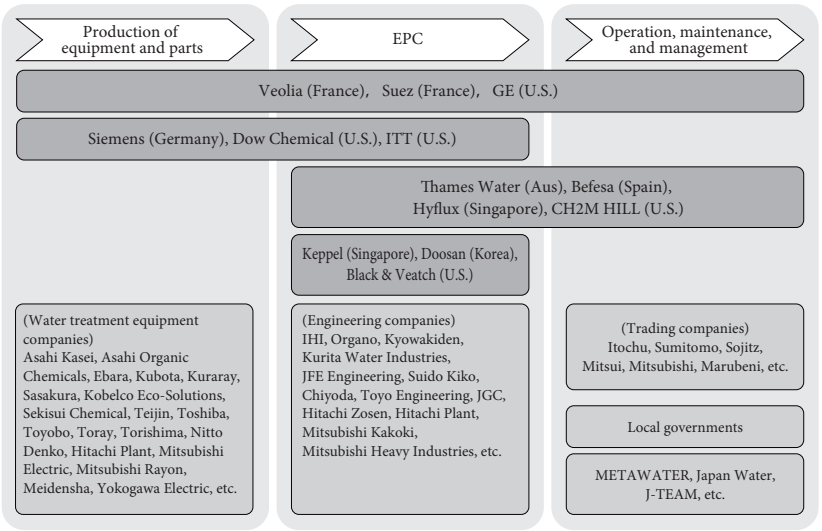
Many large-scale projects of high-speed rail

High-speed rail is another area which has been attracting a great deal of attention recently. In addition to China, Brazil, Vietnam, and other countries with large population and rapidly growing economy, the United States and European countries have shown increasing interests in high-speed rail, which emits less carbon dioxide than other types of transportation. As shown in Figure III-45, The Union of the European Railway Industries, or UNIFE estimated that the market size of high-speed rail in the world was 5.2 billion euro on average from 2005 to 2007 and the size is expected to increase to 9.2 billion euro by 2016 (high-speed rail mentioned here is the rail whose highest operating speed is over 250 km/h).

Actually, there are many large-scale projects in each region. In the United States, 11 high-speed rail lines and networks are planned under the "Vision for High-Speed Rail in America" announced by President Obama in April 2009. This is because the potential of high-speed rail with respect to environment and employment has been reappreciated, after the rail industry's share of GDP had dropped to 0.3% from 0.8%, and also the number of employees had decreased from 518.5 thousand to 229.6 thousand people during the period between 1980 and 2007. Many projects are expected to move ahead, lead by the California High-Speed Rail which will connect 700 km between Sacramento and San Diego. In Latin America, about 500km railway which connects Rio de Janeiro, Sao Paulo, and Campinas in Brazil is proceeding in the bidding stage at the time of July 2010. In China, where high-speed rail network have already built between Beijing-Tianjin, Wuhan-Guangzhou, and so on, the development plan was announced to open 4 north-south lines and 4 east-west lines by 2020, and the total extension will be about 16,000 km (more than 7 times of the operating lines of the bullet trains in Japan). Other emerging countries also plan to construct high-speed rail, including India, Vietnam, Thailand, Indonesia, and Turkey. In Europe, where the existing rail system is well developed, many high speed rail lines are being planned with the support of environmentally friendly policies.

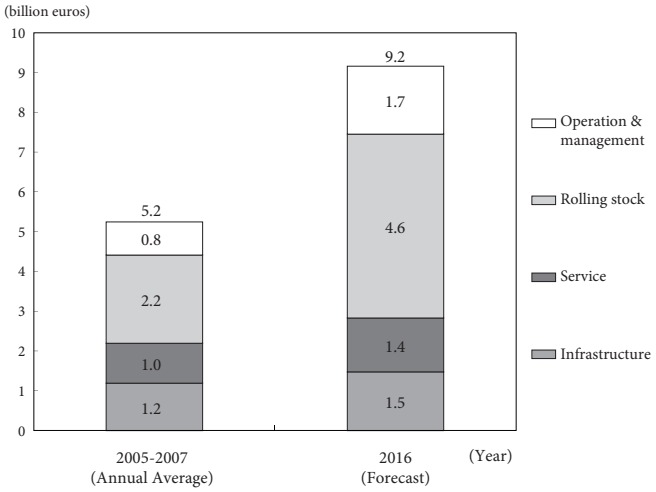
High-speed rail has very wide relating industries such as civil engineering, construction, manufacturing of rolling stocks and parts, signal and system related equipment, and electrical equipment. Even for a single rolling stock, a manufacturer would purchase wheels, axles, seats, electronics, brakes, door opening and shutting devices, brake parts, interior parts, and many other parts, so not only big companies, but also small and medium enterprises are involved. Although Japanese companies lag behind so called Big 3, Bombardier (Canada), Alstom (France), and Siemens (Germany), in overseas market, they have advanced technologies acquired through the construction and operation of the bullet train. The technologies for mass transport capacity, airtightness of rail cars which contribute to the smallness of the tunnel

Figure III – 44 The differences between Japanese and foreign companies in the water-business market



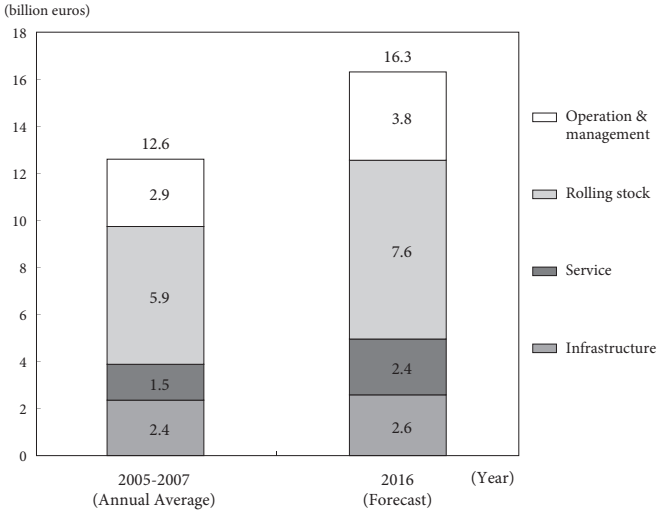
(Source) "Working Group on the Global Development of Water Business" materials, the Ministry of Economy.

Figure III – 45 Market size of high-speed rail



(Notes) (1) Excluding portions supplied from within the railway operator.
(2) "Service" was calculated by dividing the rolling-stock value proportionally.
(3) "Infrastructure" does not include civil engineering, such as tunnels and bridges.
(Source) Prepared based on "Worldwide Rail Market Study - status quo and outlook 2016" (UNIFE).

Figure III – 46 Market size of urban railways



(Notes) Same as notes on Figure III-45.
(Source) Same as source on Figure III-45.

cross-section, seismic control, and noise control could be an edge to explorer the overseas market. But the each project of high speed rail is usually huge and require a lot of related companies, so the collaboration among public and private entities will be indispensable. Such approaches, including top sales, have been taken so far, aiming for the high-speed rail projects in Vietnam, Brazil, and other countries. In the United States, the Ministry of Land, Infrastructure, Transport and Tourism, the Ministry of Foreign Affairs, the Ministry of Economy, Trade and Industry, and the Institution for Transport Policy Studies held a high-speed railway seminar in Washington in January 2010. These approaches are expected to be taken continuously in the future.

Urban transportation connecting environment and growth

There are many development plans for urban transportation in many parts of the world. Urban transportation has various types of system such as subways and MRT (usually, the railway mainly laid underground is called subway, and the railway mainly laid on the elevated tracks is called MRT. MRT stands for Mass Rapid Transit), LRT (Light Rail Transit, next generation streetcars), and new transportation systems (straddle-beam or suspended system monorail, or Automated Guideway Transit, in which small and lightweight rubber tire vehicles run along guideways on exclusive tracks). In Europe, many LRT networks are planned as an environmentally friendly public transportation system with low carbon dioxide emissions. In emerging countries, there are many development plans for subways and MRT to provide mass transportation systems for increasing urban population with due consideration for environment. According to UNIFE, there is currently a market size of 12.6 billion euro for only subways and LRT, which is far more than 2 times of the amount of the high-speed rail (annual average between 2005-2007). This amount is expected to reach 16.3 billion euro in 2016.

Looking at the urban transportation projects which are under construction or under planning based on the information of Railway Gazette International, there are growing number of LRT in Europe, which promotes public transportation-oriented urban development supported by the high awareness of the environmental issues (Figure III-47). Another reasons for this is because the transportation capacity of LRT is suitable for Europe, which has many small and medium sized cities. Also in Russia, many cities are planning to introduce LRT. Many of these are in the planning stages and the details of the projects are not clear yet, but future growth can be expected. Alstom in France and Siemens in Germany are showing willingness to increase investment in Russia. On the other hand, in big cities in such countries as Brazil, China, and India, where economic growth is continuing and urbanization is progressing, new construction or extension plans for subways and MRT are being implemented due to their mass transportation capacities.

Figure III-47 The number of projects for urban transportation
(the projects under construction or planning as of April, 2010)

	Subway/MRT	LRT	New Transportation System
North America	12	75	9
Latin America	15	20	2
Europe	34	140	14
Russia	8	65	1
East Asia	34	8	13
ASEAN	6	7	5
South Asia	15	1	4
Oceania	1	10	0
Middle East	13	11	5
Africa	4	9	2

(Note) New Transportation System includes transportation system in airports, or Light Metro, which runs mainly underground using LRT cars.
(Source) Railway Gazette International, etc.

Japanese companies are also receiving orders for several big projects in China, India, and the Middle East. There have been, and will be, many projects in which Japanese firms supply rolling stocks, but further expansion into overseas markets is expected by providing broader services to develop a whole system of an urban transportation project. To do so, it will be necessary to unify several manufacturers and to form a consortium for marketing as in the high-speed rail.

Main pillar of green growth – Renewable energy

U.S. Energy Information Administration (EIA) data on net electricity generation by type shows that, while conventional thermal power still accounts for about 70%, the share of so called renewable energies such as wind, biomass, waste, geothermal, solar is on the rise mainly in Europe. The percentage is still only 2.52%, but it increased by 67% in 5 years from 2002 to 2007. Especially, wind and "solar, tide, wave" power generations increased more than 3 times (Figure III-48). Many governments are focusing on expanding the renewable energy generation as one of the important pillars for green growth as well as for energy security and implementing various promoting policies.

EU has been aiming to boost its rate of renewable energy use to 20% by 2020, and set a target rate for each country. To achieve the targets, EU countries introduced several systems such as Feed-in Tariff (FIT) which obliges electric power suppliers to purchase electricity generated by renewable energies at a certain price. As mentioned previously, the United States is promoting clean energy as one of the core industries for economic recovery and employment creation. Although the federal government does not set a mandatory target, Renewable Portfolio Standards (RPS), which obliges electricity companies to use more than a certain amount of renewable energy, have been introduced in 30 states and Washington DC. In California State, where renewable energy use is most advanced, the target RPS rate to be attained by 2020 is as high as 33%.

China announced the reduction target of CO2 just prior to the COP15 meeting in Copenhagen, and set a target to cut CO2 emissions per GDP unit by 40 to 50% compared to 2005 by 2020, and made a decision to increase the rate of non-fossil energy (includes nuclear power generation as well as renewable energy) to around 15% among other measures. China already adopted "the medium- to long-term plan for renewable energy development" in September 2007, and is providing support such as offering subsidies for solar power generation systems.

In India, where electricity demand is rapidly increasing, the government is actively promoting renewable energy, especially solar power generation. India announced "Special Incentive Package Scheme to encourage investments for setting up semiconductor fabrication and other micro and nano technology manufacturing industries in India" in early 2007, set the goal to cover 10% of its domestic electricity demand by renewable energy by 2012, and decided to provide financial aid of 20% to 25% of capital investment costs for renewable energy generation projects. India also announced "National Solar Mission" in January 2010, aiming to be a world leader in solar energy industry. This ambitious plan aims to raise the capacity of solar photovoltaic power generation capacity connected to electricity-grid to 20GW, 100 times of present 200MW, and to raise power generation capacity of independent facilities not connected to electricity grids to 2GW by 2022. To achieve this goal, cordial encouraging systems are set such as Feed-in Tariff and purchasing obligations of state owned electricity companies that promise a higher profit margin than that in European markets, exemption from corporation tax, and finance at low interest rates.

Mexico, hosting COP16 in November 2010, places high priority on measures against climate change and aims to raise domestic capacity of renewable energy generation from 3% (in 2005) to 8%. Although details are undecided, it plans to finance renewable energy generation projects. By making full use of its characteristics as a volcanic country, geothermal power generation accounts for 2.74% of total production of electric power in Mexico, and ranks third in the world according to EIA (the first is U.S. and the second

Figure III-48 Electricity net generation by type in the world (2007)

(%)

	Nuclear	Renewable energy							Conventional thermal	Pumped storage	(Reference) Total power generation (billion kWh)
		Water	Renewable energy except water power					Subtotal			
			Geothermal	Wind	Solar, tidal, wave	Biomass, waste	Subtotal				
North America	18.02	12.73	0.43	0.75	0.01	1.56	2.75	15.48	66.63	-0.14	5,022
Latin America	1.89	65.60	0.27	0.09	—	2.46	2.82	68.42	29.70	-0.01	1,007
Europe	25.34	15.01	0.25	2.80	0.11	2.93	6.10	21.11	53.89	-0.34	3,573
Russia, CIS	17.55	17.43	0.03	0.02	—	0.15	0.20	17.64	64.89	-0.07	1,404
Middle East	—	3.33	—	0.02	—	—	0.02	3.35	96.65	—	674
Africa	2.03	16.83	0.17	0.19	0.004	0.11	0.47	17.30	80.89	-0.22	579
Asia and Oceania	7.76	12.24	0.35	0.37	0.004	0.56	1.28	13.52	78.81	-0.09	6,520
Whole world	13.81 (2)	15.97 (15)	0.31 (15)	0.88 (225)	0.03 (236)	1.32 (35)	2.52 (67)	18.49 (20)	67.84 (28)	-0.15 (12)	18,779 (22)

(Notes) (1) North America includes Mexico, etc.
(2) The main purpose of the pumped storage generation is to correspond to the peak demand, so its figures are minus for the net amount of the power generation.
(3) Figures shown in parentheses in "Whole world" line are increase rates from 2002.
(Source) U.S. Energy Information Administration (EIA) materials.

is the Philippines). Although the scale is still limited, wind power garners attention and is gradually developed after Electricity Authority approved private wind power generation companies to use public electricity supply network in 2007.

Supported by these policies, further expansion of renewable energies looks promising, but it could be severely affected by changes in the policies. It was proven in Spain: since the new installation of solar power facilities grew more than anticipated, the government lowered the purchasing price under the FIT, resulting in the sudden shrink of the market. Since many countries are facing financial deficits, trends of policies should be closely watched.

Various power generation business that are expected to grow

Next, let us focus on solar photovoltaic, wind, and solar thermal generation among renewable energies.

According to the European Photovoltaic Industry Association (EPIA), annual capacity growth of solar power generation facilities were just below several hundred MW before 2003 but had reached approximately 2,594 MW in 2007. 7,203 MW of generation capacity was added in 2009.

Germany and Spain, which promote solar photovoltaic generation by policy measures such as FIT, had lead the global market and Germany accounts for more than half of global additional capacity in 2009. However, as mentioned before, Spain raised the unit price of FIT and additional capacity that had been 2,605 MW in 2008 was mere 69 MW in 2009.

For a future market prediction, EPIA estimates the case in which governments adopts further promotional policy and the case in which government only adopts follow up policy for current status. Even in the latter case, EPIA projected a market expansion with the U.S. on the lead. It is estimated that, after stagnated in 2011 influenced by Germany's plans to reduce the unit price under FIT, the world PV market will continue to grow and add approximately 14 GW of new power generation in 2014. China, which added 160 MW capacity in 2009, is expected to install additional capacity at least 600 MW in 2014.

European countries have led the spread of wind power generation as well. However, the U.S. has vast land suitable for a wind power plant and promoted by tax break and other government support policies, rapidly increase wind power generation capacity. By adding 8,358 MW, the total installed capacity reached 25,170 MW in 2008 and overtook Germany to be the world leader. It continued to expand in 2009 and accounts for 22.1% of global wind power capacity (the current trend of top five countries of window power capacity till 2009 is illustrated in Figure III-51). China has also increased power generation capacity in recent years; it quadrupled during 2007 and 2009 and overtook Germany to rank second in the world. The Chinese government announced "Medium to Long-term Renewable Energy Development Plan" in September 2007 and aimed to expand installed wind power capacity to 30GW by 2020, but it has already reached 25GW in 2009 and will accomplish the target quite in advance. The Chinese government brought up a new proposal to expand installed wind power capacity to 100GW by 2020 in the draft of "New energy development plan" in August 2009 and expected steady increase in the future.

In India, wind power accounts for most renewable energy capacity and its installed capacity was 10,926MW, which ranked fifth in 2009 global market. In addition to solar energy, vigorous investments are anticipated in wind power.

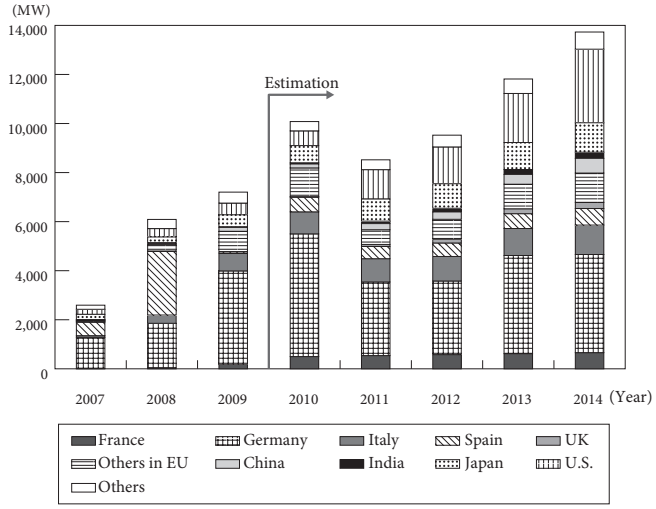
Concentrated solar thermal power (CST) is another type of renewable energy with high potential. The power plant collects sunlight with reflecting mirrors, or heliostats, and the heat generates steam which then turns turbines to generate electricity. There are several types of CST ranging from small-scale dish systems to large scale system like trough systems or central tower systems, depending on the methods to collect sunlight. In

Figure III-49 Targets for renewable energy use and major promotion policies

Country/ region	Current renewable energy use	Targets (target year)	Major policies to promote the generation by renewable energy
U.S.	6.7% (2008)	—	The American Recovery and Reinvestment Act included expenditures of US$ 26.6 billion and tax breaks for renewable-energy generation. 30 states and the District of Columbia have renewable portfolio standards (RPS). California's is for 33% by 2020.
China	3.2% (2007)	approx 15% (2020)	Post-financial crisis economic stimulus included around ¥3 trillion for environmental related expenditures. Granting subsidies for solar-energy projects (50% of the investment cost for grid connected systems). Promotion of wind power through large-scale projects.
India	3.3%-3.5% (2009)	10% (2012)	Feed-in-tariff (FIT) for solar power generation, obligatory purchases for state power authorities, corporate tax exemption for construction of the solar power plants and import duty exemption for raw materials.
EU	8.5% (2005)	20% (2020)	
Germany	5.8%	18%	FIT
France	10.3%	23%	FIT
UK	1.3%	15%	Mainly RPS. Introduction of FIT for small-scale electric sources in April 2010.
Italy	5.2%	17%	Mainly RPS. FIT in place for solar power and small-scale renewable energy generation.
Spain	8.7%	20%	FIT and FIP (electricity producers can choose either FIT or FIP, but only FIT for solar photovoltaics)

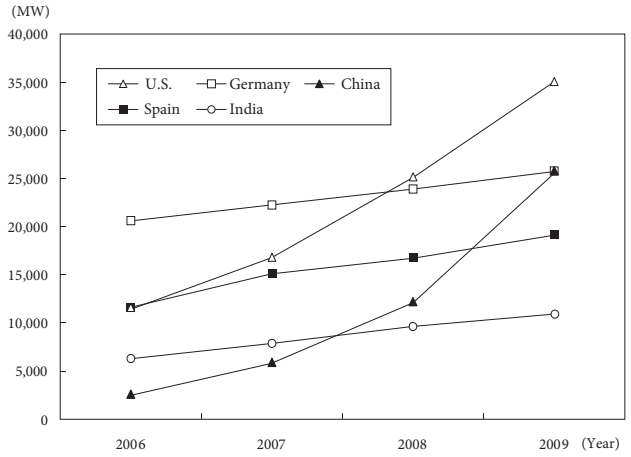
(Notes) (1) Bill passed by U.S. House of Representatives includes a plan to supply 20% of electricity through renewable energy or energy-saving methods.
(2) India's figures are of electricity generation. For others, the percentage are of energy consumption.
(3) The figure for China's current energy use includes nuclear energy.
(4) Spain's FIP is a feed in premium, in which a premium is added to a market price with an upper/lower limit.
(Sources) "Project Team for Feed-in-Tariff System for Renewable Energy" (Japan's Agency for Natural Resources and Energy) and Government documents of several countries.

Figure III – 50 Market history and forecast of solar photovoltaics (annual additional capacity)



(Note) Moderate scenario estimation by the European Photovoltaic Industry Association (EPIA) which does not assume any major enforcement of existing support mechanism.
(Source) "Global Market Outlook for Photovoltaics Until 2014"(2010, EPIA).

Figure III – 51 Installed wind power capacity in top five countries



(Note) The trend of top five countries in 2009. In 2006, Demark ranked fifth and China ranked sixth.
(Sources) Global Wind Report from 2006 to 2009 (Global Wind Energy Council).

Europe, an ambitious project called DESERTEC is planned in which electricity will be generated by solar power in the Middle East and North Africa and distributed in Europe. In this project, CST plants are supposed to serve as the main system for generation.

Spain leads the world in installed capacity of CST plants. According to the Concentrated Solar Power Industry Association in Spain (PROTERMOSOLAR), there are ten solar power plants in operation, sixteen plants under construction, and thirty-four plants being planned in the country as of June 2010. CST plants in operation in the U.S. generate 560 MW of electricity and the plants under construction are to generate 984 MW, according to the report by the European Solar Thermal Electricity Association (ESTELA) and others. According to the moderate prediction for CST growth in this report, additional 5,463 MW will be installed and 17.5 billion euros will be invested in 2015.

Many companies, such as Abengoa Solar which launched the first commercially operating tower type CST in the world, participate in CST business in Europe. PROTERMOSOLAR in Spain has eighty member companies, and additional fifty-two companies joined the European Solar Thermal Electricity Association. In the U.S. a venture business, called eSolar, uses efficient CST system to construct plants in India, China, and South Africa. Their method is to collect sunlight by using thousands of relatively small heliostats, one cubic meter per mirror, enabling to carry and assemble relatively easily with low cost. They have a expertise in a software that efficiently adjust reflecting mirrors to follow the movement of the sun. Moreover, since it is able to generate power in smaller space, approximately one sixth of ordinary power plant, it can be constructed near a city and transmitting station.

As for Japanese companies, Cosmo Oil, Mitsui Engineering and Shipbuilding, and Konica Minolta Opto are in construction of a pilot plant of CST with a beam down system in the United Arab Emirates. Professor Tamaura of Tokyo Institute of Technology devised this system in which sunlight is collected by reflecting mirrors and is reflected again to a solar furnace on the ground by a second reflecting mirror. This system is more efficient than generating at the top of central tower, and costs less for construction and maintenance

Smart Grid will be extensively effective

Smart grid will be the key to the further expansion of renewable energy. Smart grid is a system that efficiently controls the stability of electric system by networking power generation facilities, including renewable energy, high-capacity storage batteries, and smart meter with two-way communication system. It is necessary to adjust demand and supply of electricity in detail when using solar or wind power generations which fluctuate depending on the amount of solar radiation or wind power. The smart grid enables the adjustment and promotes further installation of renewable energy. Moreover, installing smart grids could benefit in many aspects including raising the trust on power distribution through reducing the incidences of power outage, saving energy by controlling demands, reducing operating cost, and preventing illicit use in emerging countries.

Many countries are promoting the installation of smart grids. As part of the American Recovery and Reinvestment Act (ARRA), the U.S. plans to allocate totaling US$ 10.5 billion including the "Smart Grid Investment Grant (SGIG)" program to distribute US$ 3.4 billion in total to 100 projects announced in October 2009. Most projects are aimed to improve infrastructure, such as promoting the installation of smart meters, improving transmission and distribution networks, and supporting smart grid related manufacturers. Furthermore, the U.S. Government announced in November 2009 that it grants totaling US$ 620 million to the pilot projects for smart grid and electricity storage. For instance, the "Pacific Northwest Smart Grid Demonstration Project," covering five states, was granted approximately US$ 89

million. This project will provide two-way communication between distributed generation, storage, and the existing grid infrastructure, and try to advance the standard for interoperability of related equipment and cyber security approaches.

Smart grids are being developed in Europe as well. The UK established 6 million pound subsidy program for research and development, aiming to install smart meters in all households by 2020. In January 2010, Scottish Power, a major energy company in the UK, announced that it will set up the largest smart grid project in the UK and start installing smart meters.

China announced to invest totaling 4 trillion yuan for smart grids by 2020. At the first stage, China will invest 550 billion yuan to install ultra-high voltage transmission networks, and will develop specific action plans and establish technical and management standards. The final stage will begin from 2016 in which high quality smart meters will be installed at offices and households.

Japanese companies may also be able to capture a business chance in energy conservation market as they have acquired advanced technology through their long experience. Particularly, European countries promote energy conservation in housing and buildings by subsidies, tax break and many other measures, as illustrated in Column III-3.

Russia consumes energy much less efficiently than other BRIC countries but it has tackled energy-saving issues recently. In the fall of 2009, a federal law was enacted by which new energy efficiency standards for building will be introduced in addition to other measures like mandating to show the energy efficiency grade for each product. Corresponding to this movement, E's, a company that was established by using the venture system in Tokyo Electric Power Company, set up a local subsidiary in a medium-sized city, Voronezh, located some 500 km South of Moscow, to capture a chance for energy-saving consulting business through energy audit management. Although many things depend on further details of the government's energy-conserving measures, this case could show that they can use in an overseas market the expertise accumulated through long experience of develop-

Column III - 3

◉ **Initiatives for saving energy in housing and building in Europe and business opportunities for Japanese companies**

Boost by subsidies and tax credits

The new "Europe 2020" strategy set a task of doing "20/20/20," namely, by 2020, 1)to cut greenhouse gas (GHG) by 20% of that in 1990 (rising to 30% if other developed countries grapple with comparable emissions reductions) 2)to increase the use of renewable energy by 20%, and 3)to increase energy efficiency by 20%. 1) and 2) were adopted in the climate and energy package in April 2009, and came into effect from June 2009. The third target used to be one of the steps to cut GHG, but that is ranked up to the one of targets. To achieve these targets, each European country subsidizes the purchase of eco-friendly products, and deducts or refunds tax, yet what European countries most emphasize is the promotion of saving energy and using renewable energy in housing and construction. This is because the amount of energy consumption and CO2 in housing and construction accounts for approximately 40% of the total, far above that in transportation and industry, and does not seem to be in a reducing trend. Some countries have already taken a measure to propagate energy-saving housing since 2009, and some cases have already obtained good results.

Concrete measures taken by respective countries are described in the table. Among the notable measures in the spheres of housing and commercial building are: 1) promotion of installing renewable energy (solar thermal power, biomass, biogas, and heat pumps etc.), 2) installation of roof and floor insulation, and replacement of windowpanes and doors, and 3) promotion of installing energy-saving heating and hot water supply equipment and systems (automated temperature control systems, central heating, and so on.) Others steps that have been taken are: requirement to measure amount of electricity and energy used in a single house or building to raise the energy efficiency, and energy-saving promotion for public buildings, including government and municipal offices, school, nursery schools, and hospitals.

Details of support for individuals are subsidies, tax exemptions, and value-added tax reduction for renovation of residential buildings and purchasing energy-saving equipment, and measures taken for companies are subsidies for investment and special loan system.

Is there a chance for Japanese companies?

From this point of view, Japanese companies produced constant results in the sphere of air conditioning, hot water heaters, and raw materials, etc. For example, Daikin (Europe) commits to eco-friendly products and has developed a heat pump type hot water heater (name of product: Altherma) for the European market by employing Japanese technology, refrigerant, in 2006, and set up a distributor in Sweden in 2008 to promote sales. The gas used in this product is one third of conventional products, and in addition to reduced energy costs, 1) it became the target of subsidies in Germany and France and so on, and 2) since heat pump technology was approved to be renewable energy, its sales have been steadily growing.

Although the state of housing starts is unfavorable, sales in 2012 are estimated to be triple of 2006. Regarding the sphere of materials, Kaneka (Europe) will release a resin to strengthen polyvinyl chloride (name of product: Kaneka Ace) and expanded polyolefin resin beads (name of product: Eperan.) The former strengthens air tightness and insulation of window frames and contributes to save energy, and the latter is material used for core of bumper and part of seat, and contributes to save eneryg by weight reduction. Kaneka tries to differentiate by distributing products that are concerned with the environment and energy-saving. Similarly, by using heat-resistant, persistent, shock-absorbing recyclable polypropylene, the major formed polymer manufacturer JSP tries to raise its presence in the energy-saving business in Europe. Although JSP's products are mainly targeted at automobiles, since excellent material is applicable to the sphere of housing, the entrance in that market is under consideration.

Since the market of housing and construction cover several fields such as materials, interior furnishing, and air conditioning equipment, there are sufficient reasons that each government in Europe should positively take measures in relevant fields that will bring Japanese companies a business chance.

Figure Policies and measures regarding energy-savings and CO2 reduction in the field of housing and construction in major European countries

Country	Target of policy, concreate measure and achievements etc.
UK	• It plans to introduce "Renewable Heat Incentive" in April 2011 that will provide financial support by purchasing calorific value generated from heat pumps, biomass boilers, bio-diesel, bio-methane, Air, water and ground-source heat pumps, or Solar thermal at high-price. • In Scotland, the Home Insulation Scheme (that offers consulting, insulation free of charge or at the special price) that were 100 thousand households when the scheme launched in November 2009 was expanded to cover additional 190 thousand households in April 2010.
France	• Regarding a new building, propagation of BBC that aims to reduce primary energy consumption to 50kW/square metre is adopted (from January 2011, that will be applicable to all new office buildings and public buildings, and from January 2013, that will be applicable to all new buildings). • Regarding existing buildings, it sets a law that targets at reducing the average energy consumption of buildings 38 percent by 2020. • It aims for construction of 400 thousand energy saving building that begins from 2013. • From April 2009, it introduced eco loan system that finance maximum 30 thousand euros without interest for the cost of energy-saving renovation such as home insulation and installation of eco-friendly heating. According to Ministry of Ecology, Energy, Sustainable Development and Sea, 100 thousands had applied during a year ended at April 2010.
Germany	• Additional 3 billion euros was spent in 2009 and 2010 to promote investment in buildings to improve energy efficiency. • KfW Bankengruppe loans at low interest and subsidizes for reconstruction of old residential buildings to reduce CO2 or to save energy. • Aiding measure, "Refurbishment program to improve energy efficiency of state owned buildings" (it decided to take measure continuously in 2011 that have aided 120 million euros during three years from 2006 to 2009).
Italy	• Tax reduction on the cost of reconstruction of existing buildings for energy-savings (introduced in 2007). High-reduction rate, 55% of cost, is set for structural reform such as installation of double-paned window, floor and wall insulation, installation of solar panels for heated water for home, business, nursing home, and school, and replacement of heating boiler. An income tax is deducted and paid tax will be refunded in 5 to 10 years. • As a part of economic measure (February 2009) for the financial crisis, 20% deduction of cost for purchasing energy-saving household electrical appliances and furniture that accompany with residential building renovation (not limited to energy-savings). • In the additional measures to boost the economy that began in April 2010, purchasing newly-built energy-saving residential building is subsidized 116 euros or 83 euros/square metre depending on its energy efficiency class.
Netherlands	• Energy efficiency of 500 thousands residential buildings will have been improved by 30% during 2008 to 2011. In 2012, it will start improving energy efficiency of 300 thousands residential buildings in a year and increase 2.4 million of energy efficiency residential buildings during 2012 to 2020. • Tax deduction on investment in energy (EIA). It enables installation of insulation, solar panel, and wind turbine for a let, and public corporation that uses renewed energy, commercial leasing company, and owner of residential building is able to have up to 44% of tax deduction. • As a subsidy to install house energy efficiency appliances, 4,000 euros for a solar heat boiler, 500 euros/kW for a heat pump, 200 euros/gigajoule for small-sized co-generation system are provided. • Reduction of value-added tax for installation of appliances from 19% to 6%. • A subsidy for 35 euros/square metre and maximum 1,100 euros for insulation windowpane.
Belgium	• Tax deduction on energy-saving residential buildings (applicable to a residential building that has been lived for five years or more, with replacement and maintenance of boiler, solar water heater, solar cell, appliances that utilizes geothermal energy, double-paned window, insulation for roof, wall, and floor, central heating with automated temperature control bulb, automated room temperature control system, and inspector of energy for residential building. However, applicable to residential building that has been lived less than five years with solar water heater, solar cell, and appliance that utilizes geothermal energy.) 40% of expenditure, upper limit of tax deduction is 2,770 euros at maximum. However, introduction of solar power (thermal and electrical) is 3,600 euros at maximum (Federal Government).
Spain	• Targeted at renovation of residential building for energy savings, utilization of renewable energy, 10% of renovation cost is deducted from individual income tax (12 thousand euros at maximum, targeted at individual with taxable income under 53,007 euros and with a time limit to the end of 2012).
Sweden	• Regarding newly-built or reconstructed building, individual measurement of amount electricity or energy used is required. • Government subsidy for installation of solar heating; 2.50 krona (approximately 30 yen) is subsidized for 1kW per annum. For a small-sized residential building, 7,500 krona (approximately 90 thousand yen) at maximum for one apartment. For a large project, up to 3 million krona (approximately 36 million yen) is subsidized (effective from January 1st, 2009). • Deduct 50% of cost to install heat insulator in separate residential building from income tax (effective from December 2008). • Deduct 50% of residential building renovation cost from income tax.
Denmark	• 25 thousand krone was provided as a subsidy to promote renovation of residential building for energy-saving. The total amount is 1.5 billion krone and targets at installation of roof, door, and windowpane that contribute the reduction of energy and installation of energy efficient facilities for tap water, heat, and electricity and installation of solar panel.
Austria	• 50 million euros is appropriated for companies. It subsidizes 15 to 30% of invested amount for environment, for instance the reduction of demands on heating and cooling by installation of insulation in facilities of building or factory. Besides, 30% of subsidy is applied for reuse of waste heat generated from production line and maintenance to improve drainage system. • In the case of replacement of conventional heating system that utilizes fossil fuels to eco-friendly system including whole residential building reform by installation of insulation on outer wall, roof, and floor, and by replacement of windowpane and door, 20% of total cost, 5,000 euros at maximum is subsidized and up to 2,500 euros is refunded for just a replacement of heating system. • Budget of 35 million euros (20 million euros in FY 2009) in FY 2010 is appropriated for the construction of solar power system. Aiming at the expansion of the range, subsidy for each residential building is reduced from 2,500 euros to 1,300 euros.
Czech Republic	Measure based on "Green savings program"(officially announced in April 2009). The pillars of that are; 1) promotion of energy savings targeted at household, 2) promotion to use renewable energy (biomass and solar energy) targeted at household, 3) promotion of construction in passive energy standard targeted at residential building, and 4) promotion of energy savings in public buildings (such as school, nursery school, and hospital.) The total amount of budget for subsidy in this project is CZK 18 billion (deadline for application is the end of June, 2012). 1) Fixed amount is subsidized on the condition of achieving fixed rate of energy savings by taking suitable steps such as protecting whole residential building or a part of residential building against cold (replacement of the part of building material in outer wall and roof, and replacement of windowpane and door). 2) Fixed rate of the cost is shared to exchange coil boiler for biomass boiler, and to connect water heater and solar collector. 3) Fixed amout is subsidized depending on the type of residential building.
Poland	• Measure based on "National Energy Efficiency Action Plan" (in June 2007). For residential sector, 20% at maximum of invested capital borrowed from financial institution is subsidized for the case of achieving energy savings by renovation and installment of adequate insulation. • Performance during eleven years from 1999 to 2009 was subsidy totaled 947.97 million zloty for 16,555 cases of investments. Actual amount of investment was raised to 6,045.96 million zloty and improved 45% of energy efficiency per case.
Hungary	• Based on "National Energy Efficiency Action Plan," that aims to increase in energy efficiency by 1% every year in residential building sector. This came into effect from 2009, and in concrete terms, the subjects of plan are; 1) windowpane and door, 2) wall and floor insulation, 3) engineering system of building, 4) installation of renewable energy such as heating and solar power generation, and 5) heat insulator for summer. 30% of cost or 500 thousand forint at maximum is subsidized.

(Source) Reports from Jetro overseas offices.

ing energy-saving products and providing consulting services in Japan.

(3) To capture a business chance

Companies in emerging countries increasingly implmenting PPP projects

As described above, infrastructure and eco-business have large potential. For further overseas development, it is indispensable to participate in public-private partnership (PPP) projects especially for infrastructure construction. The PPP system is increasingly adopted because public funds are not enough to construct infrastructure with huge demand and PPP enables to use private companies' know-how in operation, management and management for increasing efficiency. According to data from the World Bank, there were only 58 cases of PPP in all developing countries in 1990, totaling US$ 12.8 billion, but the numbers of PPP projects reached 317 with the investment amount totaling US$ 155.1 billion in 2007.

Afterwards, influenced by the global financial crises, the number of PPP dropped to 216 cases in 2008, yet began to recover in 2009 lead by large-scale electricity project in Brazil, China, India, and Turkey etc.

European companies have long history of PPP projects, with the water business as its core, but Spanish companies play an active role in transportation. According to the magazine "Public Works Financing" that carried rankings of receiving orders for PPP projects in global transportation infrastructure including developed countries (based on number of cases from 1985 to 2009 with amounts exceeding US$ 50 million), seven companies among the top ten companies are Spanish companies. Many companies gained experties through the domestic motorway concession business that began in the 60's, and are competitive in selling PPP project management packages (business planning, fundraising scheme, development, engineering, long-term outsourcing, managing risk sharing between public and private sector). In the case of OHL, a leading company among Spanish companies working in emerging markets, the extension of toll roads under operation totaled 3,226 Km and ranks top with a 25% market share in Brazil, and plans to move into India and China in the near future.

Regarding PPP in water and sewerage, by a number of projects, 80% (28 projects) of new projects in developing countries were concentrated in China in 2009. Many projects were relatively small-scale sewerage projects, yet 22 out of 28 cases were operated exclusively by funds of local companies. This trend in which local companies play a main role is seen in India too. A sampling survey conducted by the Ministry of Finance of India, foreign companies invested in capital of 22 projects that accounts for only 7% in project numbers and only 1% in investment value (Ministry of Finance, Government of India).

Since public funds are not sufficient to cover the huge amount for investment in infrastructure needed in emerging countries, infrastructure improvement projects in PPP will likely expand in the future. In emerging countries, fierce competition between Western companies that have long history and experience of PPP and local companies in emerging countries that have produced actual results in other countries seems to be unavoidable.

There are a lot of issues to overcome, such as political risks

Regarding PPP, risk sharing must be considered. In some cases, especially in the case of transportation infrastructure, demand tend to be optimistically estimated due to political background, etc. Accordingly, important points to consider are: demand estimation has to be verified carefully, public and private sectors should appropriately share the risk when a demand turns out to be lower than estimation, and, most importantly, the commitment of counterpart government has to be well ascertained. Since most revenue will be paid in local currency, foreign exchange risk is also a major issue.

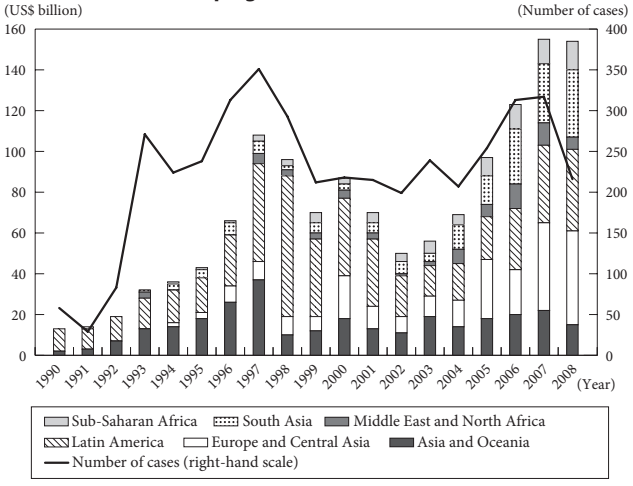
Furthemore, difference in commercial practices is always a part of overseas business, yet one has to be careful in the case of infrastructure in which large amounts of money are invested. Major Japanese construction companies and others accepted the order for Dubai Metro Project to improve the transportation system in which plans were changed requiring additional construction. In this case, the contractor was obliged to work before an agreement was reached. Due to this, the Japanese construction company had to bear part of the expense for additional construction.

As described above, in the case of eco-business, which largely depends on government policies and nationally promoted projects, one has to watch the policy carefully because policies would change as circumstances of politics change. Gathering information is essential because details of rules and regulations undergo a kaleidoscopic change in many countries.

"System-wide approach" and "collaboration" will be the key

Among various issues, the largest one is the cost issue. It continued to be effective to supply core materials and components using high technology, yet there are fierce price

Figure III – 52 Investment commitments to infrastructure projects with private participation in developing countries



(Source) Private Participation in Infrastructure Database, the World Bank.

competitions with companies in emerging countries.

The key words for Japanese companies to overcome these issues and to find business chances in infrastructure and eco-business are "system-wide approach" and "collaboration." The number of cases that require not only meeting individual tasks and needs but also improving entire system, including operation and management, is increasing in both infrastructure and eco-business, especially in emerging countries. By this sort of order that requires management of entire system, companies may have a chance for long-term earnings that the short-term supply of components does not offer.

It is necessary to package the field of expertise that each business entity has in collaboration with private-private partnership and public-private partnership to cover the system as a whole. In the case of development and management of infrastructure projects in Japan, roles for the public and private sectors are clearly divided, and the private sector tends to develop technology specialized in each field of expertise. On the other hand, regarding foreign companies, a small number of companies cover a wide range of fields and have a strong affinity to needs in emerging countries that demand improvement of an entire system. Corresponding to these circumstances, it is indispensable that each business entity bring one's strength into full play comprehensively in collaboration between public and private. In addition to the All-Japan approach, collaboration with foreign companies with sound business records could be another important gateway.

Initiatives in which public-private collaboration meet the needs of an entire system have already been taken, and one example is the endeavor trying to develop "smart communities" in India.

As a part of Delhi-Mumbai Industrial Corridor (DMIC), which is under development to equip rapid freight train supported by Japanese Yen Loans, the former-Prime Minster Hatoyama reached an agreement to cooperate in building "smart communities" (eco-friendly cities) when he visited India in December 2009.

This initiative aims to build a social system to allow effective use of electricity, water, recycling, and urban transportation. It is expected that various Japanese environmental engineering technologies will be mobilized together to move forward this initiative. In April 2010, private companies formed four consortia and concluded memorandum of understanding with state governments to begin feasibility studies. In addition, New Energy and Industrial Technology Development Organization (NEDO) plans to conduct a pilot projects to verify the concept of the system in collaboration with Delhi-Mumbai Industrial Corridor Development Corporation. As a support agency for DMIC, JETRO will also work together with them. It warrants a continued attention, as it could enable Japan's advanced green technologies to be mobilized in building a comprehensive system.

Column III - 4

◉ JETRO's initiative for business for infrastructure

Foreign governments take a positive approach to business regarding infrastructure, likewise Japan is taking a step towards that in public-private partnership.

By using overseas networks, JETRO is also supporting to find business opportunity of infrastructure and plant projects; at the formation stage, it assists overseas development and has conducted a total 401 cases of project formulation studies (commissioned by METI), organized seminars, and invitation programs in the past twelve years (recent major activities are illustrated in Figure 1). In June 2010, at the request of the largest state run business, Petrovietnam, JETRO held "Vietnam Investment Seminar on Infrastructure System" and simultaneously carried out business matching on an individual basis. Besides, JETRO dispatches missions, conducts research, shares information, and gives support on individual bases through overseas offices (Figure 2).

For further information about events and exhibitions, please visit JETRO's web site, "news and press release" (URL: http://www.jetro.go.jp/news/) and "news and event," (URL: http://www.jetro.go.jp/events/) and contact an office in charge.

Figure 1 JETRO supported projects in infrastructure and plant (including projects commissioned by METI)

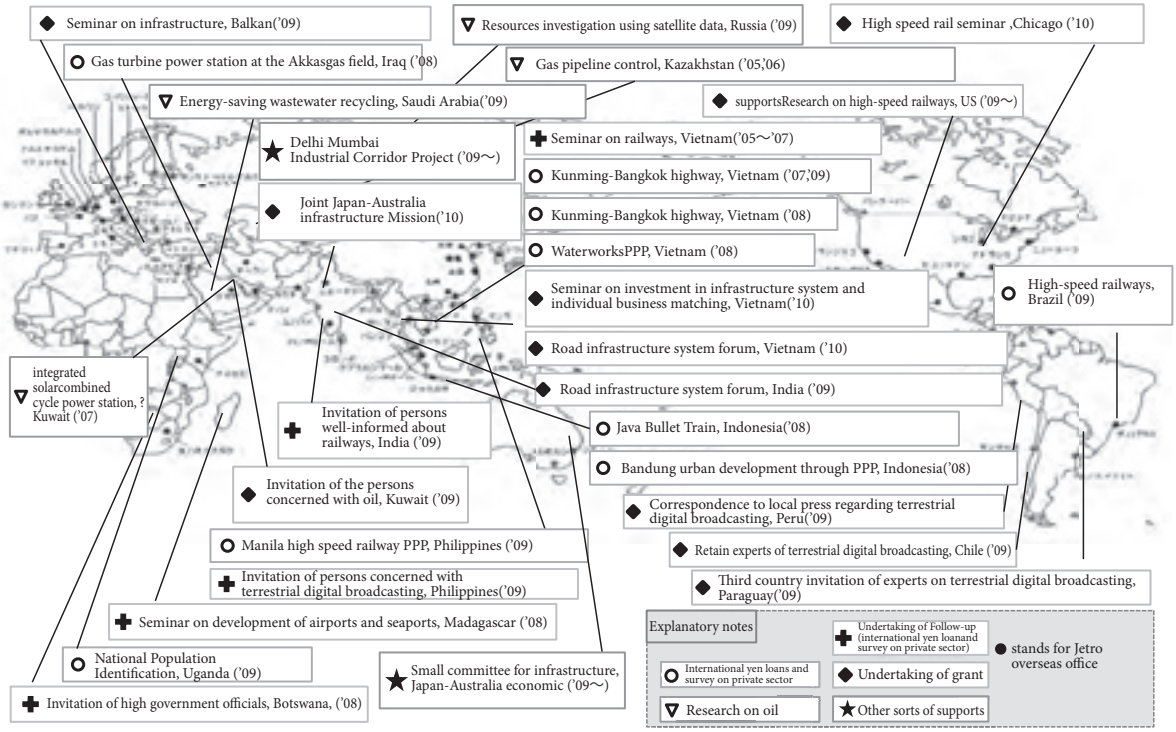


Figure 2 Supporting tools of JETRO for infrastracture and plant business

	Contents	
I. Personal exchanges	Invitation of important person and expert	Inviting key persons of government or public institutions of counterpart countries and introducing Japanese advanced technologies.
	Dispatch mission	Dispatching Japanese missions to high potential markets to collect information and exchange opinion with counterpart government.
	Dispatch expert	Dispatching experts to coordinate with relating government organization, support institution building and capacity development, and promote individual projects.
II. Organizing events	Overseas seminar and business matching	Providing information about Japanese advanced technology etc. to counterpart government, promoting potential investers in Japan (and in third countries) to participate in seminar, and facilitating business matchings on an individual basis.
	Domestic seminar and business matching	Organizing lectures on "frontier regions" and new sectors by counterpart country persons and staffs of JETRO overseas offices. Facilitating business matchings on an individual basis.
III. Researches and information sharing	Domestic	Conducting basic research on business trends and other themes and sharing results through exisiting JETRO channels (Tsusho Koho and JETRO Sensor etc.).
	Overseas	Overseas Office staffs and experts conduct reseaches on business trends and needs in counterpart country etc.
IV. Field supports	Expert retention	Retaining experts in overseas offices to gather information and coordinate with a local government, and coordinate with local Japanese companies.
V. Exhibitions	Display at exhibition	Supporting exhibition and displays for publicity, as a representative of Japanese companies (at JETRO's booth etc.)

IV A Global Strategy for Japanese Companies to Open New Frontiers in Overseas Markets (Conclusion)

Aiming for growth integrated with Asian countries through globalization

Although 4% growth can be expected in 2010, the world economy, after recording the first negative growth after the World War II in 2009, has been in a situation in which uncertainty cannot be removed, mainly due to the financial market uncertainty arising from financial problems in Greece. Since the structure in which personal consumption in the U.S. supports the economic growth of the world is becoming a thing of the past, emerging countries in Asia Pacific, such as China and India, play a role in firmly supporting the world economy.

Amid this situation, although the Japanese economy, which recorded negative growth two years in a row in 2008 and 2009, has been heading toward a normal state, it has not reached the self-sustaining recovery that businesses and households lead. Amid a situation in which the population is declining and the aging society have been continuing in the medium and long terms, the theme imposed on Japan is "how can Japan realize sustainable growth?" From now on, however, in addition to recovering the strength of domestic demand, taking in the vitality from abroad, especially vitality from emerging countries in Asia, is a challenge that Japan urgently needs to tackle in terms of both trade and investment. It is essential for the Japanese economy and companies to break away from their inward-oriented nature and promote true internationalization centering on Asia. In this sense, trade and investment are considered as national security that forms the core of the Japanese economy. It may be no exaggeration to say that, without invigoration, Japan cannot grow further.

The Asian region accounts for more than 40% of Japan's exports and about one-fourth of the operating profit (listed companies with overseas offices) of Japan, and has been increasing in importance as a market to Japanese companies. In this region, since January 2010, tariff-free has been progressing substantially by means of AFTA and ASEAN-China FTA. FTAs are now in full-fledged utilization, with ASEAN-Australia-NZ FTA and ASEAN-India FTA having come into effect, and this region has been changing into a unified market. From now on, it is requested to secure profit-earning opportunities by further developing domestic demand, while structuring effective supply chains utilizing FTAs. On the other hand, FTA coverage ratio (how much a country's trade is done with trading partners with which the country has FTA) for Japan remains 16.5% (2009). From the point of view of developing and constructing the infrastructure that will enable Japanese companies to advance business smoothly abroad, expanding FTA networks is also an issue that Japan needs to address.

Frontier markets for Japanese companies are expanding overseas

There are many markets abroad that Japanese companies have not explored yet. The markets that Japanese companies need to target are expanding from the high-income group to the middle and low income groups and from metropolitan areas and coastal areas to medium scale cities and local regions; meaning, so to speak, from "dot" to "surface." In emerging countries especially in Asia, there exist high-potential markets, such as services, infrastructure, and environmental business. These are regarded as new "frontiers" in overseas business. However, in these markets competition has become extremely severe because in addition to Western companies, South Korean and Chinese companies are also entering the markets.

In these frontiers, what should be done in order to secure profit-earning opportunities and establish a presence abroad? From the point of view of enhancing competitiveness and increasing penetration in local markets, in order to win in the emerging markets it is considered as an effective strategy to reaffirm and fully utilize the excellent technologies that other countries do not possess, such as superiority of technology including durability of products and quality, "safety and reliability," convenience in service areas, attitudes directed firstly towards customers, and high technologies, as well as to reflect the local needs accurately that include product development and production through marketing.

Regarding the the eco-business, the market is steadily expanding and the speed of expansion of the total amount of trade for eco-friendly products in the world is far above that of all trade. It is necessary to pay attention to the outcome of discussions such as carbon-leakage countermeasures, yet if the definition of "environmental goods" and tariff reduction are realized, it will bring new business opportunities because there are not a few fields in which Japanese companies have strengths.

Attempt to vitalize Japanese economy through internal and external globalization

Japanese export volume (custom clearance base) and the percentage of balance of outward direct investment to GDP in 2009 were 11.5% and 14.4%, respectively. Compared with the world average, 21.2% and 33.2% (IMF and UNCTAD), those in Japan remain at a low level. Regarding income structure from overseas, the percentage of net export volume and net factor income from abroad to GDP are 2.7% and 2.2%, respectively, yet it is necessary to reinforce the revenue base from overseas by encouraging not only large companies or specific industries but also middle and small-sized companies including service industries to advance into overseas markets in the future.

The vitalization of the Japanese economy by drawing out potential from growing overseas markets depends not only on outward globalization, but it is also necessary to attract and value-added functions and talented personnel by improving Japanese locative competitiveness and accelerating inward investment, and keeping employment opportunities and improving efficiency. Due to these, Japan will be able to prevent the domestic market from becoming hollow and to vitalize the Japanese economy. In other words, promoting both internal and external globalization is the issue to tackle in establishing a foundation for mid and long-term growth.

Appendix

World and Japan's statistics of trade and investment

Annotation I: Product category definitions

1) Products

Product name	HS
Total	00 - 99
Machinery and equipment	84 - 91
General equipment	84
Air conditioners	8415
Mining and construction equipment	8429 - 8430, 843142 - 843143, 8474, 847910
Machine tools	8456 - 8461
Electrical equipment	85
Transport equipment	86 - 89
Automobiles	8702 - 8705
Passenger vehicles	8703
Motorcycles	8711
Automotive parts	8707 - 8708, 840731 - 840734
Precision instruments	90 - 91
Chemicals	28 - 40
Industrial chemicals	28 - 38
Pharmaceuticals and medical supplies	30
Plastics and rubber	39 - 40
Foodstuffs	1 - 11, 16 - 24
Seafood	03
Grains	10
Wheat	1001
Corn	1005
Rice	1006
Processed food products	16 - 24
Oils, fats, and other animal and vegetable products	12 - 15
Miscellaneous manufactured goods	64 - 67, 92 - 97
Other raw materials and products	25 - 27, 41 - 63, 68 - 83
Iron ore	2601
Mineral fuels etc.	27
Mineral fuels	2701 - 2705, 2708 - 2713, 2715
Coal	2701
LNG	271111
Petroleum and petroleum products	2708 - 2710, 2712 - 2713, 2715
Crude oil	2709
Textiles and textile products	50 - 63
Synthetic fibers and textiles	54 - 55
Clothing	61 - 62
Base metals and base metal products	72 - 83
Steel	72 - 73
Primary steel products	72
Steel products	73
Copper	7403
Nickel	7502
Aluminum	7601
Lead	7801

2) IT Products

Product name	HS
(1) Computers and peripherals (total)	844331, 8471, 8473
Multifunctional digital equipment	844331
Computers and peripherals	8471
Parts of computer and peripherals	8473
(2) Office equipment	8469, 8470, 9009
(3) Telecommunications equipment	8517, 852510, 852520, 8526
(4) Semiconductors and electronic components	8540 - 8542
Electronic tubes and semiconductors	8540 - 8541
Integrated circuits	8542
(5) Other electronic components	8504, 8518, 8522, 8523, 8529, 8532 - 8536
Flat-panel displays	852990
(6) Video equipment	8521, 852530, 852540, 852580, 8528, 9006
Digital cameras	852580
Reception apparatus for television	852871, 852872
(7) Audio equipment	8519 - 8520
Portable audio players	851981
(8) Measuring and testing equipment	8543, 9014 - 9015, 9024 - 9027, 9030 - 9032
(9) Machines and apparatus for the manufacture of semiconductor devices	8486
IT parts	8473, 848690, (4), (5)
Finished IT products	844331, 8471, 848610, 848620, 848630, 848640, (2), (3), (6), (7), (8)
Total IT equipment	IT parts + Finished IT products

Annotation II: Estimates of world trade value in 2009

The value of world trade in 2009 was estimated based on 53 economies' trade statistics available as of June 2010 and then by obtaining a grand total of the following three categories. The trade value by products is the aggregation of (1) and (2).

(1) The total export (import) value of the 53 economies.
(2) For economies, for which statistics were not available (mainly developing economies, approximately 120 in number), the value of imports from those economies was extracted from the statistics (CIF basis) of the 53 economies and converted to FOB based figures (for imports by those areas, the export values [FOB basis] were converted to CIF based figures).
(3) For trade among economies, for which statistics were not available, data was extracted from Direction of Trade Statistics (June 2010, IMF).

The 53 economies:
Japan, U.S., Canada, Mexico, Costa Rica, Panama, Venezuela, Colombia, Peru, Chile, Argentina, Brazil, China, Hong Kong, Taiwan, South Korea, Singapore, Thailand, Malaysia, Indonesia, the Philippines, Vietnam, India, Australia, New Zealand, UK, Germany, France, Italy, Spain, Netherlands, Belgium, Denmark, Sweden, Finland, Switzerland, Austria, Poland, Czech Republic, Hungary, Romania, Greece, Ireland, Lithuania, Luxemburg, Norway, Portugal, Slovakia, Slovenia, Russia, Ukraine, Turkey, and South Africa.

Annotation III: Estimates of global direct investment value in 2009

Global inward direct investment in 2009 was estimated as described below.
(1) Figures were collected for the following 93 countries and regions for which 2009 data were available.
i) For the following 51 countries and regions, each country or region's balance of payments statistics were used: the United States, Canada, Australia, New Zealand, the United Kingdom, Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Portugal, Luxemburg, the Netherlands, Spain, Denmark, Sweden, Cyprus, the Czech Republic, Estonia, Slovakia, Slovenia, Hungary, Latvia, Lithuania, Malta, Poland, Bulgaria, Norway, Switzerland, China, Taiwan, Hong Kong, South Korea (ROK), Malaysia, the Philippines, Singapore, Thailand, Indonesia, India, Brazil, Chile, Colombia, Mexico, Venezuela, Russia, Israel, Turkey, Iceland, and the Republic of South Africa. For countries that released two types of statistical values, i.e., one including transactions via special purpose enterprises (SPEs) and the other not including such transactions, the former was used. Data valued in local currencies were converted to US dollars using the IMF's annual average rate.
ii) For Japan, the balance of payments statistics released by the Bank of Japan were converted to US dollars at the average Bank of Japan interbank rate during the term.
iii) For the following 16 countries, data from the IMF's Balance of Payments Statistics (BOP, June 2010) were used: Moldova, Panama, Ukraine, Belarus, Paraguay, Romania, Argentina, Ethiopia, Uruguay, Belize, Armenia, Croatia, Egypt, Georgia, Uganda, and Kazakhstan.
iv) For the following 24 countries and regions, data from the Economic Commission for Latin America and the Caribbean (ECLAC) were used: Anguilla (a British overseas territory), Antigua and Barbuda, Peru, El Salvador, Trinidad and Tobago, Honduras, the Bahamas, Guatemala, Nicaragua, Ecuador, Bolivia, Costa Rica, the Dominican Republic, Guyana, Grenada, Jamaica, Suriname, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Saint Lucia, Dominica, Haiti, Barbados and Montserrat (a British overseas territory).
(2) For 54 developing countries and regions, for which data for 2009 were not available, but those for 2008 were listed in the BOP (June 2010), 2008 data from the BOP were used as data for estimation purposes.
(3) As a result of the above steps, 2009 data on inward direct investment values were available for the following countries and regions: 32 developed countries and regions (corresponding to the IMF's classification of Advanced Economies: the United States, Canada, Australia, Japan, New Zealand, EU15, Iceland, Norway, Switzerland, Cyprus, Malta, Slovenia, Israel, South Korea, Singapore, Hong Kong and Taiwan; for an aggregate sum of US$761.5 billion), and 61 developing countries and regions (countries other than the 32 developed countries and regions; for an aggregate sum of US$316.1 billion). The aggregate sum for the 61 countries and regions in 2008 accounted for 85.2% of the aggregate sum for 115 developing countries, for which data for 2008 were available.
(4) The aggregate sum for the 32 developed countries and regions was used as the inward direct investment value for developed countries in 2009, and that for the 61 developing countries and regions was divided by the percentage of 85.2% for 2008 to obtain an estimated 100% value, which was used as the direct investment value for developing countries in 2008. The aggregate sum for developed and developing countries was used as the total global inward direct investment value.

Incidentally, the same method was used for the global outward FDI value: From the 32 developed countries and regions, for which 2009 data were available (a sum of US$1.2195 trillion) and 35 developing countries, for which 2008 data were also available (US$138.6 billion, with the 2008 aggregate sum for the 35 countries accounting for 91.0% of the aggregate sum for the 78 countries and regions, for which the data for 2008 were available), the sum was estimated for developed countries, developing countries, and the world total, respectively.

Table 1 GDP growth rate and contribution rate by country and region

(Unit: %)

	2006		2007		2008		2009	
	Growth rate	Contribution	Growth rate	Contribution	Growth rate	Contribution	Growth rate	Contribution
U.S.	2.7	0.6	2.1	0.5	0.4	0.1	-2.4	-0.5
EU 27	3.4	0.8	3.1	0.7	0.9	0.2	-4.1	-0.9
Japan	2.0	0.1	2.4	0.2	-1.2	-0.1	-5.2	-0.3
East Asia	9.1	1.5	10.1	1.8	6.9	1.3	5.4	1.0
China	11.6	1.1	13.0	1.3	9.6	1.0	8.7	1.0
South Korea	5.2	0.1	5.1	0.1	2.3	0.0	0.2	0.0
ASEAN	6.2	0.2	6.6	0.3	4.4	0.2	1.3	0.1
Thailand	5.1	0.0	4.9	0.0	2.5	0.0	-2.3	-0.0
Singapore	8.7	0.0	8.2	0.0	1.4	0.0	-2.0	-0.0
Malaysia	5.8	0.0	6.2	0.0	4.6	0.0	-1.7	-0.0
Vietnam	8.2	0.0	8.5	0.0	6.2	0.0	5.3	0.0
India	9.8	0.4	9.4	0.4	7.3	0.3	5.7	0.3
Australia	2.6	0.0	4.7	0.1	2.4	0.0	1.3	0.0
New Zealand	1.0	0.0	2.8	0.0	-0.1	-0.0	-1.6	-0.0
Central and South America	5.6	0.5	5.8	0.5	4.3	0.4	-1.8	-0.2
Brazil	4.0	0.1	6.1	0.2	5.1	0.1	-0.2	-0.0
Central and Eastern Europe	6.5	0.2	5.5	0.2	3.0	0.1	-3.7	-0.1
Russia	7.7	0.2	8.1	0.2	5.6	0.2	-7.9	-0.3
Middle East and North Africa	5.7	0.3	5.6	0.3	5.1	0.2	2.4	0.1
Sub-Sahara Africa	6.5	0.1	6.9	0.2	5.5	0.1	2.1	0.0
World	5.1	5.1	5.2	5.2	3.0	3.0	-0.6	-0.6
For reference:								
Developed countries	3.0	1.8	2.8	1.6	0.5	0.3	-3.2	-1.7
Developing countries	7.9	3.3	8.3	3.5	6.1	2.7	2.4	1.1
ASEAN +6	7.3	2.0	8.1	2.3	5.3	1.5	3.4	1.0
BRICS including South Africa	9.4	1.9	10.3	2.2	7.8	1.7	4.3	1.0
BRICS not including South Africa	9.5	1.9	10.5	2.1	7.9	1.7	4.5	1.0

(Notes) (1) The world growth rate was calculated by the IMF using purchasing power parity weighting.
(2) Each country or region's contribution rate was calculated using 2009 prices and purchasing power parity weighting.
(3) East Asia includes China, South Korea, Hong Kong, Taiwan and ASEAN.
(4) ASEAN+6 includes ASEAN, Japan, China, South Korea, India, Australia, and New Zealand.
(5) Some figures may differ from those in other parts because of the revision and the difference in original statistics.
(6) Developed and developing countries are as defined in the WEO (IMF).
(Source) Based on WEO (IMF) data.

Table 2 World export matrix (2009)

(Unit: US$ million)

	World	NAFTA		EU27	Japan	East Asia	ASEAN+6				APEC
			US					ASEAN+3			
									China	ASEAN	
World	12,727,102	2,067,965	1,526,523	4,600,551	499,270	2,533,383	2,912,104	2,497,677	914,053	760,126	5,553,183
NAFTA	1,615,034	751,567	398,992	259,983	61,002	213,144	277,902	233,508	81,785	58,522	1,074,371
US	1,073,388	333,726	—	221,314	51,180	189,515	241,466	203,238	69,576	53,843	615,922
EU27	4,583,911	338,727	285,292	3,044,350	50,204	243,579	337,050	264,885	114,322	70,239	766,045
Japan	581,591	109,924	95,343	72,405	—	269,219	257,359	237,332	109,632	80,463	397,819
East Asia	3,010,670	505,440	436,249	427,794	217,343	1,168,933	1,222,271	1,074,747	350,048	404,437	2,052,155
ASEAN+6	3,404,023	584,055	501,185	506,413	237,587	1,247,205	1,333,095	1,157,418	311,898	454,512	2,203,774
ASEAN+3	3,055,721	549,399	471,142	457,865	202,953	1,135,239	1,180,031	1,030,214	267,205	422,768	2,004,762
China	1,258,320	290,470	251,703	251,817	104,505	306,386	313,764	258,666	—	96,944	755,309
ASEAN	864,481	98,971	87,238	93,085	78,461	417,652	454,530	393,801	78,250	204,257	626,068
APEC	5,768,984	1,404,671	957,949	924,090	323,322	1,789,072	1,940,460	1,695,506	605,116	562,805	3,765,210

(Notes) (1) Exports from each economy to Taiwan were converted to FOB figures by multiplying 0.9 by Taiwan's CIF imports.
(2) East Asia consists of China, South Korea, Hong Kong, Taiwan, and ASEAN.
(3) ASEAN + 6 includes ASEAN, Japan, China, South Korea, India, Australia, and New Zealand.
(4) ASEAN + 3 includes ASEAN, Japan, China, and South Korea.
(5) APEC includes Japan, Australia, Brunei, Canada, Chile, China, Hong Kong, Indonesia, South Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, the Philippines, Russia, Singapore, Taiwan, Thailand, U.S., and Vietnam (21 economies in total).
(Sources) Direction of Trade Statistics (IMF) and Taiwan's trade statistics.

Table 3 World trade by country and region

(Unit: US$ million, %)

	Exports						Imports					
	2007		2008		2009		2007		2008		2009	
	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate
North America	1,568,564	10.9	1,744,032	11.2	1,372,804	-21.3	2,337,617	6.1	2,512,514	7.5	1,881,113	-25.1
U.S.	1,148,199	11.9	1,287,442	12.1	1,056,043	-18.0	1,956,962	5.6	2,103,641	7.5	1,559,625	-25.9
Canada	420,365	8.3	456,590	8.6	316,761	-30.6	380,655	8.7	408,873	7.4	321,488	-21.4
Europe	6,076,712	16.9	6,868,349	13.0	5,229,454	-23.9	6,177,698	18.7	7,042,382	14.0	5,241,394	-25.6
EU15	4,808,654	15.5	5,300,253	10.2	4,082,018	-23.0	4,893,772	16.3	5,458,007	11.5	4,129,204	-24.3
Germany	1,322,465	19.2	1,448,973	9.6	1,127,089	-22.2	1,056,059	16.3	1,185,536	12.3	937,772	-20.9
Netherlands	551,789	18.9	638,503	15.7	498,859	-21.9	493,401	18.3	581,495	17.9	445,856	-23.3
France	559,966	12.9	616,909	10.2	484,519	-21.5	631,660	16.6	716,502	13.4	559,630	-21.9
Italy	500,354	19.9	544,531	8.8	404,737	-25.7	511,976	15.6	563,001	10.0	410,325	-27.1
Belgium	431,211	17.5	473,250	9.7	369,992	-21.8	412,094	17.2	467,284	13.4	351,942	-24.7
UK	444,205	-0.7	483,848	8.9	354,434	-26.7	636,059	12.4	669,882	5.3	512,974	-23.4
Spain	253,444	18.6	282,395	11.4	218,771	-22.5	389,748	18.5	422,643	8.4	287,782	-31.9
Austria	163,840	19.7	181,699	10.9	137,697	-24.2	163,282	18.9	184,465	13.0	143,418	-22.3
Sweden	169,026	14.3	183,946	8.8	131,339	-28.6	153,461	20.2	169,026	10.1	120,039	-29.0
Ireland	121,527	11.7	125,616	3.4	114,156	-9.1	83,922	14.7	84,118	0.2	62,126	-26.1
Denmark	103,161	11.4	116,727	13.2	93,415	-20.0	98,126	14.7	110,041	12.1	82,763	-24.8
Finland	90,110	16.6	96,817	7.4	62,786	-35.2	81,774	17.7	92,089	12.6	60,580	-34.2
Portugal	51,532	18.8	56,052	8.8	43,398	-22.6	78,345	17.5	90,214	15.1	69,943	-22.5
Luxemburg	22,411	-2.0	25,324	13.0	20,781	-17.9	27,592	3.9	31,611	14.6	24,323	-23.1
Greece	23,613	13.6	25,664	8.7	20,044	-21.9	76,272	19.8	90,101	18.1	59,733	-33.7
Poland	140,446	26.6	171,023	21.8	134,671	-21.3	166,176	30.6	209,360	26.0	146,807	-29.9
Czech Republic	122,777	29.2	147,214	19.9	113,619	-22.8	118,481	26.9	142,213	20.0	105,369	-25.9
Hungary	95,593	26.8	108,745	13.8	83,934	-22.8	95,735	22.1	109,208	14.1	78,313	-28.3
Slovakia	58,683	39.8	71,222	21.4	56,141	-21.2	60,843	34.9	73,961	21.6	55,420	-25.1
Romania	40,568	24.9	49,685	22.5	40,715	-18.1	70,568	37.4	84,291	19.4	54,374	-35.5
Slovenia	30,144	29.6	34,232	13.6	26,238	-23.4	31,632	30.8	37,124	17.4	26,459	-28.7
Lithuania	17,173	21.3	23,740	38.2	16,491	-30.5	24,461	26.0	31,260	27.8	18,272	-41.5
Switzerland	172,122	16.4	200,336	16.4	172,903	-13.7	161,288	14.0	183,200	13.6	155,778	-15.0
Norway	136,468	11.7	164,146	20.3	119,058	-27.5	80,336	25.0	87,691	9.2	67,087	-23.5
Asia	3,939,806	15.9	4,462,536	13.3	3,676,538	-17.6	3,583,256	14.8	4,305,309	20.2	3,460,151	-19.6
Japan	712,735	10.1	775,918	8.9	580,787	-25.2	621,084	7.2	756,086	21.7	552,252	-27.0
East Asia	3,025,538	17.2	3,429,242	13.3	2,880,460	-16.0	2,656,246	15.8	3,123,827	17.6	2,568,017	-17.8
China	1,218,155	25.7	1,428,869	17.3	1,202,047	-15.9	956,261	20.8	1,131,469	18.3	1,003,893	-11.3
South Korea	371,489	14.1	422,007	13.6	363,534	-13.9	356,846	15.3	435,275	22.0	323,085	-25.8
Hong Kong	349,663	8.4	370,654	6.0	329,738	-11.0	370,733	10.4	393,443	6.1	352,688	-10.4
Taiwan	234,710	10.2	243,233	3.6	193,815	-20.3	218,648	8.2	239,666	9.6	174,071	-27.4
ASEAN	851,521	13.4	964,478	13.3	791,326	-18.0	753,758	15.0	923,974	22.6	714,280	-22.7
Singapore	299,404	10.1	338,143	12.9	269,909	-20.2	263,247	10.2	319,748	21.5	245,852	-23.1
Malaysia	176,065	9.5	199,759	13.5	157,527	-21.1	146,253	12.1	157,086	7.4	123,907	-21.1
Thailand	163,119	24.9	177,846	9.0	151,948	-14.6	151,703	17.9	180,583	19.0	134,735	-25.4
Indonesia	114,101	13.2	137,020	20.1	116,510	-15.0	74,473	22.0	129,197	73.5	96,829	-25.1
Vietnam	48,561	21.9	62,685	29.1	57,096	-8.9	62,765	39.8	80,714	28.6	69,949	-13.3
Philippines	50,270	6.9	49,025	-2.5	38,335	-21.8	55,317	7.3	56,646	2.4	43,008	-24.1
India	147,564	21.7	195,070	32.2	163,167	-16.4	217,543	25.8	321,410	47.7	249,967	-22.2
Oceania	178,354	15.9	227,681	27.7	187,209	-17.8	205,045	19.6	247,184	20.6	210,654	-14.8
Australia	141,379	14.5	186,505	31.9	154,452	-17.2	157,926	18.9	190,868	20.9	159,266	-16.6
New Zealand	26,955	20.1	30,571	13.4	24,977	-18.3	29,082	17.3	32,324	11.1	24,261	-24.9
South and Central America	756,778	12.3	883,047	16.7	671,248	-24.0	730,512	18.0	889,518	21.8	664,456	-25.3
Mexico	271,958	8.8	292,666	7.6	229,621	-21.5	282,041	10.1	308,849	9.5	234,385	-24.1
Brazil	160,649	16.9	197,942	23.2	152,995	-22.7	120,621	32.0	173,197	43.6	127,647	-26.3
Argentina	55,980	20.3	70,019	25.1	55,669	-20.5	44,707	30.9	57,462	28.5	38,781	-32.5
Chile	65,788	17.7	69,580	5.8	49,974	-28.2	42,714	22.9	56,475	32.2	38,402	-32.0
Colombia	29,076	22.5	37,131	27.7	32,422	-12.7	32,587	28.0	39,118	20.0	32,510	-16.9
Peru	27,588	17.7	31,208	13.1	26,436	-15.3	20,464	33.5	29,982	46.5	21,864	-27.1
Costa Rica	9,343	10.5	9,570	2.4	8,676	-9.3	12,952	1.7	15,372	18.7	11,395	-25.9
Panama	1,079	9.6	1,125	4.3	806	-28.4	6,729	44.5	8,896	32.2	7,660	-13.9
Russia, CIS	395,980	24.8	532,441	34.5	333,812	-37.3	328,077	42.4	447,013	36.3	281,352	-37.1
Russia	279,724	23.5	367,573	31.4	233,936	-36.4	189,619	48.0	255,574	34.8	155,206	-39.3
Ukraine	49,248	28.4	67,003	36.1	39,703	-40.7	60,670	34.7	85,535	41.0	45,436	-46.9
Middle East	642,924	12.9	912,014	41.9	566,932	-37.8	586,655	24.7	735,821	25.4	572,767	-22.2
Turkey	107,389	25.5	131,959	22.9	102,155	-22.6	170,399	21.9	201,709	18.4	140,929	-30.1
Africa	374,302	15.7	491,262	31.2	321,892	-34.5	348,652	25.9	442,944	27.0	374,561	-15.4
South Africa	69,868	20.7	80,208	14.8	62,380	-22.2	79,924	17.3	91,059	13.9	64,867	-28.8

(Notes) (1) Estimated for regions other than North America. See Annotation II for the estimating method.
(2) ASEAN includes the following six countries: Singapore, Thailand, Malaysia, Indonesia, the Philippines, and Vietnam.
(3) East Asia includes the following 10 economies: China, South Korea, Hong Kong, Taiwan, and the six ASEAN countries.
(Sources) National trade statistics.

Table 4 World exports by product (2009)

(Unit: US$ million, %)

	World		U.S.		EU15		Japan		China		ASEAN4		Asia NIEs	
	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate
Total	12,294,956	-23.0	1,056,043	-18.0	4,082,018	-23.0	580,787	-25.2	1,202,047	-15.9	464,320	-17.6	1,156,996	-15.8
Machinery and equipment	4,825,714	-20.2	504,726	-18.0	1,654,260	-24.5	367,190	-29.6	638,644	-12.2	178,834	-14.4	703,481	-12.9
General equipment	1,531,600	-21.9	153,160	-19.7	616,932	-25.0	101,968	-32.7	235,952	-12.2	62,664	-16.6	143,947	-18.4
Air conditioners	26,273	-23.5	1,914	-18.8	6,910	-19.5	1,244	-24.0	7,102	-25.9	3,400	-25.9	1,656	-25.4
Mining and construction equipment	70,847	-38.9	14,440	-33.3	26,792	-45.0	5,543	-57.6	6,381	-29.1	1,129	-7.2	6,940	-22.7
Machine tools	21,115	-43.2	1,336	-35.2	9,732	-33.4	3,439	-59.3	955	-34.5	137	-56.3	2,560	-50.6
Electrical equipment	1,616,160	-16.1	124,817	-18.1	361,785	-22.7	107,278	-22.6	301,215	-11.9	86,472	-10.8	389,530	-11.9
Transport equipment	1,251,749	-25.5	160,911	-20.5	527,601	-28.1	128,564	-34.4	60,084	-15.2	21,695	-21.6	99,789	-10.8
Automobiles	522,683	-33.4	40,718	-38.8	248,796	-31.7	71,311	-45.7	4,964	-47.2	8,599	-31.2	27,540	-26.3
Passenger vehicles	433,635	-31.7	28,357	-44.1	213,548	-28.1	62,475	-45.9	1,390	-53.6	4,947	-27.4	24,404	-27.1
Motorcycles	15,259	-33.0	1,162	-28.7	5,616	-28.4	3,166	-45.4	3,060	-36.4	634	-18.9	609	-25.1
Automotive parts	247,086	-27.1	26,995	-27.5	100,238	-30.5	27,612	-16.8	12,280	-23.5	6,100	-26.9	15,867	-14.8
Precision instruments	426,204	-10.5	65,838	-6.2	147,942	-10.8	29,380	-16.8	41,394	-10.3	8,003	-13.0	70,215	-9.2
Chemicals	1,712,746	-15.1	181,806	-11.4	853,722	-13.6	77,180	-12.5	90,072	-18.2	52,283	-20.8	124,539	-12.7
Industrial chemicals	1,204,107	-12.9	129,338	-9.2	645,062	-10.3	45,816	-13.0	54,133	-21.4	19,693	-15.8	64,972	-10.8
Pharmaceuticals and medical supplies	423,736	4.6	40,667	18.9	282,788	2.8	3,434	15.5	3,421	18.8	662	2.1	7,256	11.4
Plastics and rubber	508,638	-19.8	52,469	-16.4	208,660	-22.6	31,364	-11.8	35,939	-12.7	32,590	-23.5	59,566	-14.7
Foodstuffs	875,429	-10.2	76,836	-16.7	384,434	-11.1	3,981	0.4	35,507	-0.6	37,031	-6.3	17,096	0.1
Seafood	70,018	-4.6	3,528	-7.2	17,144	-9.7	1,079	-6.1	6,816	31.4	4,987	-10.2	2,854	-10.7
Grains	71,827	-28.1	17,381	-39.9	14,255	-28.6	15	-26.9	618	-8.3	5,308	-18.1	36	-39.7
Wheat	30,710	-29.1	5,381	-52.4	7,758	-29.4	0	-100.0	2	-92.6	6	-65.9	0	-22.2
Corn	19,412	-27.8	9,057	-34.7	2,481	-25.6	0	-62.0	32	-57.1	258	3.7	0	-46.6
Rice	14,638	-19.6	2,178	-1.3	1,581	-12.9	14	-26.9	523	8.5	5,029	-18.8	35	-40.6
Processed food products	393,902	-6.8	27,699	-2.6	193,230	-9.0	2,442	5.1	16,029	-12.0	20,620	-1.2	9,653	0.6
Oils, fats, and other animal and vegetable products	126,720	-19.3	23,618	-1.0	27,179	-23.1	297	1.2	2,752	-12.6	25,598	-25.0	1,129	-22.7
Miscellaneous manufactured goods	380,960	-15.0	26,997	-13.7	129,390	-17.0	6,214	-23.9	108,103	-10.2	10,757	-14.9	29,305	-17.8
Iron ore	57,890	-15.8	356	-71.4	2,884	-36.2	0	-5.0	1	-73.8	161	-28.4	2	308.8
Mineral fuels etc.	1,662,471	-38.5	55,059	-28.4	236,010	-38.8	10,467	-43.9	20,431	-34.9	64,737	-27.2	76,848	-36.1
Mineral fuels	1,558,977	-38.6	52,367	-28.7	186,428	-40.9	9,929	-44.0	19,304	-35.9	64,309	-27.2	75,717	-36.4
Coal	84,118	-13.0	6,018	-24.4	4,268	-21.3	1	-30.9	2,374	-54.7	13,896	31.4	1	-81.5
LNG	63,972	-30.0	274	-14.7	451	-56.3	0	-100.0	0	-100.0	16,341	-34.9	0	-86.0
Petroleum and petroleum products	1,291,060	-40.6	41,154	-29.9	167,567	-40.8	9,635	-44.3	15,793	-12.5	31,250	-38.1	75,209	-36.3
Crude oil	821,046	-42.3	1,768	-23.0	35,514	-40.4	0	-91.0	2,217	-19.3	16,401	-40.6	21	-60.3
Textiles and textile products	551,850	-14.5	18,297	-19.0	144,690	-17.6	7,387	-15.7	161,373	-10.0	19,402	-11.9	54,397	-16.7
Synthetic fibers and textiles	61,284	-18.0	3,048	-20.9	15,995	-24.8	3,267	-16.4	13,559	-13.3	4,970	-7.3	9,845	-14.5
Clothing	315,272	-13.0	3,505	-4.8	81,899	-14.4	351	-15.7	100,503	-11.1	10,702	-13.1	24,770	-18.8
Base metals and base metal products	849,958	-36.9	53,298	-28.8	318,884	-37.0	53,096	-25.8	77,139	-46.4	22,826	-26.1	66,534	-27.4
Steel	496,616	-40.3	29,235	-29.6	196,091	-39.3	38,915	-26.6	47,289	-53.6	11,261	-21.8	42,280	-28.0
Primary steel products	273,196	-48.0	15,446	-35.2	102,726	-46.8	28,399	-27.7	13,480	-74.8	3,436	-49.0	26,505	-30.7
Steel products	223,420	-27.2	13,789	-22.2	93,365	-28.1	10,516	-23.8	33,809	-30.1	7,825	2.0	15,775	-22.9
Copper	43,815	-21.2	530	27.3	5,955	-19.4	3,093	-5.3	440	-45.3	2,439	-6.9	1,022	-28.7
Nickel	9,239	-37.3	202	-24.3	1,412	-49.3	32	-46.9	571	283.2	0	-83.5	596	-37.7
Aluminum	35,648	-37.1	681	-36.4	6,886	-42.7	55	-10.8	506	-76.3	543	-22.2	843	-30.0
Lead	4,051	-25.1	83	-32.3	1,156	-19.1	127	50.1	44	-64.8	44	-18.0	302	-29.4
Total IT equipment	1,765,027	-14.9	155,207	-17.5	360,771	-22.7	107,523	-24.8	381,995	-9.5	116,472	-11.7	420,979	-12.4
IT parts	865,929	-15.6	78,045	-20.6	150,287	-25.2	66,400	-21.6	125,174	-14.0	71,960	-7.8	297,378	-11.8
Finished IT products	899,099	-14.3	77,161	-14.0	210,484	-20.9	41,123	-29.4	256,821	-7.1	44,512	-17.5	123,601	-13.7
Computers and peripherals (total)	396,372	-13.5	33,527	-14.9	86,118	-19.1	5,469	-29.6	134,856	-7.3	41,181	-16.1	58,555	-20.6
Multifunctional digital equipment	17,294	-5.4	395	-14.8	5,123	-14.9	554	-43.5	7,065	-10.7	1,758	295.5	1,059	-20.6
Computers and peripherals	254,097	-11.8	20,292	-14.7	58,996	-17.3	2,498	-30.6	101,591	-3.8	24,669	-22.9	21,595	-13.9
Parts of computer and peripherals	124,980	-17.6	12,840	-15.2	21,999	-24.4	2,418	-24.1	26,200	-18.1	14,754	-11.3	35,902	-24.2
Office equipment	3,904	-23.4	475	-20.4	757	-18.7	77	-32.1	1,206	-16.6	309	-38.8	668	-28.8
Telecommunications equipment	297,317	-13.0	20,518	-11.1	61,396	-22.5	7,129	-17.6	87,932	-4.4	3,582	-48.0	69,897	-12.2
Semiconductors and electronic components	402,292	-11.9	37,726	-25.5	43,821	-30.0	36,563	-17.9	39,680	-7.4	41,107	-3.9	180,368	-6.9
Electronic tubes and semiconductors	82,136	-14.8	7,586	-14.7	15,940	-19.1	9,166	-21.5	16,046	-11.4	7,851	-5.4	20,658	-13.4
Integrated circuits	320,156	-11.1	30,141	-27.8	27,881	-34.9	27,397	-16.6	23,634	-4.4	33,256	-3.5	159,711	-6.0
Other electric and electronic components	333,362	-18.8	25,884	-14.9	83,455	-22.6	25,589	-26.1	59,134	-16.1	16,078	-13.5	80,588	-15.6
Flat-panel displays	48,796	-21.2	2,993	-5.5	5,533	-34.2	5,125	-42.4	8,457	-21.8	3,079	-7.2	17,357	-15.1
Video equipment	163,524	-15.8	6,103	0.3	23,851	-25.1	10,974	-32.1	47,616	-16.4	9,731	9.9	15,116	-24.0
Digital cameras	36,252	-12.2	1,549	-0.6	6,391	-15.0	8,864	-28.2	9,700	-10.3	2,645	62.4	5,056	-5.5
Reception apparatus for television	73,071	-8.3	1,965	15.8	7,813	-35.3	291	-63.5	13,544	-4.2	3,905	69.9	3,430	27.1
Audio equipment	4,974	-27.5	384	-42.4	1,889	-10.4	91	-37.1	947	-33.5	193	-46.7	1,199	-27.9
Portable audio players	4,241	-25.5	268	-47.7	1,620	-8.8	80	-30.9	852	-32.7	117	0.1	1,091	-27.6
Measuring and testing equipment	141,561	-16.6	25,258	-14.9	54,830	-19.8	13,338	-22.7	10,168	-6.6	4,226	-11.8	12,668	-4.4
Machines and apparatus for the manufacture of semiconductor devices	21,723	-32.8	5,331	-28.5	4,654	-39.8	8,293	-39.7	457	-19.3	66	-1.6	1,918	-4.7

(Notes) (1) See Annotation I for the definition of products.
(2) Value of world exports based on JETRO estimates.
(3) Asia NIEs include South Korea, Hong Kong, Singapore, and Taiwan.
(Sources) Same as Table 3.

Table 5 World imports by product (2009)

(Unit: US$ million, %)

	World		U.S.		EU15		Japan		China		ASEAN4		Asia NIEs	
	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate
Total	12,743,679	-23.2	1,559,625	-25.9	4,129,204	-24.3	552,252	-27.0	1,003,893	-11.3	398,479	-23.9	1,095,696	-21.1
Machinery and equipment	4,877,048	-20.8	622,670	-20.4	1,479,881	-23.0	147,204	-19.8	479,225	-8.7	172,698	-16.7	516,815	-14.1
General equipment	1,553,968	-22.3	203,059	-18.5	478,130	-27.1	45,951	-22.2	123,814	-10.7	56,919	-15.9	137,685	-15.1
Air conditioners	26,843	-23.4	2,957	-20.1	8,495	-28.7	1,819	-0.4	596	-6.7	623	-14.9	1,448	-22.2
Mining and construction equipment	69,649	-39.8	3,866	-50.1	10,850	-54.0	228	-23.0	3,736	-6.2	2,502	-25.7	5,740	-9.6
Machine tools	20,746	-44.5	1,871	-54.3	5,394	-52.1	306	-47.1	4,567	-19.6	913	-41.7	1,458	-54.9
Electrical equipment	1,720,676	-16.3	214,097	-14.9	394,178	-20.2	64,916	-16.5	243,779	-8.6	81,451	-19.2	305,488	-12.4
Transport equipment	1,180,032	-26.7	152,391	-30.7	479,077	-23.7	16,333	-27.7	43,105	8.2	25,018	-10.4	31,409	-20.8
Automobiles	535,472	-32.6	90,372	-35.0	227,485	-26.2	4,866	-32.6	15,353	1.4	5,845	-21.6	7,795	-20.7
Passenger vehicles	441,464	-30.6	81,305	-35.5	199,240	-22.3	4,598	-32.6	14,354	2.3	3,616	-12.2	6,708	-19.2
Motorcycles	15,008	-32.3	1,802	-42.3	6,814	-32.0	629	-11.9	8	26.1	347	-19.0	206	-42.6
Automotive parts	242,805	-27.8	33,906	-28.6	94,392	-31.2	4,319	-37.1	13,904	12.0	5,700	-30.8	5,597	-18.1
Precision instruments	422,372	-14.2	53,123	-13.8	128,496	-10.9	20,004	-16.9	68,526	-13.9	9,309	-15.3	42,234	-17.7
Chemicals	1,766,012	-15.9	182,893	-15.1	702,880	-15.2	56,937	-13.1	128,329	-6.8	49,702	-22.3	100,422	-17.1
Industrial chemicals	1,248,416	-13.7	139,047	-12.7	521,507	-11.8	43,693	-8.9	69,445	-9.8	32,150	-24.0	68,224	-17.2
Pharmaceuticals and medical supplies	429,282	3.3	55,722	6.5	218,369	2.0	13,058	30.7	6,012	23.0	3,307	11.5	8,260	6.5
Plastics and rubber	517,575	-20.7	43,846	-21.9	181,373	-23.6	13,244	-24.6	58,884	-3.1	17,552	-19.0	32,198	-16.9
Foodstuffs	902,257	-11.1	80,372	-7.6	390,780	-10.5	53,810	-11.2	17,311	6.6	27,142	-11.5	43,864	-7.1
Seafood	74,614	-8.8	9,997	-7.6	30,093	-9.5	10,497	-9.9	3,604	-1.5	2,749	-8.2	5,752	-1.9
Grains	79,002	-30.9	2,061	-25.8	16,583	-28.5	6,550	-36.5	877	25.5	5,109	-26.9	4,846	-29.0
Wheat	33,962	-31.8	698	-35.4	7,065	-24.2	1,446	-55.7	205	2,700.1	2,677	-21.3	1,370	-26.7
Corn	21,365	-32.4	283	-19.0	4,149	-37.6	3,757	-32.9	20	64.5	784	-3.7	2,603	-36.8
Rice	15,823	-21.2	588	8.0	2,434	-14.5	616	48.8	201	9.7	1,621	-40.9	807	9.1
Processed food products	403,057	-7.1	39,681	-7.2	178,967	-7.7	20,637	-1.5	6,412	5.3	12,087	-4.4	16,896	-5.2
Oils, fats, and other animal and vegetable products	133,356	-21.0	6,247	-23.7	40,045	-23.4	5,775	-26.4	28,964	-15.3	4,138	-17.3	4,918	-20.8
Miscellaneous manufactured goods	410,342	-16.3	89,902	-16.8	158,482	-16.0	18,864	-9.5	4,934	-1.8	3,458	-9.9	27,607	-18.8
Iron ore	78,787	-28.0	378	-59.0	8,412	-47.9	8,705	-34.4	50,168	-15.4	460	-54.7	4,598	-31.3
Mineral fuels etc.	1,778,147	-38.7	271,798	-44.8	528,626	-39.1	152,460	-42.8	123,148	-27.0	61,716	-36.8	199,429	-34.9
Mineral fuels	1,669,502	-38.7	268,948	-44.7	462,390	-38.3	152,165	-42.8	121,574	-27.4	60,923	-36.9	196,818	-35.0
Coal	98,581	-22.0	1,431	-30.0	22,439	-35.6	21,987	-25.6	10,578	198.5	2,514	-15.6	16,780	-19.8
LNG	78,637	-27.3	2,375	-35.5	16,289	-10.6	30,337	-32.8	1,263	35.7	2	-55.5	17,787	-33.2
Petroleum and petroleum products	1,351,088	-40.9	248,307	-43.9	357,859	-42.3	93,316	-47.8	107,298	-33.2	53,810	-38.9	157,468	-36.5
Crude oil	881,668	-42.3	194,603	-45.0	230,374	-44.9	80,120	-48.1	88,896	-31.1	34,050	-37.9	90,523	-41.7
Textiles and textile products	541,370	-15.2	83,203	-13.2	194,657	-14.1	31,061	-2.2	21,784	-12.7	9,130	-20.4	36,883	-17.8
Synthetic fibers and textiles	60,018	-20.3	2,814	-26.8	13,821	-26.4	951	-25.6	5,725	-7.3	2,390	-18.1	3,865	-20.4
Clothing	315,813	-12.1	64,289	-12.1	137,231	-10.8	24,029	-1.1	1,651	-20.4	889	-17.0	20,409	-17.6
Base metals and base metal products	865,142	-37.3	71,960	-42.1	283,202	-42.8	21,731	-47.0	86,123	8.2	38,958	-36.6	71,856	-38.9
Steel	511,867	-40.7	36,648	-47.6	162,065	-46.0	10,186	-42.1	36,661	4.5	25,592	-39.3	41,898	-43.6
Primary steel products	281,095	-49.0	12,379	-61.4	91,252	-54.0	4,930	-56.6	27,787	13.3	15,758	-47.3	29,711	-50.3
Steel products	230,772	-26.0	24,269	-35.9	70,813	-30.2	5,256	-15.9	8,874	-15.9	9,834	-19.7	12,188	-15.6
Copper	42,791	-22.1	3,014	-43.3	10,436	-45.0	217	-70.3	15,879	54.9	2,585	-35.3	5,894	-27.1
Nickel	10,172	-38.8	1,277	-52.2	2,423	-63.3	393	-62.2	3,572	30.0	45	-51.0	1,585	-9.1
Aluminum	34,642	-40.0	5,321	-35.4	11,948	-48.1	3,382	-59.7	2,745	386.6	1,735	-33.1	3,814	-28.6
Lead	4,079	-29.4	410	-38.4	1,157	-42.5	25	-63.2	300	155.0	367	-18.7	579	-5.1
Total IT equipment	1,860,439	-15.5	257,062	-10.8	428,424	-21.5	74,452	-17.7	269,095	-8.2	89,713	-19.1	345,439	-11.8
IT parts	943,018	-16.2	69,645	-15.5	155,867	-26.1	36,780	-21.4	201,532	-9.1	68,718	-20.7	244,332	-12.7
Finished IT products	872,175	-14.6	187,417	-9.0	272,557	-18.6	37,672	-13.6	67,563	-5.7	20,995	-13.5	101,107	-9.6
Computers and peripherals (total)	395,214	-15.3	76,781	-4.2	120,749	-22.3	16,438	-19.1	35,871	-8.0	18,028	-17.3	47,957	-16.7
Multifunctional digital equipment	17,183	-12.6	4,668	-1.4	6,733	-15.9	1,356	-14.8	449	-9.5	255	57.5	905	-10.7
Computers and peripherals	253,711	-13.6	53,417	-5.4	86,308	-19.4	11,312	-19.6	21,764	-4.8	5,375	-19.5	20,421	-8.7
Parts of computer and peripherals	124,320	-19.0	18,697	-1.1	27,708	-31.2	3,769	-19.1	13,658	-12.5	12,398	-17.2	26,631	-22.0
Office equipment	4,447	-24.2	871	-20.7	1,193	-20.3	251	-6.1	115	-39.1	153	-56.1	446	-40.1
Telecommunications equipment	310,788	-13.3	62,722	-3.0	80,226	-17.5	10,731	-0.4	19,637	1.0	7,343	-9.2	39,574	-7.0
Semiconductors and electronic components	460,120	-13.6	21,369	-16.5	51,929	-24.3	18,769	-21.2	136,651	-7.6	37,374	-22.9	156,518	-9.7
Electronic tubes and semiconductors	79,974	-14.7	4,951	-17.0	25,590	-18.3	2,494	-20.9	15,899	-8.4	3,878	-18.0	17,422	-13.6
Integrated circuits	380,146	-13.3	16,418	-16.4	26,338	-29.3	16,275	-21.3	120,752	-7.5	33,496	-23.4	139,096	-9.2
Other electric and electronic components	353,291	-18.4	28,681	-21.9	74,871	-25.1	13,815	-22.0	50,813	-11.7	18,897	-18.4	59,281	-16.7
Flat-panel displays	61,295	-18.5	1,832	-27.2	7,121	-41.6	3,371	-26.5	6,052	-25.8	4,329	9.4	9,572	-19.4
Video equipment	161,479	-15.6	44,169	-15.4	53,860	-15.6	6,259	8.8	4,841	-8.6	2,085	6.7	12,625	-16.4
Digital cameras	38,380	-13.0	7,546	-17.9	11,423	-16.8	1,434	-12.5	3,220	1.1	721	41.4	6,400	1.8
Reception apparatus for television	70,615	-10.8	23,740	-13.4	24,957	-10.4	2,074	80.3	53	-53.7	243	40.8	1,510	-11.6
Audio equipment	6,748	-26.8	870	-36.6	3,015	-18.7	295	-31.7	37	-52.6	79	-40.5	1,009	-34.7
Portable audio players	5,615	-24.5	734	-38.4	2,544	-16.3	232	-28.4	34	-27.1	35	-33.3	936	-29.6
Measuring and testing equipment	144,689	-18.5	18,571	-18.5	40,134	-21.6	6,770	-23.4	16,314	-7.4	5,514	-18.7	16,772	-19.8
Machines and apparatus for the manufacture of semiconductor devices	23,663	-13.4	3,029	-18.8	2,447	-42.6	1,123	-55.1	4,815	-22.0	241	50.0	11,256	28.7

(Notes and Sources) Same as Table 4.

Table 6 FDI of major economies (net flows; balance-of-payments basis)

(Unit: US$ million, %)

	Inward FDI					Outward FDI				
	2008	2009	Growth rate	Share	Contribution	2008	2009	Growth rate	Share	Contribution
U.S.	328,334	134,707	-59.0	12.5	-9.8	351,141	268,680	-23.5	19.8	-3.7
Canada	55,270	18,657	-66.2	1.7	-1.9	80,797	38,832	-51.9	2.9	-1.9
EU27	806,384	506,611	-37.2	47.0	-15.2	1,266,549	692,125	-45.4	51.0	-25.7
EU15	685,448	479,379	-30.1	44.5	-10.5	1,192,886	687,648	-42.4	50.6	-22.6
Belgium	109,956	33,780	-69.3	3.1	-3.9	129,951	-15,066	n.a.	n.a.	-6.5
Luxembourg	102,259	166,964	63.3	15.5	3.3	136,872	188,657	37.8	13.9	2.3
Austria	11,824	7,370	-37.7	0.7	-0.2	30,332	4,386	-85.5	0.3	-1.2
Denmark	2,726	7,797	186.0	0.7	0.3	13,907	15,781	13.5	1.2	0.1
Finland	-1,974	2,551	n.a.	0.2	0.2	8,491	2,895	-65.9	0.2	-0.3
France	62,257	59,628	-4.2	5.5	-0.1	161,071	147,161	-8.6	10.8	-0.6
Germany	26,485	39,158	47.8	3.6	0.6	134,592	62,705	-53.4	4.6	-3.2
Greece	4,499	3,355	-25.4	0.3	-0.1	2,418	1,838	-24.0	0.1	-0.0
Ireland	-20,030	24,971	n.a.	2.3	2.3	13,501	20,750	53.7	1.5	0.3
Italy	17,026	28,985	70.2	2.7	0.6	43,839	43,703	-0.3	3.2	-0.0
Netherlands	166,797	53,074	-68.2	4.9	-5.8	250,626	120,007	-52.1	8.8	-5.8
Portugal	4,665	2,871	-38.5	0.3	-0.1	2,741	1,294	-52.8	0.1	-0.1
Spain	73,294	15,031	-79.5	1.4	-3.0	74,856	16,334	-78.2	1.2	-2.6
Sweden	33,704	10,851	-67.8	1.0	-1.2	27,806	30,287	8.9	2.2	0.1
UK	91,961	22,992	-75.0	2.1	-3.5	161,884	46,916	-71.0	3.5	-5.1
12 new EU members	120,936	27,233	-77.5	2.5	-4.8	73,663	4,477	-93.9	0.3	-3.1
Czech Republic	6,580	2,667	-59.5	0.2	-0.2	4,318	1,283	-70.3	0.1	-0.1
Hungary	62,838	-5,645	n.a.	n.a.	-3.5	60,812	-6,991	n.a.	n.a.	-3.0
Poland	14,849	11,546	-22.2	1.1	-0.2	3,102	2,924	-5.7	0.2	-0.0
Slovakia	3,414	-50	n.a.	n.a.	-0.2	258	432	67.4	0.0	0.0
Slovenia	1,930	-95	n.a.	n.a.	-0.1	1,412	851	-39.7	0.1	-0.0
Estonia	1,745	1,751	0.4	0.2	0.0	1,130	1,570	38.9	0.1	0.0
Latvia	1,357	74	-94.6	0.0	-0.1	266	-17	n.a.	n.a.	-0.0
Lithuania	1,846	307	-83.4	0.0	-0.1	356	201	-43.5	0.0	-0.0
Cyprus	1,760	5,029	185.7	0.5	0.2	1,303	4,468	242.9	0.3	0.1
Malta	879	895	1.9	0.1	0.0	277	111	-59.9	0.0	-0.0
Bulgaria	9,809	4,463	-54.5	0.4	-0.3	707	-136	n.a.	n.a.	-0.0
Romania	13,929	6,290	-54.8	0.6	-0.4	-277	-218	n.a.	n.a.	0.0
Norway	7,981	5,237	-34.4	0.5	-0.1	29,417	32,257	9.7	2.4	0.1
Switzerland	5,085	9,695	90.6	0.9	0.2	51,143	15,501	-69.7	1.1	-1.6
Australia	46,722	22,572	-51.7	2.1	-1.2	32,819	18,426	-43.9	1.4	-0.6
New Zealand	1,979	348	-82.4	0.0	-0.1	-100	406	n.a.	0.0	0.0
Japan	24,550	11,839	-51.8	1.1	-0.6	130,801	74,650	-42.9	5.5	-2.5
East Asia	252,756	162,154	-35.8	15.1	-4.6	148,539	134,390	-9.5	9.9	-0.6
China	147,791	78,200	-47.1	7.3	-3.5	53,471	43,900	-17.9	3.2	-0.4
South Korea	3,311	1,506	-54.5	0.1	-0.1	18,943	10,572	-44.2	0.8	-0.4
Taiwan	5,432	2,803	-48.4	0.3	-0.1	10,287	5,868	-43.0	0.4	-0.2
Hong Kong	59,621	48,449	-18.7	4.5	-0.6	50,581	52,269	3.3	3.8	0.1
ASEAN5	36,601	31,196	-14.8	2.9	-0.3	15,257	21,781	42.8	1.6	0.3
Thailand	8,570	5,954	-30.5	0.6	-0.1	2,568	3,836	49.3	0.3	0.1
Malaysia	7,235	1,607	-77.8	0.1	-0.3	15,046	8,658	-42.5	0.6	-0.3
Indonesia	8,340	4,878	-41.5	0.5	-0.2	5,861	2,949	-49.7	0.2	-0.1
Philippines	1,544	1,948	26.2	0.2	0.0	259	359	38.6	0.0	0.0
Singapore	10,912	16,809	54.0	1.6	0.3	-8,478	5,979	n.a.	0.4	0.6
India	40,702	34,574	-15.1	3.2	-0.3	20,039	14,855	-25.9	1.1	-0.2
Argentina	9,726	4,895	-49.7	0.5	-0.2	1,391	679	-51.2	0.0	-0.0
Brazil	45,058	25,949	-42.4	2.4	-1.0	20,457	-10,084	n.a.	n.a.	-1.4
Chile	15,181	12,702	-16.3	1.2	-0.1	7,988	7,983	-0.1	0.6	-0.0
Colombia	10,388	12,023	15.7	1.1	0.1	2,254	3,025	34.2	0.2	0.0
Mexico	23,683	12,522	-47.1	1.2	-0.6	1,157	7,598	556.6	0.6	0.3
Venezuela	349	-3,105	n.a.	n.a.	-0.2	1,273	1,834	44.1	0.1	0.0
Russia	75,461	38,722	-48.7	3.6	-1.9	56,091	46,057	-17.9	3.4	-0.4
Israel	10,877	3,771	-65.3	0.4	-0.4	7,210	1,152	-84.0	0.1	-0.3
South Africa	9,006	5,700	-36.7	0.5	-0.2	-3,147	1,593	n.a.	0.1	0.2
Turkey	18,269	7,886	-56.8	0.7	-0.5	2,549	1,554	-39.0	0.1	-0.0
Developed economies (32 countries and regions)	1,254,421	761,473	-39.3	67.2	-25.0	1,946,419	1,219,489	-37.3	88.9	-32.5
Developing economies	717,374	371,163	-48.3	32.8	-17.6	289,710	152,723	-47.3	11.1	-6.1
World	1,971,795	1,132,635	-42.6	100.0	-42.6	2,236,129	1,372,212	-38.6	100.0	-38.6

(Notes) (1) JETRO estimates used for "World" and "Developing Economies" figures (see Annotation III for methods of estimation). Figures for "Developed Economies" represent the sum total of figures for 32 countries and regions.
(2) For countries and regions which do not release dollar-based data, figures are converted to dollar values using IMF average exchange rates for corresponding years.
(3) "Developed Economies" refers to 32 countries and regions classified based on BOP (IMF) categories. "Developing Economies" is defined to include all other countries and regions.
(4) Figures for "East Asia" represent the sum total of figures for China, South Korea, Taiwan, Hong Kong, and five ASEAN nations.
(Sources)National and regional balance of payments statistics, BOP (IMF), and UN Economic Commission for Latin America and the Caribbean (ECLAC) data.

Table 7 World cross-border M&As (by target and acquirer country and region)

(Unit: US$ million, %, deals)

		2006	2007	2008	2009				First half 2010			
		Value	Value	Value	Value	Growth rate	Share	No. of Deals	Value	Growth rate	Share	No. of Deals
	World	1,014,516	1,627,360	1,218,298	513,586	-57.8	100.0	7,090	273,361	6.9	100.0	3,795
Target country or region	U.S.	189,036	325,160	318,435	116,327	-63.5	22.6	946	48,249	-33.8	17.7	490
	Canada	74,203	123,117	44,695	15,514	-65.3	3.0	383	14,506	213.0	5.3	176
	EU27	504,016	798,273	469,881	200,745	-57.3	39.1	2,516	108,120	11.7	39.6	1,336
	EU15	481,216	779,327	451,055	185,835	-58.8	36.2	2,224	104,462	15.2	38.2	1,201
	UK	212,017	229,768	176,562	48,177	-72.7	9.4	507	40,120	87.6	14.7	309
	France	47,511	68,633	26,054	3,317	-87.3	0.6	231	6,202	260.6	2.3	139
	Germany	62,715	90,519	55,559	21,166	-61.9	4.1	345	17,576	225.9	6.4	202
	Netherlands	35,806	191,417	30,204	28,421	-5.9	5.5	152	8,292	117.8	3.0	87
	Italy	34,717	34,012	33,207	5,333	-83.9	1.0	173	5,022	76.7	1.8	85
	Spain	14,573	65,709	42,711	37,034	-13.3	7.2	215	7,113	-74.3	2.6	92
	12 new EU members	22,800	18,945	18,826	14,910	-20.8	2.9	292	3,659	-40.5	1.3	135
	Czech Republic	1,775	1,449	5,835	4,375	-25.0	0.9	46	228	-89.7	0.1	25
	Hungary	3,444	6,285	2,866	2,882	0.5	0.6	22	457	-75.3	0.2	25
	Poland	5,027	3,549	3,761	2,284	-39.3	0.4	80	1,275	-14.5	0.5	36
	Switzerland	14,024	26,902	21,219	20,862	-1.7	4.1	127	2,643	-72.1	1.0	56
	Norway	6,388	10,683	19,634	2,518	-87.2	0.5	103	4,169	221.2	1.5	64
	Australia	17,535	67,267	44,134	37,432	-15.2	7.3	359	5,175	-64.6	1.9	175
	Japan	4,500	27,064	19,112	5,479	-71.3	1.1	125	5,347	298.7	2.0	75
	East Asia	62,451	65,237	109,513	42,376	-61.3	8.3	836	21,122	21.6	7.7	443
	China	18,742	11,685	20,424	17,003	-16.7	3.3	260	3,919	-36.5	1.4	128
	South Korea	3,657	3,025	5,216	3,861	-26.0	0.8	49	1,293	-10.2	0.5	17
	Taiwan	6,569	6,828	2,835	466	-83.6	0.1	23	641	64.0	0.2	18
	Hong Kong	16,040	11,733	48,116	4,733	-90.2	0.9	130	8,486	1,050.5	3.1	77
	ASEAN6	17,443	31,966	32,922	16,313	-50.4	3.2	374	6,783	-21.3	2.5	203
	Singapore	7,901	11,084	17,178	9,661	-43.8	1.9	91	3,218	-22.3	1.2	60
	Thailand	5,121	3,126	421	525	24.5	0.1	46	630	37.2	0.2	25
	Malaysia	2,695	8,086	3,520	576	-83.6	0.1	60	530	484.7	0.2	40
	Indonesia	886	4,296	6,711	3,414	-49.1	0.7	99	1,712	-29.2	0.6	53
	Philippines	620	4,754	4,042	1,679	-58.5	0.3	22	494	-64.8	0.2	6
	Vietnam	220	620	1,050	458	-56.3	0.1	56	198	79.7	0.1	19
	India	8,284	22,808	15,775	8,792	-44.3	1.7	190	2,893	-55.4	1.1	106
	Mexico	2,789	11,572	5,824	490	-91.6	0.1	63	9,377	4,150.3	3.4	47
	Brazil	10,910	19,392	21,252	9,455	-55.5	1.8	118	7,839	113.1	2.9	76
	United Arab Emirates	80	1,739	4,279	392	-55.5	1.8	16	424	307.4	0.2	12
	South Africa	7,137	9,575	8,353	5,857	-29.9	1.1	54	661	-87.4	0.2	25
	Russia	9,151	26,814	18,574	8,394	-54.8	1.6	310	546	-57.4	0.2	208
Acquirer country or region	U.S.	218,743	301,232	149,616	61,496	-58.9	12.0	1,295	75,368	140.0	27.6	745
	Canada	39,488	68,046	54,241	31,784	-41.4	6.2	500	9,914	-3.3	3.6	260
	EU27	439,411	842,867	575,572	203,061	-64.7	39.5	2,813	80,200	-23.8	29.3	1,452
	EU15	430,980	837,978	570,201	198,887	-65.1	38.7	2,539	79,628	-23.0	29.1	1,269
	UK	93,313	315,656	138,891	34,337	-75.3	6.7	619	12,405	-29.5	4.5	297
	France	67,182	113,218	87,476	60,011	-31.4	11.7	384	28,036	-27.0	10.3	193
	Germany	50,634	116,976	81,962	38,655	-52.8	7.5	411	9,511	-18.8	3.5	171
	Netherlands	29,308	38,156	64,389	4,247	-93.4	0.8	262	14,130	584.2	5.2	133
	Italy	15,702	77,032	35,109	22,150	-36.9	4.3	108	783	-96.0	0.3	59
	Spain	100,756	61,137	34,496	6,825	-80.2	1.3	109	6,421	51.8	2.3	58
	12 new EU members	8,431	4,889	5,371	4,174	-22.3	0.8	274	571	-67.9	0.2	183
	Switzerland	49,215	27,825	51,351	61,171	19.1	11.9	242	10,735	-78.4	3.9	117
	Norway	10,486	11,276	8,969	1,330	-85.2	0.3	91	943	15.7	0.3	44
	Australia	53,474	54,740	27,650	3,801	-86.3	0.7	171	4,638	194.7	1.7	100
	Japan	21,260	40,901	65,743	21,989	-66.6	4.3	279	18,714	52.3	6.8	147
	East Asia	52,242	76,101	140,012	54,942	-60.8	10.7	801	26,646	77.5	9.7	448
	China	15,025	20,028	77,037	26,437	-65.7	5.1	147	13,241	261.3	4.8	83
	South Korea	2,589	9,446	7,594	7,066	-7.0	1.4	88	2,879	131.4	1.1	36
	Taiwan	500	1,773	1,237	1,179	-4.7	0.2	50	349	229.5	0.1	27
	Hong Kong	12,302	10,306	9,790	11,826	20.8	2.3	174	3,057	-22.6	1.1	90
	ASEAN6	21,826	34,547	44,354	8,435	-81.0	1.6	342	7,120	17.7	2.6	212
	Singapore	15,060	27,952	28,133	3,630	-87.1	0.7	169	5,154	165.6	1.9	121
	Thailand	102	283	1,516	885	-41.6	0.2	23	143	-83.0	0.1	13
	Malaysia	4,633	5,087	13,453	3,574	-73.4	0.7	125	1,182	-62.5	0.4	60
	Indonesia	1,786	906	924	258	-72.1	0.1	14	420	334.7	0.2	10
	Philippines	236	120	303	88	-71.0	0.0	11	162	678.1	0.1	5
	India	7,313	32,109	14,721	1,055	-92.8	0.2	97	14,791	2,012.2	5.4	86
	Mexico	3,746	19,976	621	5,371	765.0	1.0	30	291	-90.7	0.1	7
	Brazil	19,861	10,853	5,534	4,533	-18.1	0.9	33	6,757	156.9	2.5	20
	Saudi Arabia	5,689	16,549	4,543	203	-95.5	0.0	8	473	2,620.5	0.2	4
	United Arab Emirates	25,724	26,625	27,868	19,894	-28.6	3.9	68	934	-91.8	0.3	24
	South Africa	11,558	5,125	5,419	1,761	-67.5	0.3	57	245	-35.9	0.1	25
	Russia	4,257	21,967	20,145	9,620	-52.2	1.9	96	6,682	24.7	2.4	42

(Notes) (1) Data as of July 2, 2010.

(2) ASEAN 6 consists of Singapore, Thailand, Malaysia, Indonesia, the Philippines, and Vietnam.

(3) East Asia figures represent totals for China, South Korea, Taiwan, Hong Kong, and ASEAN6.

(Source) Thomson Reuters.

Table 8 World cross-border M&As (by industry)

(Unit: US$ million, %, deals)

	2006	2007	2008	2009				First half 2010			
	Value	Value	Value	Value	Growth rate	Share	No. of deals	Value	Growth rate	Share	No. of deals
All industries	1,014,516	1,627,360	1,218,298	513,586	-57.8	100.0	7,090	273,361	6.9	100.0	3,795
Primary industries	104,696	123,012	140,834	82,217	-41.6	16.0	889	36,664	30.8	13.4	477
Oil and Gas: Petroleum Refining	39,322	81,106	76,021	52,542	-30.9	10.2	274	20,421	53.2	7.5	153
Agriculture, Forestry, and Fishing	2,454	2,997	3,016	1,329	-55.9	0.3	87	407	-37.1	0.1	40
Mining	62,920	38,908	61,797	28,345	-54.1	5.5	528	15,836	12.6	5.8	284
Manufacturing	251,104	512,131	414,969	173,952	-58.1	33.9	2,096	97,937	2.7	35.8	1,124
Food, Tobacco	27,924	71,749	156,751	25,352	-83.8	4.9	264	38,603	218.8	14.1	117
Food and Kindred Products	25,981	49,605	107,838	24,397	-77.4	4.8	256	38,530	236.1	14.1	116
Tobacco Products	1,943	22,144	48,913	955	-98.0	0.2	8	73	-88.7	0.0	1
Textile and Apparel Products	3,195	13,231	3,549	827	-76.7	0.2	60	4,096	1289.8	1.5	37
Wood and Paper Products	6,565	14,262	7,744	5,870	-24.2	1.1	89	2,957	7.1	1.1	59
Wood Products, Furniture, and Fixtures	4,614	5,093	1,883	697	-63.0	0.1	36	205	-49.1	0.1	25
Paper and Allied Products	1,951	9,169	5,860	5,173	-11.7	1.0	53	2,752	16.7	1.0	34
Stone, Clay, Glass, and Concrete Products	11,943	49,055	31,531	3,845	-87.8	0.7	75	3,655	293.0	1.3	35
Chemicals	69,744	138,959	97,569	87,790	-10.0	17.1	462	23,087	-62.8	8.4	283
Chemicals and Allied Products	29,627	26,739	34,570	11,216	-67.6	2.2	138	2,591	-70.6	0.9	100
Drugs	30,513	99,156	50,545	75,009	48.4	14.6	223	17,791	-66.2	6.5	131
Metal and Metal Products	18,752	112,650	29,035	3,846	-86.8	0.7	190	1,614	7.1	0.6	104
Machinery and Equipment	86,883	91,580	81,344	45,525	-44.0	8.9	850	19,879	31.0	7.3	435
Machinery	19,458	25,647	16,857	4,936	-70.7	1.0	219	1,204	13.2	0.4	113
Electronic and Electrical Equipment	19,408	21,237	21,452	16,181	-24.6	3.2	220	4,224	-12.3	1.5	110
Computer and Office Equipment	2,047	4,523	441	962	118.1	0.2	38	627	-24.3	0.2	22
Communications Equipment	19,588	4,091	1,951	2,611	33.8	0.5	58	4,599	611.8	1.7	17
Transportation Equipment	7,312	8,998	13,634	16,410	20.4	3.2	138	6,240	10.2	2.3	74
Aerospace and Aircraft	9,673	13,779	3,680	320	-91.3	0.1	22	123	-53.5	0.0	9
Measuring, Medical, Photo Equipment; Clocks	9,397	13,305	23,329	4,106	-82.4	0.8	155	2,863	50.9	1.0	90
Printing, Publishing, and Allied Services	23,668	18,994	5,396	482	-91.1	0.1	75	3,960	836.7	1.4	29
Miscellaneous Manufacturing	2,430	1,651	2,051	415	-79.8	0.1	31	87	-50.7	0.0	25
Service	658,716	992,217	662,480	257,418	-61.1	50.1	4,098	138,761	4.8	50.8	2,184
Electric, Gas, and Water Distribution	52,674	153,490	101,042	79,646	-21.2	15.5	265	14,885	-68.8	5.4	147
Transportation	66,980	47,422	38,794	11,441	-70.5	2.2	257	2,210	-52.4	0.8	126
Transportation and Shipping (except air)	29,820	41,364	30,077	5,030	-83.3	1.0	226	2,006	-41.2	0.7	110
Air Transportation and Shipping	37,160	6,058	8,718	6,410	-26.5	1.2	31	204	-83.4	0.1	16
Telecommunications	117,128	67,088	76,146	23,200	-69.5	4.5	139	36,452	154.7	13.3	80
Construction Firms	18,157	16,363	3,178	13,039	310.3	2.5	135	902	-92.9	0.3	63
Commerce	29,805	80,870	42,153	13,930	-67.0	2.7	534	12,927	90.7	4.7	285
Wholesale Trade	8,573	23,865	22,209	7,602	-65.8	1.5	289	3,615	56.4	1.3	166
Retail Trade, Eating and Drinking Places	21,232	57,005	19,944	6,327	-68.3	1.2	245	9,312	108.5	3.4	119
Real Estate; Mortgage Bankers and Brokers	77,756	104,564	47,621	18,776	-60.6	3.7	236	12,315	33.2	4.5	124
Finance, insurance	165,309	362,082	229,708	58,660	-74.5	11.4	848	28,078	-4.0	10.3	453
Commercial Banks, Bank Holding Companies	76,715	183,179	124,074	22,242	-82.1	4.3	127	12,299	-21.3	4.5	97
Investment & Commodity Firms, Dealers, Exchanges	39,412	127,366	60,406	12,095	-80.0	2.4	403	7,865	67.3	2.9	210
Insurance	37,732	43,794	38,043	17,685	-53.5	3.4	166	4,845	-8.4	1.8	56
Hotels and Casinos	25,181	21,334	6,599	1,431	-78.3	0.3	53	2,507	214.8	0.9	57
Other service	105,726	139,004	117,238	37,295	-68.2	7.3	1,631	28,484	314.1	10.4	849
Advertising Services	2,112	2,887	472	1,076	127.8	0.2	34	162	16.1	0.1	25
Broadcasting Services (radio, television)	17,340	35,506	8,796	7,176	-18.4	1.4	58	10,033	3151.8	3.7	20
Leisure related Services	7,438	5,331	1,712	698	-59.2	0.1	49	488	315.5	0.2	29
Film related Services	1,132	2,709	317	186	-41.5	0.0	36	236	43.1	0.1	17
Business Services (such as computer-related services)	28,496	48,728	61,538	16,733	-72.8	3.3	934	9,777	174.3	3.6	480
Prepackaged Software	20,649	16,638	34,315	4,982	-85.5	1.0	318	4,770	217.3	1.7	161
Others	0	0	0	0	n.a.	n.a.	0	0	n.a.	n.a.	0
IT (for reference)	204,027	161,862	155,820	62,122	-60.1	12.1	1,152	63,368	172.2	23.2	564

(Notes) (1) Data as of July 2, 2010.
(2) Based on industries of target company.
(3) IT includes hardware such as computers and peripherals, telecommunications equipment, software services, and telecommunications services.
(Source) Same as Table 7.

Table 9 Japanese trade by country and region

(Unit: US$ million, %)

	Exports						Imports					
	2007		2008		2009		2007		2008		2009	
	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate
Asia	343,113	11.5	382,658	11.5	314,406	-17.8	267,926	6.1	307,169	14.7	246,431	-19.8
China	109,060	17.5	124,035	13.7	109,630	-11.6	127,644	7.7	142,337	11.5	122,545	-13.9
South Korea	54,199	7.7	58,985	8.8	47,248	-19.9	27,252	-0.3	29,248	7.3	21,997	-24.8
Taiwan	44,780	1.4	45,708	2.1	36,426	-20.3	19,809	-2.6	21,637	9.2	18,339	-15.2
Hong Kong	38,818	6.4	39,988	3.0	31,868	-20.3	1,448	-4.8	1,545	6.7	1,099	-28.9
ASEAN	86,990	13.9	102,799	18.2	80,449	-21.7	86,898	8.6	106,118	22.1	77,936	-26.6
Thailand	25,553	11.5	29,253	14.5	22,254	-23.9	18,275	8.2	20,627	12.9	16,036	-22.3
Singapore	21,784	12.5	26,425	21.3	20,696	-21.7	7,031	-6.1	7,829	11.3	6,113	-21.9
Malaysia	15,027	13.6	16,329	8.7	12,863	-21.2	17,368	12.1	23,027	32.6	16,755	-27.2
Indonesia	9,047	22.6	12,508	38.3	9,334	-25.4	26,445	9.5	32,293	22.1	21,825	-32.4
Philippines	9,458	4.9	9,902	4.7	8,233	-16.9	8,704	9.3	8,355	-4.0	6,402	-23.4
Vietnam	5,673	37.0	7,767	36.9	6,518	-16.1	6,125	15.7	9,027	47.4	6,962	-22.9
India	6,152	38.0	7,850	27.6	6,336	-19.3	4,153	2.4	5,215	25.6	3,733	-28.4
Oceania	17,891	15.4	21,069	17.8	15,126	-28.2	35,529	11.9	51,658	45.4	37,989	-26.5
Australia	14,199	13.5	17,162	20.9	12,180	-29.0	31,161	11.5	47,280	51.7	34,780	-26.4
New Zealand	2,489	18.7	2,501	0.5	1,509	-39.7	2,686	6.0	2,892	7.7	2,121	-26.7
North America	153,903	-1.1	146,891	-4.6	101,400	-31.0	80,857	4.0	89,780	11.0	68,313	-23.9
US	143,383	-1.6	136,200	-5.0	93,653	-31.2	70,836	4.1	77,018	8.7	59,044	-23.3
Canada	10,520	5.6	10,691	1.6	7,746	-27.5	9,957	3.5	12,680	27.4	9,180	-27.6
Central and South America	35,063	14.7	40,684	16.0	33,116	-18.6	24,117	18.2	27,448	13.8	20,160	-26.6
Panama	8,594	6.1	10,851	26.3	12,851	18.4	13	-62.3	18	35.4	181	905.2
Mexico	10,221	10.1	9,880	-3.3	6,836	-30.8	3,153	11.7	3,783	20.0	2,799	-26.0
Brazil	3,989	30.8	5,878	47.4	4,236	-27.9	5,981	17.5	9,068	51.6	6,369	-29.8
Chile	1,581	45.3	2,727	72.5	1,347	-50.6	8,133	12.1	7,852	-3.5	5,307	-32.4
Europe	112,492	11.6	118,411	5.3	81,460	-31.2	72,510	8.2	79,053	9.0	67,732	-14.3
EU27	105,270	11.8	109,383	3.9	72,374	-33.8	65,009	8.2	69,915	7.6	59,130	-15.4
Germany	22,581	10.5	23,796	5.4	16,658	-30.0	19,388	5.0	20,702	6.8	16,775	-19.0
Netherlands	18,513	25.6	20,923	13.0	13,518	-35.4	2,799	28.6	3,790	35.4	3,461	-8.7
UK	16,268	6.8	16,309	0.3	11,825	-27.5	7,520	11.9	7,410	-1.5	5,690	-23.2
France	8,365	9.7	8,922	6.7	6,191	-30.6	10,015	11.6	10,561	5.5	9,132	-13.5
Belgium	7,895	10.4	8,415	6.6	5,343	-36.5	1,926	4.2	2,047	6.3	1,833	-10.5
Italy	6,709	4.4	6,754	0.7	4,804	-28.9	7,234	2.8	7,897	9.2	6,370	-19.3
Spain	5,574	-1.1	4,363	-21.7	2,561	-41.3	1,971	2.4	2,487	26.2	2,348	-5.6
Hungary	2,380	35.4	2,599	9.2	1,730	-33.5	620	7.1	717	15.7	645	-10.1
Czech Republic	2,618	34.7	2,992	14.3	1,696	-43.3	479	13.2	523	9.0	426	-18.5
Sweden	1,962	6.2	2,183	11.3	1,447	-33.7	2,235	0.9	2,072	-7.3	1,692	-18.4
Poland	1,637	54.8	1,962	19.9	1,389	-29.2	379	44.3	477	25.7	373	-21.7
Finland	2,519	4.7	2,325	-7.7	852	-63.3	1,680	24.0	1,891	12.6	1,152	-39.1
Austria	1,292	8.2	1,239	-4.1	790	-36.2	1,597	3.5	1,544	-3.3	1,355	-12.3
Ireland	1,599	-2.4	1,268	-20.7	752	-40.7	4,090	17.1	4,133	1.0	4,647	12.4
Greece	1,300	-8.5	1,211	-6.9	689	-43.1	56	-26.8	101	79.8	59	-41.4
Portugal	819	6.7	759	-7.3	398	-47.6	169	-10.2	219	29.6	223	2.0
Denmark	766	-13.6	727	-5.1	391	-46.3	2,020	-0.8	2,428	20.2	2,181	-10.2
Slovakia	437	-10.3	460	5.2	367	-20.2	204	21.3	215	5.4	125	-41.9
Romania	256	35.9	445	74.1	225	-49.4	223	21.5	216	-3.3	220	1.9
Bulgaria	134	63.5	139	3.9	75	-46.5	53	7.2	56	5.2	58	3.2
Norway	1,121	-31.0	1,321	17.9	1,047	-20.8	1,662	36.5	2,055	23.6	1,642	-20.1
Switzerland	3,019	24.8	4,313	42.9	6,283	45.7	5,210	2.1	6,393	22.7	6,268	-2.0
Turkey	2,745	15.1	3,070	11.9	1,597	-48.0	374	4.1	417	11.3	399	-4.2
Russia, CIS	12,482	50.1	19,139	53.3	4,129	-78.4	11,514	56.2	14,743	28.0	9,659	-34.5
Russia	10,738	52.0	16,374	52.5	3,295	-79.9	10,554	58.5	13,281	25.8	8,853	-33.3
Middle East	26,184	36.4	33,722	28.8	21,650	-35.8	113,824	4.2	165,445	45.4	92,850	-43.9
United Arab Emirates	8,053	33.1	10,793	34.0	6,498	-39.8	32,298	2.2	46,415	43.7	22,727	-51.0
Saudi Arabia	6,711	44.6	7,824	16.6	5,395	-31.0	35,350	-5.0	50,470	42.8	29,203	-42.1
Oman	2,524	45.8	3,912	55.0	2,354	-39.8	3,578	33.9	5,519	54.2	3,325	-39.8
Iran	1,329	13.2	1,889	42.1	1,650	-12.6	12,678	14.1	18,095	42.7	9,319	-48.5
Qatar	1,842	26.2	2,010	9.1	1,630	-18.9	16,942	14.4	26,233	54.8	15,940	-39.2
Kuwait	1,665	40.0	2,088	25.4	1,247	-40.3	9,928	9.0	15,121	52.3	8,997	-40.5
Israel	1,896	57.3	2,166	14.2	1,145	-47.1	899	7.9	916	1.8	816	-10.9
Africa	11,602	22.7	13,344	15.0	9,498	-28.8	14,770	11.3	20,768	40.6	9,107	-56.2
South Africa	4,599	13.2	4,598	0.0	2,613	-43.2	7,709	16.2	8,920	15.7	4,989	-44.1
Liberia	1,190	36.2	1,203	1.2	1,473	22.4	0	-98.3	46	33,134.7	1	-98.0
Egypt	1,287	12.9	1,859	44.5	1,360	-26.9	839	111.2	1,576	87.9	299	-81.1
Nigeria	732	29.6	923	26.2	564	-38.9	674	-16.9	1,749	159.4	535	-69.4
World	712,735	10.1	775,918	8.9	580,787	-25.2	621,084	7.2	756,086	21.7	552,252	-27.0
APEC	527,354	8.1	567,769	7.7	432,529	-23.8	402,149	7.5	468,213	16.4	365,838	-21.9
NAFTA	165,942	-0.4	158,368	-4.6	109,911	-30.6	85,316	4.2	94,765	11.1	72,530	-23.5
Mercosur 4	4,984	30.1	7,085	42.2	4,968	-29.9	6,910	20.9	9,977	44.4	7,121	-28.6

(Note) (1) Exchange rates are converted to US$ based on applicable customs rates.
(2) Mercosur 4 includes Argentina, Brazil, Paraguay and Uruguay.
(Source) Based on "Trade Statistics"(Ministry of Finance).

Table 10 Japan's exports by products (2009)

(Unit: US$ million, %)

	World		US		EU27		China		ASEAN		Asia NIEs	
	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate
Total value	580,787	-25.2	93,653	-31.2	72,374	-33.8	109,630	-11.6	80,449	-21.7	136,238	-20.4
Machinery and equipment	367,190	-29.6	71,349	-34.7	51,303	-38.3	61,633	-11.5	46,114	-21.9	66,668	-23.8
General equipment	101,968	-32.7	18,427	-35.2	16,004	-42.9	19,341	-17.5	15,105	-28.0	20,513	-31.1
Air conditioners	1,244	-24.0	122	-32.6	497	-29.1	185	-0.9	122	-27.4	118	-20.5
Mining and construction equipment	5,543	-57.6	410	-75.1	429	-79.8	892	-7.4	1,090	-33.6	1,137	-20.7
Machine tools	3,439	-59.3	558	-71.9	440	-76.5	963	-38.4	499	-49.2	580	-43.6
Electrical equipment	107,278	-22.6	13,783	-31.4	13,285	-36.3	25,651	-14.6	17,527	-21.6	32,132	-19.0
Transport equipment	128,564	-34.4	33,790	-37.5	16,406	-40.2	10,165	10.0	10,558	-14.1	7,358	-20.7
Automobiles	71,311	-45.7	24,227	-40.7	9,676	-46.0	3,877	-4.9	3,187	-28.3	1,925	-38.8
Passenger vehicles	62,475	-45.9	23,962	-40.8	9,488	-44.6	3,511	-6.4	1,602	-34.1	1,571	-38.2
Motorcycles	3,166	-45.4	1,010	-48.9	1,314	-43.3	1	-63.7	51	-62.9	64	-58.2
Automotive parts	27,612	-16.8	5,963	-28.6	3,629	-35.8	6,356	23.4	4,128	-16.0	1,606	-8.0
Precision instruments	29,380	-16.8	5,350	-21.3	5,608	-17.9	6,477	-6.1	2,925	-14.7	6,664	-23.7
Chemicals	77,180	-12.5	8,831	-17.8	8,706	-23.2	17,412	-1.8	8,749	-18.9	25,851	-12.5
Industrial chemicals	45,816	-13.0	5,804	-15.0	5,755	-18.1	10,280	-2.5	4,684	-22.0	16,119	-15.5
Pharmaceuticals and medical supplies	3,434	15.5	1,437	28.2	904	6.2	229	25.6	103	10.1	402	5.5
Plastics and rubber	31,364	-11.8	3,027	-22.8	2,951	-31.5	7,132	-0.8	4,065	-15.0	9,732	-7.0
Foodstuffs	3,981	0.4	653	2.0	170	1.3	410	17.6	488	-14.2	1,989	2.7
Seafood	1,079	-6.1	185	2.1	27	-1.8	237	22.7	171	-34.4	323	-5.1
Grains	15	-26.9	0	-35.7	0	2.8	0	-70.6	1	-9.0	4	3.5
Processed food products	2,442	5.1	427	3.4	123	8.7	142	17.6	222	-1.2	1,397	6.9
Oils, fats, and other animal and vegetable products	297	1.2	61	-6.0	43	-22.0	34	3.8	31	7.8	101	27.1
Miscellaneous manufactured goods	6,214	-23.9	1,697	-9.8	1,317	-35.2	908	-27.9	534	-17.5	1,104	-28.2
Other raw materials and products	91,343	-25.8	5,619	-31.4	6,349	-25.7	22,687	-20.6	19,768	-27.6	30,385	-24.2
Mineral fuels etc.	10,467	-43.9	332	-52.2	651	-43.3	1,916	-59.1	3,950	-16.6	5,094	-23.3
Mineral fuels	9,929	-44.0	330	-50.6	651	-43.3	1,810	-59.9	3,939	-16.2	4,679	-21.2
Petroleum and petroleum products	9,635	-44.3	330	-29.7	618	-43.1	1,801	-60.1	3,905	-16.8	4,547	-21.5
Textiles and textile products	7,387	-15.7	465	-29.0	597	-31.3	2,966	-11.8	1,202	-8.5	1,236	-21.0
Synthetic fibers and textiles	3,267	-16.4	160	-35.6	327	-33.5	1,214	-10.6	486	-9.9	385	-23.1
Clothing	351	-15.7	25	-31.0	42	-16.1	63	2.9	28	1.0	185	-19.8
Base metals and base metal products	53,096	-25.8	3,304	-33.0	2,308	-32.0	14,440	-13.4	10,817	-35.0	16,199	-28.0
Steel	38,915	-26.6	2,265	-32.1	1,394	-28.6	9,459	-14.4	8,025	-37.2	12,229	-29.5
Primary steel products	28,399	-27.7	676	-44.4	542	-35.0	7,577	-12.9	5,824	-39.9	10,855	-29.4
Steel products	10,516	-23.8	1,589	-25.1	852	-23.9	1,882	-20.0	2,201	-28.8	1,373	-30.5
Copper	3,093	-5.3	23	-53.5	11	-50.4	1,639	5.2	477	-1.1	915	-19.8
Nickel	32	-46.9	1	-73.0	17	2.3	5	-67.5	2	-56.5	6	-51.4
Aluminum	55	-10.8	3	-24.7	0	-93.4	14	23.9	17	-31.9	7	36.8
Lead	127	50.1	-	n.a.	-	n.a.	44	193.2	51	38.9	28	-8.8
IT products												
Computers and peripherals	5,469	-29.6	1,959	-28.7	1,008	-37.3	659	-22.3	526	-37.2	1,055	-28.0
Multifunctional digital equipment	554	-43.5	308	-45.1	154	-44.5	14	-13.1	10	-26.8	35	-29.8
Computers and peripherals	2,498	-30.6	1,049	-27.1	555	-35.1	288	-27.3	99	-36.4	355	-38.9
Parts of computer and peripherals	2,418	-24.1	602	-19.7	299	-37.3	358	-18.2	417	-37.6	665	-20.3
Office equipment	77	-32.1	43	-30.5	11	-48.1	1	-41.7	11	5.7	7	-37.1
Telecommunications equipment	7,129	-17.6	1,216	-26.0	1,027	-23.5	1,757	-2.0	754	-7.1	1,813	-21.0
Semiconductors and electronic components	36,563	-17.9	2,243	-30.2	2,794	-34.8	9,058	-9.7	8,270	-19.7	15,495	-17.2
Electron tubes and semiconductors	9,166	-21.5	823	-30.0	1,658	-34.8	1,761	-10.2	1,826	-15.2	3,011	-20.7
Integrated circuits	27,397	-16.6	1,421	-30.3	1,137	-34.9	7,297	-9.6	6,444	-20.9	12,484	-16.3
Other electric and electronic components	25,589	-26.1	3,032	-36.7	3,054	-44.3	6,264	-22.7	4,225	-22.1	7,202	-19.3
Flat-panel displays	5,125	-42.4	462	-59.2	843	-63.6	1,262	-46.2	766	-4.5	1,029	-10.3
Video equipment	10,974	-32.1	2,639	-38.3	3,314	-31.7	1,682	-6.9	640	-36.0	1,827	-24.0
Digital cameras	8,864	-28.2	2,051	-37.1	2,705	-27.8	1,562	-2.5	482	-33.9	1,435	-20.6
Reception apparatus for television	291	-63.5	21	-7.2	31	-75.2	2	-72.9	27	-56.3	116	-48.9
Audio equipment	91	-37.1	48	9.0	27	-65.1	1	-68.4	4	14.9	8	-25.6
Portable audio players	80	-30.9	43	39.9	24	-65.2	1	-68.3	4	2.6	7	-4.2
Measuring and testing equipment	13,338	-22.7	2,605	-25.1	2,467	-22.4	2,901	-15.0	1,443	-26.3	2,973	-28.0
Machines and apparatus for the manufacture of semiconductor devices	8,293	-39.7	1,520	-16.7	223	-38.1	1,186	-36.7	613	-43.0	4,977	-43.7
IT parts	66,400	-21.6	6,584	-29.8	6,238	-40.1	15,809	-15.7	13,070	-21.2	24,172	-18.7
Finished IT products	41,123	-29.4	8,721	-31.3	7,687	-28.8	7,700	-15.6	3,416	-29.2	11,185	-34.4
Total IT equipment	107,523	-24.8	15,305	-30.7	13,925	-34.3	23,509	-15.7	16,486	-23.0	35,357	-24.4

(Notes) (1) See Appendix, Annotation I for product-category definitions.
(2) Singapore figures are included under both ASEAN and Asia NIEs statistics.
(Source) Same as Table 9.

Table 11 Japan's imports by products (2009)

(Unit: US$ million, %)

	World		US		EU27		China		ASEAN		Asia NIEs	
	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate	Value	Growth rate
Total value	552,252	-27.0	59,044	-23.3	59,130	-15.4	122,545	-13.9	77,936	-26.6	47,547	-21.1
Machinery and equipment	147,204	-19.8	25,242	-21.5	20,467	-26.9	52,089	-14.5	22,160	-20.4	23,587	-20.0
General equipment	45,951	-22.2	7,807	-22.8	6,450	-32.1	20,078	-16.7	6,106	-23.7	5,024	-26.4
Air conditioners	1,819	-0.4	15	-37.6	18	-46.2	1,487	4.5	277	-12.9	21	-23.0
Mining and construction equipment	228	-23.0	39	-9.7	79	-28.6	57	-22.0	9	-55.7	35	-8.5
Machine tools	306	-47.1	32	-43.4	125	-30.1	33	-62.4	26	-70.3	60	-50.7
Electrical equipment	64,916	-16.5	6,729	-19.3	3,275	-30.5	26,037	-11.3	13,016	-19.3	16,048	-16.5
Transport equipment	16,333	-27.7	4,892	-27.7	6,057	-28.6	2,340	-19.9	1,083	-33.3	894	-21.7
Automobiles	4,866	-32.6	269	-56.3	3,996	-27.3	22	-42.4	115	-28.4	40	15.4
Passenger vehicles	4,598	-32.6	244	-54.6	3,886	-27.1	12	-35.8	7	-77.3	27	-13.2
Motorcycles	629	-11.9	191	-6.3	93	-11.4	127	-19.7	40	-12.3	175	-11.2
Automotive parts	4,319	-37.1	293	-61.0	1,320	-37.9	1,311	-27.8	840	-34.9	414	-32.7
Precision instruments	20,004	-16.9	5,815	-16.2	4,685	-11.5	3,634	-20.0	1,954	-6.0	1,621	-29.6
Chemicals	56,937	-13.1	9,805	-15.6	19,627	3.9	8,840	-25.7	6,463	-28.2	5,577	-21.8
Industrial chemicals	43,693	-8.9	8,199	-11.8	18,286	7.6	4,984	-34.4	2,567	-20.4	3,209	-19.4
Pharmaceuticals and medical supplies	13,058	30.7	2,158	20.0	7,567	25.7	226	13.7	203	47.1	282	33.5
Plastics and rubber	13,244	-24.6	1,606	-30.5	1,341	-28.9	3,856	-10.3	3,895	-32.6	2,367	-24.9
Foodstuffs	53,810	-11.2	12,982	-26.0	7,299	- 0.3	6,987	-0.8	7,366	-1.8	2,664	-6.0
Seafood	10,497	-9.9	1,161	-20.3	473	-24.7	975	-15.0	1,902	-7.1	1,077	-9.2
Grains	6,550	-36.5	5,015	-38.3	34	160.4	106	3.8	118	-5.9	0	2,445.0
Wheat	1,446	-55.7	859	-56.6	2	-42.1	—	n.a.	—	n.a.	—	n.a.
Corn	3,757	-32.9	3,623	-34.4	18	175.4	6	575.6	3	-40.1	0	n.a.
Processed food products	20,637	-1.5	3,466	-21.1	4,982	8.4	4,321	3.6	3,624	-2.0	1,200	-1.5
Oils, fats, and other animal and vegetable products	5,775	-26.4	1,903	-24.5	401	-4.7	438	-15.1	651	-33.4	116	-17.4
Miscellaneous manufactured goods	18,864	-9.5	788	-34.6	1,519	-28.1	12,919	-5.0	2,345	-3.3	809	-2.5
Other raw materials and products	258,670	-37.2	6,685	-39.0	9,045	-29.7	40,039	-16.5	35,917	-35.2	10,693	-32.4
Iron ore	8,705	-34.4	0	893.3	9	23,817.8	0	-82.2	15	17,437.4	3	-60.8
Mineral fuels etc.	152,460	-42.8	1,053	-47.7	221	-67.0	1,373	-68.5	22,192	-43.8	3,060	-41.3
Mineral fuels	152,165	-42.8	1,008	-44.1	220	-67.1	1,347	-67.3	22,074	-43.9	2,854	-43.0
Coal	21,987	-25.6	190	-59.4	0	7.1	785	-63.8	3,346	-20.5	1	2.8
LNG	30,337	-32.8	243	-16.6	—	n.a.	—	n.a.	14,566	-31.7	—	n.a.
Petroleum and petroleum products	93,316	-47.8	507	-50.4	205	-68.6	462	-57.0	4,104	-70.1	2,812	-42.9
Crude oil	80,120	-48.1	—	n.a.	—	n.a.	112	-71.1	2,352	-70.9	—	n.a.
Textiles and textile products	31,061	-2.2	402	-24.5	1,642	-23.2	24,525	0.5	2,594	2.5	840	-13.7
Synthetic fibers and textiles	951	-25.6	62	-37.9	130	-29.5	207	-27.3	254	-25.8	240	-23.5
Clothing	24,029	-1.1	140	-8.0	1,092	-21.4	20,232	-1.1	1,724	14.1	241	-3.5
Base metals and base metal products	21,731	-47.0	1,419	-46.1	1,659	-40.7	5,748	-40.7	3,240	-39.2	4,154	-38.6
Steel	10,186	-42.1	494	-51.4	656	-24.1	3,537	-39.6	647	-30.5	3,188	-34.8
Primary steel products	4,930	-56.6	122	-73.6	256	-34.6	643	-75.0	83	-66.2	2,230	-40.3
Steel products	5,256	-15.9	372	-32.7	400	-15.4	2,894	-11.7	564	-17.8	958	-17.0
Copper	217	-70.3	0	-42.8	3	242.1	1	4,395.3	10	-81.9	6	-79.2
Nickel	393	-62.2	1	-59.2	54	-58.8	0	863.8	—	n.a.	1	-80.9
Aluminum	3,382	-59.7	25	-67.2	37	-30.7	287	-65.1	253	-42.5	84	-78.0
IT products												
Computers and peripherals	16,438	-19.1	866	-27.6	695	-28.7	10,347	-17.0	2,967	-21.1	2,010	-20.4
Multifunctional digital equipment	1,356	-14.8	0	-34.0	0	-75.3	793	-16.8	528	-11.9	35	-8.3
Computers and peripherals	11,312	-19.6	676	-25.2	580	-29.9	7,577	-16.9	1,996	-20.1	910	-28.1
Parts of computer and peripherals	3,769	-19.1	189	-35.0	115	-22.1	1,978	-17.8	444	-33.3	1,065	-12.7
Office equipment	251	-6.1	14	35.0	1	-38.3	194	-3.6	15	-10.9	29	-29.2
Telecommunications equipment	10,731	-0.4	995	-13.1	414	-2.4	5,534	6.9	1,673	-12.3	1,892	6.6
Semiconductors and electronic components	18,769	-21.2	3,190	-20.5	684	-40.0	2,125	-15.1	3,711	-21.4	9,823	-20.1
Electron tubes and semiconductors	2,494	-20.9	243	-29.9	115	-21.7	756	-4.2	830	-32.8	574	-13.0
Integrated circuits	16,275	-21.3	2,947	-19.6	568	-42.7	1,368	-20.1	2,880	-17.3	9,249	-20.5
Other electric and electronic components	13,815	-22.0	1,127	-22.2	614	-27.6	6,504	-23.3	2,677	-26.6	2,768	-10.9
Flat-panel displays	3,371	-26.5	204	-28.7	40	-31.3	1,745	-16.3	592	-44.7	778	-27.9
Video equipment	6,259	8.8	101	-17.0	108	-13.7	4,427	9.2	1,178	20.8	399	-6.8
Digital cameras	1,434	-12.5	46	-7.7	58	-5.2	816	-4.4	444	-24.2	53	-15.1
Reception apparatus for television	2,074	80.3	6	-56.0	2	-47.1	1,445	86.4	446	170.4	173	-7.5
Audio equipment	295	-31.7	5	0.4	3	-25.3	221	-34.8	57	-19.8	9	-18.8
Portable audio players	232	-28.4	4	3.3	2	-37.3	171	-35.9	49	18.1	6	-13.1
Measuring and testing equipment	6,770	-23.4	2,447	-25.3	1,520	-25.0	1,260	-16.3	694	-19.3	525	-28.2
Machines and apparatus for the manufacture of semiconductor devices	1,123	-55.1	636	-49.9	235	-72.2	39	-53.1	52	-60.6	177	-27.7
IT parts	36,780	-21.4	4,733	-22.5	1,474	-33.4	10,634	-20.9	6,858	-24.4	13,746	-17.9
Finished IT products	37,672	-13.6	4,647	-27.2	2,800	-33.0	20,017	-6.3	6,167	-12.1	3,885	-12.0
Total IT equipment	74,452	-17.7	9,380	-24.9	4,274	-33.1	30,652	-12.0	13,024	-19.1	17,631	-16.7

(Notes and Source) Same as Table 10.

Table 12 Japan's outward/inward foreign direct investment by country and region (net flows; balance-of-payments basis)

(Unit: US$ million, %)

	Outward FDI				
	2007	2008	2009	Share	Growth rate
Asia	19,388	23,348	20,636	27.6	-11.6
China	6,218	6,496	6,899	9.2	6.2
Hong Kong	1,131	1,301	1,610	2.2	23.7
Taiwan	1,373	1,082	339	0.5	-68.7
South Korea	1,302	2,369	1,077	1.4	-54.5
ASEAN10	7,790	6,309	7,002	9.4	11.0
Thailand	2,608	2,016	1,632	2.2	-19.1
Indonesia	1,030	731	483	0.6	-33.9
Malaysia	325	591	616	0.8	4.2
Philippines	1,045	705	809	1.1	14.8
Singapore	2,233	1,089	2,881	3.9	164.5
Vietnam	475	1,098	563	0.8	-48.7
India	1,506	5,551	3,664	4.9	-34.0
Oceania	4,204	6,060	7,629	10.2	25.9
Australia	4,140	5,232	7,136	9.6	36.4
New Zealand	-22	635	237	0.3	-62.7
Guam	41	5	-2	n.a.	n.a.
Marshall Islands	19	72	209	0.3	189.4
North America	17,385	46,046	10,889	14.6	-76.4
U.S.	15,672	44,674	10,660	14.3	-76.1
Canada	1,713	1,372	229	0.3	-83.3
Central and South America	9,482	29,623	17,393	23.3	-41.3
Mexico	501	315	211	0.3	-33.1
Brazil	1,244	5,371	3,753	5.0	-30.1
Cayman Islands (GB)	5,838	22,550	12,903	17.3	-42.8
Panama	791	807	114	0.2	-85.9
Bermuda (GB)	-428	185	24	0.0	-87.1
British Virgin Islands	1,120	138	24	0.0	-82.6
Peru	50	32	60	0.1	91.6
Argentina	82	101	-3	n.a.	n.a.
Western Europe	20,456	22,418	17,073	22.9	-23.8
EU	19,934	22,939	17,039	22.8	-25.7
Germany	880	3,905	2,089	2.8	-46.5
UK	3,026	6,744	2,126	2.8	-68.5
France	479	1,703	1,161	1.6	-31.8
Netherlands	12,440	6,514	6,698	9.0	2.8
Italy	45	177	110	0.1	-38.0
Belgium	796	2,196	423	0.6	-80.7
Luxembourg	2,291	527	3,279	4.4	521.7
Sweden	254	570	160	0.2	-72.0
Spain	10	210	162	0.2	-22.6
Denmark	-2	23	54	0.1	135.0
Ireland	-600	-158	311	0.4	n.a.
Austria	3	27	-20	n.a.	n.a.
Cyprus	16	12	98	0.1	698.6
Malta	-2	-	17	0.0	n.a.
Switzerland	61	165	221	0.3	34.2
Norway	-91	37	275	0.4	643.8
Turkey	-26	25	92	0.1	263.2
Eastern Europe, Russia, etc.	509	650	757	1.0	16.6
Russia	99	306	391	0.5	28.0
Poland	206	53	-6	n.a.	n.a.
Hungary	27	106	87	0.1	-17.9
Czech Republic	87	98	156	0.2	58.5
Middle East	958	1,138	575	0.8	-49.4
Saudi Arabia	746	892	378	0.5	-57.6
United Arab Emirates	60	194	139	0.2	-28.3
Egypt	55	63	40	0.1	-36.2
Africa	1,101	1,518	-301	n.a.	n.a.
South Africa	82	648	143	0.2	-78.0
Liberia	-70	-4	40	0.1	n.a.
Mauritius	1,026	772	-359	n.a.	n.a.
World	73,483	130,801	74,650	100.0	-42.9

	Inward FDI				
	2007	2008	2009	Share	Growth rate
Asia	1,605	3,381	1,093	9.2	-67.7
China	15	37	-137	n.a.	n.a.
Hong Kong	47	257	-81	n.a.	n.a.
Taiwan	36	66	57	0.5	-13.1
South Korea	221	279	255	2.2	-8.7
ASEAN10	1,283	2,740	985	8.3	-64.1
Thailand	1	6	24	0.2	325.4
Indonesia	2	0	0	0.0	-28.6
Malaysia	-1	13	203	1.7	1500.6
Philippines	1	3	-	n.a.	n.a.
Singapore	1,282	2,716	756	6.4	-72.2
India	3	1	14	0.1	1520.9
Oceania	215	258	50	0.4	-80.8
Australia	207	53	40	0.3	-25.2
New Zealand	7	204	4	0.0	-98.1
North America	12,709	12,005	1,712	14.5	-85.7
U.S.	13,270	11,792	1,831	15.5	-84.5
Canada	-561	213	-119	n.a.	n.a.
Central and South America	2,831	4,020	690	5.8	-82.8
Mexico	-	-	-	n.a.	n.a.
Brazil	-	-	-8	n.a.	n.a.
Cayman Islands (GB)	1,480	3,592	965	8.2	-73.1
Panama	3	7	5	0.0	-24.7
Bermuda (GB)	309	189	-329	n.a.	n.a.
British Virgin Islands	883	137	24	0.2	-82.2
Western Europe	4,785	4,861	8,210	69.3	68.9
EU	642	2,943	9,207	77.8	212.9
Germany	-813	1,185	389	3.3	-67.2
UK	540	-1,289	5,629	47.5	n.a.
France	504	177	371	3.1	109.4
Netherlands	-390	2,692	2,584	21.8	-4.0
Italy	62	33	-18	n.a.	n.a.
Belgium	148	-2,040	14	0.1	n.a.
Luxembourg	484	477	543	4.6	14.0
Sweden	368	92	-97	n.a.	n.a.
Spain	-44	66	9	0.1	-86.5
Ireland	-211	1,524	-252	n.a.	n.a.
Austria	-8	42	41	0.3	-3.8
Switzerland	1,162	1,873	-990	n.a.	n.a.
Eastern Europe, Russia, etc.	1	5	1	0.0	-87.0
Russia	-	1	0	0.0	-35.9
Middle East	3	-2	23	0.2	n.a.
Saudi Arabia	1	-	10	0.1	n.a.
United Arab Emirates	-	-0	0	0.0	n.a.
Israel	4	0	7	0.1	7779.8
Africa	33	21	61	0.5	195.8
South Africa	0	-	-	n.a.	n.a.
Mauritius	32	-	0	0.0	n.a.
World	22,181	24,550	11,839	100.0	-51.8

(Notes) (1) Figures released in yen were converted to the US dollar at the average quarterly Bank of Japan interbank rate.
(2) Negative figures indicate withdrawal.
(3) "0"indicates an amount of less than one million US dollars; "-" indicates no investment recorded during the corresponding period.
(4) Growth rates are yoy.
(5) "World" includes countries that are not classified into individual regions. Therefore, "World" figures are not necessarily equal to the sums of regional components.
(Sources) Ministry of Finance Balance of Payments Statistics and Bank of Japan foreign exchange rates.

Table 13 Japan's outward/inward foreign direct investment by industry (net flows; balance-of-payments basis)

(Unit: US$ million, %)

Outward FDI						Inward FDI					
	2007	2008	2009	Share	Growth rate		2007	2008	2009	Share	Growth rate
Manufacturing (total)	39,515	45,268	32,934	44.1	-27.2	Manufacturing (total)	1,381	2,261	3,490	29.5	54.3
Food	12,776	3,601	8,954	12.0	148.7	Food	365	-86	421	3.6	n.a.
Textile	371	716	477	0.6	-33.4	Textile	109	-3	-8	n.a.	n.a.
Wood and pulp	745	734	1,207	1.6	64.4	Wood and pulp	3	-5	-1	n.a.	n.a.
Chemicals and pharmaceuticals	3,744	11,647	7,407	9.9	-36.4	Chemicals and pharmaceuticals	-1,010	245	307	2.6	25.4
Petroleum	-280	652	-51	n.a.	n.a.	Petroleum	935	300	-19	n.a.	n.a.
Rubber and leather	835	771	445	0.6	-42.3	Rubber and leather	35	4	6	0.0	60.0
Glass and ceramics	837	1,417	2,042	2.7	44.1	Glass and ceramics	663	212	-90	n.a.	n.a.
Iron, non-ferrous and metals	2,202	3,152	3,738	5.0	18.6	Iron, non-ferrous and metals	230	124	287	2.4	131.8
General machinery	2,642	3,726	4,411	5.9	18.4	General machinery	-22	721	115	1.0	-84.0
Electrical equipment	4,691	5,675	2,505	3.4	-55.9	Electrical equipment	-391	642	1,705	14.4	165.7
Transport equipment	8,671	10,924	566	0.8	-94.8	Transport equipment	331	-55	469	4.0	n.a.
Precision instruments	1,293	953	609	0.8	-36.1	Precision instruments	20	113	94	0.8	-16.8
Non-manufacturing (total)	33,968	85,533	41,717	55.9	-51.2	Non-manufacturing (total)	20,800	22,289	8,349	70.5	-62.5
Agriculture and forestry	93	59	10	0.0	-83.5	Agriculture and forestry	41	1	-5	n.a.	n.a.
Fishery and marine products	64	119	36	0.0	-69.6	Fishery and marine products	-33	-2	1	0.0	n.a.
Mining	4,053	10,518	6,482	8.7	-38.4	Mining	—	—	-1	n.a.	n.a.
Construction	490	389	499	0.7	28.3	Construction	19	-60	16	0.1	n.a.
Transportation	2,133	2,283	2,894	3.9	26.7	Transportation	-288	43	-90	n.a.	n.a.
Communications	-331	1,675	3,870	5.2	131.1	Communications	-633	-1,028	619	5.2	n.a.
Wholesale and retail	4,792	13,319	8,418	11.3	-36.8	Wholesale and retail	1,660	1,160	1,057	8.9	-8.9
Finance and insurance	19,458	52,243	15,463	20.7	-70.4	Finance and insurance	17,661	19,823	5,205	44.0	-73.7
Real estate	162	162	463	0.6	186.5	Real estate	1,413	581	-71	n.a.	n.a.
Services	1,406	2,721	2,163	2.9	-20.5	Services	295	473	1,343	11.3	184.1
Total	73,483	130,801	74,650	100.0	-42.9	Total	22,181	24,550	11,839	100.0	-51.8

(Notes) (1) Figures released in yen were converted to the US dollar at the average quarterly Bank of Japan interbank rate.
(2) Negative figures indicate withdrawal.
(3) "0"indicates an amount of less than one million US dollars; "-" indicates no investment recorded during the corresponding period.
(4) Growth rates are yoy.
(Sources) Same as Table 12.

Table 14 Japan's outward/inward foreign direct investment balance by country and region

(Unit: US$ million, %)

	Outward FDI balance (assets)				Inward FDI balance (liabilities)			
	2007-end	2008-end	2009-end	Share	2007-end	2008-end	2009-end	Share
Asia	132,986	159,570	175,645	23.7	9,390	16,769	17,336	8.7
China	37,797	49,002	55,045	7.4	125	225	197	0.1
Hong Kong	9,129	11,716	13,048	1.8	2,301	3,203	2,656	1.3
Taiwan	7,742	8,830	9,349	1.3	1,534	1,892	1,999	1.0
South Korea	12,103	12,180	12,603	1.7	694	1,235	1,444	0.7
ASEAN10	61,435	67,654	75,746	10.2	4,721	10,193	11,004	5.5
Thailand	19,776	20,529	22,748	3.1	44	61	79	0.0
Indonesia	8,315	8,528	9,491	1.3	9	12	12	0.0
Malaysia	8,184	7,743	8,017	1.1	1	7	216	0.1
Philippines	5,780	7,800	8,186	1.1	46	61	60	0.0
Singapore	17,586	19,511	23,608	3.2	4,620	10,047	10,632	5.3
Vietnam	1,711	3,307	3,353	0.5	0	0	0	0.0
India	4,218	9,440	8,982	1.2	13	18	32	0.0
Oceania	19,617	21,624	36,175	4.9	779	1,075	1,095	0.5
Australia	17,940	19,107	32,557	4.4	764	838	853	0.4
New Zealand	951	1,440	2,039	0.3	11	231	230	0.1
North America	183,776	234,957	240,246	32.4	45,947	75,680	76,184	38.1
U.S.	174,199	226,611	230,948	31.2	44,795	74,344	75,003	37.5
Canada	9,577	8,346	9,298	1.3	1,152	1,336	1,181	0.6
Central and South America	54,749	90,794	99,056	13.4	15,227	23,576	20,990	10.5
Mexico	1,469	2,097	1,718	0.2	5	6	6	0.0
Brazil	11,028	16,492	21,337	2.9	32	40	32	0.0
Cayman Islands (GB)	32,038	61,531	65,353	8.8	10,469	17,363	16,965	8.5
Western Europe	145,884	161,649	174,939	23.6	62,341	86,915	83,883	41.9
EU	145,280	161,783	174,881	23.6	55,117	75,600	74,832	37.4
Germany	9,524	11,992	15,096	2.0	3,811	6,592	7,166	3.6
UK	32,021	32,576	31,282	4.2	5,962	6,750	7,318	3.7
France	12,415	14,920	16,811	2.3	12,776	16,233	15,208	7.6
Netherlands	63,941	72,172	77,470	10.5	26,025	36,510	36,034	18.0
Italy	837	882	1,100	0.1	509	719	694	0.3
Belgium	12,071	14,009	14,503	2.0	1,947	1,362	934	0.5
Luxembourg	3,537	4,332	7,235	1.0	2,267	4,000	4,262	2.1
Sweden	2,956	3,054	2,565	0.3	709	901	731	0.4
Spain	1,736	1,276	1,568	0.2	102	175	168	0.1
Switzerland	1,118	1,332	1,555	0.2	3,942	7,150	4,913	2.5
Eastern Europe, Russia, etc.	2,864	3,786	4,112	0.6	46	63	63	0.0
Russia	373	668	954	0.1	48	61	60	0.0
Middle East	3,066	4,164	4,453	0.6	20	29	51	0.0
Saudi Arabia	2,585	3,481	3,650	0.5	3	4	13	0.0
United Arab Emirates	254	303	338	0.0	1	1	1	0.0
Iran	5	6	6	0.0	-0	-2	-1	n.a.
Africa	3,895	7,325	5,734	0.8	99	275	342	0.2
South Africa	852	1,673	1,730	0.2	0	0	0	0.0
OECD nations	363,214	433,482	466,630	63.0	106,484	160,743	158,446	79.2
Total	546,839	683,872	740,364	100.0	133,888	204,433	199,991	100.0

(Notes) (1) Figures first released in Japanese yen were converted to US dollars using Bank of Japan year-end interbank rates.
(2) For inward FDI, negative figures indicate net outflow.
(3) "0"indicates an amount of less than one million US dollars.
(4) OECD member countries include the EU15, Australia, Canada, Iceland, New Zealand, Norway, Switzerland, Turkey, U.S., Mexico, Czech Republic, Hungary, South Korea, Poland, and Slovakia (29 countries in total).
(Sources) Based on Japan's Balance of External Assets & Liabilities statistics by Ministry of Finance and Bank of Japan, and Bank of Japan foreign exchange rates.

Table 15 Worldwide FTA list (191cases)

Area	Name	Effective date
Europe, Russia and the CIS, Middle East, Africa	European Union (EU; formerly European Community [EC] under Treaties of Rome)	1958.1.1
	European Free Trade Association (EFTA)	1960.5.3
	EU-Switzerland	1973.1.1
	EU-Syria	1977.7.1
	EU-Andorra	1991.7.1
	Economic Cooperation Organization (ECO)	1992.2.17
	EFTA-Turkey	1992.4.2
	EFTA-Israel	1993.1.1
	Armenia-Russia	1993.3.25
	Kyrgyzstan-Russia	1993.4.24
	Faroe Islands-Norway	1993.7.1
	Economic Community of West African S tates (ECOWAS)	1993.7.24
	European Economic Area (EEA)	1994.1.1
	Ukraine-Russia	1994.2.21
	Georgia-Russia	1994.5.10
	Common Market for Eastern and Southern Africa (COMESA)	1994.12.8
	Commonwealth of Independent S tates (CIS) economic union	1994.12.30
	Faroe Islands-Switzerland	1995.3.1
	Kyrgyzstan-Armenia	1995.10.27
	Ukraine-Turkmenistan	1995.11.4
	Kyrgyzstan-Kazakhstan	1995.11.11
	Armenia-Republic of Moldova	1995.12.21
	EU-Turkey	1996.1.1
	Ukraine-Uzbekistan	1996.1.1
	Georgia-Ukraine	1996.6.4
	Armenia-Turkmenistan	1996.7.7
	Georgia-Azerbaijan	1996.7.10
	Ukraine-Azerbaijan	1996.9.2
	Kyrgyzstan-Republic of Moldova	1996.11.21
	Armenia-Ukraine	1996.12.18
	EU-Faroe Islands	1997.1.1
	Turkey-Israel	1997.5.1
	EU-Palestinian Territories	1997.7.1
	Eurasian Economic Community (EAEC)	1997.10.8
	Pan-Arab Free Trade Area	1998.1.1
	Kyrgyzstan-Ukraine	1998.1.19
	EU-Tunisia	1998.3.1
	Kyrgyzstan-Uzbekistan	1998.3.20
	Ukraine-Kazakhstan	1998.10.19
	Georgia-Armenia	1998.11.11
	CEMAC (Economic and Monetary Community of Central Africa)	1999.6.24
	EFTA-Palestinian Territories	1999.7.1
	Georgia-Kazakhstan	1999.7.16
	EFTA-Morocco	1999.12.1
	EU-South Africa	2000.1.1
	Georgia-Turkmenistan	2000.1.1
	Western African Economic and Monetary Union (WAEMU/UEMOA)	2000.1.1
	EU-Morocco	2000.3.1
	EU-Israel	2000.6.1
	East African Community (EAC)	2000.7.7
	Turkey-Macedonia	2000.9.1
	Southern African Development Community (SADC)	2000.9.1
	EFTA-Macedonia	2001.1.1
	EU-Macedonia	2001.6.1
	Ukraine-Macedonia	2001.7.5
	Armenia-Kazakhstan	2001.12.25
	EFTA-Jordan	2002.1.1
	EFTA-Croatia	2002.1.1
	EU-Croatia	2002.3.1
	EU-San Marino	2002.4.1
	EU-Jordan	2002.5.1
	Ukraine-Tajikistan	2002.7.11
	Gulf Cooperation Council (GCC)	2003.1.1
	EU-Lebanon	2003.3.1
	Turkey-Bosnia and Herzegovina	2003.7.1
	Turkey-Croatia	2003.7.1
	Single Economic Space	2004.5.20
	EU-Egypt	2004.6.1
	Southern African Customs Union (SACU)	2004.7.15
	Ukraine-Moldova	2005.5.19
	EFTA-Tunisia	2005.6.1
	Turkey-Palestinian Territories	2005.6.1
	Turkey-Tunisia	2005.7.1
	EU-Algeria	2005.9.1
	Turkey-Morocco	2006.1.1
	Faroe Islands-Iceland	2006.11.1
	Ukraine-Belarus	2006.11.1
	EU-Albania	2006.12.1
	Turkey-Syria	2007.1.1
	EFTA-Lebanon	2007.1.1
	Turkey-Egypt	2007.3.1
	Central European Free Trade Agreement (CEFTA)	2007.5.1
	EFTA-Egypt	2007.8.1
	EU-Montenegro	2008.1.1
	Turkey-Albania	2008.5.1
	EFTA-SACU	2008.5.1
	EU-Bosnia and Herzegovina	2008.7.1
	Turkey-Georgia	2008.11.1
	EU-Cote d'Ivoire	2009.1.1
	EU-Cameroon	2009.10.1
	Turkey-Montenegro	2010.3.1

Area	Name	Effective date
Americas	Central American Common Market (CACM)	1961.10.12
	Caribbean Community (CARICOM)	1973.8.1
	Latin American Integration Association (ALADI)	1981.3.18
	Andean Community (CAN)	1988.5.25
	Common Market of the South (Mercosur)	1991.11.29
	North American Free Trade Agreement (NAFTA)	1994.1.1
	Costa Rica-Mexico	1995.1.1
	Canada-Chile	1997.7.5
	Mexico-Nicaragua	1998.7.1
	Chile-Mexico	1999.8.1
	Mexico-El Salvador	2001.3.15
	Guatemala-Mexico	2001.3.15
	Honduras-Mexico	2001.6.1
	Chile-Costa Rica	2002.2.15
	Chile-El Salvador	2002.6.1
	Canada - Costa Rica	2002.11.1
	Panama - El Salvador	2003.4.11
	U.S.-Chile	2004.1.1
	CAFTA-DR	2006.3.1
	Chile-Panama	2008.3.7
	Panama-Costa Rica	2008.3.7
	U.S.-Peru	2009.2.1
	Panama-Honduras	2009.1.9
	Chile-Colombia	2009.5.8
	Canada-Peru	2009.8.1
Asia-Pacific	Asia-Pacific Trade Agreement (APTA)	1976.6.17
	Papua New Guinea-Australia Trade and Commercial Relations Agreement (PATCRA)	1977.2.1
	South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA)	1981.1.1
	Australia/New Zealand Closer Economic Relations Trade Agreement (ANZCERTA)	1983.1.1
	Laos-Thailand	1991.6.20
	ASEAN Free Trade Area (AFTA)	1992.1.28
	Melanesian Spearhead Group (MSG)	1994.1.1
	New Zealand-Singapore	2001.1.1
	India-Sri Lanka	2001.12.15
	Japan-Singapore	2002.11.30
	ASEAN-China (Framework Agreement)	2003.7.1
	Singapore-Australia	2003.7.28
	Pacific Island Countries Trade Agreement (PICTA)	2003.11.30
	China-Macao	2004.1.1
	China-Hong Kong	2004.1.1
	Thailand-India	2004.9.1
	Thailand-Australia	2005.1.1
	Pakistan-Sri Lanka	2005.6.12
	Thailand-New Zealand	2005.7.1
	India-Singapore	2005.8.1
	South Asian Free Trade Area (SAFTA)	2006.1.1
	South Korea-Singapore	2006.3.2
	Japan-Malaysia	2006.7.13
	India-Bhutan	2006.7.29
	South Korea-ASEAN	2007.6.1
	China-Pakistan	2007.7.1
	Japan-Thailand	2007.11.1
	Pakistan-Malaysia	2008.1.1
	Japan-Indonesia	2008.7.1
	Japan-Brunei	2008.7.31
	China-New Zealand	2008.10.1
	Japan-Philippines	2008.12.11
	China-Singapore	2009.1.1
	India-Afghanistan	2003.5.13
	Japan-ASEAN	2008.12.1
	Japan-Vietnam	2009.10.1
	ASEAN-Australia-New Zealand	2010.1.1
	ASEAN-India	2010.1.1
	India-South Korea	2010.1.1
Cross-Regional	EU-OCTs (Overseas Countries and Territories)	1971.1.1
	PTN (Protocol relating to Trade Negotiations among Developing Countries)	1973.2.11
	U.S.-Israel	1985.8.19
	GSTP (Global System of Trade Preferences among Developing Countries)	1989.4.19
	Canada-Israel	1997.1.1
	EU-Mexico	2000.7.1
	Israel-Mexico	2000.7.1
	EFTA-Mexico	2001.7.1
	U.S.-Jordan	2001.12.17
	EFTA-Singapore	2003.1.1
	EU-Chile	2003.2.1
	Panama-Taiwan	2004.1.1
	U.S.-Singapore	2004.1.1
	South Korea-Chile	2004.4.1
	EFTA-Chile	2004.12.1
	U.S.-Australia	2005.1.1
	Japan-Mexico	2005.4.1
	Jordan-Singapore	2005.8.22
	U.S.-Morocco	2006.1.1
	Trans-Pacific Strategic Economic Partnership Agreement (P4)	2006.5.28
	Panama-Singapore	2006.7.24
	U.S.-Bahrain	2006.8.1
	EFTA-South Korea	2006.9.1
	China-Chile	2006.10.1
	India-Chile	2007.8.17
	Japan-Chile	2007.9.3
	Nicaragua-Taiwan	2008.1.1
	Honduras-Taiwan	2008.3.1
	EU-CARIFORUM	2008.11.1
	U.S.-Oman	2009.1.1
	Australia-Chile	2009.3.6
	Mercosur-India	2009.6.1
	EFTA-Canada	2009.7.1
	Peru-Singapore	2009.8.1
	Japan-Switzerland	2009.9.1
	Peru-China	2010.3.1

(Notes) Although the EEA has been reported to the WTO only under Article 5 (Services) of the GATS Agreement, the agreement contains elements of liberalization of trade in goods.
(Sources) Based on list on WTO website (http://rtais.wto.org/UI/PublicAllRTAList.aspx) as of June 1, 2010,
to which ASEAN - South Korea, ASEAN - India, India - South Korea, and Thailand - India have been added.