Chapter 1 Current and Future Status of the Global Economy in Transition

The subprime mortgage loan problem (subprime loan) of 2007 led to a financial crisis after the Lehman Brothers investment bank went bankrupt in the fall of 2008.

This crisis which originated in the United States was marked by 1. a huge influx of capital which created an economic environment where an even larger amount of consumption was possible in the United States and, 2. a rapid increase in leverage by financial institutions and the globalization of the financial industry[1] which caused countries which were not even at the epicenter of the crisis, such as Japan, to be effected. More specifically, the credit crunch and rapid decrease in demand through interlocking trade investment had grave repercussions for the various countries and regions around the world. (Global economic crisis)

Within the framework of the G20 and other organizations, various countries enacted their own financial measures which helped the global economy avoid a crisis and generally start on the road to recovery.

Chapter 1 will provide an overview of the current status and issues of the global economy after the global economic crisis. The following topics will be covered in more detail.

1) Status of the global economic recovery and measures implemented by various countries, regions and related organizations.

2) Analysis of risk factors related to the global economy returning on track to a self-sustaining recovery.

3) Show that the global economic structure is in the middle of transitioning from an over concentrated dependence on US consumption to a more multifaceted structure.

Section 1 Current status of the global economy and movement to alter its structure

1. Current status of the global economy and future forecast

(1) Current status of the global economy

(a)The rise and expectation on emerging countries

After the crisis in the fall of 2008, the global economy entered into the worst economic decline in recent year causing a 2009 GDP growth rate of -0.6% which was the first negative economic growth in 60 years[2]. However, thanks to the large scale financial policies of various countries the world economy hit bottom in 2009. According to the IMF, the global GDP growth rate for 2010 is forecast to be 4.2%. (Table 1-1-1-1)[3]. The speed of the economic recovery differs largely by country and region. While the economies of developed countries which rapidly tumbled due to the global economic crisis in 2009 are

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1 Trading on margin or using financial derivatives products in investing to manipulate a larger amount of funds than funds on hand. Using the securities purchased as collateral, the amount of leverage can be further increased by borrowing and investing again. A comparison of equity shows that both losses and gains are increased.

2 IMF online survey (2009), 'Signs of the first negative growth for the global economy in 60 years', "In an analysis submitted to 20 countries made up of developed and emerging countries (G20), the global economy is forecast to experience between 0.5% and 1% negative growth on an annual basis, and this drop in economic growth would be the first in 60 years."

3 IMF (2010a), World Economic Outlook, April 2010.

forecast to recover and transition into the positive in 2010, growth will be relatively moderate. Meanwhile, China and other Asian countries are maintaining a 6.6% economic growth rate in 2009 and in 2010 are forecast to achieve a high growth rate of 8.7%.

When the real GDP growth rate is looked at quarterly, it is possible to confirm that the global economy is heading toward recovery after the first quarter of 2009 (Figure 1-1-1-2). However, while economic growth in emerging countries largely exceeded the global average, growth in developed countries was lower than the global average.

Based on data from the IMF, when the economic growth rate of the six years[4] before and after the global economic crisis are examined, the proportion that emerging countries contribute to this percentage is estimated to jump from 22% in 2003 to 60% in 2015, which would be a 2.7 fold increase. In addition, when the percentage contributed by emerging countries is compared before and after the crisis, this rate is forecast to increase from 40% to 60% and beyond that of developed countries (Figure 1-1-1-3). In this way, the rapid economic growth and expansion of emerging countries' economies is forecasted.

[4] The predicted values for the GDP growth rate and percentage contributed to this amount by countries in the world for the six years after 2009 between 2010 and 2015 has been given by the IMF, and it was decided to trace back the values in a similar way before 2009 for the six years between 2003 and 2008.

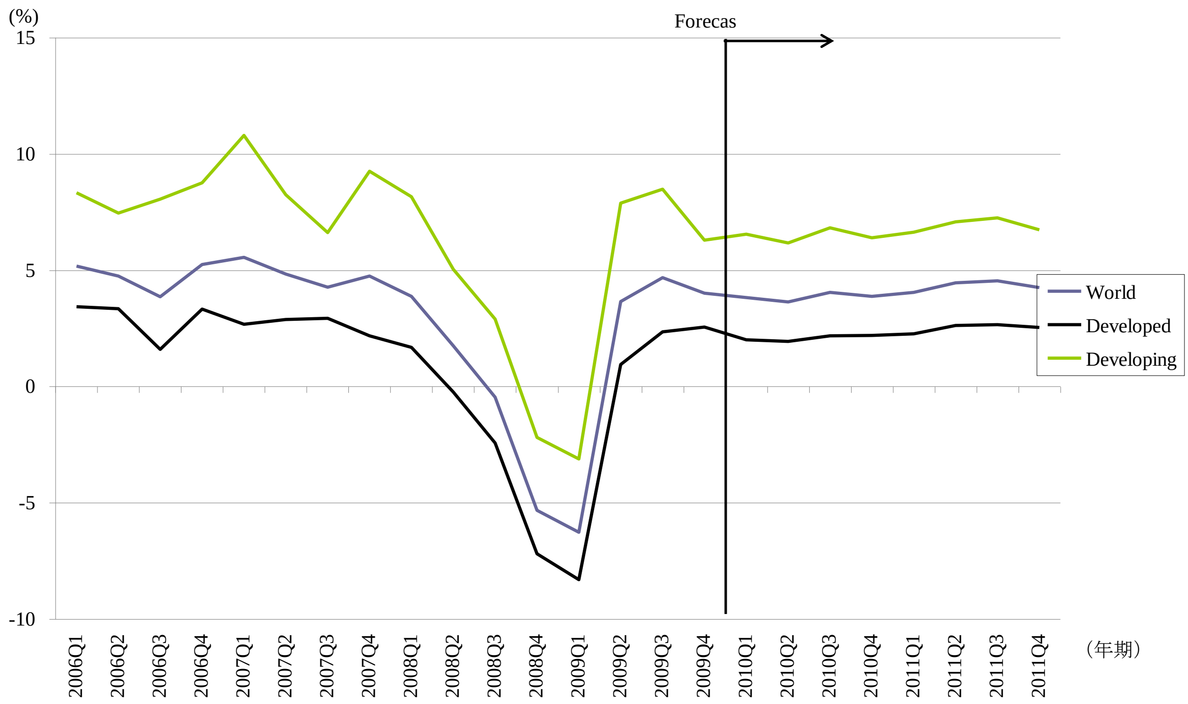
Table 1-1-1-1: Global Economic Outlook (April 2010)

	2008	2009	Current Outlook 2010	Current Outlook 2011
Global Economic Growth	3.0	-0.6	4.2	4.3
Developed Nations	0.5	-3.2	2.1	2.4
US	0.4	-2.4	3.1	2.6
Europe	0.6	-4.1	1.0	1.5
Germany	1.2	-5.0	1.2	1.7
France	0.3	-2.2	1.5	1.8
Italy	-1.3	-5.0	0.8	1.2
Spain	0.9	-3.6	-0.4	0.9
Japan	-1.2	-5.2	1.9	2.0
England	0.5	-4.9	1.3	2.5
Canada	0.4	-2.6	3.1	3.2
Other Developed Nations	1.7	-1.1	3.7	3.9
Emerging Economies	6.1	2.4	6.3	6.5
Central & Eastern Europe	3.0	-3.7	2.8	3.4
Commonwealth of Independent States (CIS)	5.5	-6.6	4.0	3.6
Russia	5.6	-7.9	4.0	3.3
Non-Russian	5.3	-3.5	3.9	4.5
Emerging Asia	7.9	6.6	8.7	8.7
China	9.6	8.7	10.0	9.9
India	7.3	5.7	8.8	8.4
ASEAN-5	4.7	1.7	5.4	5.6
Middle East & Northern Africa	5.1	2.4	4.5	4.8
Sub Saharan Africa	5.5	2.1	4.7	5.9
Brazil	5.1	-0.2	5.5	4.1
Mexico	1.5	-6.5	4.2	4.5

Note: Red indicates negative growth.

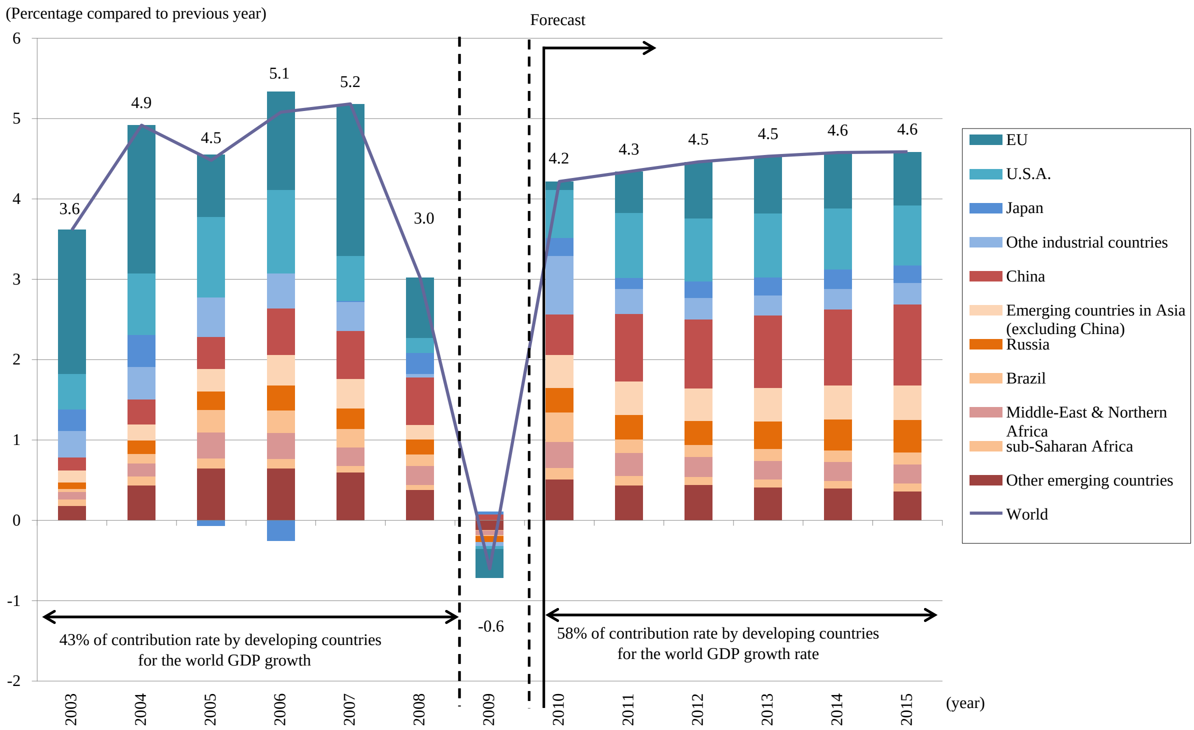
Source: reprinted from IMF "World Economic Outlook, April 2010".

Figure 1-1-1-2: Real GDP Growth Rate Trends for Industrial/Developing Countries (Quarterly, USD Base)



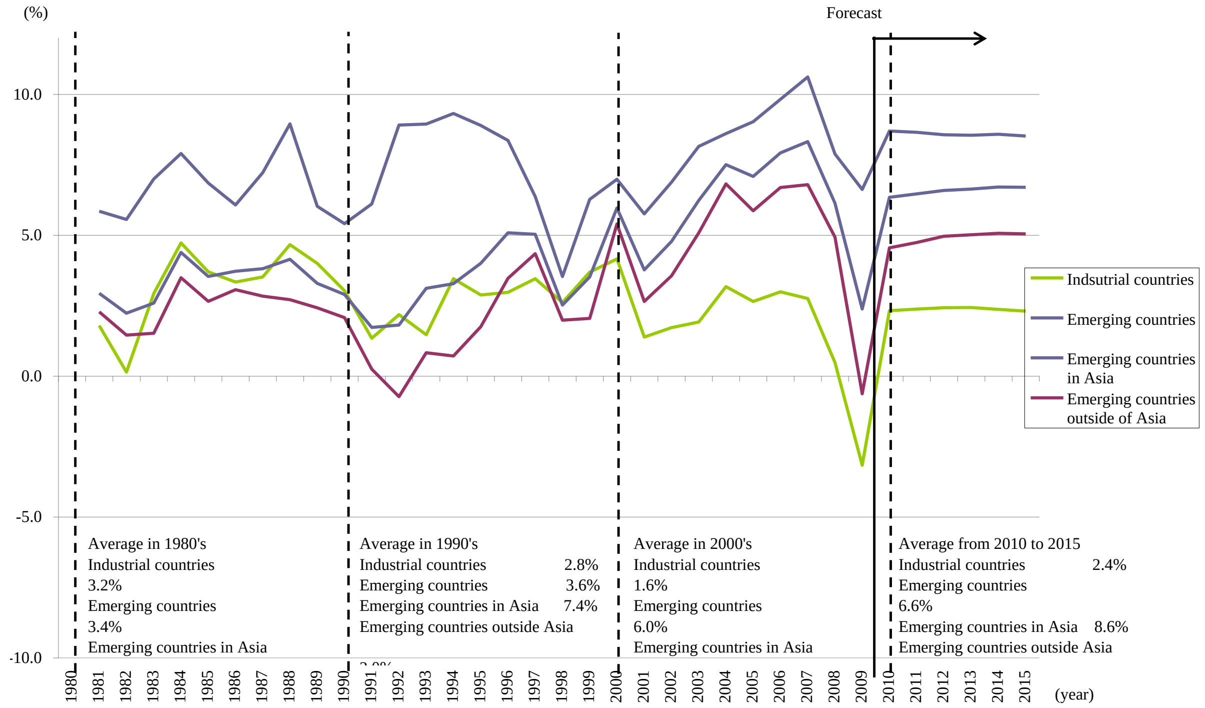
Source: "World Economic Outlook Update, January 2010" by the IMF

Figure 1-1-1-3: Breakdown of GDP Growth Rates and Contribution Rates for Each Country



Remarks: The contribution rate was calculated by applying nominal contribution rates of each country to the world GDP real growth rate.
Data source: IMF "World Economic Outlook, April 2010"

Figure 1-1-1-4: Real GDP Growth Rate Trends for Industrial/Developing Countries (Annual, USD Base)



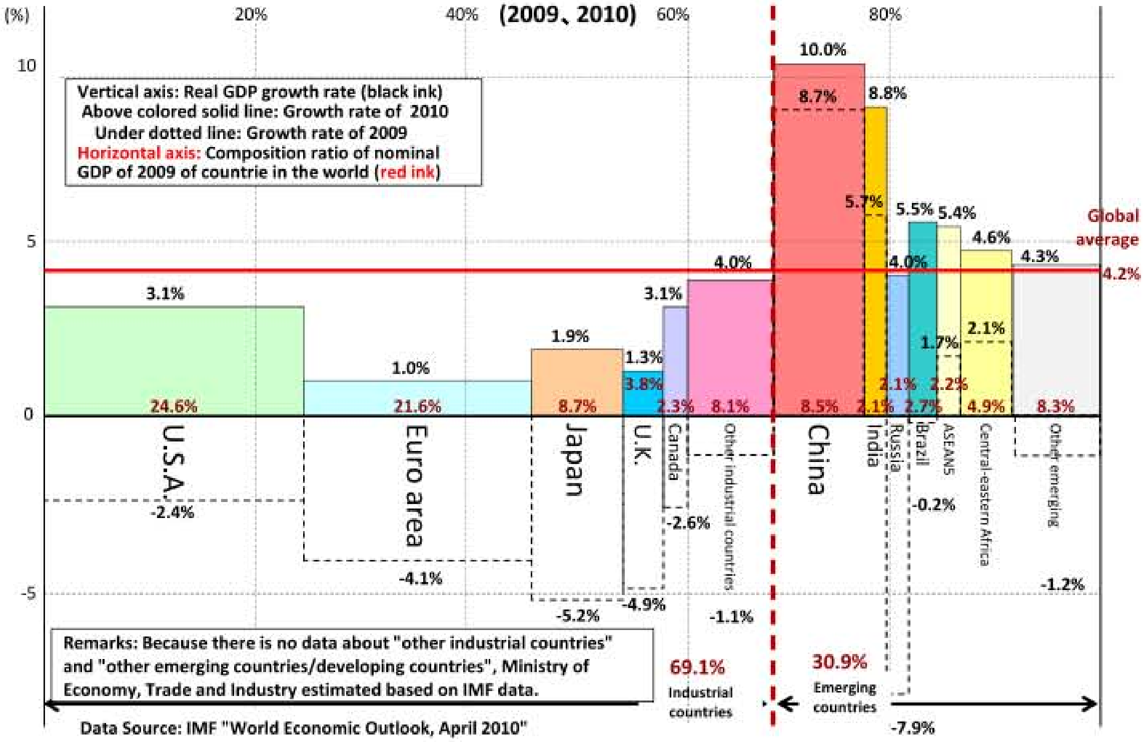
Remarks: The growth rates of countries outside Asia were estimated by Ministry of Economy, Trade and Industry based on the values of emerging countries and Asian emergping countries.

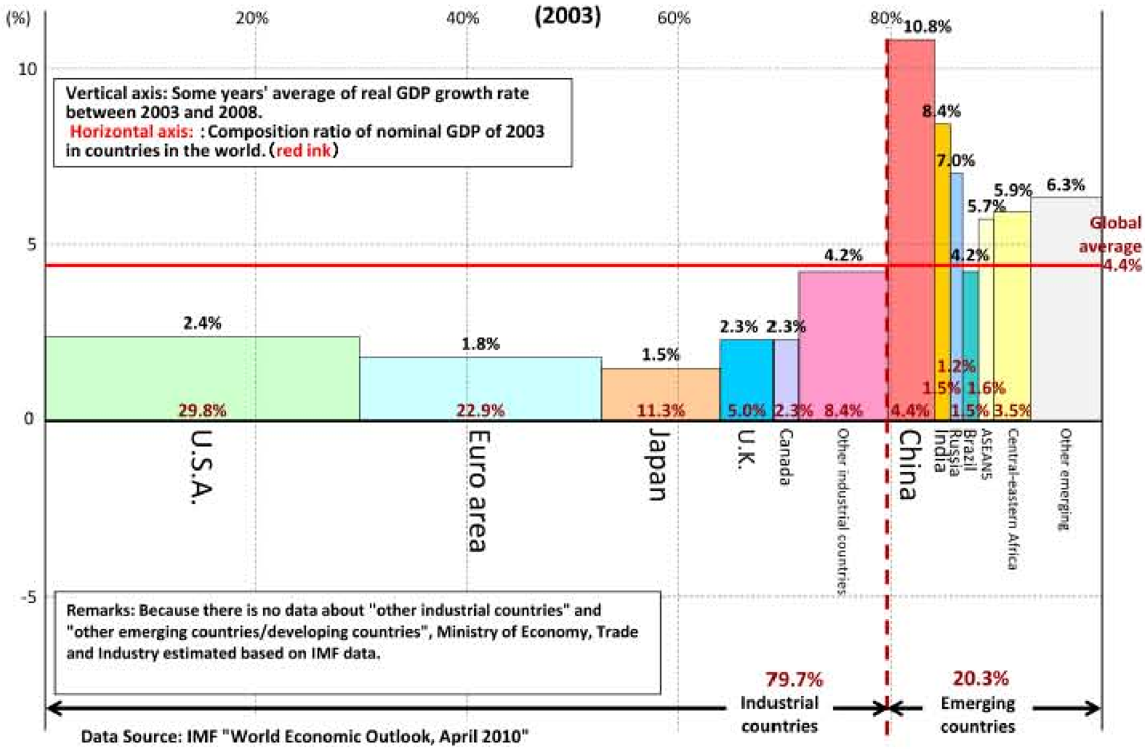
Furthermore, when the mid- and long-term real GDP rate per year is examined, growth of developed countries outpaced emerging countries until the beginning of the 1990's. However, during the mid-1990's and later, Asia emerged as the world's factory and began to show high growth after overcoming their currency crisis. After the early 2000's, with demand expanding in countries with large populations like China and India and resource prices soaring after the mid-2000's, Russia, Brazil, China and other resource rich countries showed growth. In this way, once the 2000's began, emerging countries including those in Asia started exceeding the growth exhibited by developed countries and this trend is projected to continue into the future (1-1-1-4). The growth rate of just emerging countries in Asia was 0.3% during the 1980's, increased to 7.2% during the 1990's and further increased to 10.5% during the 2000's.

A forecast of strong overall growth for developed countries in the future is thought to be difficult because of the slow recovery of credit creation among other issues. On the other hand, the proportion of global GDP taken up by emerging countries including China was 30.9% in 2009 and has expanded to 32.7% in 2010 (Figures 1-1-1-5 and 1-1-1-6)[5]. Emerging countries are forecast to occupy 38.8% of global GDP by 2015 and their presence is expected to increase along with their size and growth rates. In these ways it is thought that emerging countries have played a role in propping up the global economy and there are expectations that this growth will continue.

[5] The predicted values for the GDP growth rate and percentage distribution of countries in the world have been given by the IMF for the six years after 2009 between 2010 and 2015. Therefore, we decided to take a look back at the values in a similar way before 2009 for the six years between 2003 and 2008 and look at the three following periods, 2009, 2003 to 2008, and 2010 to 2015.

Figure 1-1-1-5: GDP structural ratio and growing rate of all the countries of the world





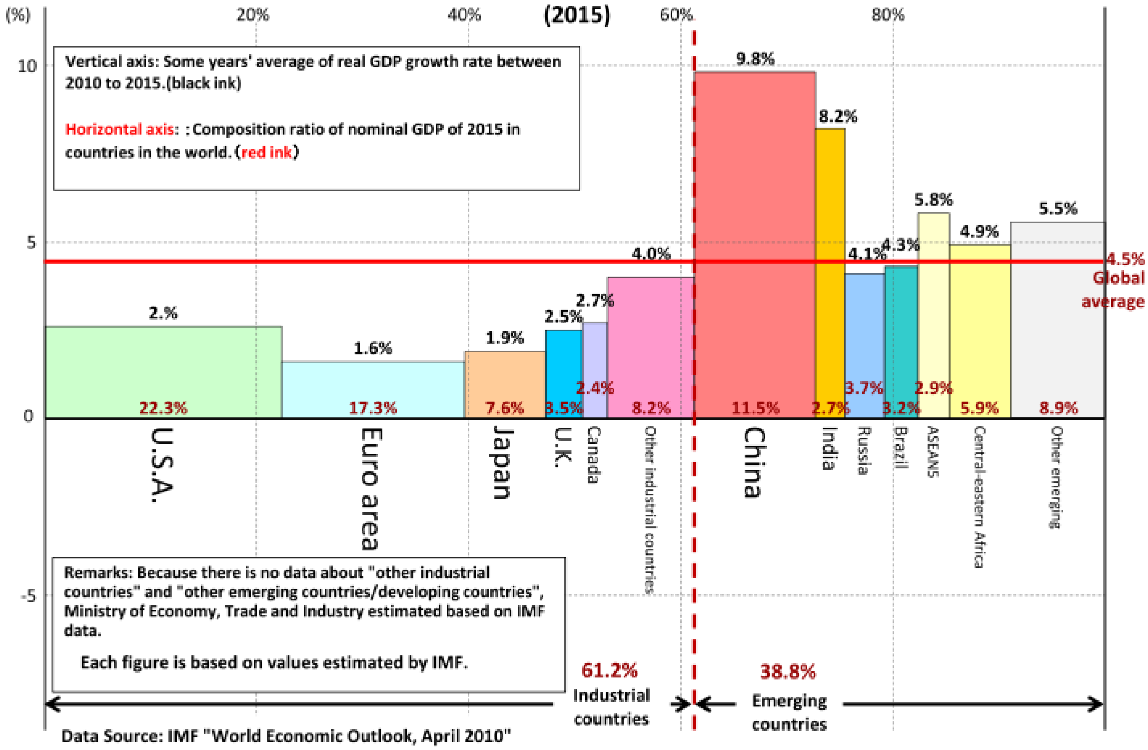
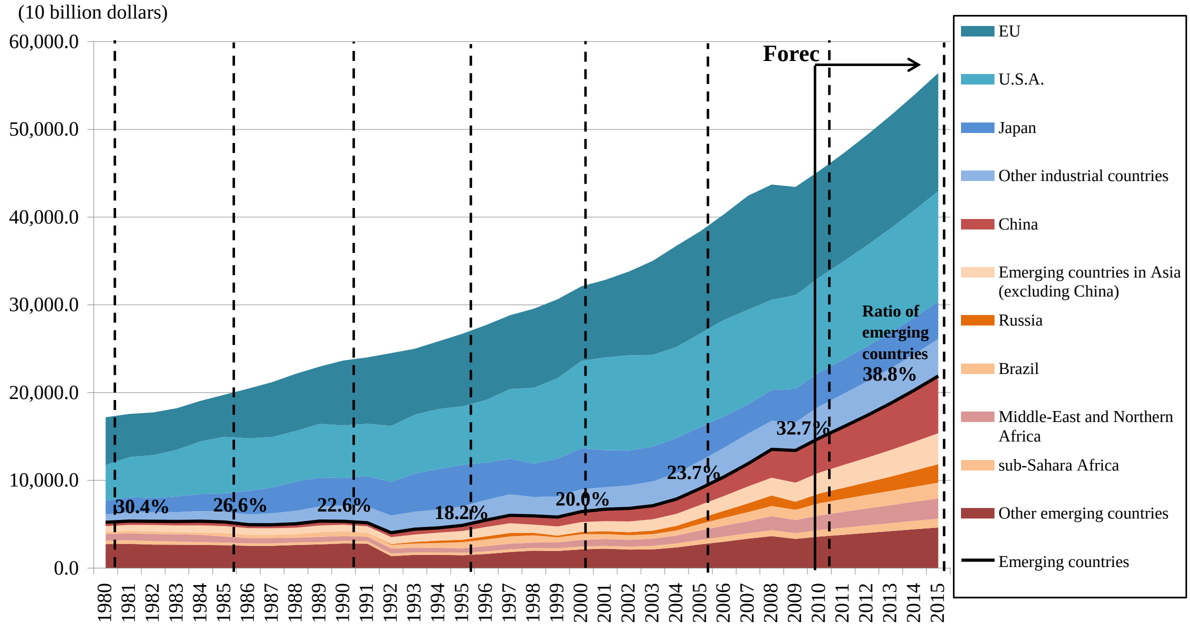


Figure 1-1-1-6: Global Real GDP Trends (USD Base)



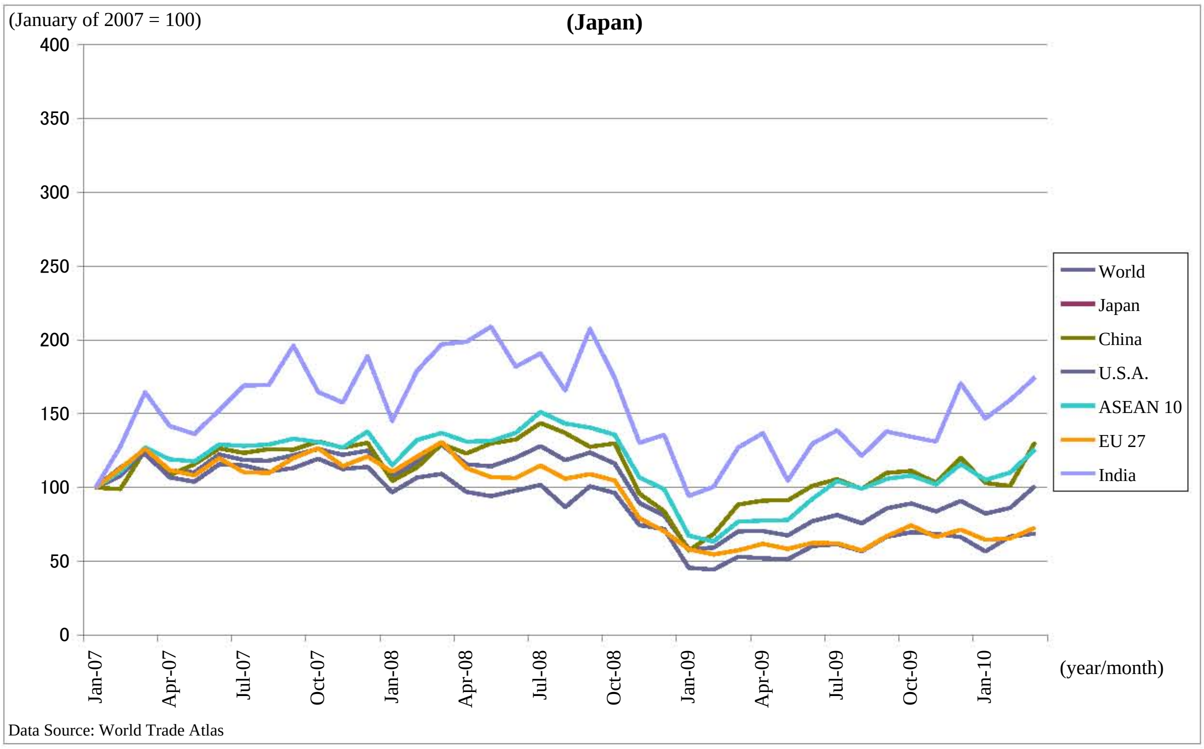
Remarks: Real GDP of each year (2000 basis, total GDP of the world) was estimated by multiplying IMF-projected-real-growth-rate by nominal GDP of 2000 (total of the world).
Composition ratio of GDP for each country/area was estimated based on nominal amount.
Real GDP of each country was estimated by multiplying projected-composition-ratio by real GDP (total of the world).
Data Source: IMF "World Economic Outlook Database"

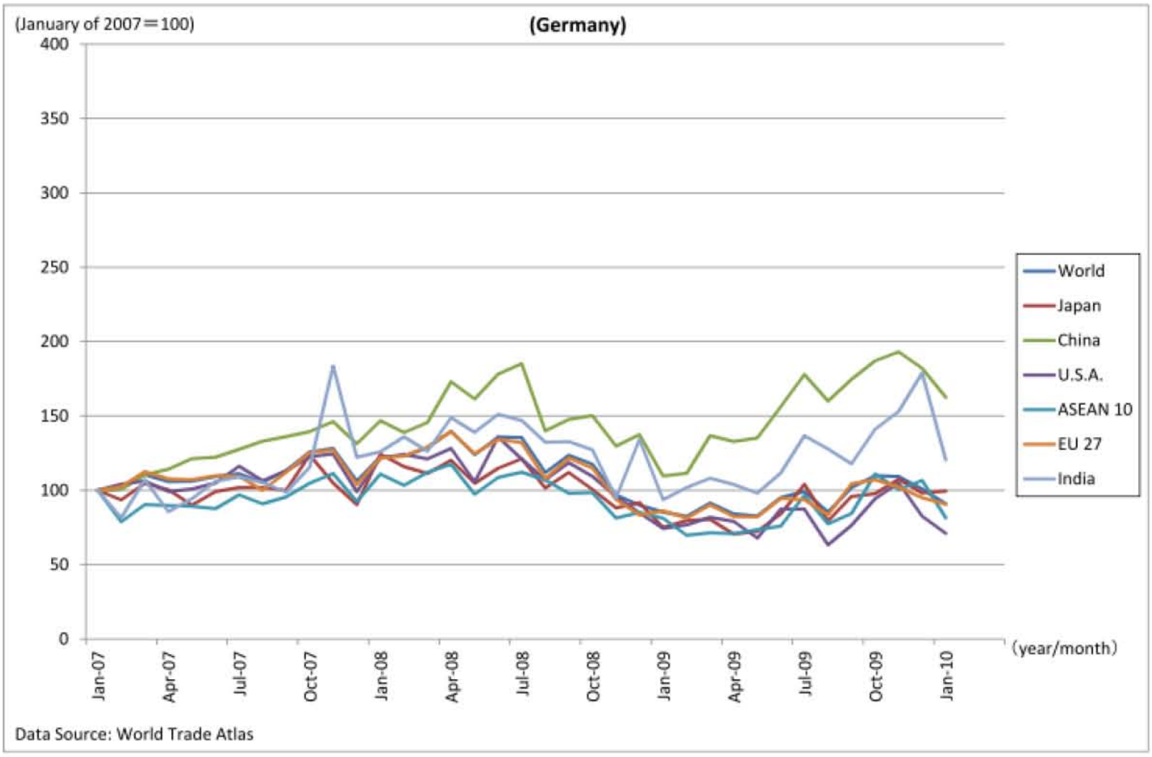
(b)Changes in global trade and capital movement due to the crisis

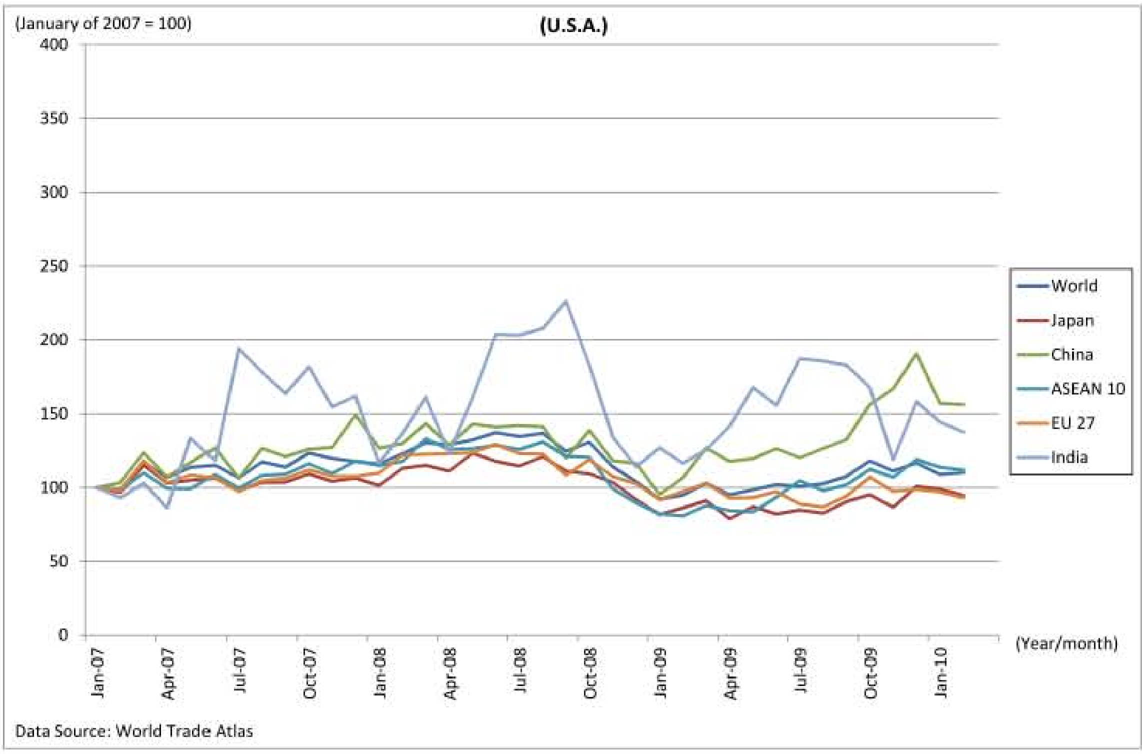
(A) Changes in trade between major countries and regions

Imports of various countries dramatically dropped after the Lehman Brother's crisis in September 2008, and in 2009 the worst was over. Figure 1-1-1-7 compares import levels of major exporters to Asia including Japan, China and South Korea and major exporters of the United States and Europe including Germany, the United States, France and the United Kingdom before and after the crisis. In all of the countries, exports to the United States and Europe which are recovering slower than emerging countries have not yet rebounded. On the other hand, exports to Asia have generally returned to levels before the crisis. Growth in exports to China from the United States and the United Kingdom are especially apparent.

Figure 1-1-1-7: Transition of value of exports of each country (Monthly base, index 2007/1=100)







(January of 2007 = 100)
(U.S.A.)
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World
Japan
China
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EU 27
India
(Year/month)
Jan-07
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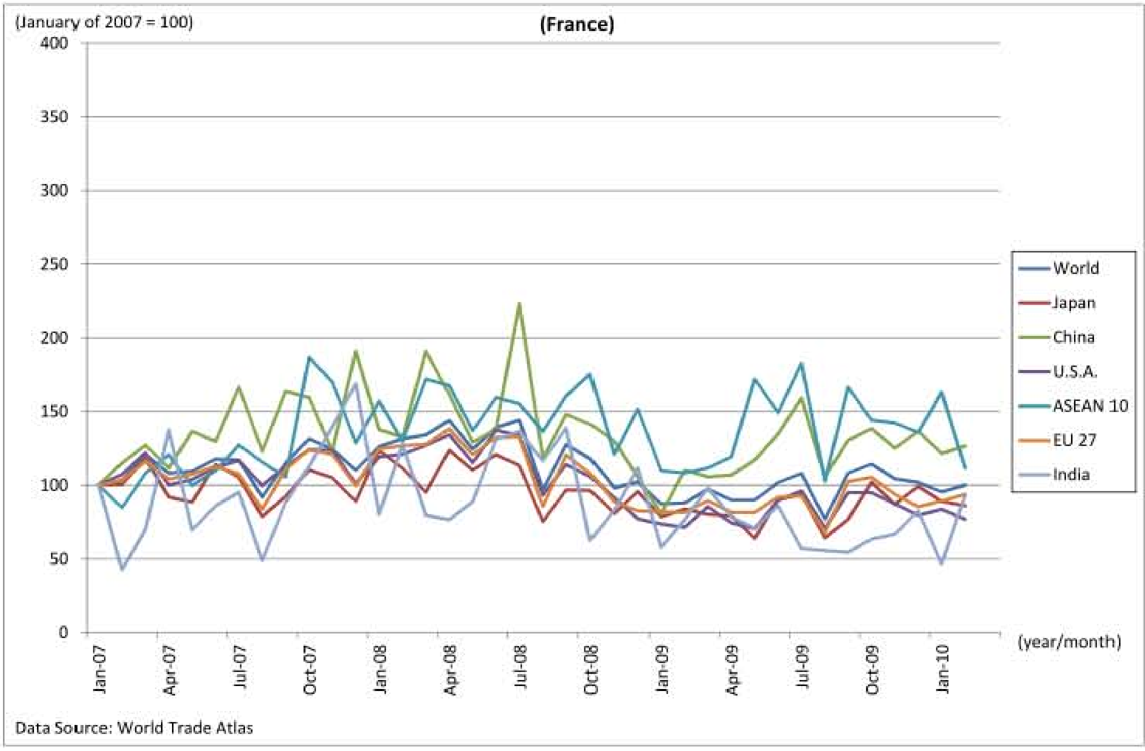
Data Source: World Trade Atlas



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100
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0
World
Japan
China
U.S.A.
ASEAN 10
EU 27
India
(year/month)
Jan-07
Apr-07
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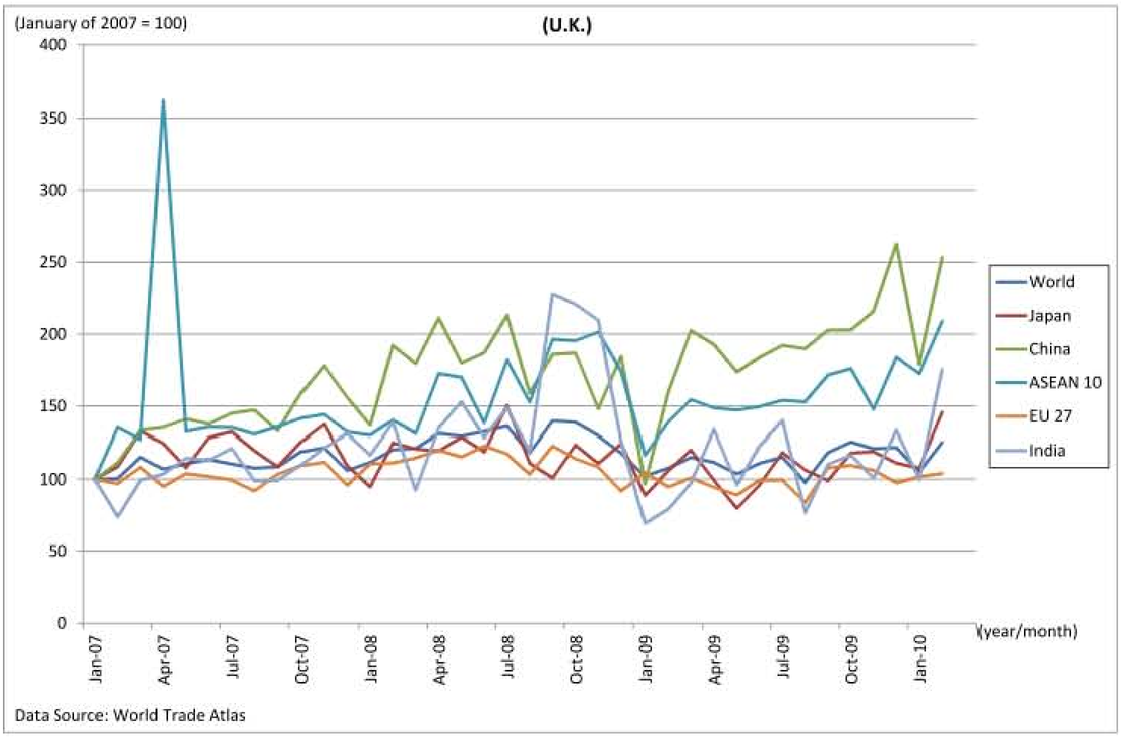
Data Source: World Trade Atlas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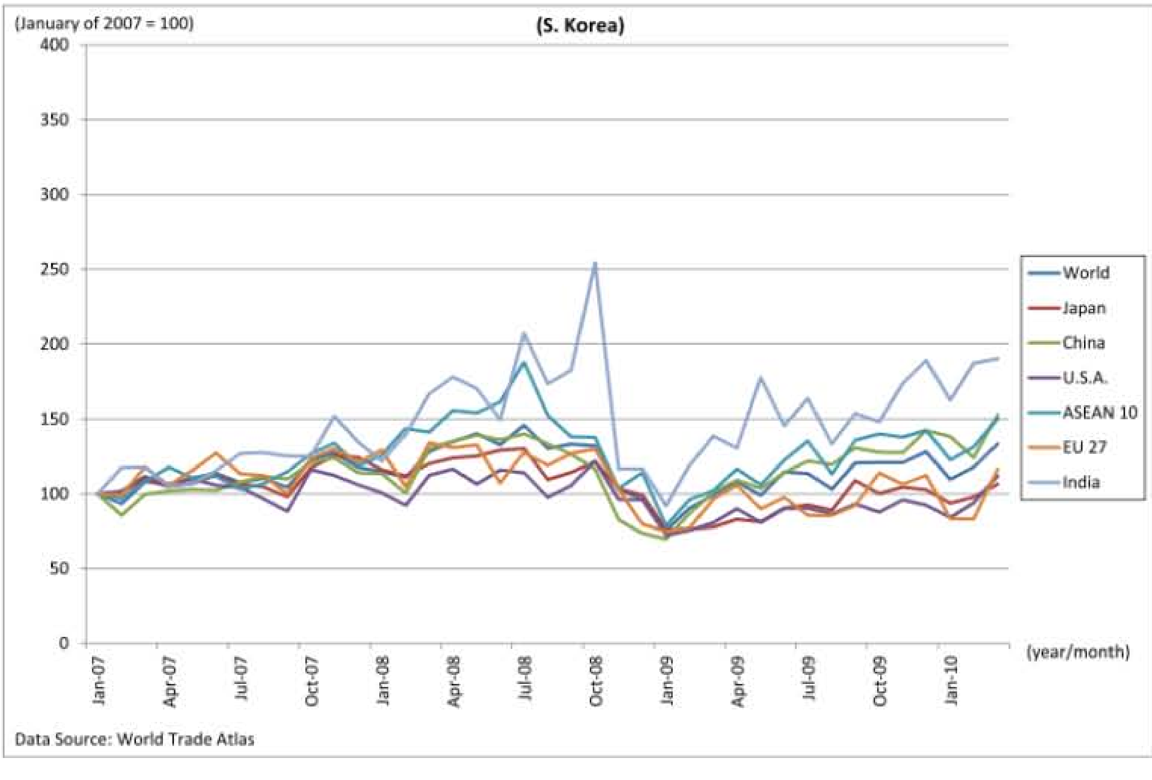
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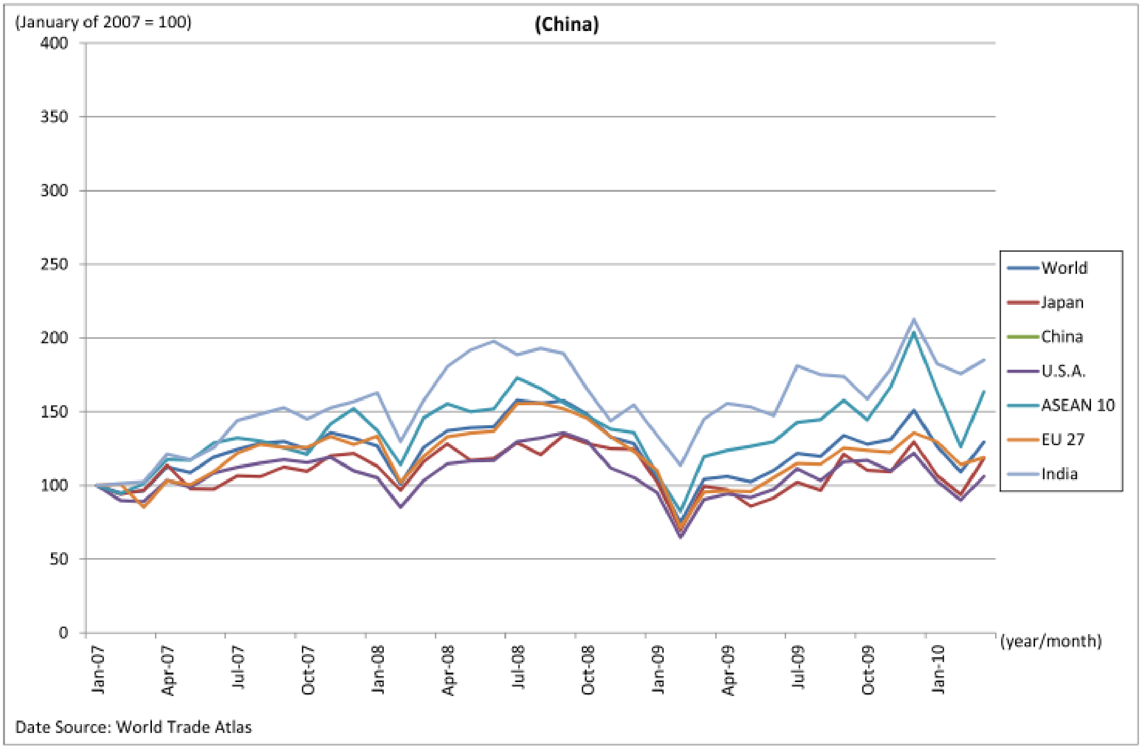
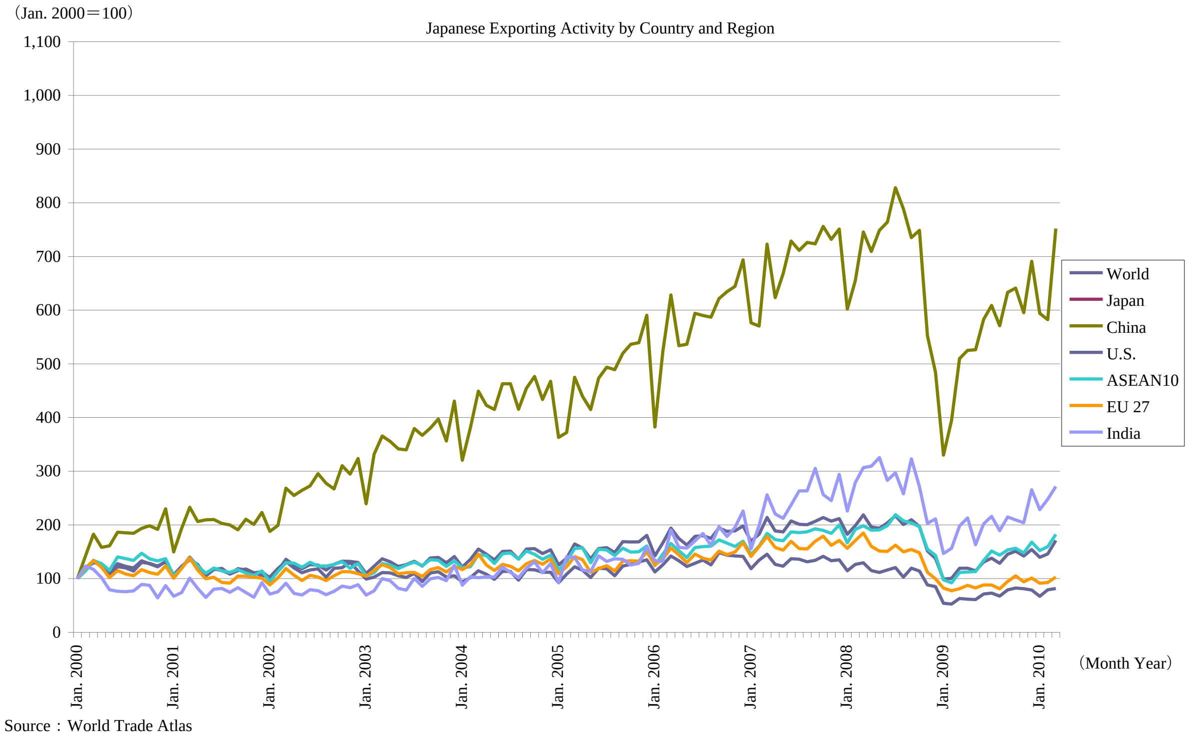
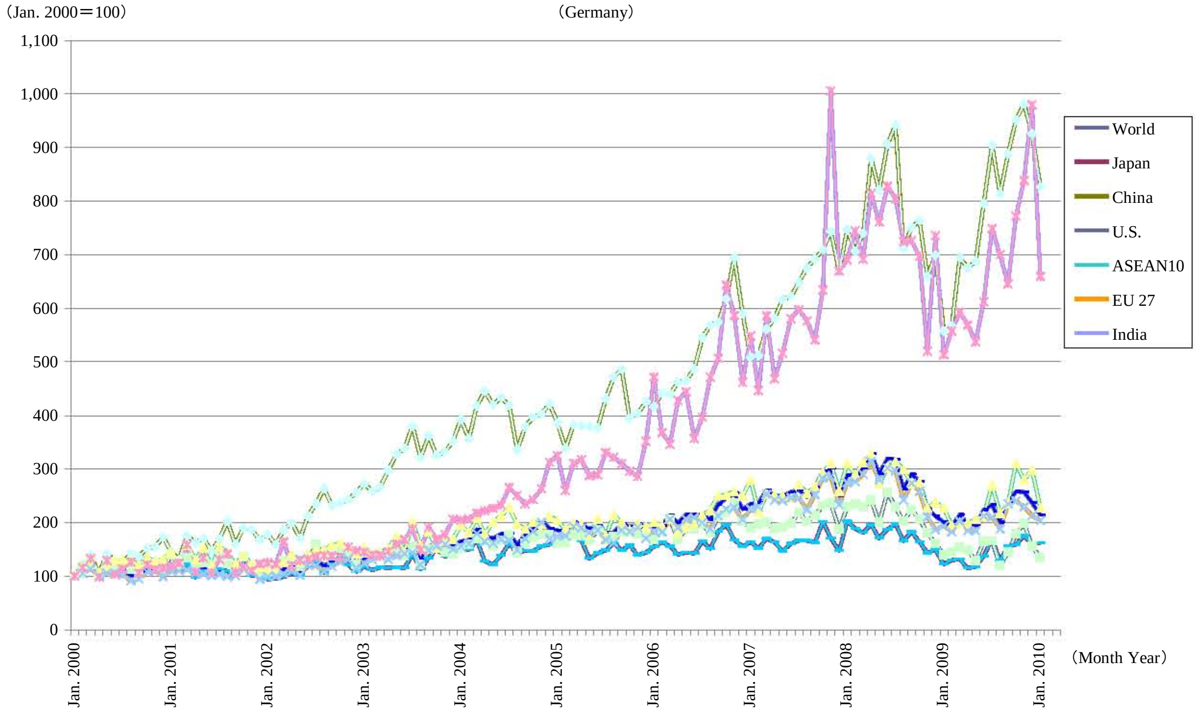
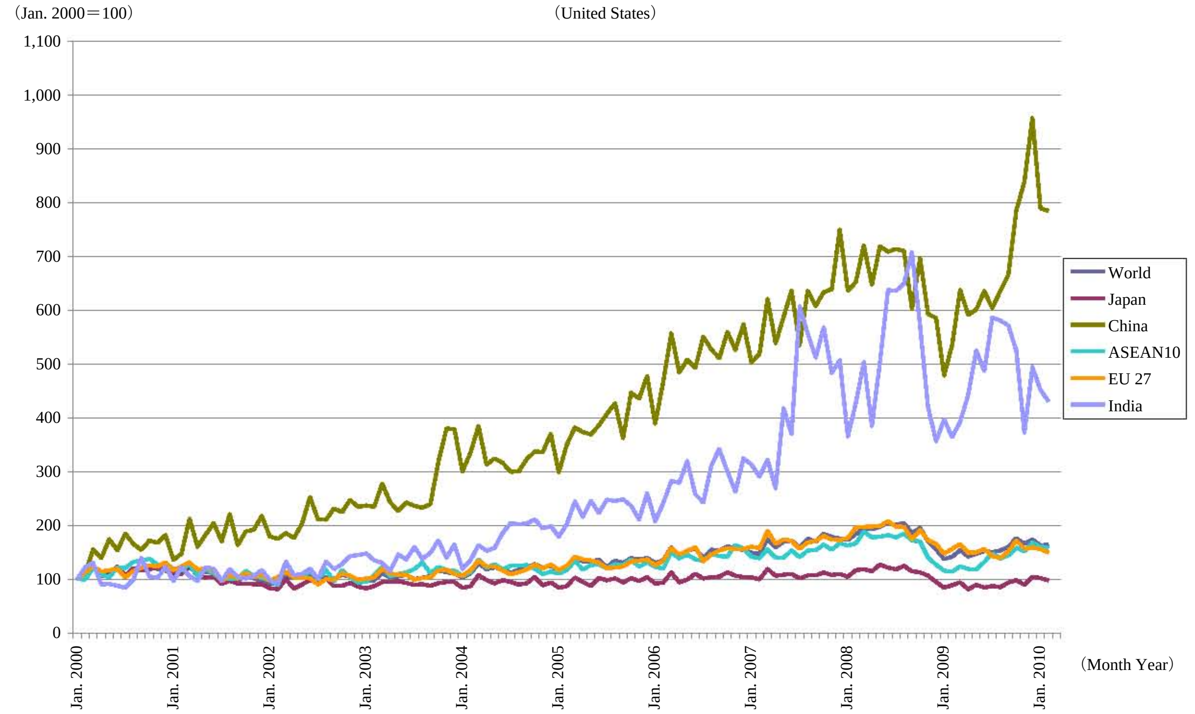


Figure 1-1-1-8: Export Value Trends for Each Country (Monthly Base, Index: January 2000 = 100)



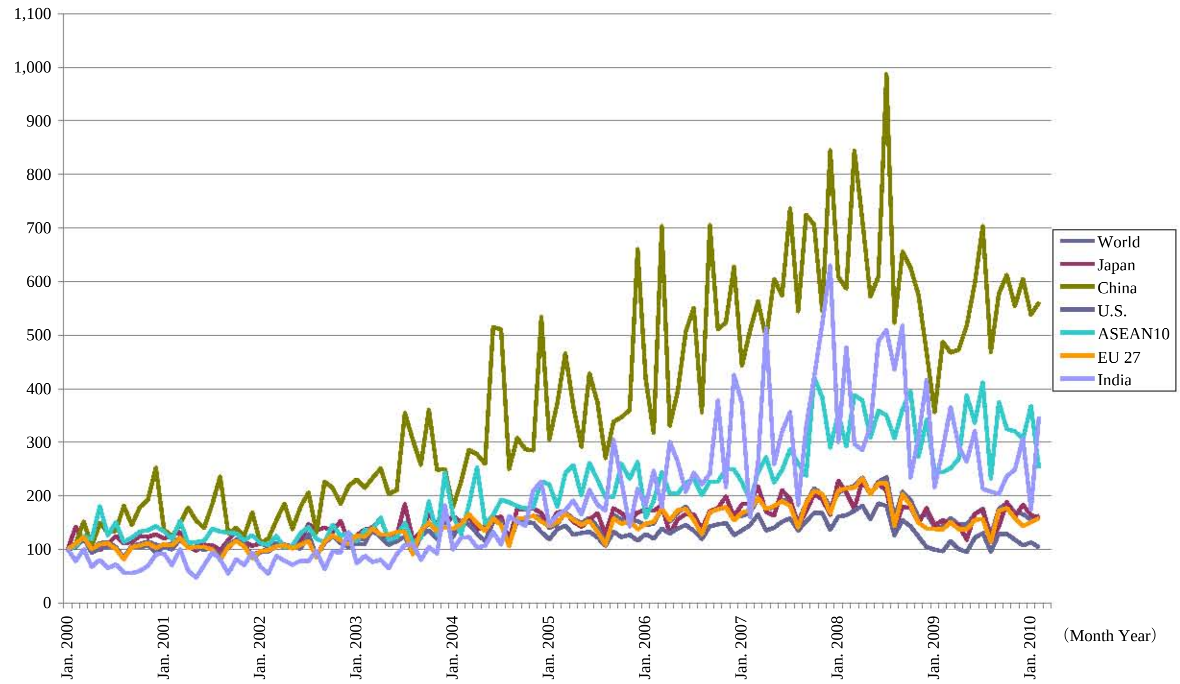


Source: World Trade Atlas



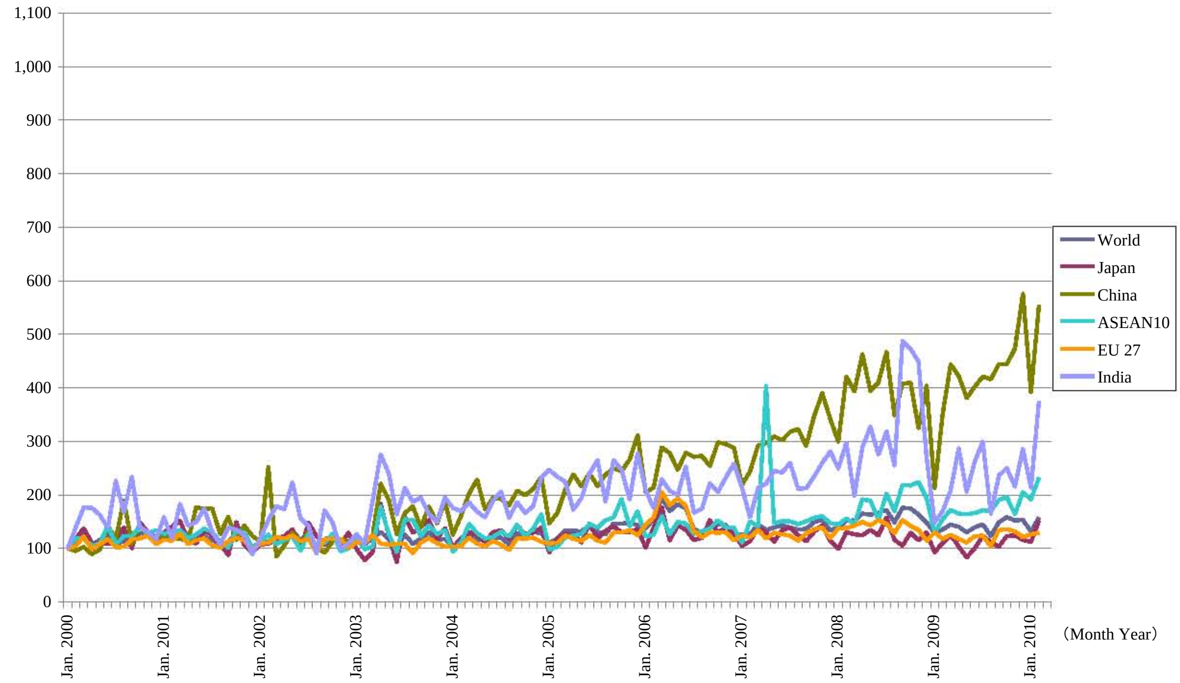
Source: World Trade Atlas

(Jan. 2000＝100)　(France)



Source: World Trade Atlas

(Jan. 2000＝100)　(United Kingdom)



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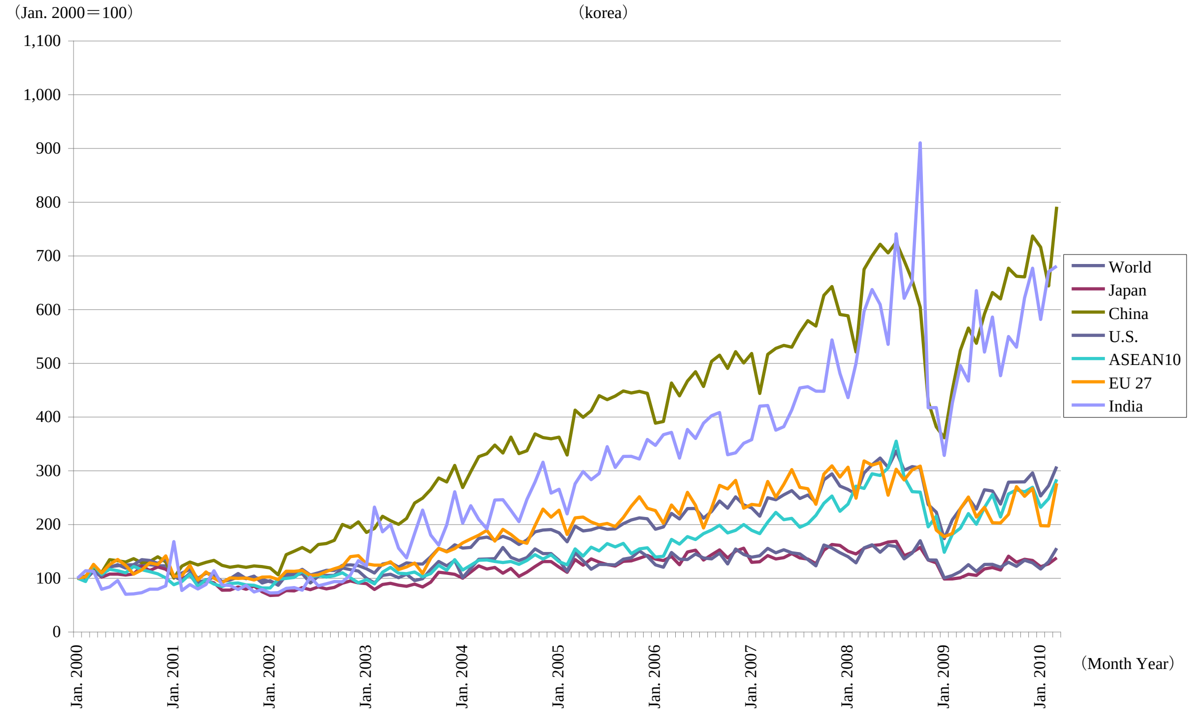

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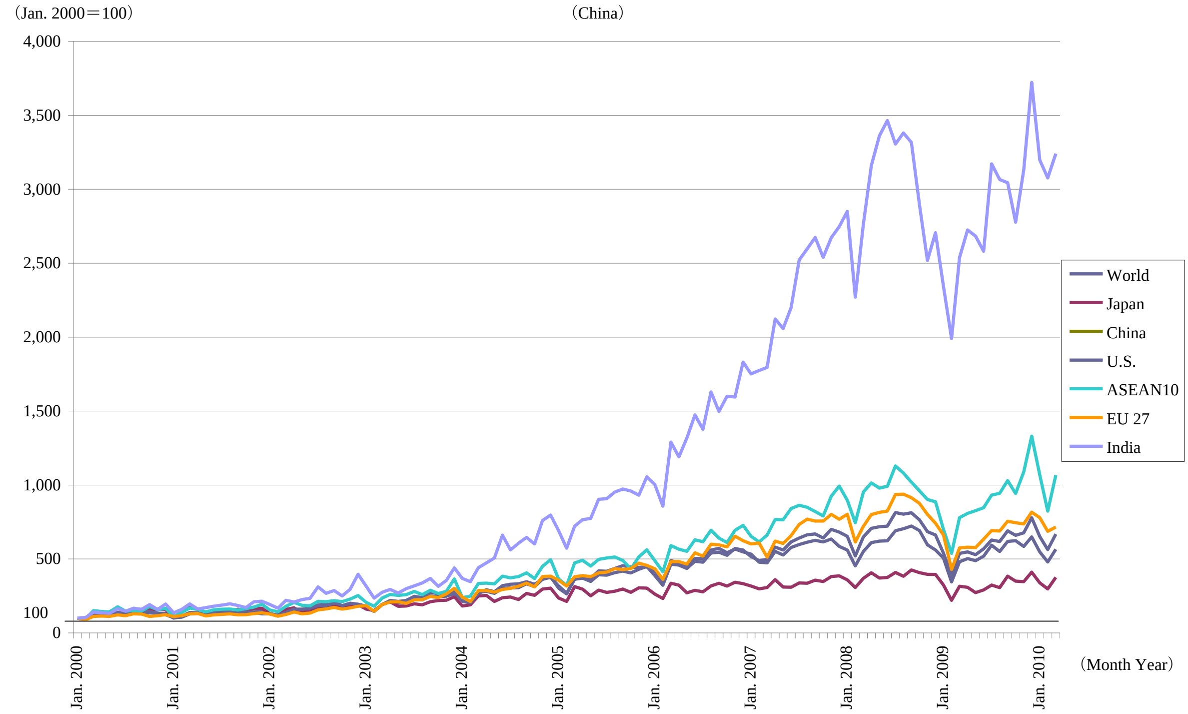


Source: World Trade Atlas

When looked at in the mid- to long-term over the past ten years, it is readily apparent that Asia, mainly China and India, are significantly rising in status as both a consuming region and export location (Figure 1-1-1-8).

(B) Changes in capital movement between major regions

It appears that the flow of capital between major regions[6] after 2000 has seen an expansion in capital exports from emerging countries and resource-rich countries with current account surpluses to the United States, the United Kingdom and other developed countries with current account deficits.

The basic flow of capital from emerging countries and resource-rich countries has seen their public sectors (monetary authorities) export capital through huge foreign investment preparations. Their private sectors have been importing capital through securities investments (stocks and bonds) and direct investment, among other means.

When this flow of capital is explained from the viewpoint of the United States which was the epicenter of the global economic crisis, the following changes before and after the crisis are clear.

•Before the crisis (2nd quarter 2007)

During the 2nd quarter of 2007 before the crisis began, capital was flowing into the United States from all regions. The amount of capital flowing into the United States was more than the amount flowing out.

There was a larger flow of capital between the United States and Europe than between any other region.

Flow of capital from Latin America, the Middle East and Africa to the United States could also be confirmed.

•During the crisis (3rd quarter 2008)

After summer 2007 which was the start of the subprime loan problem and furthermore the bankruptcy of Lehman Brothers in fall 2008, risk preferences of global investors dropped rapidly. As a result, there was a delay in the flow of funds mainly into the United States. More specifically, the inflow of capital into the United States from Europe, Latin America, the Middle East and Africa and the flow of capital from the United States to various countries in Asia, the Middle East, Africa and offshore became negative. However, the flow of capital from various Asian Pacific countries during the same period only dropped around 20%.

•One year after the crisis

1) 3rd quarter 2009

One year after the crisis began during the 3rd quarter of 2009, the inflow of capital to the United States began to return. In addition, the flow of capital from the United States to other regions also started to return. There has especially been a flow of capital from the United States to Asian Pacific countries that exceeds the amount before the crisis began. The flow of capital to Latin America has also returned to levels prior to the crisis.

Reasons why the flow of capital to emerging countries such as countries in the Asian Pacific and Latin America has recovered favorably include:

[6] Bank of Japan (2010a), "Flow of International Funds of Emerging Countries and Fluctuations in Asset Prices" ('Bank of Japan Review').

- Lower level of uncertainty about the future economic situation after more countries observed the global economy bottoming out due to unprecedented economic stimulus policies implemented by various countries.

- Concerns about a liquidity crisis in the markets were dispelled as a result of a bold injection of funds to raise liquidity by central banks.

- The difference in growth rates between developed countries and emerging countries since around spring 2009 has expanded.

- Predictions have grown stronger that developed nations will continue to hold a low interest policy for the long term.

Because of these reasons, investor's risk preferences have rebounded since spring 2009 and this is believed to be because of prompt investment in emerging countries[7].

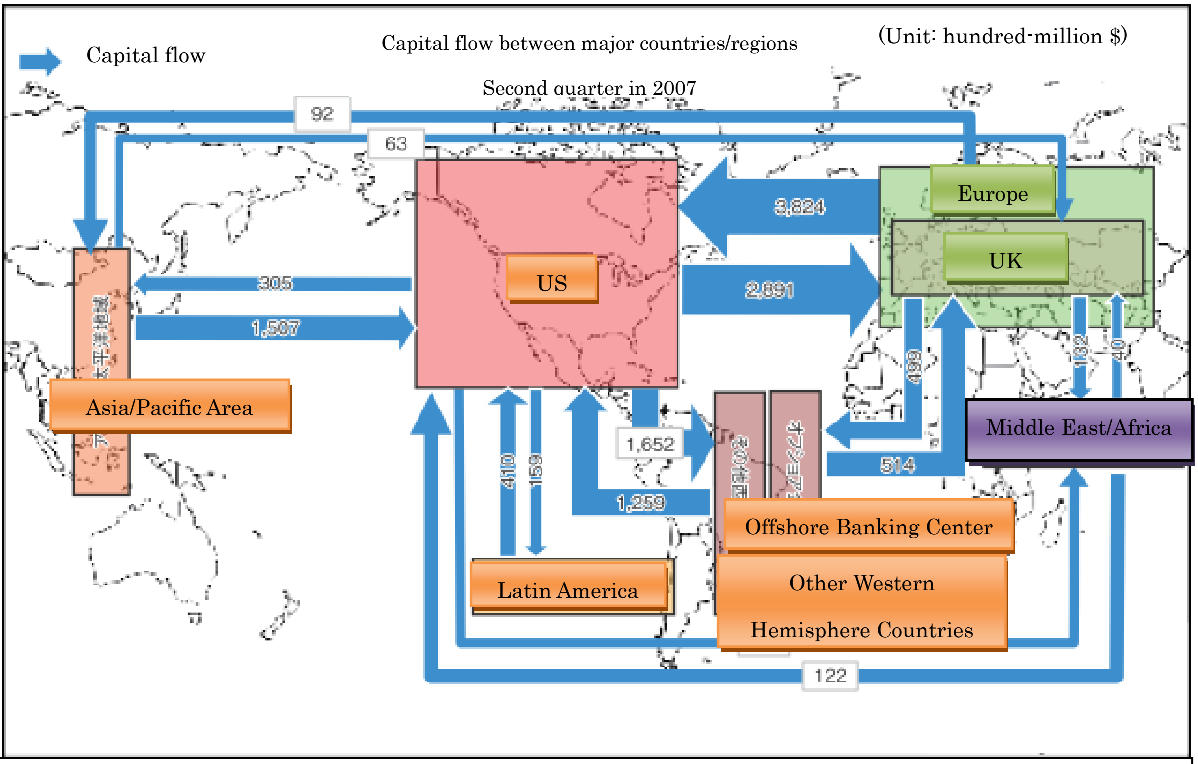
In addition, the flow of capital into the United States, Europe and emerging countries with balance sheet problems has been delayed.

2) 4th quarter 2009

Big changes occurred during the 4th quarter of 2009 even though only three months passed since the previous quarter (3rd quarter). In other words, the positive capital flows between the United States and Europe and the United States and offshore countries during the previous quarter became negative during the 4th quarter. Additionally, capital flows from the Middle East and Africa to the United States and Europe were confirmed to have returned.

1-1-1-9 Changes of financial flow in the main areas

7 Same as above.

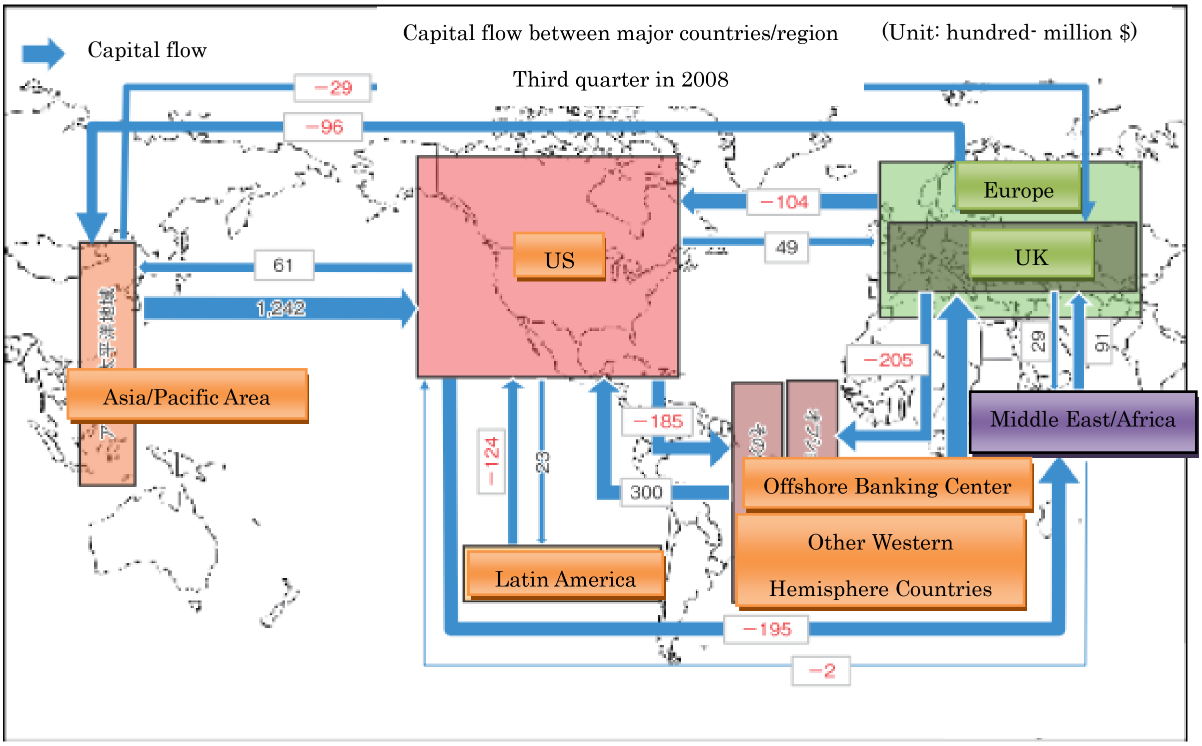


Note: 1. Balance of payments of investment (total of direct investments and security investments) according to the capital flow

2. Due to limitation of data, descriptions of Asia/Pacific area, Middle East/Africa, and Offshore banking market are only for bank division to UK.

3. Offshore banking market means 14 countries/regions of Aruba, Bahrain Barbados, Cayman Islands, Guernsey, Isle of Man, Jersey, Lebanon, Macao, Mauritius, Netherlands Antilles, Panama and Vanuatu.

Source: Created from "Bank of England" by the Board of Trade.



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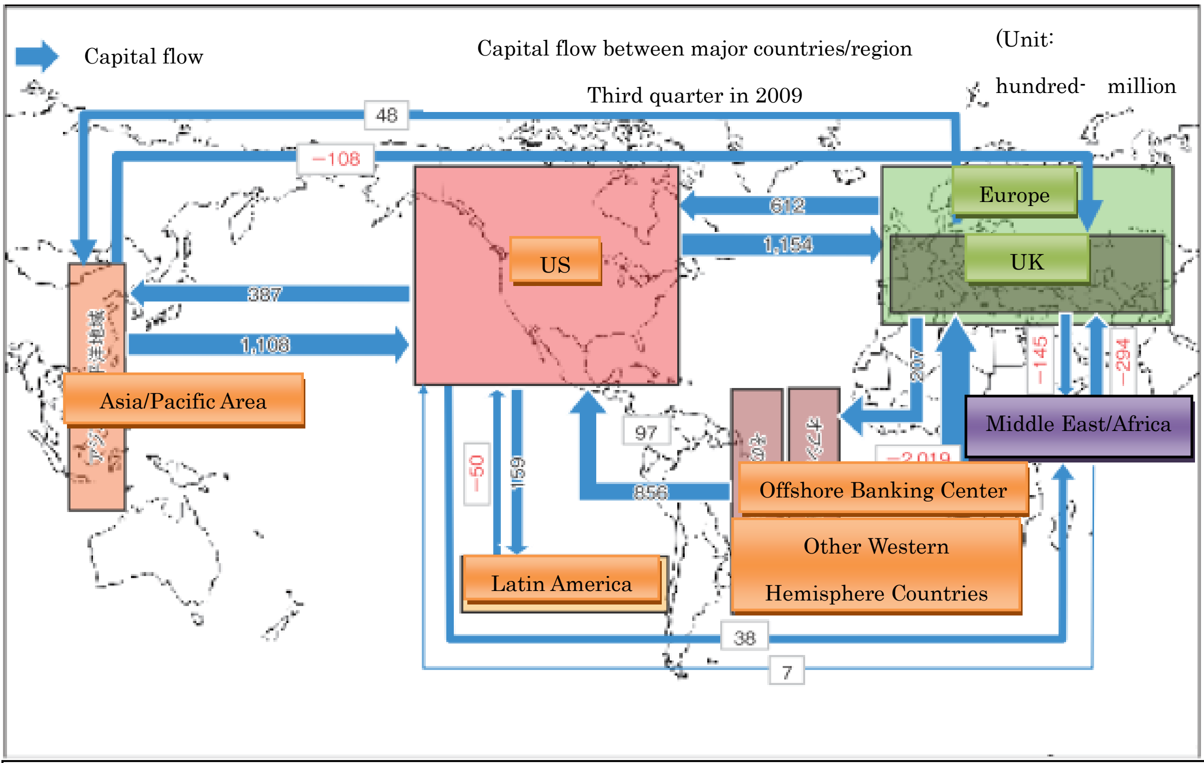

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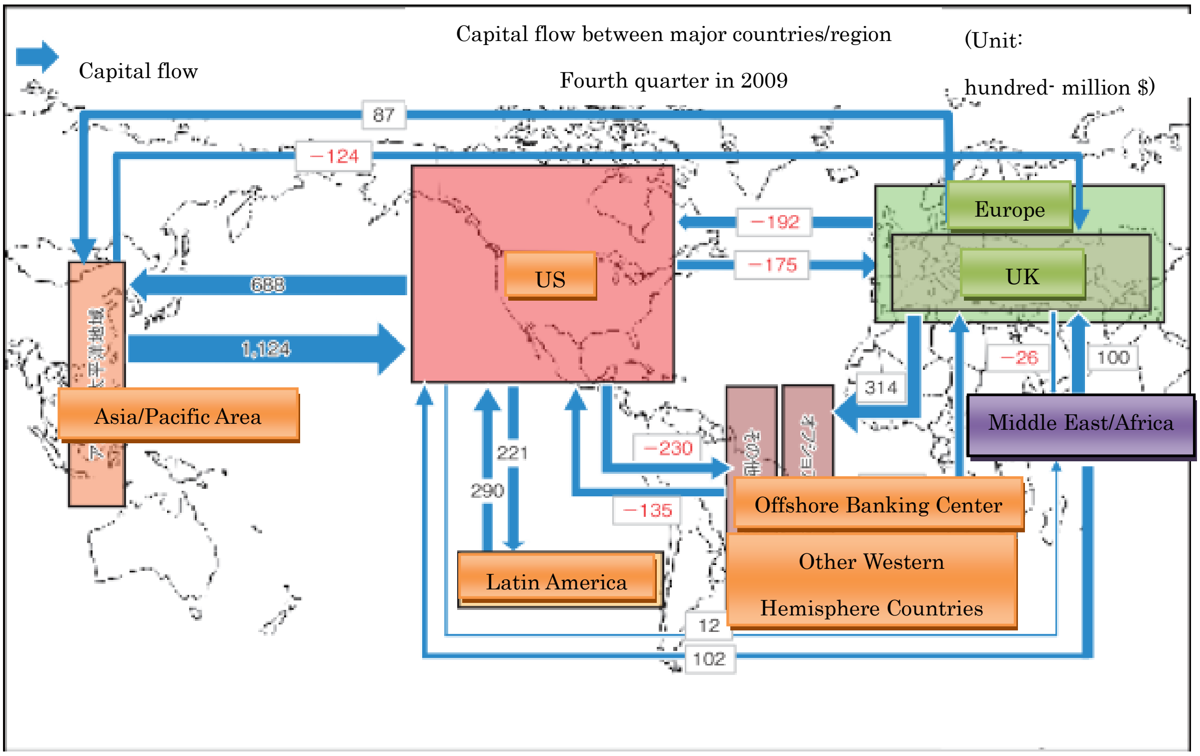

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Source: Created from "Bank of England" by the Board of Trade.

The following is a summary of the above.

The flow of capital from regions in the Asian Pacific to the United States has stayed in the positive throughout the global financial crisis. A large amount of investment to the United States from these various Asian countries was in the form of dollar-based reserves of central banks and government organizations that were invested in government bonds and bonds from organizations. A historical bond on both sides which can withstand crisis can be observed.

While the flow of capital from Europe offshore to financial centers, the Asia-Pacific and from the United States to the Asia-Pacific, Middle East and Africa was stagnant for a period of time after the financial crisis, the flow of capital has once again resumed. This expresses a strong recovery and the fact that emerging nations that are expected to economically grow in the future are attracting funds on a global scale.

On the other hand, the flow of funds to Europe has been slow to recover even though it has been over 1 year since the crisis started. This is thought to reflect a delayed economic recovery in Europe.

(C)Trends of indicators

(a) Stock movements which reflect economic performance

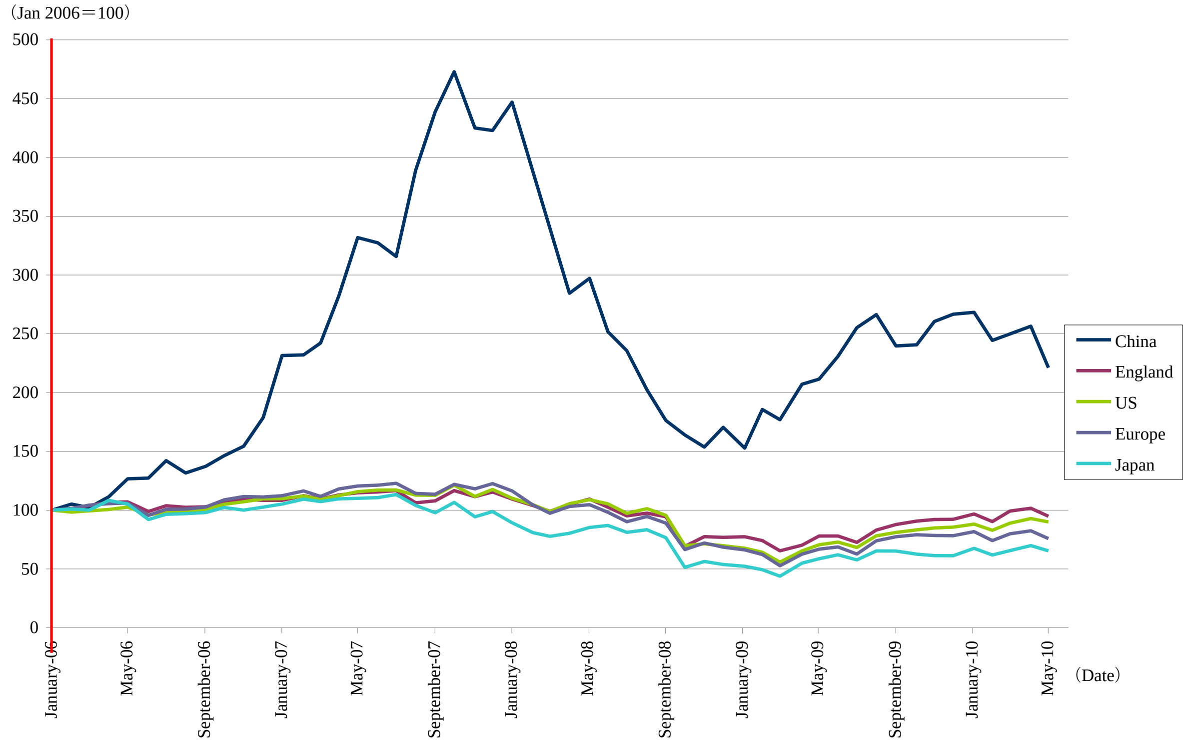
When fluctuations in stock price movements which are affected by economic conditions are examined, stock prices in major countries such as Japan, Europe and the United States bottomed out around March 2009 after the global economic crisis and are finally starting to trend up. However, while the stock prices of these developed countries have rebounded to levels before the crisis, stock prices in China have rebounded rapidly after the global economic crisis and have continued to rise (Figure 1-1-1-10)

(b) Exchange rates

Exchange rates easily fluctuate based on various factors related to the economy. Events which could affect exchange rates in the future include state finance crisis such as that in Greece and trends in US financial policies.

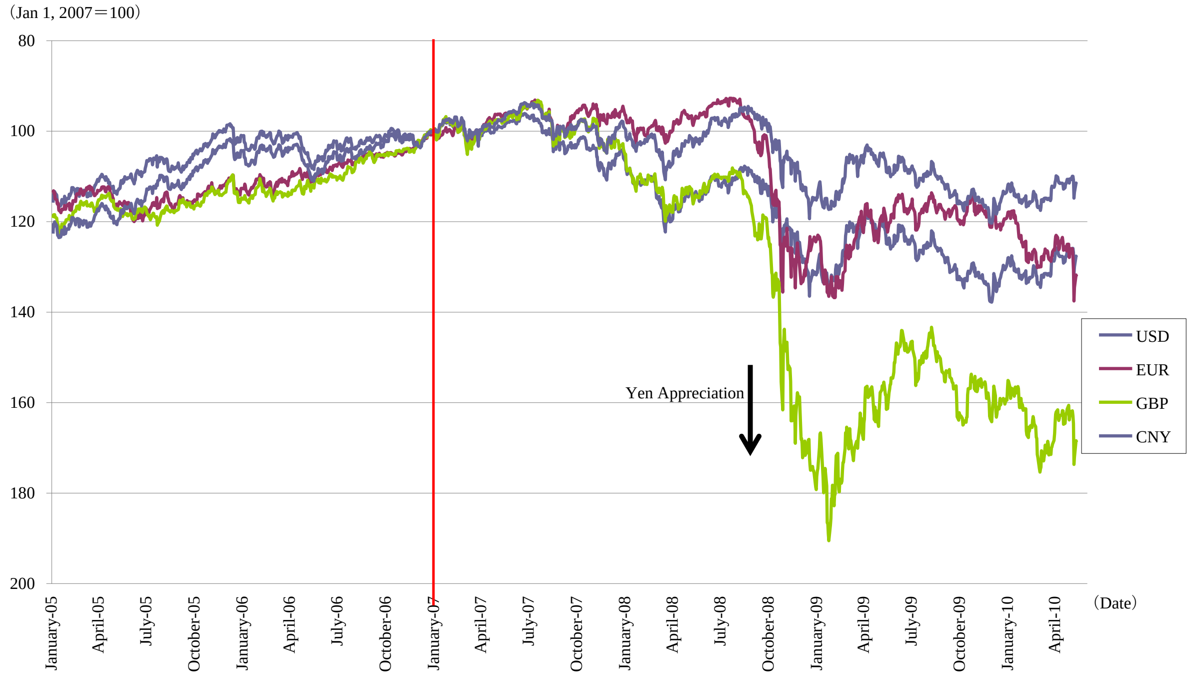
The relationship between the yen and dollar has experienced weaker dollar overtones thanks to an improved global economy and expectations for more continued monetary easing in the United States. The strong yen reached a peak of 84 yen against the dollar due to a reversal of the short-term interest rate between the yen and dollar in November 2009 and the crisis in Dubai, however increasing policy by the Bank of Japan to ease credit and an improvement in US economic indicators have moved the currencies to a stronger dollar and weaker yen on expectations of a rate increase and upon entering 2010 the yen hovered around 90 to 95 yen per dollar (Figure 1-1-1-11).

Figure 1-1-1-10: Major Stock Index Trends



Source: Created by Bloomberg.

Figure 1-1-1-11: Major Currency Exchange Rates vs Yen



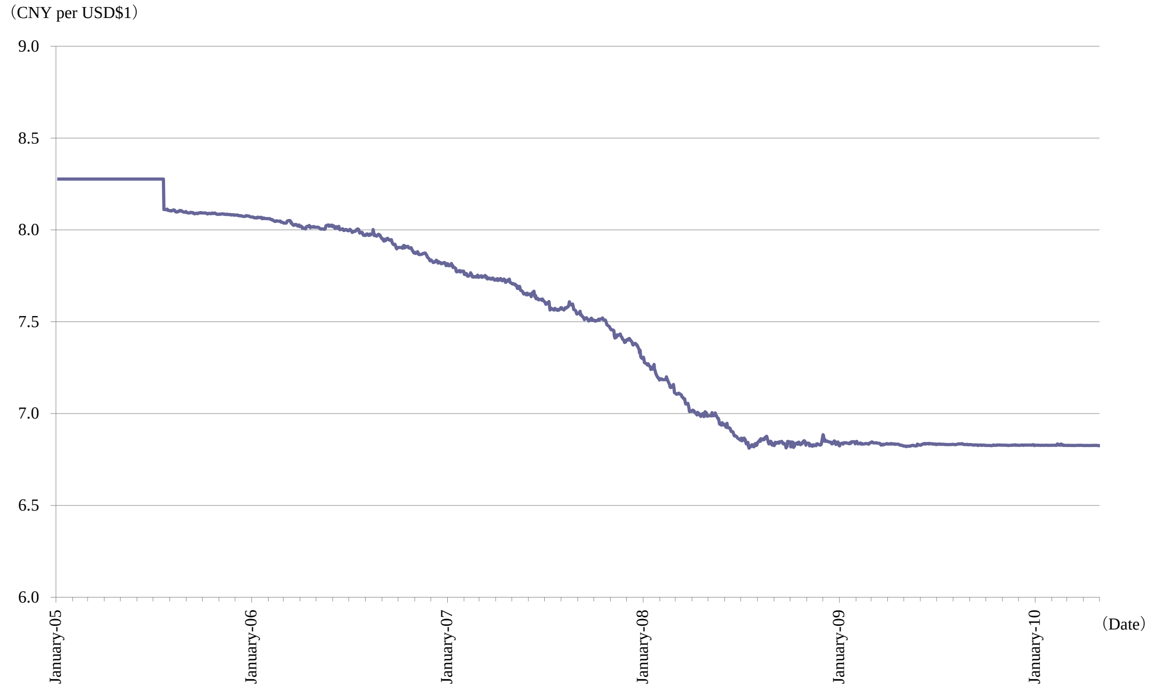
Source: Created from Bloomberg.

As for the yen and euro, there has been predominant weakening of the euro from the beginning of 2010 after the concerns in Europe including Greece.

The yuan was at 6.8 yuan per dollar after the global economic crisis occurred in September 2008 (Figure 1-1-1-12). If the imbalance in the yuan market is not corrected the US will draft a bill which makes it possible to implement an anti-dumping tax[8]. In this way, people demanding the yuan be a floating currency are rising and the response from the Chinese including their future actions will be watched carefully (Refer to (Chapter 1 Section 1 Column 9 [Debate regarding exchange rates]))

[8] Put together by Democratic Senator Charles Schumer (New York) and Republican Senator Lindsay Graham (South Carolina).

Figure 1-1-1-12: RMB vs USD Trends



Source: Created from Bloomberg.

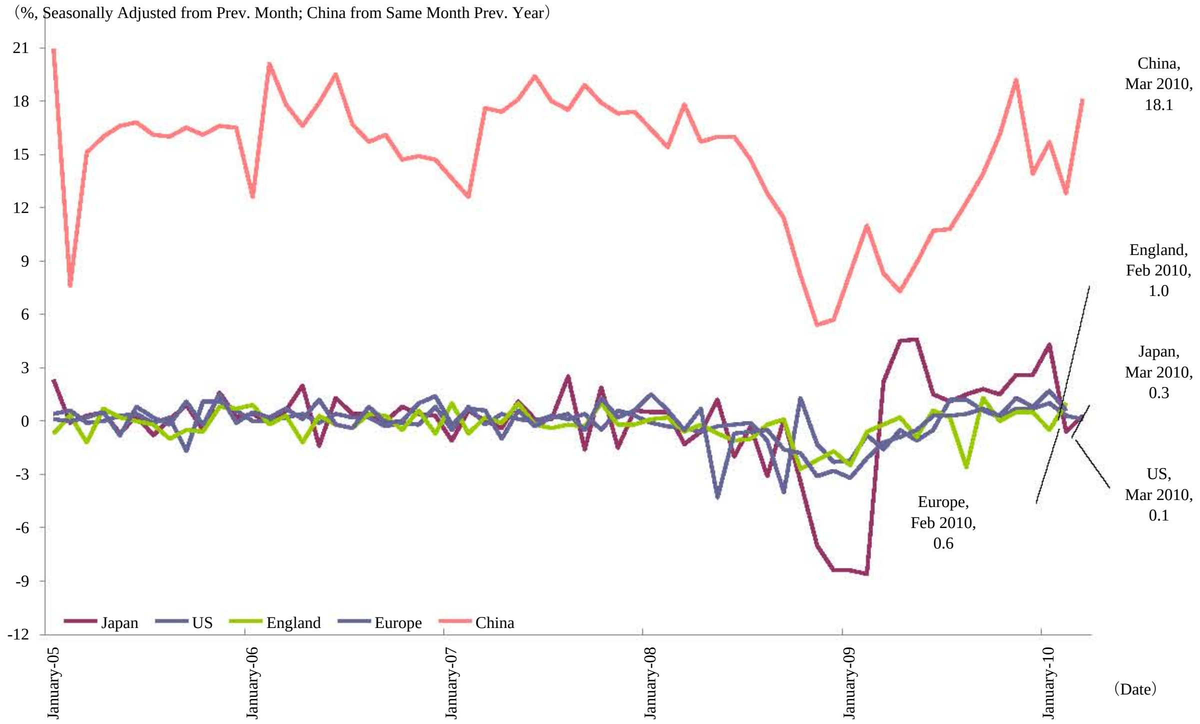
(c) Production gradually recovering for the mining and manufacturing industry

The index of mining and industrial output which expresses the overall activities of the mining and manufacturing industry has, as a whole, been showing gradual signs of recovery. Emerging countries are especially showing high growth and China has shown remarkable growth and remained positive compared to the previous year even after the global economic crisis (Figure 1-1-1-13). In addition, no particular change was seen in India with its index of mining and industrial output after the global economic crisis began and the impact of this crisis on them is thought to be low. South Korea recovered rapidly in a short period of time after the crisis and Brazil has practically recovered to levels before the crisis began.

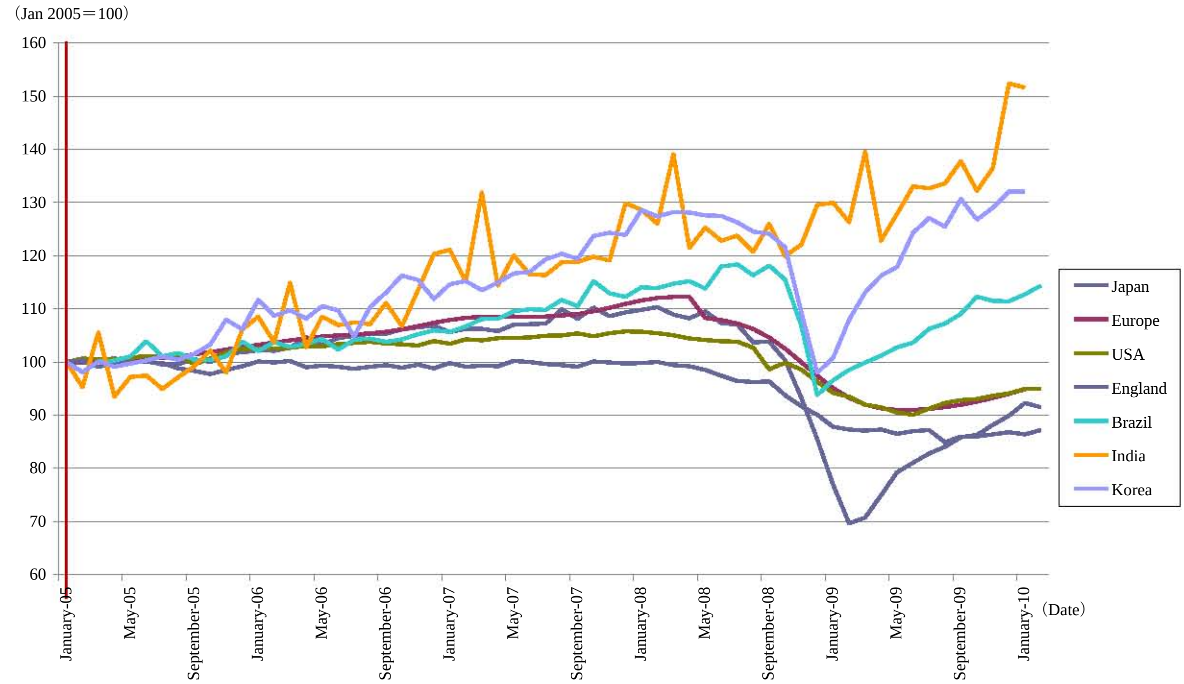
The slow recovery in developed countries stands out. The index of mining and industrial output for the Euro zone, the United States and the United Kingdom are all stagnant. (Figure 1-1-1-13 index)[9].

[9] The index of mining and industrial output for china is not shown here because the index could not be recreated from the data made public comparing this year’s output with last year’s output of the same month.

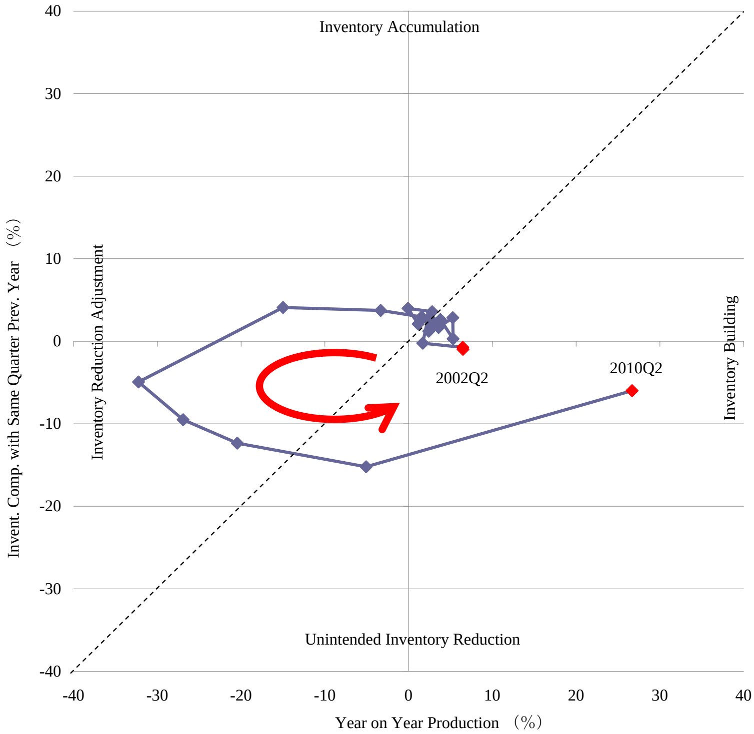
Figure 1-1-1-13: Transition of Industrial Production Index



Source: Created from Bloomberg, except for Japan figures. Japan figures created from METI "Industrial Index".



Source: Created from CEIC, except for Japan. Japan figures from METI "Industrial Production Index". Seasonally adjusted, except for India.
Figures for China have not been released.



Source: Created from METI "Industrial Index".

When the handling by the manufacturing industry in Japan regarding this crisis is examined it is apparent that their handling of the crisis was extremely characteristic.

In other words, directly after the rapid drop in exports once the crisis began, the manufacturing industry of Japan experienced an unprecedented sharp drop in production. As a result, inventory cutbacks occurred rapidly and inventory cutbacks in the mining and manufacturing industry quickly reached a peak in the 1st quarter of 2009. Then, during the 4th quarter of the same year the inventory cutbacks broke away from its peak (Figure 1-1-1-13. Relationship between production and inventory). Because the slump in production after the crisis was large, the index of mining and industrial output in 2009 was significantly negative compared to the prior year and stood at -21.9%. The percentage of growth after the recovery was largely due to this counteraction and when the level of production is examined, production levels are still far away from levels before the crisis. The pace of this recovery is seen gradually decreasing. Therefore, it will be important to keep an eye on whether or not mining and manufacturing production recovers to levels before the crisis.

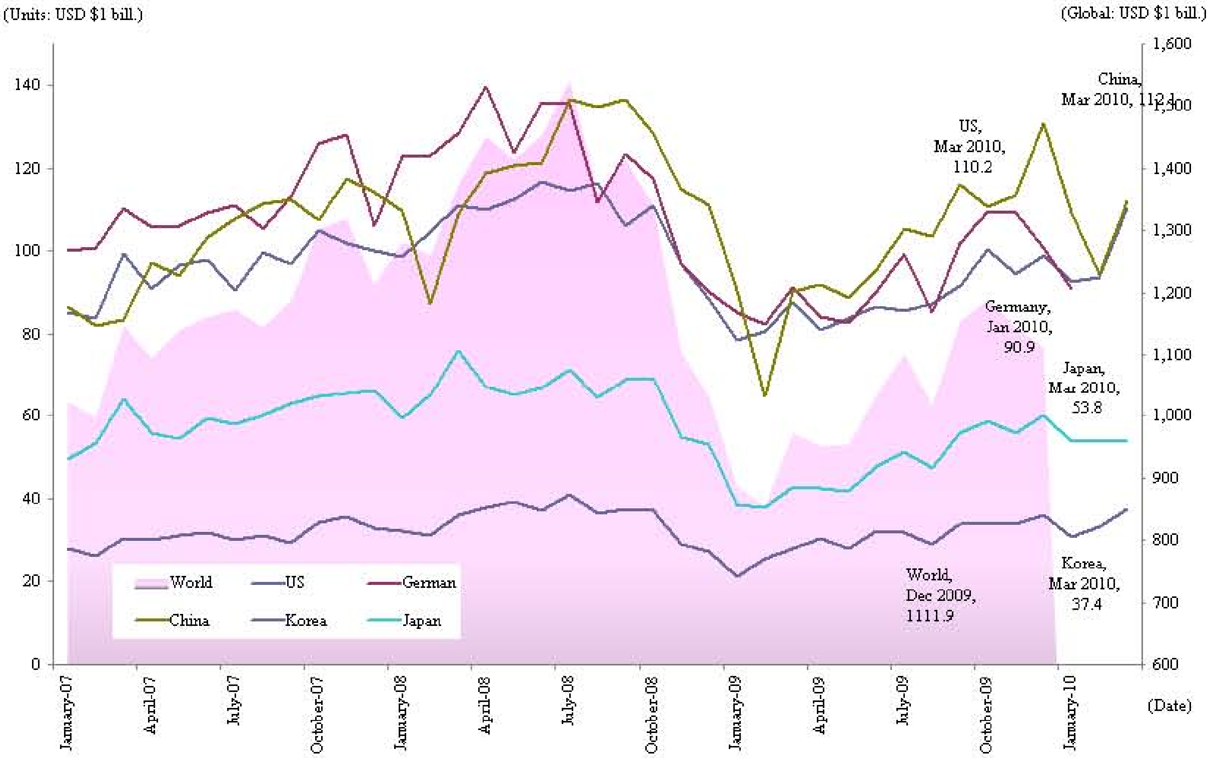
(d) Recovery of trade

The recovery of trade can be seen from the rapid drop in world trade in the fall of 2008 to the return to recovery upon entering 2009. This trend can be seen in all countries and the total amount of recent exports of the main countries has recovered by around 80% compared to their peak two years ago (Figure 1-1-1-14 Amount of exports by month).

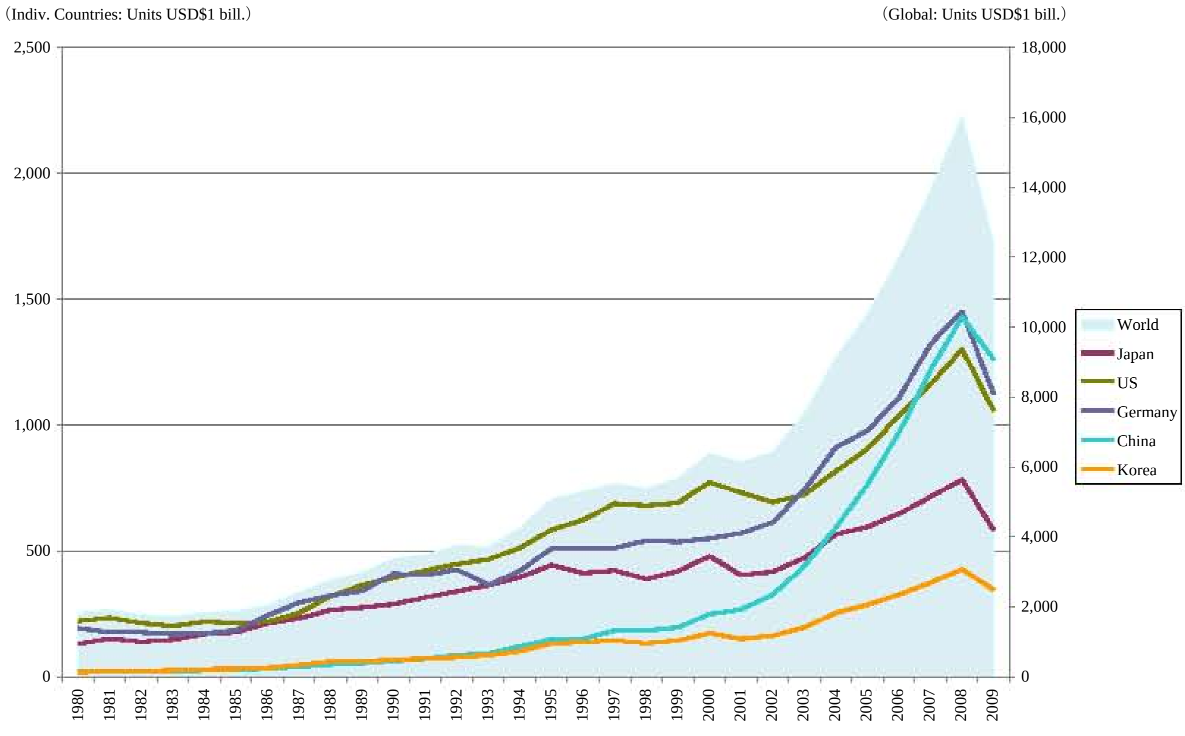
Exports and imports from China have especially grown remarkably since 2002. While exports dropped during 2009, China's exports were the largest in the world because the extent of the decrease was comparatively small (Figure 1-1-1-14 Amount of exports by year).

China (1.0056 trillion dollars) also became 2nd in the world in exports by passing Germany (931.447 billion dollars) in 2009 (Figure 1-1-1-14 Amount of imports by year). China's presence in the world continues to build.

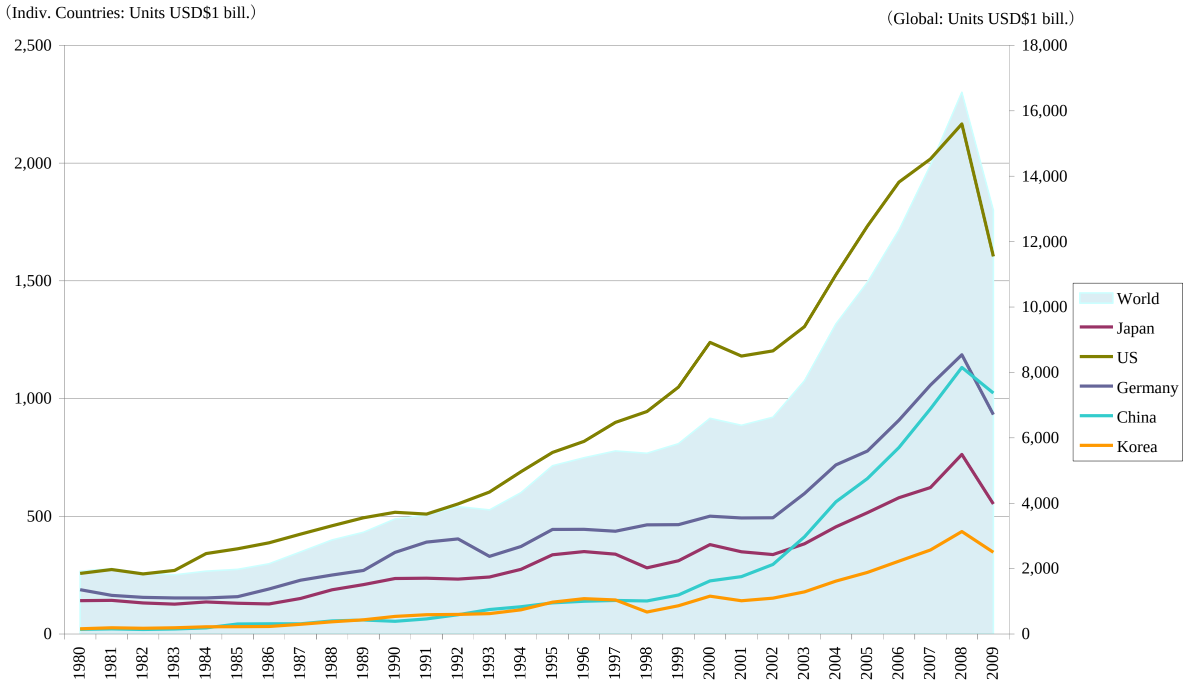
Figure 1-1-1-14: Transition of imports and exports total value of the world and the main countries



Source: Created from IMF "DOT", World Trade Atlas.



Source: Created from IMF "DOT".

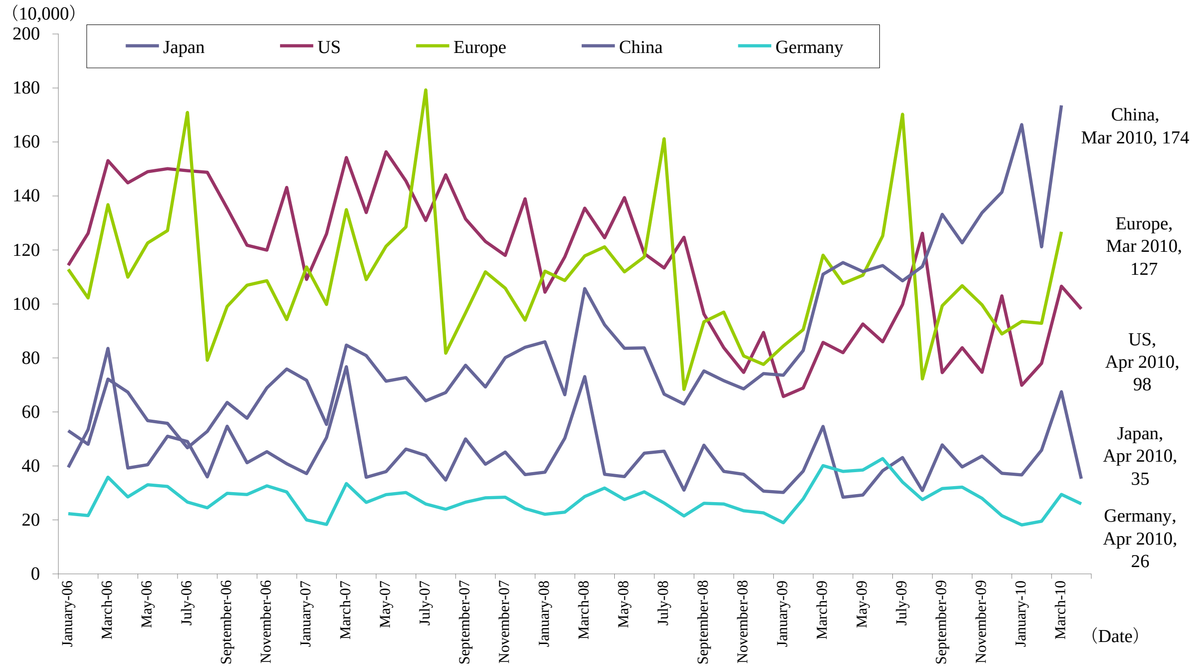


Note: Imports are based on the CIF method (including freight & insurance), so total world imports do not equal total world exports.
Source: Created from IMF "DOT".

(e) Favorable sales of automobiles mainly in emerging countries

Sales of automobiles which have a large rippling effect on the real economy have shown remarkable growth in China (Figure 1-1-1-15). In 2009, the yearly sales of new cars in China reached 13.64 million, outpacing the United States (10.43 million) to become number one in the world. Even by month, sales of new cars in China during March 2010 was around 1,735,200 and 1,734,300 new cars were produced which was the largest amount seen yet. Sales of new cars in the United States and the Euro zone (Germany, etc.) are rebounding moderately. On the other hand, the recovery in Japan is slow.

Figure 1-1-1-15: Domestic Automobile Sales Volume (Monthly Base)



Note: Figures for Europe are calculated from the number of newly registered passenger and light commercial vehicels. German figures are calculated from new vehicle registrations.
Source: Created from Bloomberg.

Additionally, automobiles are comparatively high priced items and it is easy for their demand to drop during an economic crisis and their sales have a large impact on the real economy. This is why various countries are implementing a variety of support measures to help the purchase of automobiles (Refer to figure 1-1-1-16 [Various countries economic stimulus policies]) In the Euro zone the effects of these policies are clear and in addition China has implemented a policy to give aid to residents in rural areas to replace their automobiles in March 2009 and this has increased growth.

Meanwhile, there are concerns about the negative drop related to the end of support policies. The United States ended their measure to support automotive purchases in August 2009 and Germany in September 2009 because they had reached their expected limits. In the United States, it seems that the rapid negative repercussions directly after the end of the support policy have settled down after entering 2010. On the other hand, in Germany sales of new automobiles in February 2010 stood at 190,000 (30% drop compared to the previous year) and the negative repercussions are just moving into full swing. In the future, support policies to replace automobiles in countries other than the United States and Germany will end and there are concerns as to what impact this will have on those countries real economies.

Column 1　Recovery pattern of main economies after the global economic crisis

In the 2009 White Paper on International Economy and Trade, the spread of the crisis was classified into three categories. These were:

1) Easy-credit pattern: United States, United Kingdom, Spain, Ireland, etc.

Pattern where domestic consumption largely declines due to the collapsing housing bubble and disruption to the financial system.

2) Export-led pattern: Japan, Germany, South Korea, Singapore, etc.

Pattern where exports largely decline due to a rapid drop in demand in developed countries such as the United States.

3) Emerging country boom pattern:

Pattern where an inflow of funds from abroad drops rapidly due to economic decline in Western European countries that supply funds

These types of patterns in which the crisis is spread also have a large impact on the recovery pattern after the crisis.

According to the IMF[10], the global economy can be broken down largely into: 1. developed countries, 2. emerging counties with a high rate of potential growth, and 3. South European countries and emerging Central and Eastern European countries.

In addition, the recovery in developed nations depends largely on huge economic stimulus policies and inventory cutbacks while on the other hand, strong domestic demand and rising product prices have become a driving force for economic growth in major emerging countries.

Based on these points, progress of the global economic recovery can be generally broken down into the following three patterns (Column Figure 1-1).

(1) Slowly recovering developed countries: United States, United Kingdom, Germany, France, Japan, etc.

With projected positive growth for 2010-2011, the economic picture is recovering; however it is forecast to be a moderate recovery. Especially for countries where the crisis spread through an ease of credit, a slow recovery for the financial system and weak household balance sheets are assumed and the high unemployment rate and large fiscal deficit are all issues. In export-led countries where the crisis spread, an excess of equipment can be see with the decline in consumption in ease-of-credit pattern countries and regions and it is thought that the capacity utilization rate has not yet recovered to levels before the crisis (Column Figure 1-2).

(2) Emerging nations with growing domestic demand and an inflow of capital: China, India, etc.

All of these countries exhibit a high level of potential growth and are supported by strong domestic demand. Based on comparatively healthy public finances, immediate response through policy measures and a recovery in the inflow of funds from abroad, a high level of economic growth is projected for 2010-2011. China's economic growth is supported on a large scale through pubic finances and financial policy measures, however domestic consumption is steady and a continuous recovery is expected.

10 Cited previously, IMF (2010a)
Comment at a press conference of IMF Chief Economist, Olivier Blanchard (acquired from the IMF website).

(3) Various South European countries which hold sovereign risk and emerging Central and Eastern European countries: Spain, Portugal, Ireland, Greece, Latvia, Hungary, etc.

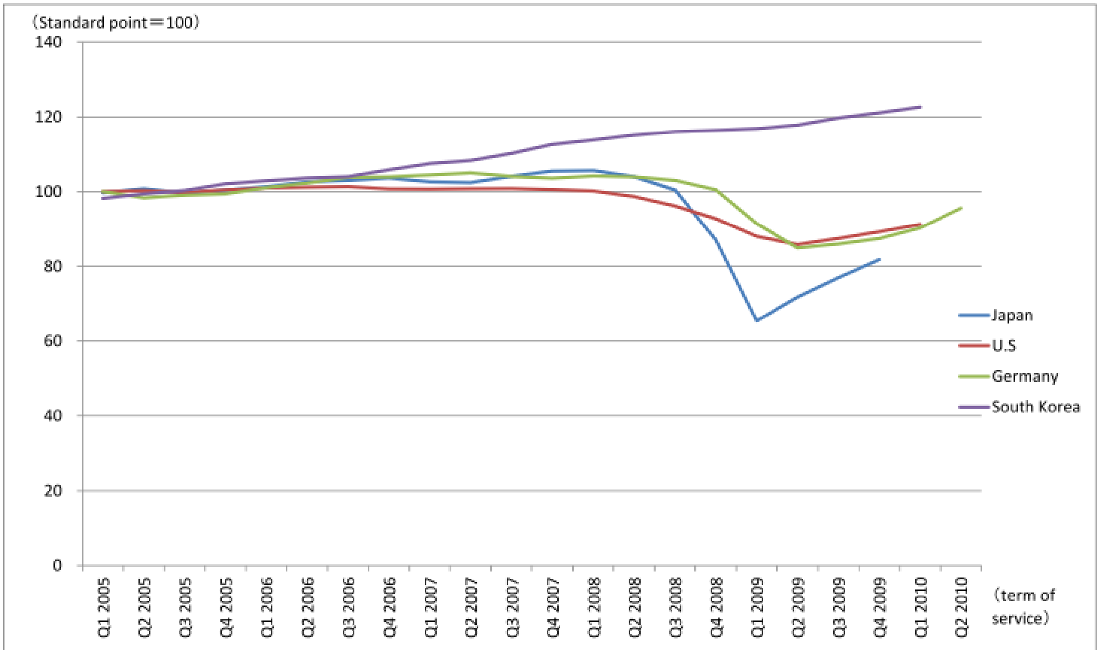
A number of countries are forecast to continue experiencing negative growth even in 2010 related to the disruption to the financial system due to the collapse of the housing bubble and the large budget deficit that has been acknowledged as sovereign risk.

South European countries such as Greece are experiencing serious financial deficits. However, because the Euro zone has one shared currency, they do not have the option of lowering the exchange rate for example or performing financial restructuring through recovering the economy by promoting exports.

Column figure 1-1: Recovery pattern of main economies after the global economic crisis

Slowly recovering developed countries	Emerging nations with growing domestic demand and an inflow of capital	Various South European countries which hold sovereign risk and emerging Central and Eastern European countries
United States, United Kingdom, Germany, France, Japan, etc.	China, India, etc.	Spain, Portugal, Ireland, Greece, Latvia, Hungary, etc.

Column figure 1-2 Transitive rate of the capacity utilization rate in Japan, US and Germany



Note: Converted into index having the capacity utilization rate in the first quater of 2005 as a basa data, 100 for the data of US and Germany. Used published data as standard index of 2005 for the data of Japan and South Korea

Source: DATASTREAM

Table 1-1-1-16: Major Economic Measures of Leading Nations (Fiscal/Monetary Policy)

Country/Region	Name of Econ. Policy	Published/Estab.	Details	2009	2010	2011	2012
Japan	Comprehensive Emergency Measures for Peace of Mind	Decided Aug 29, 2008	• Lifestyle/Employment Support, Strengthening Healthcare and Pensions, Parenting/Education Support • Low-Carbon Project, Housing/Disaster Reform Project, Agricultural Industry Strengthening Project • SME Vitalization Project, with Consideration for Local Governments • Establishment of Secondary Safety Net • Support for New Graduates • Employment Creation in Priority Areas				
	Lifestyle Measures	Decided Oct 30, 2008	• Household Emergency Financial Support, Strengthen Employment Safety Net, Ensure Peace of Mind • Stabilize Financial Markets, Support SMEs, Pro-Growth Measures • Regional Revitalization, Strengthen Home/Disaster Investment, Support Local Governments				
	Emergency Lifestyle Protection Measures	Decided Dec 19, 2008	• Employment Measures, Increased Tax Grants for Regional Job Creation, Tax Reform (Eco-Car Tax) etc.				
	Economic Crisis Measures	Decided Apr 10, 2009	• Employment, Financing and Business Acceleration Measures • Low Carbon Revolution (Solar Power/Fuel Efficient Vehicle Support), Longevity/Child Rearing (Community Health/Medical Technology, Improvement of Nursing Staff/Carer Base Development, Parenting Support), Underlying Strengths (Forestry & Fisheries, SME Support, IT, Soft Power, Tourism) • Regional Vitalization (Vitalization of Regional Transportation, Community Development Support, and Local Living Conditions etc.) • Strengthening Social Security, Disaster Prevention, Welfare and Consumer Policies etc. • Consideration of Local Government Organizations (Financial Support etc.) • Expansion of R&D Tax System • Tax Relief for SME Entertainment Expenses • Gift Tax Relief Period for Housing Acquisition				
	Stimulus Package aimed at Growth and Peace of Mind for Tomorrow	Decided Dec 8, 2009	• Employment (Relax Measures for Employment Subsidies, Establish 2nd Safety Net, Create Employment through Assistance to New Graduates and Priority Fields) • Environment (3 Pillars of Eco-Consumer, Stepping Stone to Growth Strategies) • Ensure Peace of Mind (Until Current Elderly Policies Abolished, Continue in 2010 to Reduce Load on Elderly, Strengthen Measures against New Influenza) • Economy (Create Guarantee for Economic Emergencies, Extend Safety Net Loans, Provide Relief for High Interest Rates Associated with Deflation, Expand Housing Financing) etc.				
US	Emergency Economic Stabilization Act (EESA)/Troubled Asset Relief Program (TARP)	Established Oct 3, 2008 * Temporary measure until Dec 31, 2009. However, on Dec 9, 2009 this was extended to Oct 3, 2010, by the authorization of the Secretary of the Treasury as granted to EESA	• Financial Institution Support (USD$319.7 bill.) • Auto Industry Support (USD$84.8 bill.) • Asset Liquidation Support (USD$90 bill.) • Housing Market Support (USD$50 bill.)		Extend Term		
	American Recovery and Reinvestment Act (ARRA)	Established Feb 17, 2009 * Distribute by FY2019	• Discretionary Spending on Infrastructure Investments etc.(USD$308.3 bill.) • Direct Spending on Unemployment Benefits etc.(USD$267 bill.) • Income, Housing, Corporate and Environmental Tax Cuts(USD$211.9 bill.) * Inject a total of USD$787.2 bill. as economic stimulus measures				
China	4 Trillion Yuan Domestic Demand Expansion	Announced Nov 9, 2008	• Low Income Housing Construction • Rural Infrastructure Development • Rail, Road and Airport Infrastructure Construction • Health, Culture and Education Project • Environmental Measures • Technical Innovation and Structural Reform • Earthquake Area Disaster Reconstruction • Income Increases for Urban/Rural Citizens • VAT Relief • Expansion of Bank Lending				
	Household Appliance Support	Feb 1, 2009 (began nationwide deployment) * Until Jan 31, 2013. * In Dec 2009, changes were made to increase prices of relevant products.	• 13% government assistance for the purchase of household appliances in rural areas		Extend Term		
	Transport Support	Implemented Mar 1, 2009	• 10% government assistance for the purchase of 3 wheeled vehicles to light trucks				
	Tax Relief for Vehicle Purchases	Announced Jan 2009	• Tax relief for the purchase of small passenger vehicles				
Korea	Green New Deal	Announced Jan 6, 2009	• 4 Great Rivers/Surrounds Development Project (CNY 18 trill. over 4 years) • Green Transportation Development Project (inject CNY 11 trill. over 4 years)				
Australia	Economic Security Strategy	Announced Oct 14, 2008	(Aim for 1% Increase in GDP Growth) *2007/2008 GDP of AUD$1.1316 trill. • Increase in Pensions: AUD$4.8 bill. • Cash Assistance Payments to Medium and Low Income Households: AUD$3.9 bill. • First Home Buyer Subsidies: AUD$1.5 bill. • Vocation Training for Additional 56,000 People in 2008/2009: AUD$187 mill. • Accelerate 2009 State Construction Projects (Transportation/Communications, Education, Healthcare)				
	National Construction Package (total of AUD$4.7 bill.)	Announced Dec 12, 2008	• Rail: Additional investments in rail, roads, and educational facilities • Tax breaks for capital investment and tax incentives for SMEs				
	National Construction/Employment Project (AUD$22 bill. over next 4 years)	Announced Feb 3, 2009	• Support the introduction of residential insulation (AUD$3.9 bill.) • New construction or renovation of school buildings(AUD$14.7 bill.) • Construction of low-income and military housing(AUD$6.6 bill.) • Cash payments to low income earners, single income households, students and drought affected farmers (AUD$12.7 bill.) • Temporary tax breaks for SME asset acquisition (AUD$2.7 bill.) • Spending on local roads and regional infrastructure(AUD$8.9 bill.)				
	FY2009/2010 Budget	Announced May 12, 2009	• Spend AUD$22 bill. over 4 Years on Roads, Rail, Ports, Telecommunications, Hospital and University Facilities and Physical/Social Infrastructure • Increased Pensions, Widow Allowance and Veteran Benefits (AUD$11 bill. in 2009/2010) • Extension of First Home Buyer's Subsidy (AUD$540 million) • Personal Income Tax Cuts (see Attachment)				

EU	European Economic Recovery Plan	Announced Nov 26, 2008	European Commission Funding: • For Infrastructure Development, Contribute 3.5 bill. Euro for Energy-related Support, and 1.5 bill. Euro for Rural Land Development • As Investment Aid, Support Green Vehicles and Energy Efficient Buildings with Contribution of 2.1 bill. Euro • Contribute 1.8 bill. Euro for European Social Fund for Employment (ESF) Payments • Contribute 4.5 bill. Euro for the Acceleration of Payments for Transportation and Environmental Funding in Southern Europe.				
	Additional Credit Line	Announced Dec 16, 2008	European Investment Bank (EIB) Lending. • SME Financing (3.5 bill. Euro) • Energy, Climate Change, Infrastructure Financing(6 bill. Euro) • Regional Economic Policy Loans (2.5 bill. Euro) • Emergency Reserve (3 bill. Euro)				
England	Housing Market Support Measures	Announced Sept 2, 2008 * Initial Announcement was for 1 Year, but this was Extended in the 2009 Budget, to the end 2009.	• Stamp Duty Exemption, Loan Repayment Assistance: 1.6 bill. Pounds	Extend Term			
	Interbank Government Guarantees	Announced Oct 8, 2008 * Initial Announcement was until 2012, but on Dec 15, this was Extended to 2015.	British Treasury Provide Guarantees for Short and Medium Term Interbank Transactions of 100 bill. pound in 2008, Guaranteeing a Total of 250 bill. Pound				
	FY 2009 Budgeting Process Policy (Pre-Budget Report 2008)	Announced Nov 24, 2008	Implement Major Fiscal Stimulus on Scale of 20 bill. Pound by Apr 2010. • Paid Benefits of 60 pound for Pensioners • Employment Support for Unemployed: 1.3 bill. pound • Small Business Finance Scheme: 1 bill. Pound etc.				
	Unemployment/Employment Measures	Announced Jan 12, 2009	• Pay Incentives to Companies that Hire Unemployed of 6 months or more, Provide Financial Support for New Ventures, and Implement Vocational Training Programs for Unemployed etc., for Total of 500 mill. pound (2 year plan)				
	SME Financing Support Measures	Announced Jan 19, 2009	• For SME Bank Financing, Provide Government Guarantees for 50% of Existing or New Working Capita • For Bank Financing for Small Business, Provide up to 10 Year Government Guarantees for 75% of Working Capital Loans of 1 mill. pound or less, and Investment Loans				
	FY2009 Budget Proposal	Announced Apr 22, 2009	• Provide Grants of 2,000 pound (abt. 290,000 yen) to Discard Vehicles of 10 years or more (Owned for at least 12 Months) and Replace with New Vehicle. • Extend Suspension of Land Stamp Duty				
	FY2010 Budget Policy (Pre-Budget Report 2009)	Announced Dec 9, 2009	• Creation of Temporary Bank Payroll Tax • Corporate Debt Guarantees Extended for 1 Year				
Germany	Financial Markets Stabilization Act (Up to 480 bill. Euro)	Decided Oct 13, 2008, Enforced Oct 18, 2008	• Interbank Guarantees: Up to 400 bill. Euro. Underwrite up to 2009, for max 3 years. • Financial Institution Recapitalization: In principle, provide up to 10 bill. Euro per financial institution. Till end 2009. • Purchase Bad Loans from Financial Institutions: Up to 5 bill. Euro per financial institution. Capital Injections of up to a Total of 70 bill. Euro.				
	Stimulus Package (Total of abt. 50 bill. Euro)	Announced Nov 5, 2008	• Expand Reconstruction Finance Corporation (KfW) Lending for SMEs: 15 bill. Euro • Increase Investment in "CO2 Building Renovation Program": 3 bill. Euro • Tax Exemption of up to Two Years for Euro-5 or Euro-6 Passenger Vehicles, or up to One Year for Newly Registered Passenger Vehicles.				
	Second Stimulus Package "Package for Employment and Stability" (Total of abt. 50 bill. Euro)	Announced Jan 13, 2009	• Income Tax: Reduction of Lowest Tax Rate (15% to 14%), and Gradual Increase in Exemptions (7,834 Euro in 2009, and 8,004 Euro in 2010) • Public Health Insurance Premium Reduction (15.5% to 14.9%): 9 bill. Euro • Provide Temporary Payment (Child Bonus) of 100 Euro for each Child (6-13 years) and Increase Child Benefits for Long Term Unemployed • Federal Government to Cover 50% of Social Security Costs for Employees that have Work Hours Shortened instead of being Laid Off. • 2 bill. Euro in Spending on Vocational Training for Short term Employees and Youth. Government Employment Security Agency to Hire an Additional 5,000. • Invest 14 bill. Euro for the Development of Schools, Day Care Centers, Hospitals and Roads etc. • Total of 450 mill. Euro per year to Support R&D in SMEs for the Improvement of Energy Efficiency and Climate Protection • As Bank Credit Flow Measure, set out Guarantees of 100 bill. Euro (outside of Second Stimulus) • Provide Grants or Loans of 500 mill. Euro over 2 Years for Institutions that Show Potential in Hydrogen Fuel Cell Technology				
			• Support Purchase of New Vehicles: Payment of Subsidy of 2,500 Euro when Replacing 9 Year Old or Older Vehicles with New Vehicles (or Used Vehicles up to 1 Year after Registration). Implemented from Jan 2009, to end 2009.				
	Expansion of Environmental Premier (3.5 bill. Euro)	Announced Apr 8, 2009	Increase Grant Budget by 3.5 bill. Euro to 5 bill. Euro. Individual Grants Changed to 2,500 Euro. Finish in Sept 2009.				
France	Financial Institution Rescue Package	Announced Oct 13, 2008	• 320 bill. Euro in Loan Guarantees, and 40 bill. Euro of Capital Injection to Financial Institutions. Loan Guarantees until end Dec 2009.				
	Economic Measures	Announced Oct 23, 2008	• Total Exemption of Corporate Tax on New Investments (can be fully depreciated).				
	Comprehensive Economic Stimulus Package "Implementation of Economic Revitalization Plan"	Announced Dec 4, 2008, Details Announced Feb 2, 2009	• Corporate Support (11.4 bill. Euro): Refund from Government to Companies of R&D Tax Credits and VAT • Infrastructure Investment for State Owned Enterprises (4 bill. Euro): Investment in Faciliy Expansion/Modernization in the Fields of Rail, Energy and Postal, etc. • Spend 1.5 bill. Euro to Support the Auto Industry. Including Special Incentives (1,000 Euro) to Support Consumers in Changing Vehicles 10 Years Old or Older for Vehicles with High Environmentally Friendly Performance (CO_2 Emissions of 160g or less per km). • SME, Housing Support (2 bill. Euro) • Support for Low Income Families (3.8 mill. households): 200 Euro Subsidies per Household for a Total of 760 mill. Euro • Employment Measures (1.2 bill. Euro): For Companies of 10 Employees or Less that Employ New EMployees before end 2009, Employer Paid Social Security Must be Paid in Proportion of Wages Paid • Financing for Municipality Infrastructure Investments				
	Living Support Measures	Announced Feb 18, 2009	• Raise Temporary Layoff Allowance (60% --> 75% of Salary) • Reduce Lowest Tax Rate (Taxable Income of 5,687 to 11,344 Euro, Tax Rate of 5.5%) to Tax Payment of 1/3 • Special Grant of 500 Euro for Unemployed not Qualifying for Unemployment Benefits etc.				
	Youth Employment Measures	Announced Apr 24, 2009	Provide Incentives for Social Insurance Exemptions for New Apprentice Jobs (up to end Jun 2010), for 1 Year from Jun 2009, on the Basis of 1,000 Euro per Person Employed on a "Contract of Employment", or 2,000 Euro for New Employees Qualified to Enter University, or 1,800 Euro for Companies with 50 or less Employees.				

Meanwhile, Central and Eastern European countries are experiencing the same problems and although after the crisis the rate of funds was increased from Western European countries supplying the funds, adjustments were made in the exchange markets and the rate as been turning more favorable since the end of 2009.

As shown above, the speed of recovery differs for each country and region. In all, emerging countries are expected to have a speedier recovery and a higher rate of economic growth compared to developed countries and even some emerging countries exist that have risks and a slow recovery.

(4) Recovery supported by economic stimulus policies, an evaluation of those policies and future response

The large-scale economic stimulus policies put into place by various countries helped lead the global economy to faster than forecast growth[11].

The economic stimulus policies are largely made up of fiscal policies and monetary policies and their details vary widely (Figure 1-1-1-16 and Figure 1-1-1-17). Fiscal policies mainly include tax reductions (for automobile purchases, acquiring homes, etc.) public works projects (related to transportation infrastructure, energy and the environment) and subsidies (unemployment, paid leave, etc.). The main monetary policies are quantitative easing and a low interest rate policy.

(A) Fiscal policy

Major countries decided on implementing large-scale measures to boost the economy after the global economic crisis hit. At the G20 Washington Summit held in November 2008, a declaration was made by leaders which included adding all necessary measures in order to overcome the crisis and prevent its reoccurrence. Utilization of fiscal policies to stimulate domestic demand according to economic conditions and the importance of support through monetary policies were mentioned. In addition, the declaration made by leaders which attended the G20 London Summit held in April 2009 stated that the government expansion by various countries would rise to 5 trillion dollars (500 trillion yen) by the end of 2010 and confirmed the importance of continued measures by each country to maximize fiscal and monetary policy measures.

Main fiscal policy measures implemented by major countries include support in purchasing new automobiles and housing and policy measures regarding unemployment and employment (Figure 1-1-1-16 and Figure 1-1-1-17).

As we have seen up until now, the global economy as a whole has undertones of a switch to positive economic growth and during this revival phase, China’s performance especially shines. However, an autonomous recovery of private demand in various countries has still not come to fruition. The economic stimulus measures implemented by various countries are soon scheduled to end and there remain concerns that this will lead the economies into a recession once again.

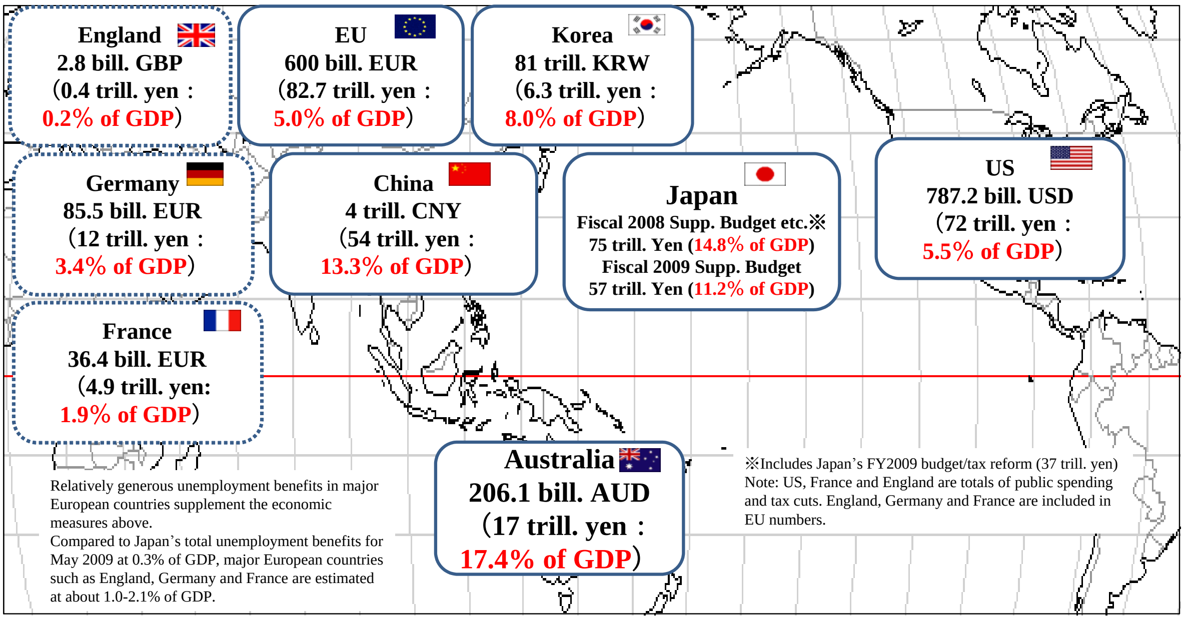
[11] Cited previously, according to the IMF, the total amount of economic stimulus measures implemented by various countries totals 20 trillion dollars, or 30% of world GDP.

(B) Monetary policy

As monetary policies to deal with the crisis, various countries put into effect low interest rate policies and pumped an abundance of funds into the market (quantitative easing) to deal with the credit crunch. Because of this, the fall in consumption and investment was halted to a certain extent and in conjunction with fiscal policies, were able to help keep the economy afloat (Figure 1-1-1-16).

When the impact of the monetary easing is examined, there has been a lack of demand for funds due to the economic slump in developed countries and currently it is difficult for the money supply to expand. On the other hand, on the back of super low interest rate policies in developed countries, excess funds created by the abundant supply of funds through various countries' economic stimulus measures are seeking a place of investment and a large amount of funds are flowing into emerging countries, increasing the money supply (Figure 1-1-1-18). This creates concerns that the prices assets, resources and food will rise.

Figure 1-1-1-17: Economic Measures of Leading Countries/Regions (As of April 2010)



In light of the delayed economic recovery in developed countries, there are some who express the view that it is difficult to quickly end these super low interest rate policies and those in emerging countries must first modify expansive economic stimulus measures in a timely manner while implementing restrictions on the flow of funds into their countries[12].

(C) Evaluation of economic stimulus measures

Regarding the economic stimulus measures implemented by various countries, the IMF provided the following evaluation. "After the crisis occurred, various countries implemented extraordinary support

[12] Cited previously, Bank of Japan (2010a). Nippon Research Institute (2010), "Inflow of Funds to Emerging Countries and Prospects for an Exit Strategy". Nippon Research Institute (2010), "Future Rate Hikes by Emerging Countries and Circumstances which Run Counter to an Exit Strategy by Developed Countries".

measures. This was the basis of the recovery and removed the risk of a 2nd great depression from occurring. This also prevented the world's economies from entering into a deflationary spiral that would bring havoc to economies as a whole including financial systems[13]. In addition the United Nations stated, "The support measures restored global credit, stabilized financial markets, propped up demand and eased the economic and social impact of the financial crisis," and while they offered a positive viewpoint, "Leaders of various countries that attended the G20 London Summit and Pittsburgh Summits agreed on implementing as many exceptional measures as needed and launching a continuous and balanced framework. This is a clear sign that various countries would not succumb to beggar-thy-neighbor tactics," they also indicated that, "Up until now cooperation on policy has been limited to a superficial level. What is lacking is a concrete framework expressing clear goals, a clear consensus on an exit strategy and a mechanism to summarize the actions of each country[14]."

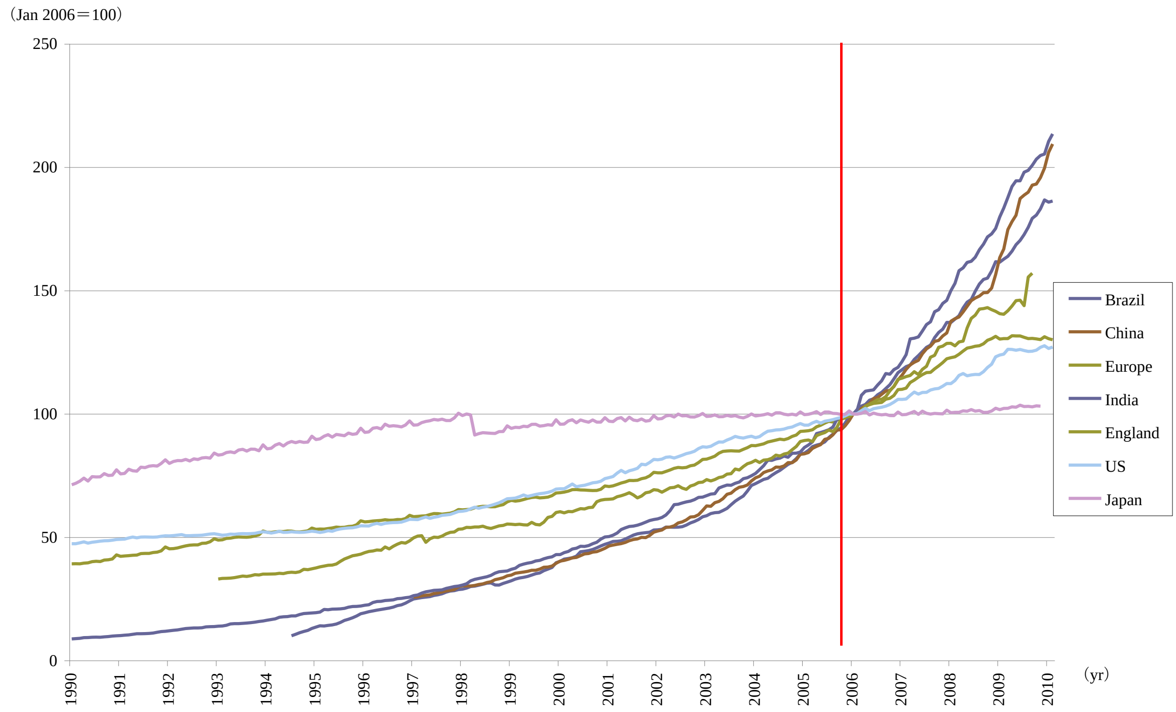
(D) Response in preparation of each country's exit strategy and future projections

As expressed in (A) and (B), in order to prevent another economic decline after the economic stimulus measures come to an end and inflation due to monetary easing measures from occurring, a so-called "exit strategy" is necessary in order to modify the easing financial environment and fiscal stance that is being economically stimulated in a timely manner (Figure 1-1-1-19).

In regards to raising interest rates as an exit strategy for interest rate policy, the central bank of Israel was the first central bank in the world to raise rates after the crisis on August 25, 2009. In addition, Australia was the first of governments in the G20 to raise interest rates on October 6, 2009. After this, emerging countries and resource-rich countries such as Norway, Vietnam, Malaysia, India and Brazil raised their interest rates due to a steady economic recovery and concerns over inflation.

13 Cited previously, IMF (2010a).
14 UN (2010), World Economic Situation and Prospects 2010.

Figure 1-1-1-18: Money Supply Trends



Note: World Development Indicator data utilized up to 1997, and CEIC data from 1998
Source: Created from World Bank "WDI" and CIEC.

On the other hand, Russia, Turkey, Demark, Hungary, Romania and South Africa have all lowered their interest rates due to serious concerns over economic recession and they have expressed movement which runs counter to an exit strategy (Figure 1-1-1-12).

While China did not go so far as to raise their interest rate[15], they did raise the reserve requirement ratio, and other financial tightening can be observed in India by the raising of its reserve requirement ratio and statutory liquidity ratio and Singapore raising its own currency level.

The United States announced on February 18, 2010 that they would raise their discount rate. However, the interest rate was left as is although the employment situation continues to be severe and the economic recovery lacks strength.

As for Japan, long-standing deflation has made the economic recovery rough. Also, while the central bank of Europe continues to numerate the importance of removing exceptional measures incrementally and at the appropriate time, the state of the real economy still continues to look grim and the implementation of any sort of exit strategy is considered to be further out still.

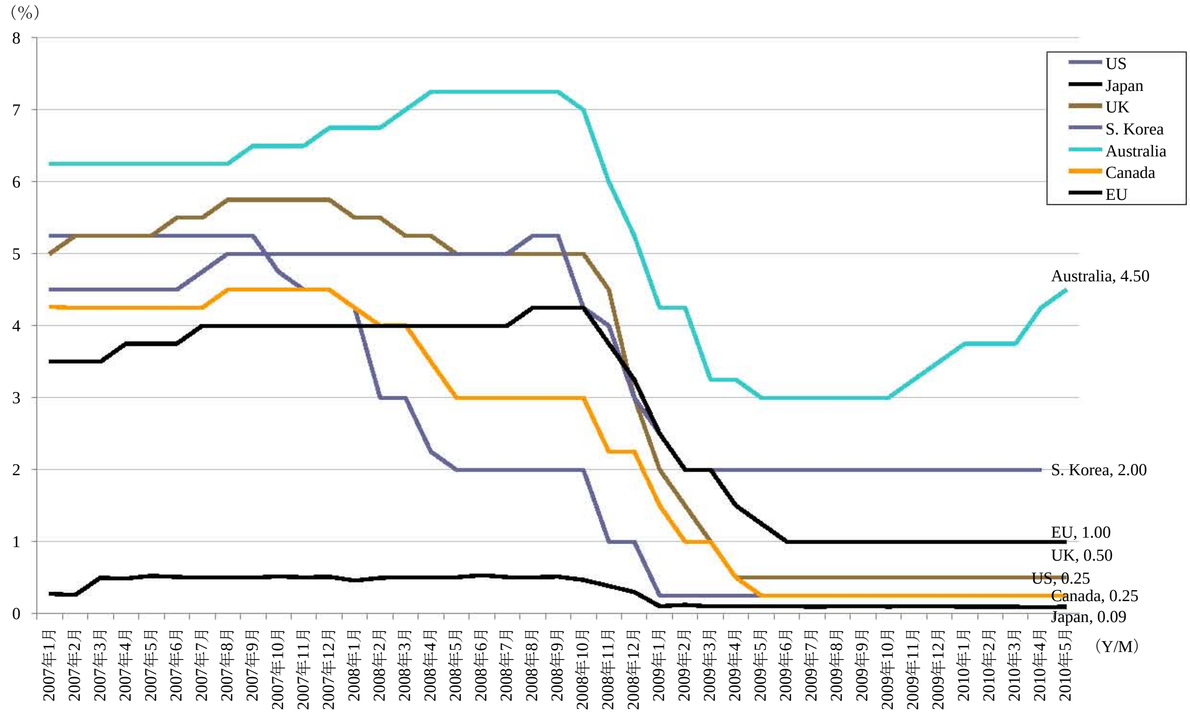
[15] Ratio of the total amount of government debt and other obligations stipulated by the government that must be held by domestic commercial banks.

Table 1-1-1-19: Exit Strategies and Economic Trends for Each Country

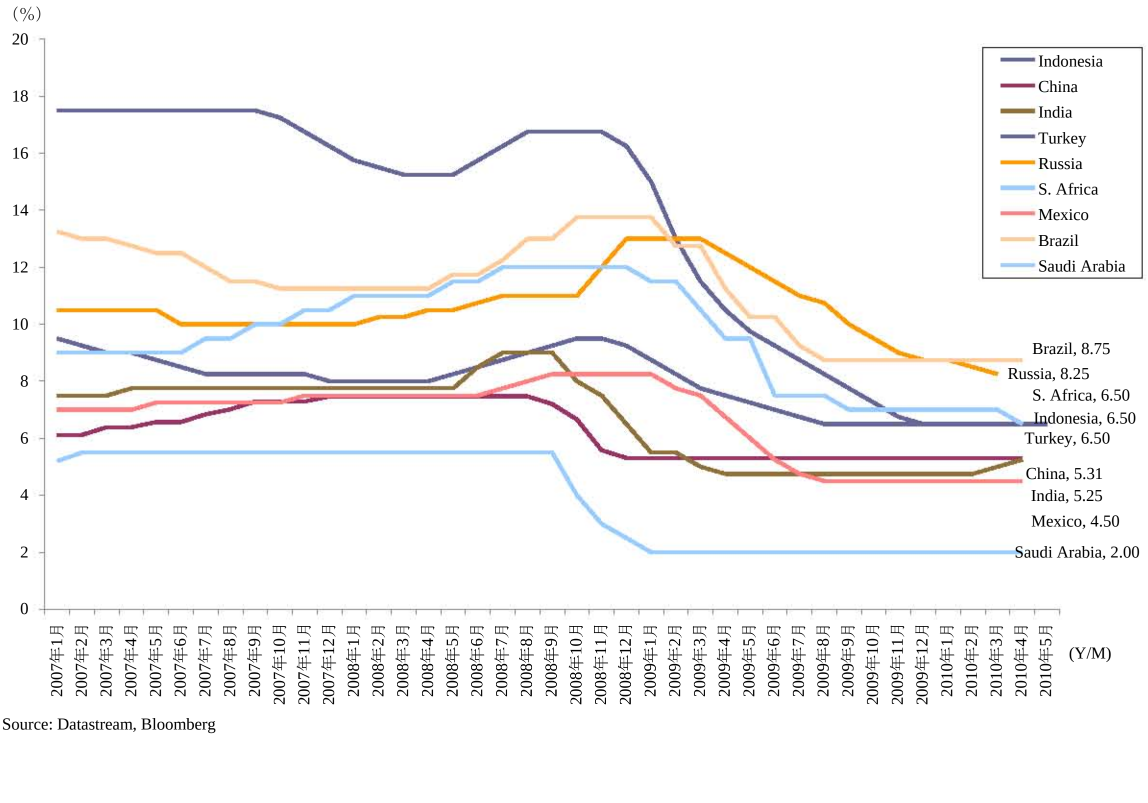
	Monetary Policy			Fiscal Policy
	Interest Rate Policy (Current Target and Stance)	**Credit and Quantative Easing (B/S Scale and Plan)**	**Exit Strategy Tools (Conceivable Options)**	
United States	• 0–0.25% • Maintain ultra-low interest rate policy for a while.	• 2.2 trillion dollars Federal Reserve lending to greatly decrease, importance of long-term US and internal bonds to increase. • Partially concluded; other policies are expected to be concluded by June, 2010.	• Bank rate hikes (0.5–0.75%, Feb. 10, 2010) • Long-term debt sellout • (New) Central bank term deposits • (New) Large-scale reverse repurchase agreements	• President Obama has committed to halving the budget deficit by the end of his first term. • Congress has enacted PAYGO legislation. It has been enacted for the Financial Oversight Committee as well.
Europe (Euro Zone)	• 1.0% • Induce market interest rates that provide a liquidity supply of about 0.3% (a deposit facility rate that equals a policy rate of 0.75%). • Maintain deferment posture for the time being.	• 1.8 trillion euros • Funding operations to level off, foreign-currency money supply to decrease. • Effect of covered bond trading to be negligible.	• Operation Twist • Term deposit facility, central bank bill issuance • Covered bond sales	• Budget deficit to be reduced by 0.5% as percentage of nominal GDP each year beginning in 2011 at the latest. • Target year for getting budget deficit within 3% to be set on a country-by-country basis. • Growth in 2009 fall term expected for all countrie
United Kingdom	• 0.5% • Maintain deferment posture for the time being.	• 0.3 trillion pounds sterling • Funding operations to level off, other property (government bond purchases) to increase in importance. • Points regarding advisability of large increases in capital purchases	• Term deposit facility, central bank bill issuance • Reverse repurchase agreements • Long-term debt sales	• No expenditure cuts this fiscal year. • Reduce budget deficit as percentage of nominal GDP by half in four years compared to 2009. • Plan to reduce outstanding debt as percentage of nominal GDP from 2015 onward.
Japan	• 0.1% • No prospects of rate hikes for the time being.	• Long-term bond purchases of 1.8 trillion yen per month • Three-month operation of 10 trillion yen (0.1%)	• None under consideration for the time being.	• Initial budget for 2010 to reach record high (92 trillion yen). • Discuss size of budget toward mid-year.
Developing Countries and Elsewhere	• Israel (3 rate increases since Aug. 2009) • Australia (4 rate increases since Oct. 2009) • Norway (2 rate increases since Oct. 2009) • China (cash-deposit ratio raised 0.5% twice, in Jan. and Feb. 2010) • India (cash-deposit ratio raised 0.75% in Feb. 2			• Brazil, India and Mexico to reduce budget deficits in 2010.

Source: Mizuho Research Institute

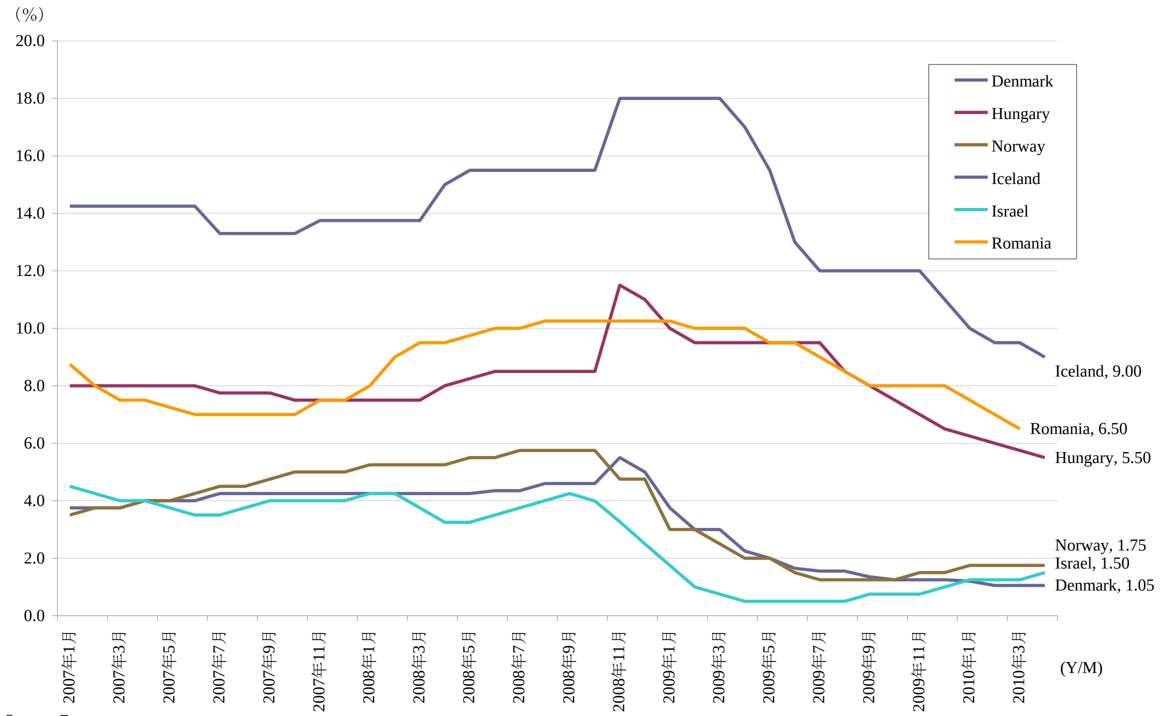
Figure 1-1-1-20:Policy interest rate of each country



Source: Datastream



Source: Datastream, Bloomberg



Source: Datastream

The exit strategy for fiscal policy has started and some countries have already ended some of their economic stimulus measures. At the same time, while the future of the economy is unclear, the timing at which each country's economic stimulus measures will end depends on the degree of economic stimulus and the financial state of that country. Countries are forecast to start implementing exist strategies while searching vigilantly for the possibility of a self-sustaining recovery in the future[16].

As we have seen up until now, the global economy as a whole is transitioning to positive economic growth. However, as self-sustaining recovery has still not been achieved in private sector demand yet in various countries. If interest rates in developed countries are tightened too soon or fiscal spending is ended too soon it could bring about concerns of another retreat for the global economy and if too late, there could be consequences for the sustainability of fiscal management in various countries. On the other hand, with a favorable economic recovery in the foreground, the early raising of rates in emerging countries to prevent the overheating of inflation is desirable. With the rising of interest rates may come an inflow of funds targeting the higher interest rates which could raise exchange rates, choke exports and raise prices. This could create concerns that the economy may enter another downturn.

If exit strategies are not implemented at the appropriate time and speed, it could elicit risks that will be presented later. Each country will be required to steer their economic policies carefully in the coming future.

Column 2　Discussion over an exit strategy for the G20

[16] For example, according to the European Commission (2010) "Communication from the Commission: Europe 2020 A Strategy for smart, sustainable and inclusive growth", support measures should be repealed once the economic recovery is self-sustaining and financial stability has been returned.

The disruption to financial markets by the global economic crisis has spread to the real economy and has increased concerns about the future of the global economy. While the interdependent relationship between countries deepens due to the globalization of economies, the need for a discussion on a response by leaders of developed and emerging countries has been strongly acknowledged which led to the holding of a summit meeting of G20 member countries. A summit with finance ministers and leaders of central banks from 20 countries was held at St. Andrews in the United Kingdom in November, 2009. Their joint declaration on the global economy stated that, “after we harmoniously responded to the crisis, economic and financial conditions have improved. However, the recovery has not been uniform and still depends on continued support measures,” which indicates weakness that the recovery was not yet self-sustaining. They specifically stressed regarding employment conditions that, “the high level of unemployment was a major pending problem.” Regarding the economic stimulus measures they agreed to, “continue maintaining support measures until the recovery is certain,” expressing again that it was too early to implement an exit strategy.

The IMF submitted the following seven criteria regarding the formulation and execution of an exit strategy at the summit.

<IMF Criteria for an exit strategy>

Criteria 1: The timing of the exit strategy should be based on the economic conditions and state of the financial systems of each country and it is important that maximum concern be given to the importance of policies that arouse demand and restore financial systems.

Criteria 2: The most important priority is financial restructuring. If monetary policy needs to be normalized, it can be adjusted flexibly.

Criteria 3: The exit strategy for public financing should be done within a clear and specific time line, have a goal of reducing sovereign debt to a common standard and should be communicated in a transparent, comprehensive and clear manner.

Criteria 4: Strengthening of the primary balance should be a vital driving force behind financial restructuring. First, fiscal stimulus to handle the crisis should be limited to only being a temporary measure.

Criteria 5: Untraditional monetary policy does not necessarily need to be lifted before tightening traditional monetary policy.

Criteria 6: The time and method of how financial policy support measures are to be lifted should be decided based on mechanisms including economic conditions, the stability of financial markets and market principals.

Criteria 7: Having a consistent exit strategy will help improve the results of all countries. This does not mean that it must be coordinated in sync with other countries but that the absence of policy coordination has the possibility of creating ripples of negative repercussions.

In April 2010, statements from leaders at the summit attended by finance ministers and central bank leaders from 20 countries stated that while the global economy is recovering faster than expected, the speed of the recovery differs within certain regions and between regions and different policy measures will be required. Moreover, the leaders stressed that economies still relied largely on policy support measures and for a sustainable fiscal government and coherent country commented, “policy support measures should be maintained until the recovery is without a doubt being led by the private sector and until it is stronger,” and “a reliable exit strategy should be formulated from exceptional macro economic support policies and monetary support policies that meet the conditions of each individual country while taking into consideration all conceivable repercussions.”

In this way the discussion on an exit strategy for the G20 is moving forward which involves not just the developed countries but also involves emerging countries.

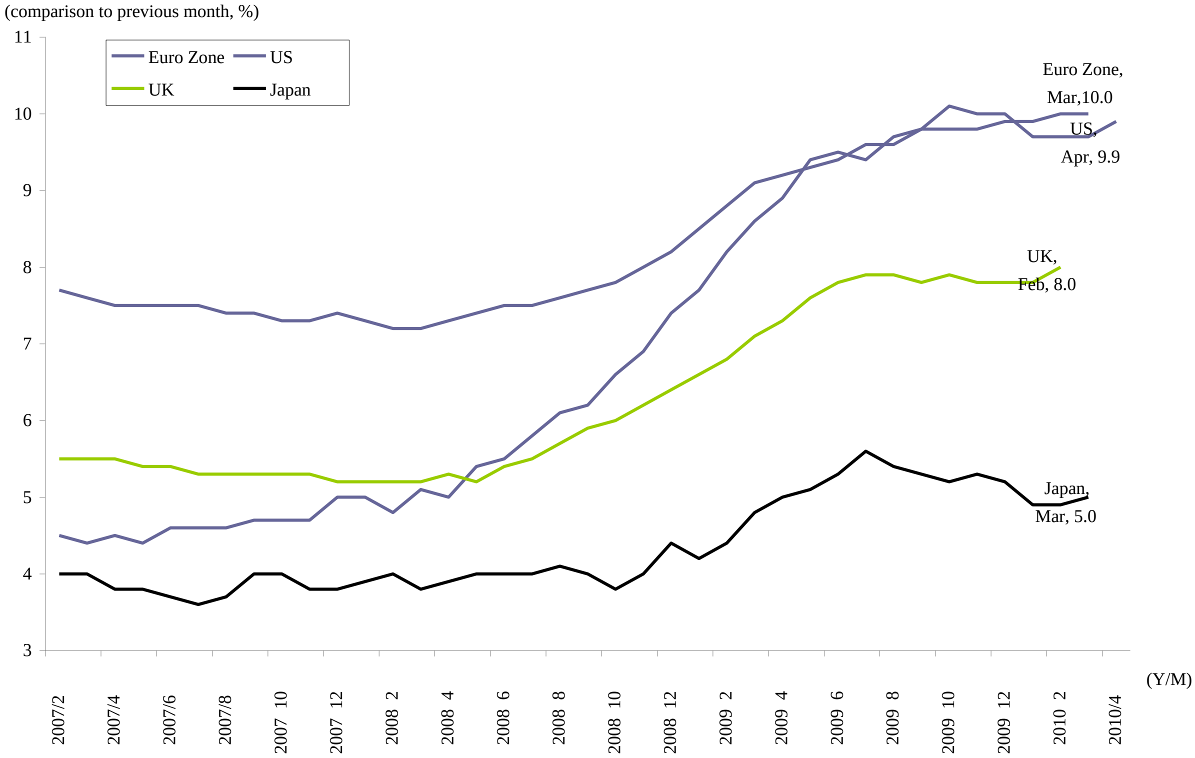
(2) Risk factors

As we saw in (1), while the global economy is recovering, risks exist including a delayed recovery in employment and in restoring the financial system, expanding fiscal deficits, rising prices due to an inflow of funds to emerging countries and wild fluctuations in product, resource and food prices. A watchful eye must be kept on the effects these risks can have on a self-sustaining recovery for the global economy.

1st risk factor: delayed recovery in employment

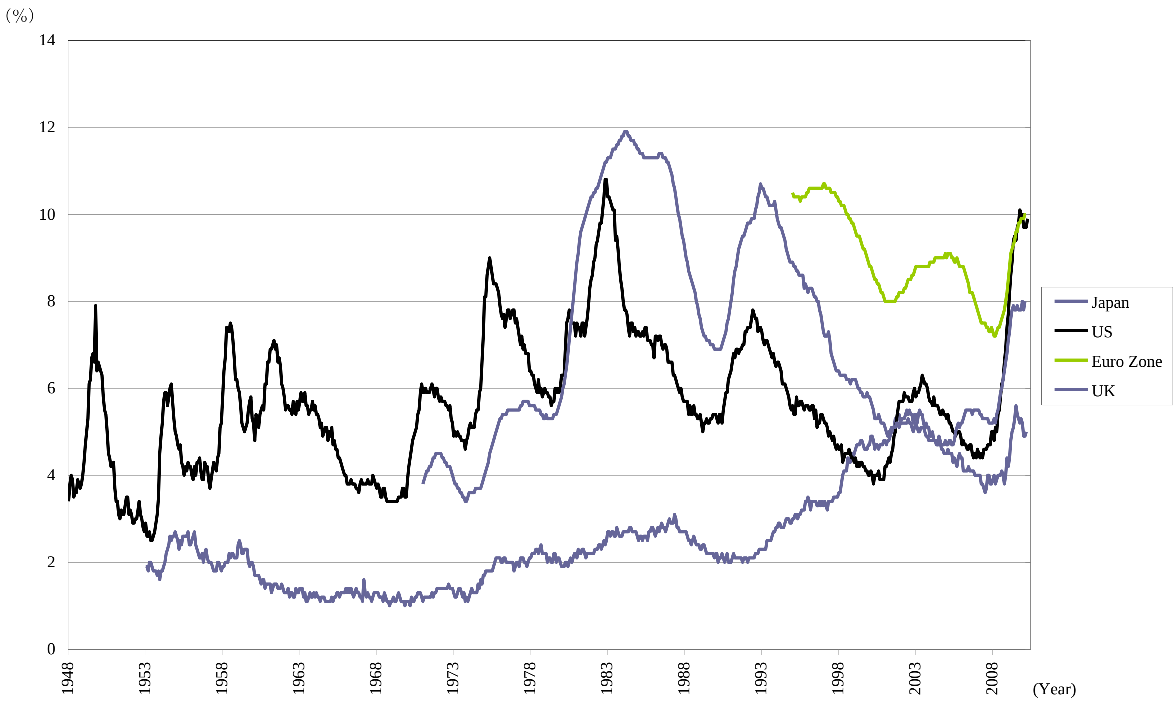
When the unemployment rate in major developed countries is examined, the rates are still the same as when they worsened after the crisis even though the global economy is in a recovery (Figure 1-1-1-21). Especially in the United States the unemployment rate after the crisis has been at a dire rate not seen in a quarter century (Figure 1-1-1-22). Companies up until now have overcome the crisis by improving labor productivity through cutting high cost regular employees and full-time laborers. With predictions of economic recovery this uncertain, companies have been wary of expanding production and increasing hiring to levels seen previously. Because of this there are fears of a so-called jobless recovery occurring (Refer to Chapter 1 Section 2 [Current state and future of the United States economy].

Figure 1-1-1-21: Unemployment Trends of Major Industrial Countries



So/urce: Bloomberg

Figure 1-1-1-22: Unemployment Trends of Major Industrial Countries (Long Term)



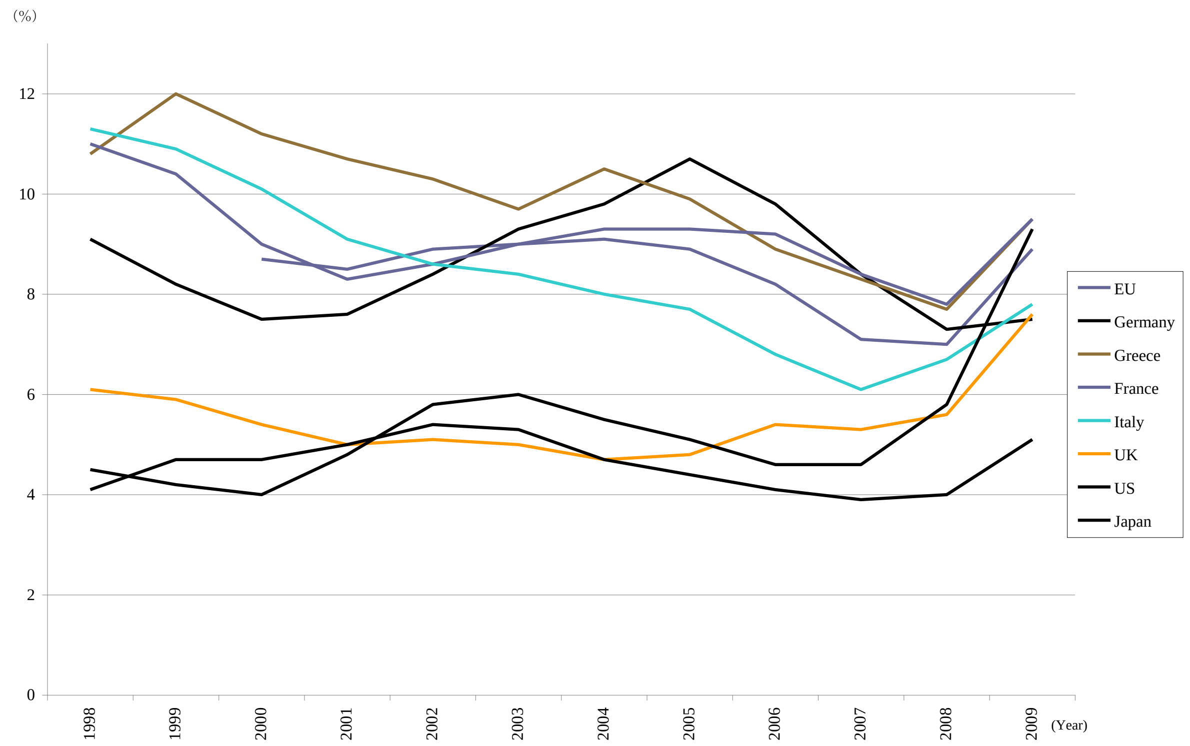
Source: Bloomberg

According to a report[17] by the ILO, there are predicted to be 43 million more long-term unemployed

17 ILO (2009), World of Work Report 2009

if the economic stimulus measures implemented by major countries are cut off early compared to if they are continued. In addition, unemployment among young people has been increasing at a rapid rate since 2007 in the United States and 2008 in other major developed countries (Figure 1-1-1-23 Young people). In all countries the unemployment rate among young people is higher compared to all ages (Figure 1-1-1-23 All ages). The ILO has pointed out that the increase in unemployment among young people has made them lose opportunities for employment which are a vital human resource that supports the future of each country. This means that young people will lose the chance to gain expertise and knowledge through working. If the human resources of each country are continually not utilized in an effective manner then the destruction of that country's economic foundation to grow is inevitable[18]. Moreover, an increase in young people harboring concerns about economic strength raises concerns that the proportion of those unmarried will increase and accelerate the declining birth rate[19].

Figure 1-1-1-23: Transition of unemployment rate of major advanced countries (all age groups, young people)



Source: Euro Stats

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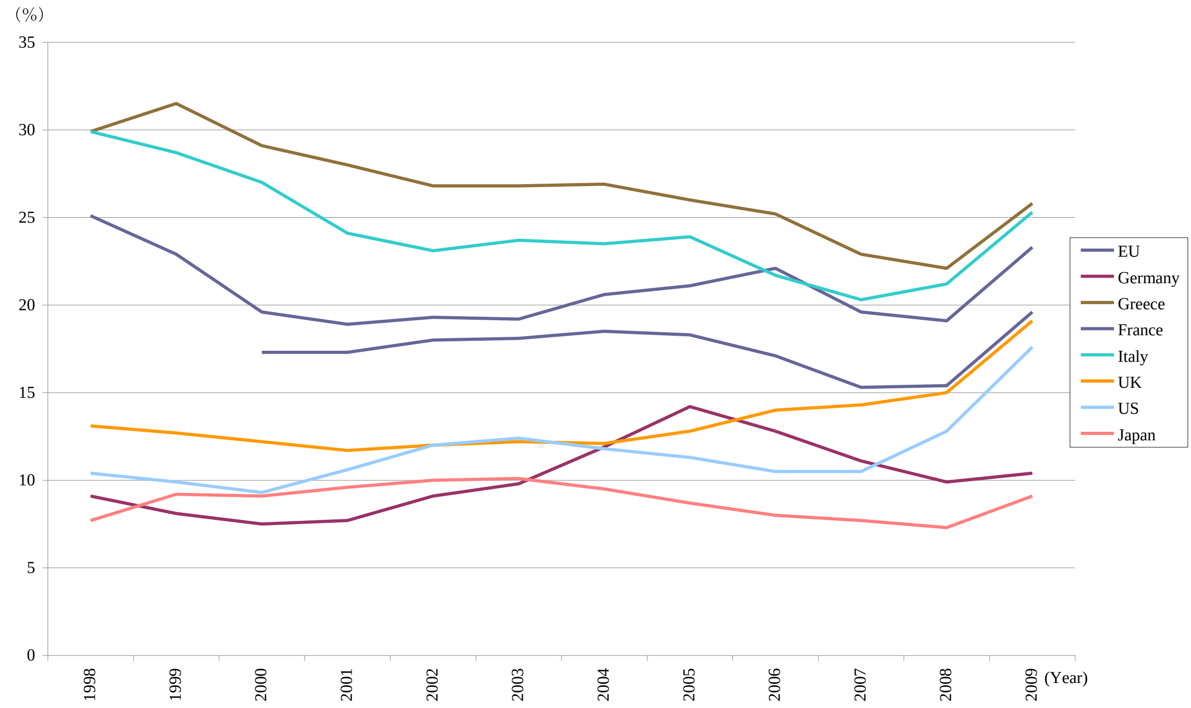
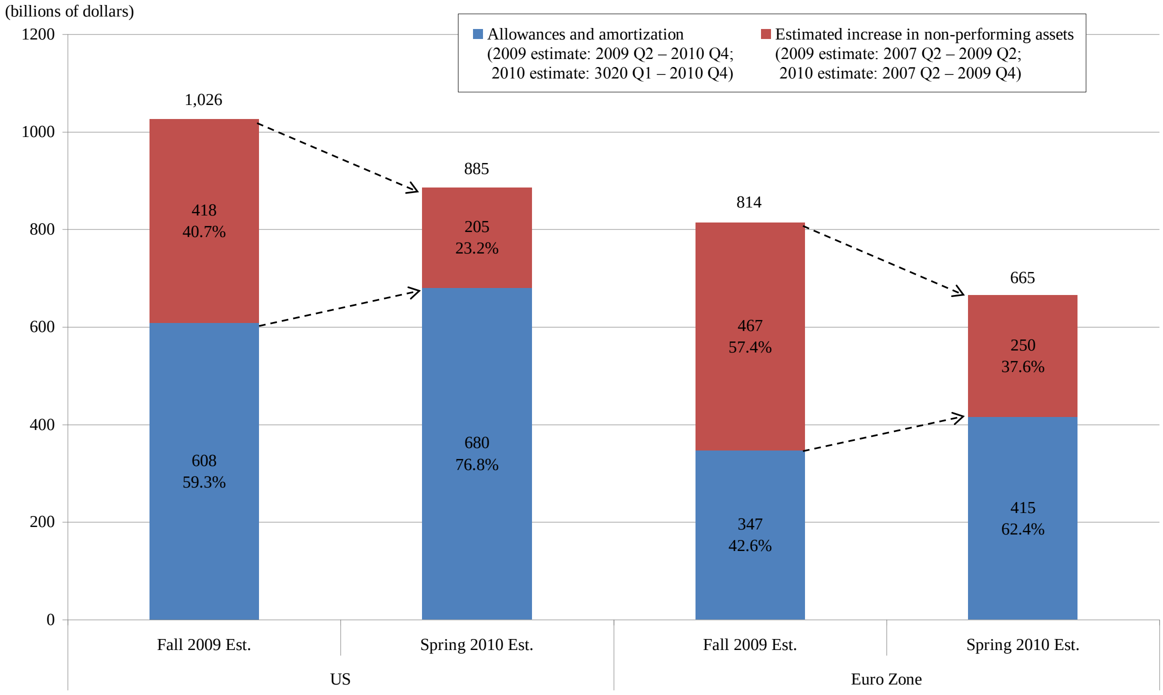
[18] Ministry of Economy, Trade and Industry (2004) 'White Paper on International Economy and Trade'.
[19] The Small and Medium Enterprise Agency (2006) 'White Paper on Small and Medium Enterprises'.



Source: Euro Stats

Figure 1-1-1-24: Trends in Disposal of Non-Performing Assets in the US/Europe



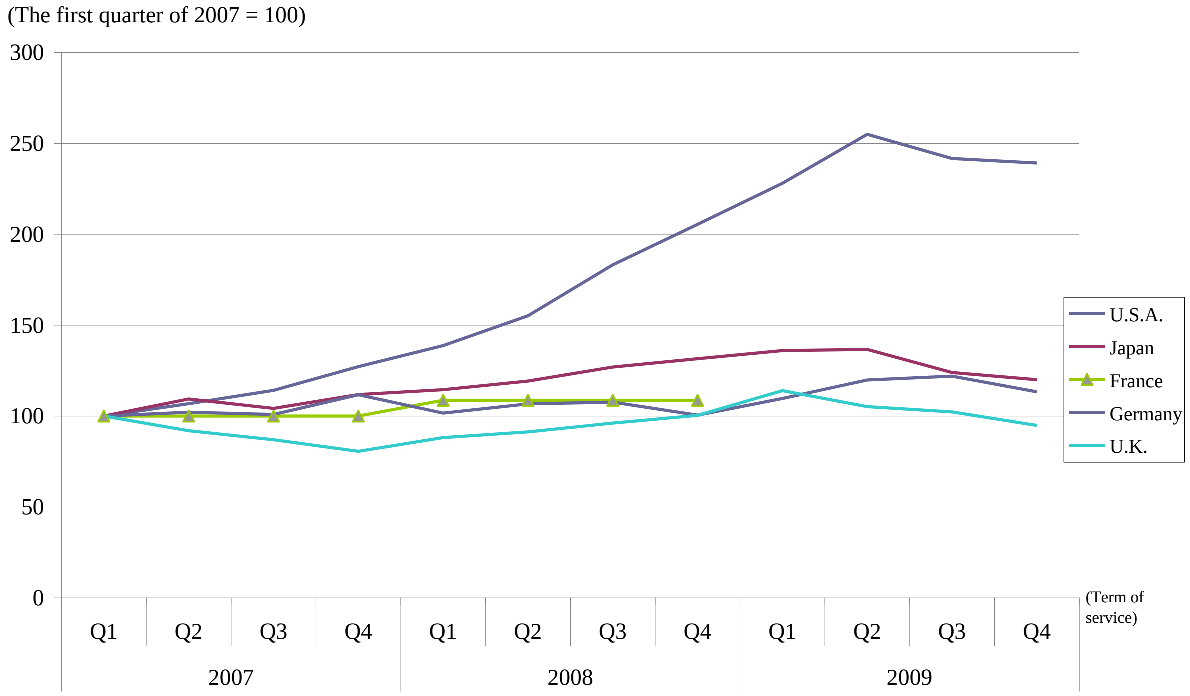
Source: "Global Financial Stability Report, April 2010" by the IMF

Table 1-1-1-25: Non-Performing Assets as a Percentage of Total Bank Assets

Country or Region	Non-performing assets as a percentage (%) of total bank assets (*1)
United States	7.0
United Kingdom	5.4
Euro Zone	2.9
Other developed European countries (*2)	3.9
Asia (*3)	1.5
World	4.1

(*1) As of the first quarter of 2009
(*2) Includes Denmark, Norway, Iceland, Sweden, and Switzerland.
(*3) Includes Australia, Hong Kong, Japan, New Zealand, and Singapore.
Source: "Global Financial Stability Report 2010" by the IMF

Figure 1-1-1-26: Trends in Number of Corporate Bankruptcies in Major Industrial Countries



Remarks: The data for France is based on annual data. The data of France in 2008 is based on preliminary figures, 2009 data is undisclosed. (As of May 2010)
Data Sources: Teikoku Data Bank for Japan, American Bankruptcy Institute for U.S.A., The Insolvency Service for U.K., INSEE for France, Statistisches Bundesamt Deutschland for Germany

The newest predictions for the global economy by the IMF indicate that while many developed countries have had employment turn positive during 2010, the IMF forecasts that the unemployment rate will continue to be high throughout 2011 and that there is the possibility that the proportion of short-term unemployed will continue to remain high in the midterm[20]. If the delayed recovery in the employment situation turns into a long-term problem, there is the risk that there will be a delay in consumption resuming.

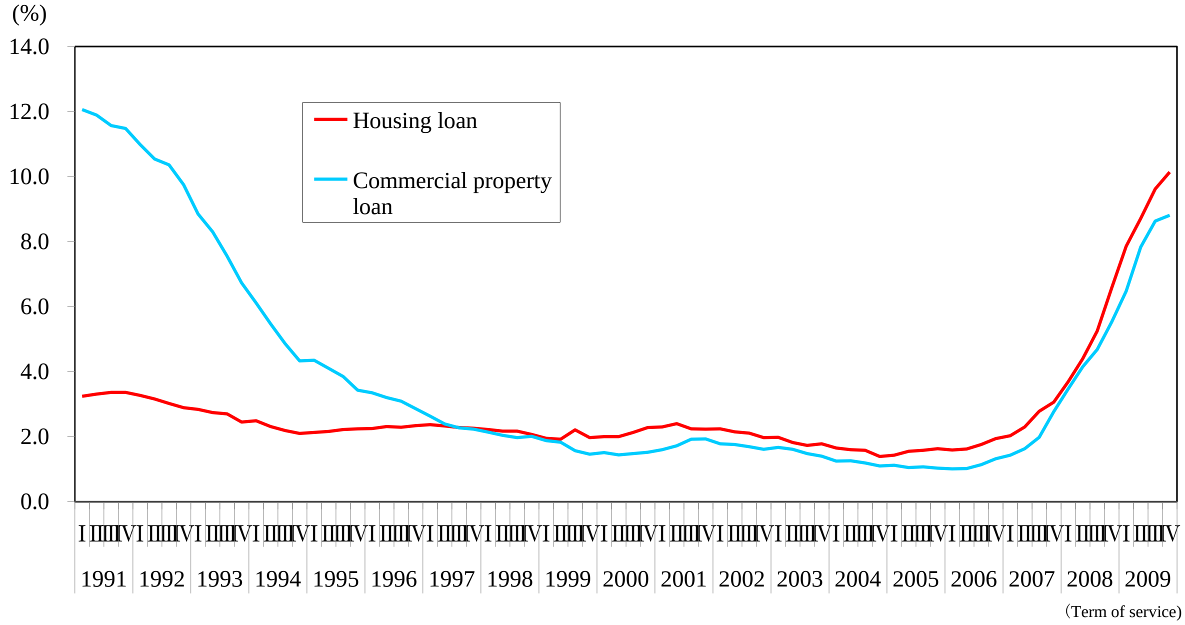
2nd risk factor: Delayed recovery in the functions of financial institutions

[20] Cited previously, IMF (2010a).

According to the IF, due to the improved global economic outlook, the increased amount of non-performing assets throughout 2010 as of April 2010 has decreased when compared to October 2009 (Figure 1-1-1-24). However, while the amount being processed is increasing it is still middle-of-the-road. The proportion of non-performing assets which make up the total amount of assets possessed in countries such as the United States (including the presumed increase) is large and the future is doubtful because of concerns that this may worsen due to future economic trends (Figure 1-1-1-25).

In Europe, the number of failing institutions in recent years has turned more positive in the United Kingdom, France and Germany compared to previous years (Figure 1-1-1-26).

Figure 1-1-1-27: Trends in the Delinquency Rates of Housing Loans and Commercial Property Loans in the US



Data Source: FRB

The credit contraction related to the holding of a large amount of non-performing assets by financial institutions (worsening balance sheet) has had an adverse affect on the real economy and will invite further crisis if new problems occur in the future.

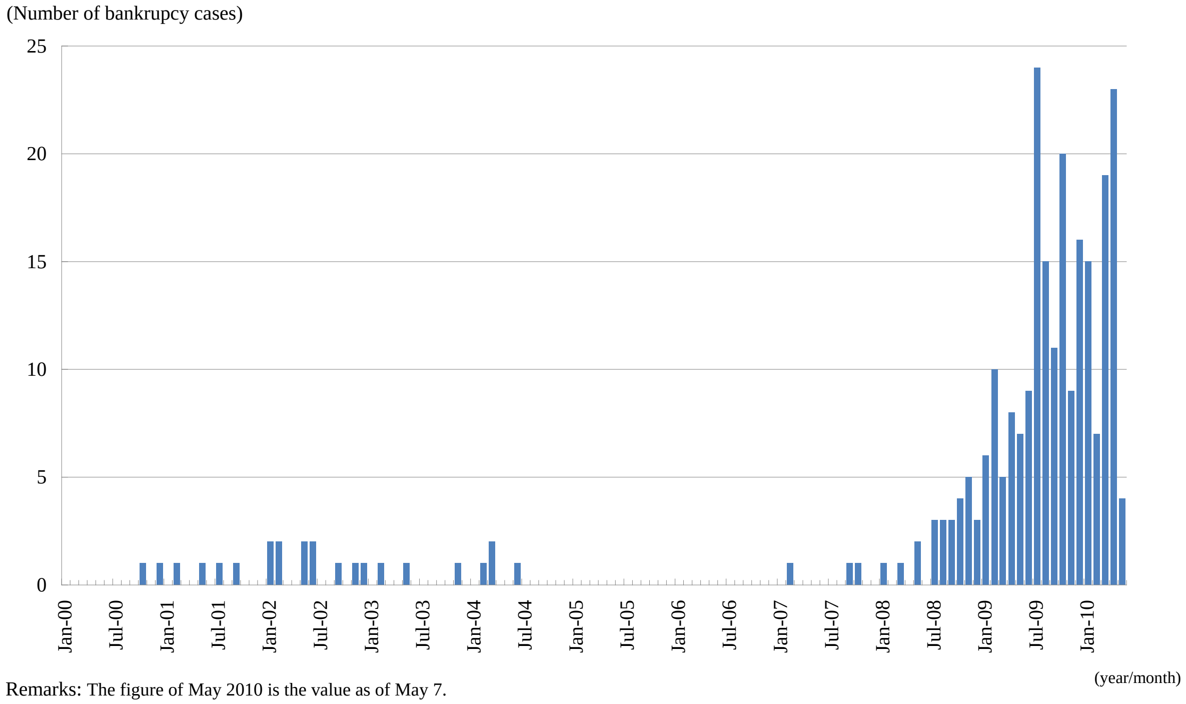
In the United States, the percentage of delinquencies of housing loans and commercial real estate loans is rising (Figure 1-1-1-27). The amount of commercial real estate loans was 3.4 trillion dollars and this amount is larger than the 1.3 trillion dollars of subprime loans. The proportion of commercial real estate loans directly given by local banks is high[21]. Therefore, if these are turned into bad assets a large negative impact is envisioned for the financial strength of local banks[22]. In reality, directly before the Lehman Brothers crisis began around July 2008, the number of failing local banks within the

[21] The ratio of commercial real estate loans out of total loans held by financial institutions is high for financial institutions with 1 billion dollars or less in loans, which amounts to 30% of all loans and 10% of all loans for financial institutions with more than 1 billion dollars in loans.

[22] The number of banks by size is as follows: 424 banks over 1 billion dollars in assets, 3,434 banks over 100 million dollars in assets and 3,912 banks with under 100 million in assets making the number of small to medium sized banks overwhelmingly more than larger banks. Most local banks are small to medium sized banks.

United States rapidly increased and in 2009 alone, 140 banks went bankrupt (Figure 1-1-1-28). The pace of local bank bankruptcies has accelerated upon entering 2010 and between the months of January and April, 50 banks went bankrupt and this is more than the previous year during the same time period (29 banks). There are concerns that the rapid increase in local bank failures will have a serious impact on local economies and the ability of small- and mid-sized companies to acquire financing[23].

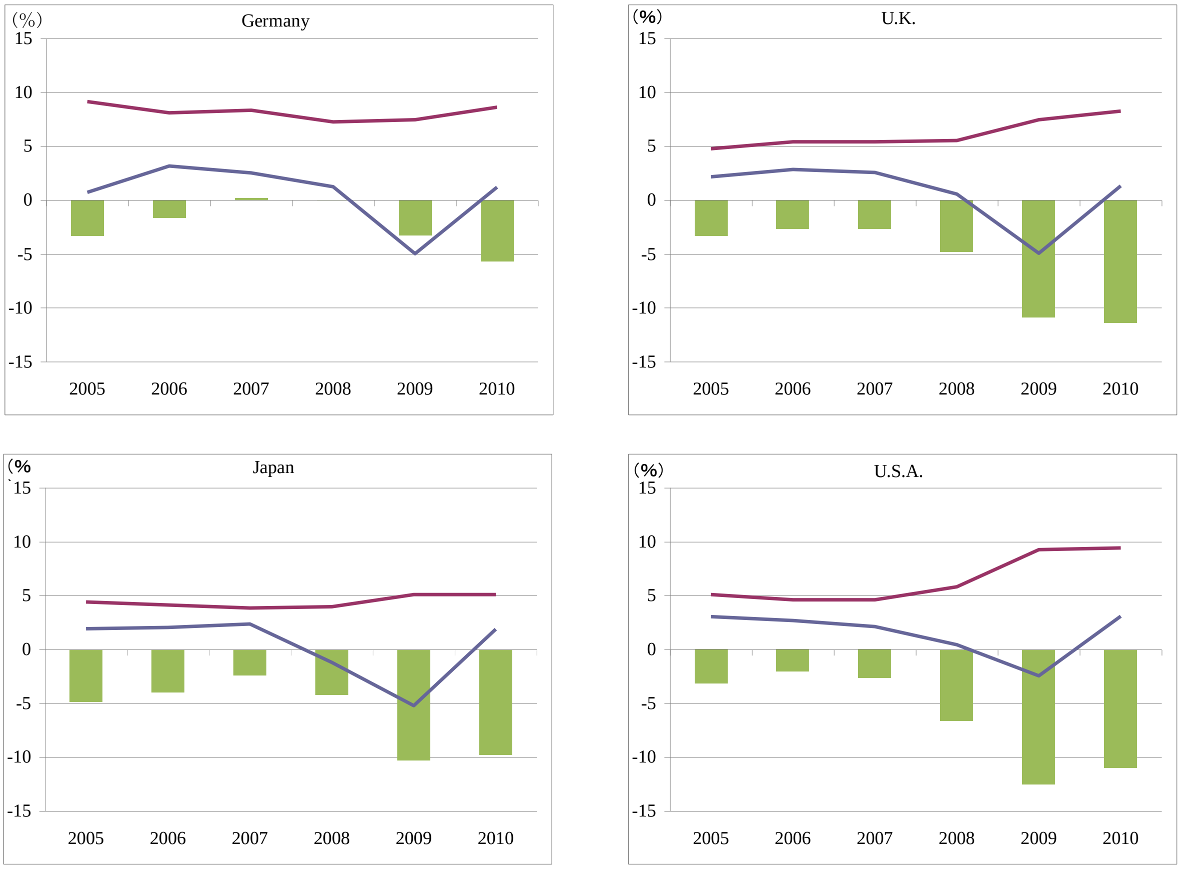
Figure 1-1-1-28: Trends in the Number of Bankruptcies Among Regional Banks in the US



Remarks: The figure of May 2010 is the value as of May 7.
Data Source: Federal Deposit Insurance Corporation (FDIC) "Failed Bank List"

23 In the "FEBRUARY OVERSIGHT REPORT" by the Troubled Asset Relief Program Committee (2010), the commercial real estate market has been significantly worsening since the beginning of 2007 and the incredible increase in defaults of commercial real estate loans forecast in the next few years will threaten the stability of many banks, especially small and medium sized banks. The report also indicated concerns that the weak situation of banks would not stop at individual banks but spread to all banks.

Figure 1-1-1-29: Transition of financial deficit of main advanced countries



3rd risk factor: Dilemma between economic stimulus measures and increasing fiscal deficits

In order to deal with the global economic crisis, many countries have implemented huge economic stimulus measures and enlarged their fiscal deficits (Figure 1-1-1-29). Fiscal deficits are piling up in major developed countries, Central and Eastern European countries and the so-called PIIGS which are southern European countries including Portugal, Ireland, Italy, Greece and Spain[24] (Tabel 1-1-1-30).

In Central, Eastern and Southern Europe, concerns over a sovereign default (national financial collapse) are growing more serious with the fiscal crisis in Greece. The CDS spread of government bonds is significantly growing compared to developed countries (Figure 1-1-1-31) and currently concerns do not stop with Greece. In the future, if investors decide to withdraw funds from these countries it could lead to soaring long-term interest rates and those country's economies taking a serious blow. If this occurs, there will also be great repercussions for the overseas companies and financial institutions that provided funds to these governments and private sectors.

Figure 1-1-1-30: International Comparison of Budget Deficits as a Proportion of GDP

[24] All monetary policy for member countries of the euro zone is unified by the ECB (European Central Bank). Therefore, member countries cannot implement economic stimulus measures such as raise or lower interest rates based on their own judgment. As a result, member countries with comparatively low economic power have no choice but to rely on fiscal policies (increase government expenditures) to recovery the economy and it is easy for these countries to lose their fiscal soundness.

		2007	2008	2009	2010	2011
Major industrial countries	Japan	-2.4	-4.2	-10.3	-9.8	-9.1
	U.S.A.	-2.7	-6.6	-12.5	-11.0	-8.2
	U.K.	-2.8	-5.9	-11.5	-13.3	-12.5
	Germany	0.2	0.0	-3.3	-5.3	-4.6
	France	-2.7	-3.3	-7.5	-8.6	-8.0
	Italy	-1.5	-2.7	-5.3	-5.4	-5.1
PIIGS	Portugal	-2.6	-2.8	-9.4	-7.6	-7.8
	Ireland	0.1	-7.3	-14.3	-12.2	-11.6
	Italy	-1.5	-2.7	-5.3	-5.4	-5.1
	Greek	-5.1	-7.7	-13.6	-9.8	-10.0
	Spain	1.9	-4.1	-11.2	-8.5	-7.7
Central-eastern Europe	Hungary	-5.0	-3.8	-4.0	-4.1	-3.6
	Latvia	-0.3	-4.1	-9.0	-	-
Asia	China	2.0	1.1	-1.8	-0.9	-0.3
	S. Korea	4.6	3.3	-1.8	0.4	1.1

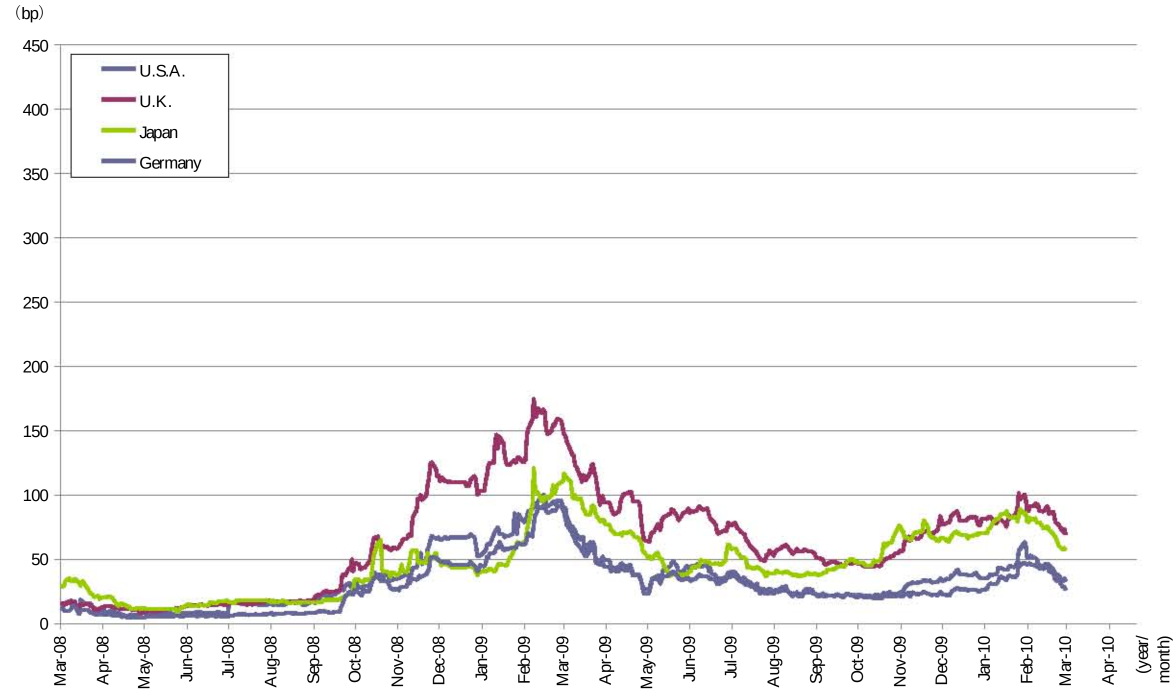
*The figures after 2009 (after 2010 for Europe) are based on estimations by OECD/IM
Data sources: OECD Economic Outlook No.86(Nov.2009), Eurostat
IMF "World Economic Outlook April 2010".

Meanwhile, the CDS spread for government bonds of major developed countries is showing a stable trend. However, in an environment where it is difficult to forecast a high rate of growth in the future, if the economy takes another step in the wrong direction there is the fear that it could lead to even larger fiscal deficits. If the concerns of investors regarding the fiscal position of countries was to come true, the credibility of the developed country's government bonds would diminish, the price of government bonds would drop precipitously (soaring interest rates) and furthermore those country's currencies would rapidly lose value. These are not just risks factors for developed countries but for the global economy which is currently on the track to recovery.

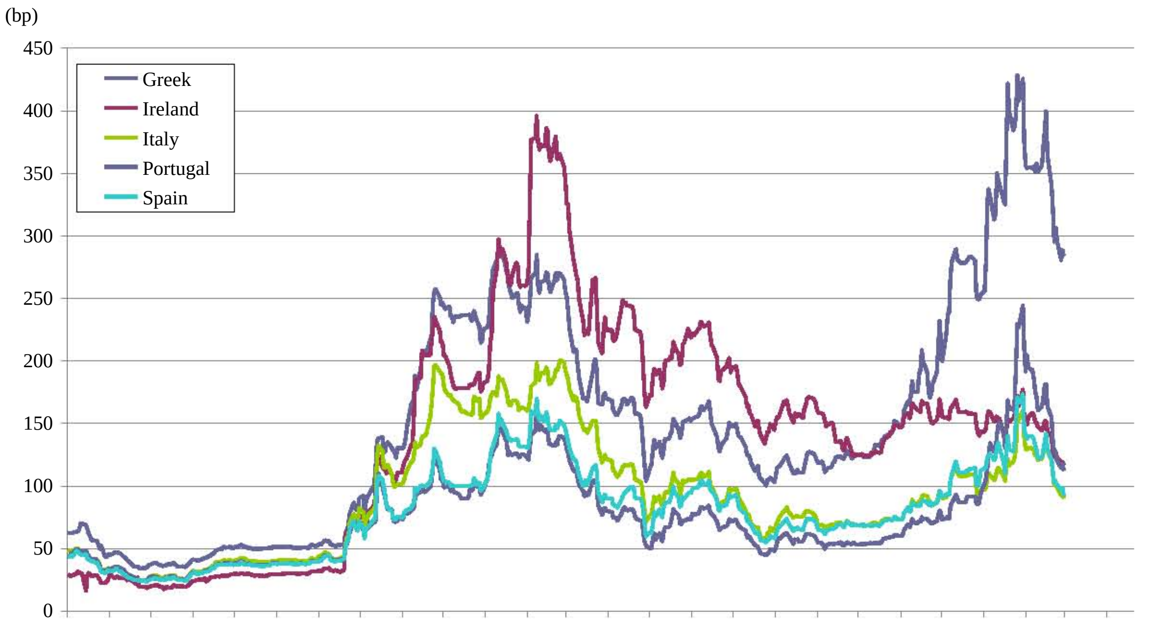
In this way the further expansion of fiscal deficits could become a risk factor which could hinder growth of the global economy that has just started to recover (Refer to Column 3 and 4). On the other hand, there is the risk of the economy turning sour once again if expenditures are controlled to avoid sovereign default[25].

Figure 1-1-1-31: Transition of the CDS spread of government bond of each country

[25] Cited previously, IMF (2010a).



Remarks: Spread with 5-year government bond
Data Source: Bloomberg



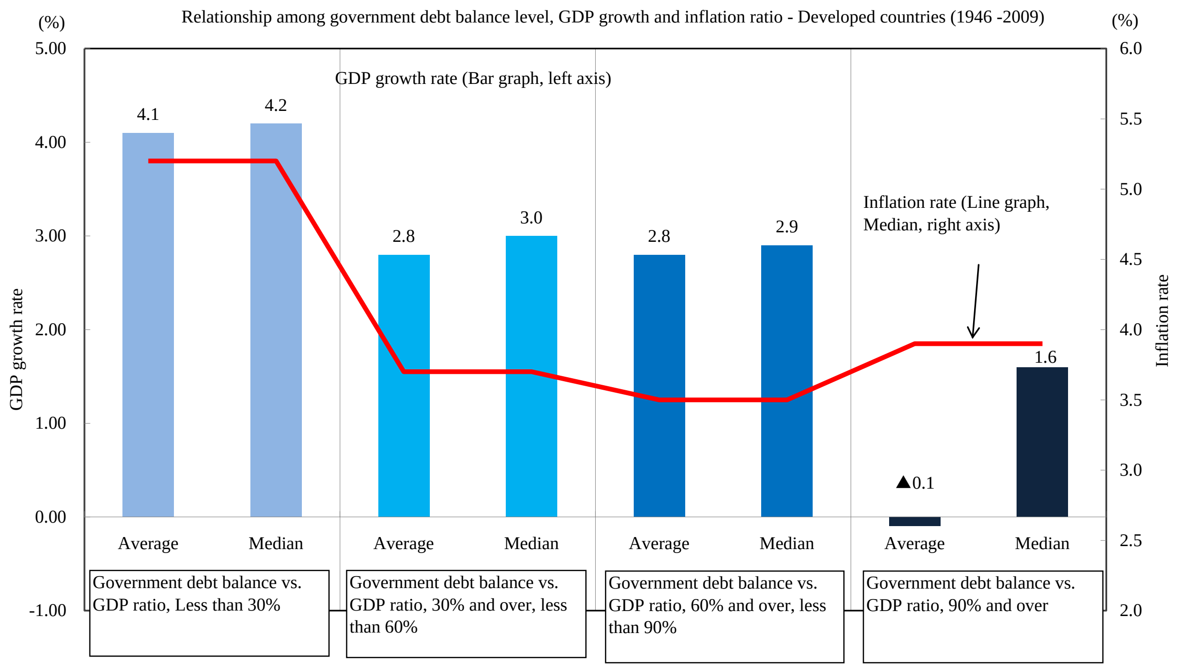
Remarks: Spread with 5-year government bond
Data Source: Bloomberg

<u>Column 3 Relationship between the level of outstanding obligations, the GDP growth rate and rate of inflation</u>

Professors Carmen M. Reinhart and Kenneth S. Rogoff[26] give a positive analysis of the relationship between the level of outstanding government obligations (only the central government), the real GDP growth rate and rate of inflation by using data of 44 countries over 200 years in, “Growth in a Time of Debt.”[27]

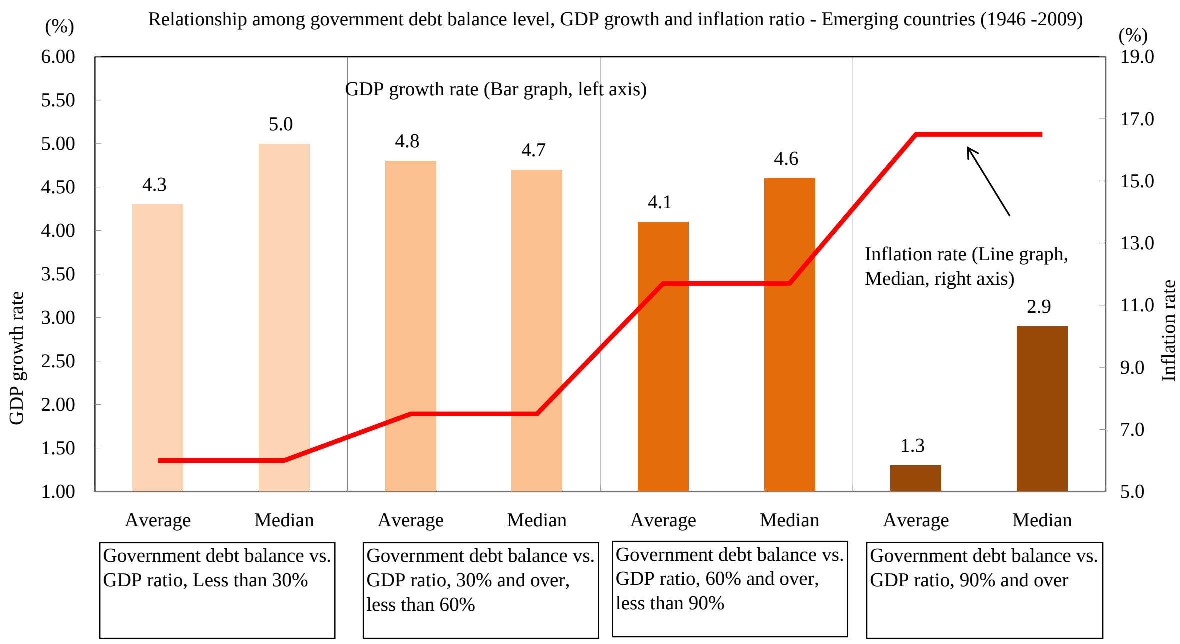
According to their analysis results: 1. if the ratio of outstanding government obligations is less than 90% of GDP, the relationship between government obligations and the real GDP growth rate are low, however, if the rate of outstanding government obligations is over 90% of GDP, then the rate would be 1% less when compared to cases where the real GDP growth rate central value is less than 90% and it is even lower using the average value. This relationship is shared with both developed and emerging countries. 2. There is no clear relationship between the level of outstanding government obligations and the rate of inflation but in emerging countries, the rate of inflation goes up in proportion to the increase in obligations (Column figure 3-1).

Column figure 3-1: Relationships among the level of government debt, GDP growing rate and inflation rate



Notes: Developed countries include Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greek, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, UK and U.S.
Source: Reinhart & Rogoff (2010) “Growth in a Time of Debt”

[26] International Monetary Fund (IMF) Former Chief Economist.
[27] Carmen M. Reinhart & Kenneth S. Rogoff (2010), “Growth in a Time of Debt”.



Note: Emerging countries include Argentine, Bolivia, Brazil, Chile, Columbia, Costa Rica, Ecuador, El Salvador, Ghana, India, Indonesia, Kenya, Korea, Malaysia, Mexico, Nigeria, Peru, the Philippines, Singapore, South Africa, Sri Lanka, Thailand, Turkey, Uruguay and Venezuela.
Source: Reinhart & Rogoff (2010) "Growth in a Time of Debt"

Column 4 The debt problem in Greece

<Concerns over a finance problem which surfaced from statistical revisions conducted by the new administration>

In October 2009, the new administration in Greece announced that there were errors in the former administration's financial statistics. The stable growth agreement in the EU states that fiscal deficits for a single year must be below 3% of GDP and that outstanding government obligations (general government) must be below 60% of GDP. However the fiscal deficit in Greece for 2008 was revised to 7.75% of GDP even though they had stated it was 2.75% and because of this concerns surfaced that Greece may fall into default (default on debt) and stock prices and the value of the euro dropped.

<Response by the government of Greece for sound public finance>

On January 14, 2010 the government of Greece announced a stable growth plan which included a 10% cut in pension benefits and tax increases in order to keep fiscal deficits within 8.7% of GDP in 2010 and 2.8% in 2012[28]. The government of Greece also announced additional policies for fiscal restructuring totaling 4.8 billion euros (approx. 2% of GDP).

<Euro member states and decision on joint financing for Greece by the IMF>

On March 25th at the EU regional summit an announcement was made that preparations for concerted

[28] On February 10th, 2010, public workers unions hold a strike to protest the fiscal restrain policies. Schools, public offices and railways were forced to close.

bilateral financing by the IMF and euro member states would be performed. The bilateral financing was approved by a unanimous vote between euro member states and Greece would not receive favorable treatment in regards to the financing interest rate.

<Market fears do not end even after decision on support measures>

Even after the basic policy on support for Greece was decided on, market fears concerning the effectiveness of the support measures did not ebb and on April 9th, the credit ratings agency Fitch, Inc. lowers Greece's government bond rating by two levels (BBB+ to BBB-). In addition, the four large banks in Greece could not garner enough financing from the domestic short-term financial market and requested assistance from the government which impacted the markets and due to additional fears that the serious fiscal deficits in Greece would worsen even more, stock prices in Greece dropped even further.

<Emergency phone conference of euro zone leaders on concrete support measures >

On April 11, 2010, treasury ministers of the euro zone conducted an emergency telephone conference regarding support for Greece and agreed to a finance period of three years where 30 billion euros in financing would be offered the first year in order to cover the necessary funds for the joint plan and co-finance with the IMF. The lending rate would be based on the Euro Interbank Offered Rate (EURIBOR) of 5%. Support after the next year would be decided according to the agreement of the joint plan.

<Further statistical revisions and reductions in government bond ratings>

On April 22nd, after the EU completed a detailed examination of Greece's statistics, the fiscal deficit of Greece was revised from 12.7% in 2009 to 13.6%. After this new information government bonds in Greece and the euro dropped and the dollar/euro rate dropped to the low level of 1 euro = 1.33 dollars for the first time in a year. On the same day (April 22nd, 2010), market fears were amplified when the credit rating agency Moody's lowered their credit rating on Greece's government bonds one rank from A2 to A3 for reason there was the possibility that Greece's fund raising costs could rise to a high level.

<Euro member states and the IMF decide on support for Greece>

On April 23rd, Greece formally requests support from the European Commission, the European Central Bank, the Euro Group and the IMF. On May 2nd, after finishing discussions on support with the European Commission, the ECB and IMF, they announce a fiscal restructuring program which entails increasing the value added tax, reducing public worker's salaries and reforming the apprenticeship system to reduce the fiscal deficit by 30 billion euros (or 11% of GDP) within three years (by 2013) and reduce the fiscal deficit to within 3% of GDP by 2014. Upon hearing this, the Euro Group decided to offer 110 billion euros in support for three years between 2010 and 2012. Eighty billion euros would be financed bilaterally between euro member states (30 billion euros the first year) while 30 billion euros would be invested by the IMF (10 billion euros the first year). This support measure was confirmed at the euro zone summit on May 7th and at the IMF council on May 9th.

Greece would receive 14.5 billion euros from euro member countries and 5.5 billion euros in financing from the IMF and paid off government bonds (8.5 billion euros) with payback due on May 19th.

The ECB on May 3rd announced that they would support the fundraising of banks in Greece by excluding government bonds of Greece from the eligible security standards for fund supply operations[29].

<Response by the EU for acceptance of the euro>

At the euro zone summit held on May 7th, 2010, all organizations within the euro zone (cabinet ministers, European Commission and the ECB) and member countries agreed to implement all executable measures in order to maintain stability within the euro zone. On May 9th, a comprehensive package of countermeasures was agreed upon at the emergency EU treasury minister board meeting held in order to ensure a stable financial system in Europe. Included in these countermeasures was the European stabilization mechanism which is a fund support framework of at most 500 billion euros for euro member countries. The IMF would also participate in this support measure by supplying half the amount of the European stabilization mechanism, or 250 billion euros. The European stabilization mechanism would be made up of 60 billion euros procured from the market by the European Commission using the EU budget as a guarantee and the support (guarantee) of at most 440 billion euros from euro member states.

On May 10th the ECB announced that they would be purchasing euro zone government debt, private sector bonds, finance euros and reopen the temporary dollar swap arrangement with the FRB in order to stabilize the financial markets and prevent a rise in interest rates due to ensuring liquidity.

On May 12th, a measure to prevent the reoccurrence of a fiscal crisis which included an advance evaluation of the EU member state budget proposals was proposed at the European Commission and based on the stable growth agreement the Commission expressed their goal of maintaining confidence in the euro.

<Further issues for the euro zone>

In Greece social concerns within the country regarding salary cuts and reductions in pensions are spreading and while this situation must be continually watched, there is also the need to be concerned about the same huge fiscal deficit problems in the so-called “PIIGS” countries, Portugal, Ireland, Italy and Spain. For example, it can be said that the net indebtedness to other countries and public debt outstanding compared to GDP is rising higher and is currently coming to a head.

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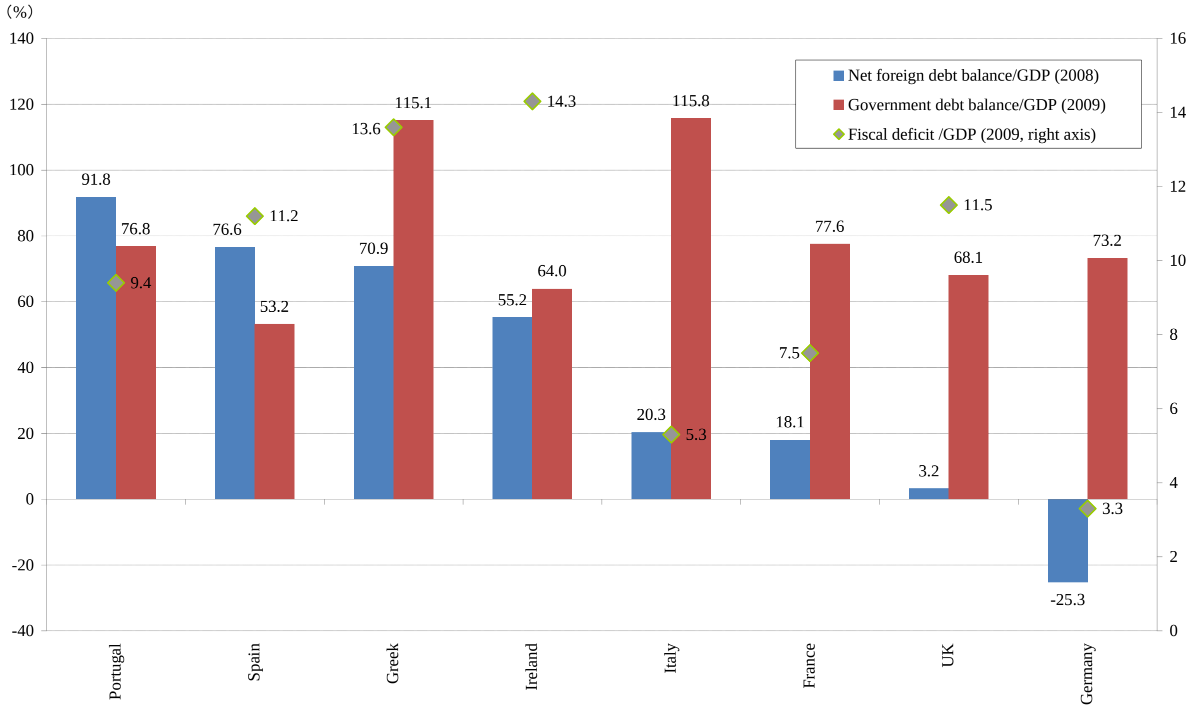
[29] On April 27th, the credit rating agency S&P lowered the credit rating of Greece’s government debt from BB+ to BBB+ which is lower than the BBB- for applicable standards for collateral by the ECB.

Column figure 4-1: Net Foreign Debt and Government Debt (General Debt) As a Proportion of GDP for European Countries



Sources: World Economic Outlook (IMF) and IFS (IFM), Eurostat, AMECO

While the ECB is conducting financial policy measures in the euro zone, the euro member countries have sovereign power over their basic fiscal policies and they realized that ensuring countermeasures in the event that a default occurs in one of the euro member countries is an issue for the euro zone.

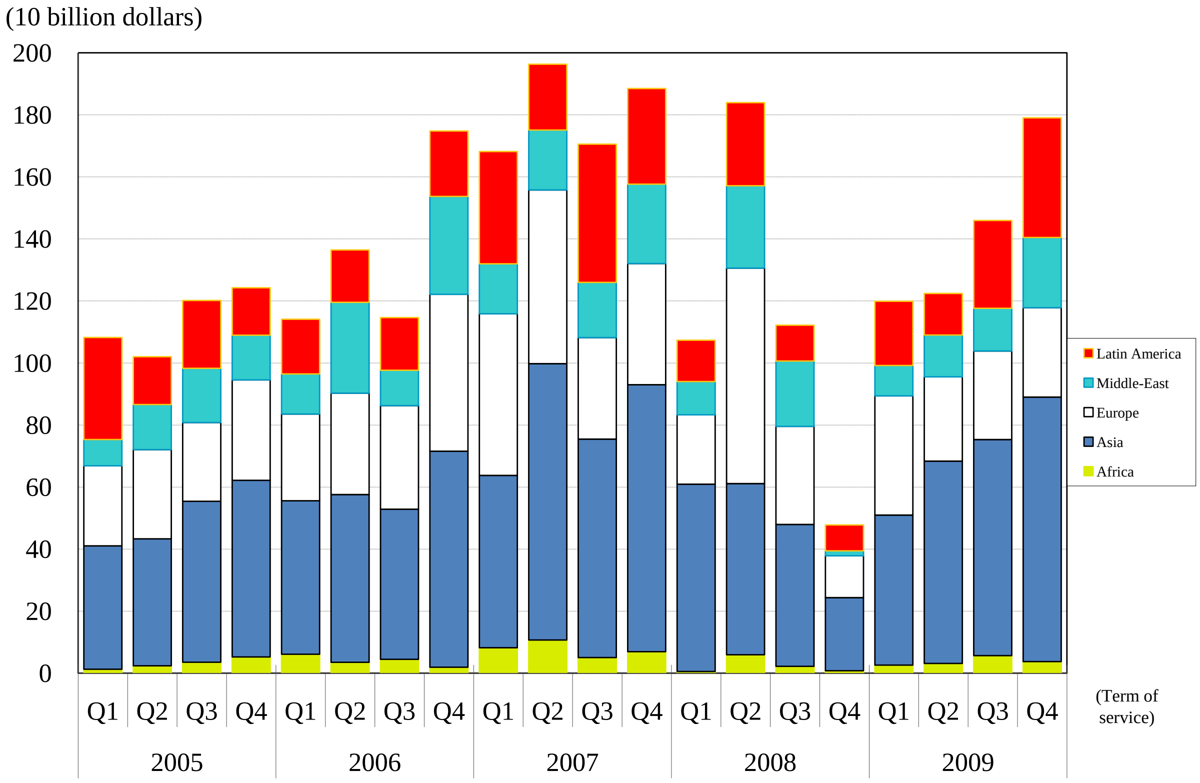
4th risk factor: Fear of the bubble in emerging countries bursting

While the inflow of funds to emerging countries temporarily dropped significantly due to the global economic crisis it has begun to increase once again after the start of 2009. Especially with the favorable economic recovery in sight, the increase in the flow of funds to Asia stands out and the rate of funds flowing into Asia has almost returned to the peak levels seen before the crisis (Figure 1-1-1-32).

An outflow of 15 billion dollars in funds (2008) from India transitioned to an inflow of 21.1 billion dollars (2009) and an inflow of funds to Brazil totaling 1.1 billion dollars (2008) transitioned to 49.1 billion dollars (2009) (Figure 1-1-1-33).

With the inflow of funds to emerging countries, a long-term low interest rate policy in developed countries was predicted due to the slow economic recovery while in emerging countries there were expectations that interest rates and exchange rates would rise due to a speedy economic recovery in emerging countries. Other conceivable factors include the rapid recovery in the risk preferences of investors after the bankruptcy of the large US investment bank Lehman Brothers in September 2008 and the excess funds equaling leverage which was produced from the abundant fund supplies through credit expansion in various countries which demands an investment location and a large amount of these funds are flowing into emerging countries.

Figure 1-1-1-32: Flow of Funds into Emerging Countries by Region

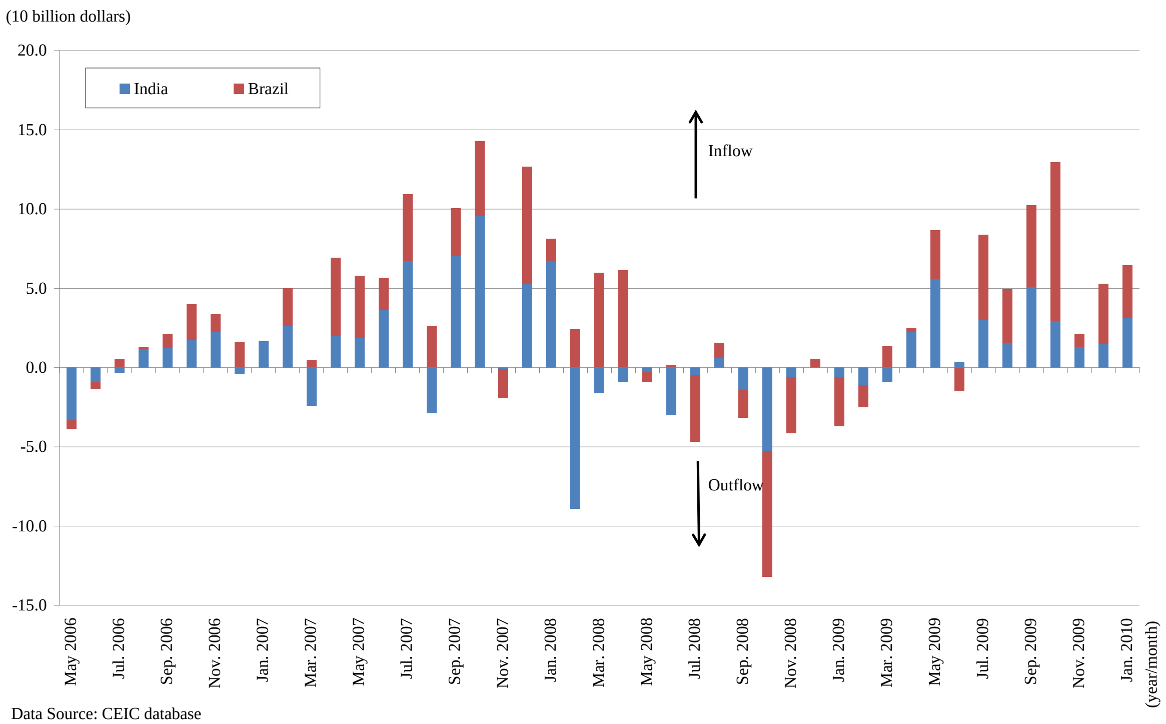


Data Source: IMF "World Economic Outlook, April 2010"

According to the IMF, it was thought that the shift in funds to emerging countries at the time (2nd quarter 2009) was based on a recovery in the risk preferences of investors desiring higher returns but the inflow of funds to emerging countries after this was due to expectations in a projected turnaround for growth in Asia and Latin America and to rising exchange rates[30].

[30] IMF (2010b), Global Financial Stability Report 2010 April.

Figure 1-1-1-33: Flow of Investment Funds into Emerging Country Securities



Data Source: CEIC database

The increase in liquidity brought about by the large increase in the flow of funds to emerging countries raise concerns that the prices of assets (stock prices and real estate prices) will rise considerably, creating a bubble. According to the IMF, the rise in asset prices is not extensive or excessive but in a number of countries the pressure of rising prices is mounting. The IMF points out that rising real estate prices can be seen in some regions in a limited amount[31]. For example, real estate prices in Australia, Hong Kong and Seoul are all exceeding levels seen before the global economic crisis hit. In Hong Kong especially real estate prices of luxury housing is rising at a remarkable rate on the back of an inflow of excess funds created from economic stimulus measures in other countries (Figure 1-1-1-34).

Real estate prices in China dropped after the second half of 2007[32] and were less than the previous year during the later half of 2008. After the economic slump in China due to the global economic crisis, real estate prices in China rapidly recovered in November 2008 after the Chinese government announced a change in policy to “moderate easing of monetary policy.” During March 2010, the economy in 70 cities throughout China including Peking, Shanghai, Guangzhou and Shenzhen in the east all recorded growth of more than 10% compared to the previous year. Shenzhen especially showed an improvement of over 20% and many point out the fact that the real estate market throughout the nation including inland areas such as central and western China is heating up. A factor in the heating up of the real estate market in China is thought to be the existence of funds from abroad flowing into the country[33]. However, some argue that the real estate market in China is taking a

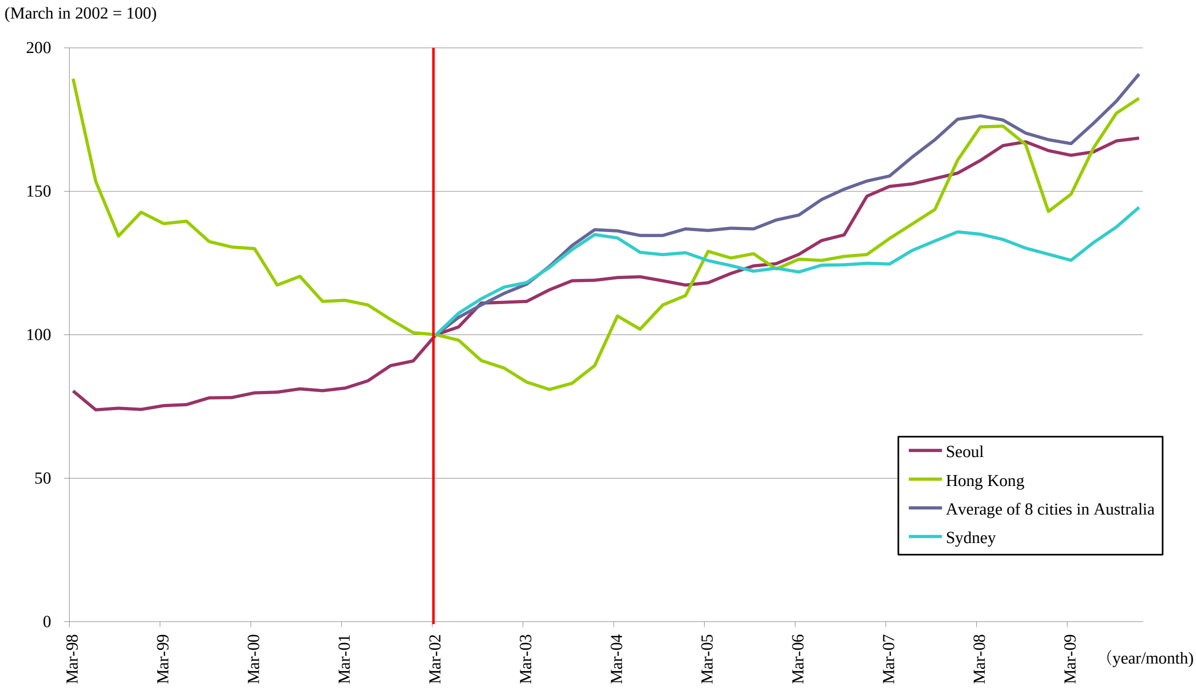
[31] Same as above.

[32] As an example, the Chinese government has implemented restrictions on bank lending and policies to restrain credit in order to contain the rise in real estate prices.

[33] Bank of Japan (2010b), According to, “Regarding the recent rise in real estate prices in China” (Bank of Japan Review), “speculative

breather[34] and in the short-term the rate of growth of real estate prices in Shenzhen and Guangzhou will decrease (Figure 1-1-1-35).

Figure 1-1-1-34: Home Prices in Emerging Countries/Resource Countries



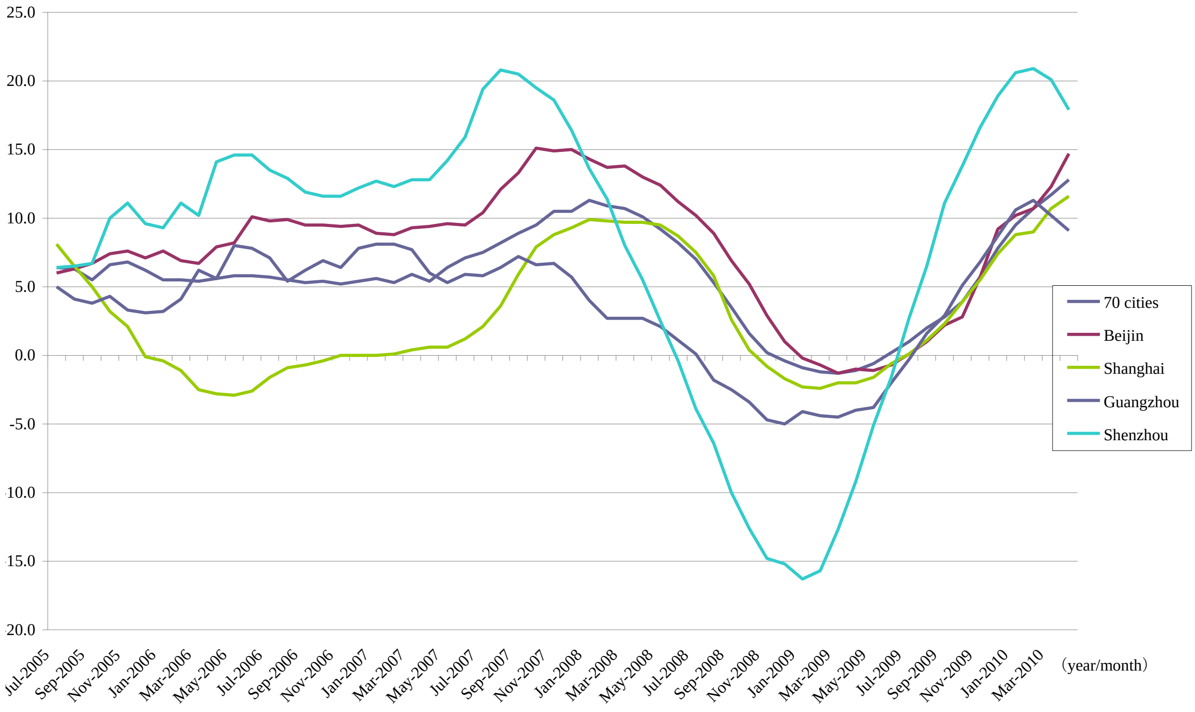
Data Source: CEIC

Figure 1-1-1-35: Increase in Chinese Real Estate Prices (Compared with Same Month Prev. Year)

funds from abroad outside of the scope of oversight from authorities has entered the country in a number of ways by passing through loopholes on fund restrictions and has flowed into the country as short-term funds called "hot money"". One of the factors given of soaring real estate prices in China are the strong incentives offered for real estate development by local governments. In other words, local governments are gaining income by method of transferring the land of farmers to real estate developers or investment and loan companies which so-called investment platforms that the governments have an investment in at a high price by expropriating the land at prices close to conventional use values. Therefore, they point to the fact that local governments have an incentive to promote aggressive real estate development by real estate developers and real estate investments by local commercial banks.

34 The National Development and Reform Commission of China expressed a view that as of May 19th, 2010, the rise in real estate prices in China had stopped since the middle of April and that the number of transactions had also decreased.

(% compared to the same month in previous year)



Data Source: CEIC database

The inflow of funds to emerging countries also affects stock prices and this is thought to be the main mover of prices[35]. As a result, for example in China and Hong Kong which uses a fixed exchange rate system and Singapore which uses a managed floating system, the large drop in stock prices due to the global economic crisis rapidly recovered and in the spring of 2009 continued to rise. However, in 2010 the deposit reserve requirement ratio in China was raised which created wariness over credit tightening. The announcement of controls on speculation in real estate in China[36] made an impact on real estate related stock prices. Based on these incidents[37], stock prices in emerging countries in Asia advanced and then retreated, and at the end of May 2010, the drop in prices continues (Figure 1-1-1-36).

There is no doubt that the soaring prices of assets in emerging countries due to an influx of speculative funds from abroad will cause large fluctuations in the economies of those countries[38]. If the bubble bursts in emerging countries which are the engine of the global economic recovery, it will

35 Cited previously, Bank of Japan (2010a).

36 Cabinet Office (2010), According to the "Related Cabinet Meeting Materials on Economic Monthly Reports" (May 24th, 2010), the Chinese government has been consistently rolling out stringent policies to restrain real estate related investment. In addition, the Chinese government announced the following measures to restrict loans for housing.

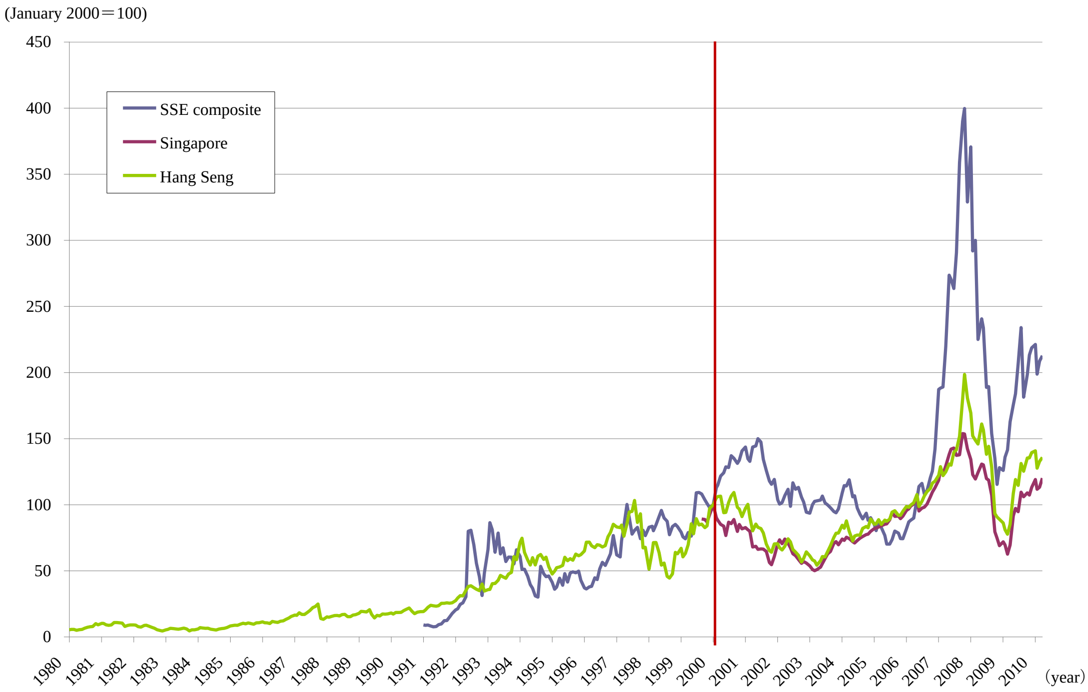
- A 30% down payment is needed when purchasing the first home.
- Over a 50% down payment is needed when purchasing a second home and the interest rate must be at least 1.1 times higher than the standard rate.
- The rates have been significantly raised for both the down payment and loan rate when purchasing three or more homes.
- In areas where the price of homes has sky rocketed and supply is being squeezed, the loaning of funds to purchase three or more homes can be temporarily suspended.
- Ability to temporarily suspend the loaning of funds to purchase a home for those who do not have evidence of living in the area for more than a year.

37 Other incidents which have had an impact are the proposal for more financial regulations in the United States and the fiscal problem, etc. in Europe.

38 Cited previously, According to the Bank of Japan (2010b), while the increasing amount of flow of funds to emerging countries has the effect of improving the fund raising environment of companies through the capital markets and through the wealth effect caused by the rise in asset prices boosted domestic demand and promoted growth, if the increase in the international funds continues, there is the risk economies will experience a slump as a result of an overheated economy and soaring asset prices due to the expansive monetary policies of countries.

become a risk factor that could once again worsen the global economy which is now starting on the road to recovery.

Figure 1-1-1-36: Stock Price Trends in Emerging Countries



Data Source: Bloomberg

Column 5 Carry trades and the influx of investment to emerging countries

It has been pointed out that the recovery in the risk preferences of investors has increased the number of carry trades investing in high interest rate currencies in emerging and resource-rich countries by raising funds in low interest rate currencies in developed countries[39].

Although it is said to be difficult to fully know the extent of the total carry trade market, there is the need to carefully determine how much of the inflow of funds to emerging countries is, in fact, carry trades[40]. Transactions in the marketplace in which currencies are not actually transferred using currency futures where low interest rate currencies are shorted (you gain if you predict the value will fall) and high interest rate currencies are bought (you gain if you predict the value will rise) are also generally referred to as carry trades[41]. Therefore, it is thought that if you examine the movement of positions on the Chicago Board of Trade of noncommercial trades with IMM currency future positions[42] you can get an approximate view of the number of carry trades which exist.

Column Figure 1-5 compares changes in the IMM currency future positions before and after the global economic crisis with changes in the US dollar exchange rate of currencies in emerging

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39 Cited previously, Bank of Japan (2010a).Hiroyuki Fujihara (2010), "Inflow of Funds to Emerging Countries and Prospects for an Exit Strategy". ('Financial and Economic Report', Nippon Research Institute)

40 Same as above.

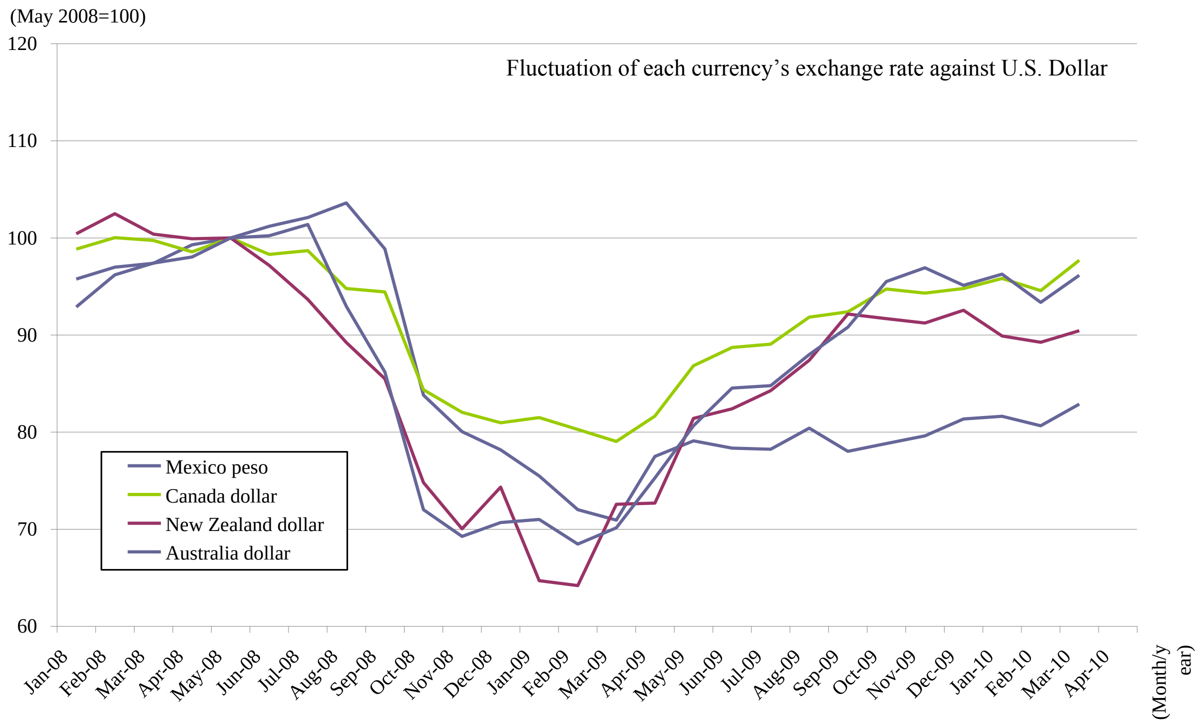
41 Hiroyuki Shiozawa, Maiko Koga, Takeshi Kimura (2009) "Carry Trade and Currency Rate Fluctuations" ('Bank of Japan Review').

42 The IMM currency futures show trends in positions on the Chicago Mercantile Exchange's International Monetary Futures Market. The Commodity Exchange Commission publishes the report once a week. Traders are able to confirm whether there are more long or short positions at a glance.

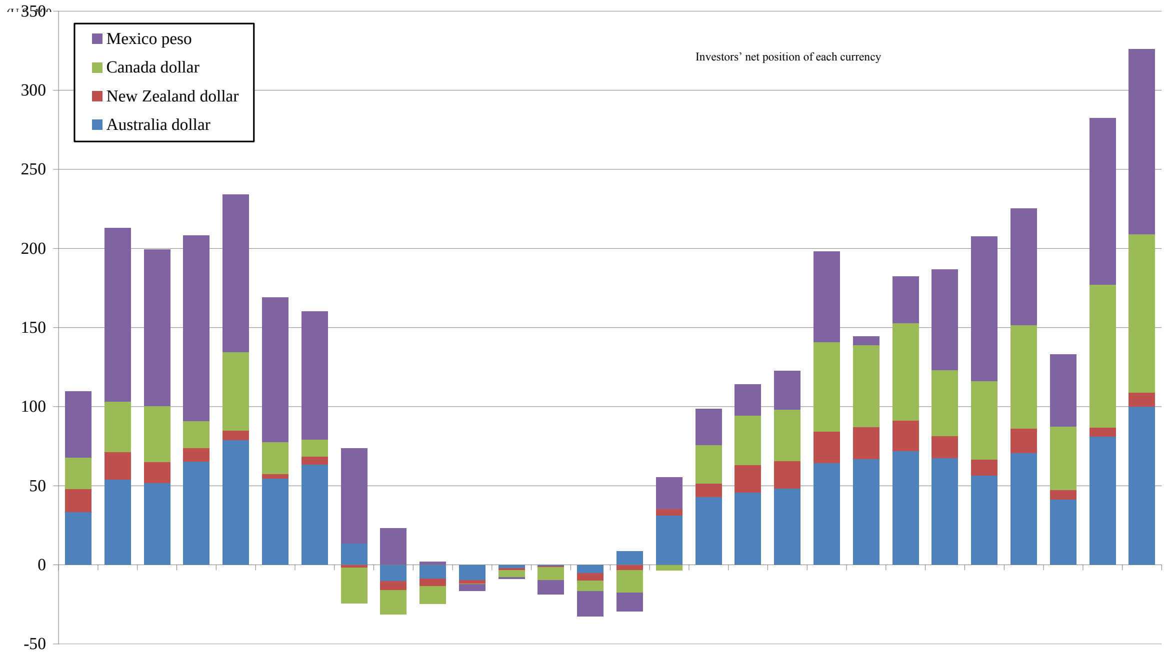
countries. Funds from almost all high interest rate currencies were removed after the Lehman Brothers bankruptcy in the fall of 2008. Then carry trades utilizing the US dollar into currencies such as the Australian dollar, New Zealand dollar, Canadian dollar and Mexican peso all resumed in the spring of 2009 and recovered to levels seen before the Lehman Brother's problem in the fall of the same year.

While a retreat in investor risk preferences could be seen due to concerns with the finance problem in Greece in 2010, as of April 2010, the growth in carry trades had accelerated at such a rate that double the number of carry trades existed compared to before the Lehman Brothers bankruptcy. The spur in dollar carry trades brought about rises in the value of currencies in emerging and resource-rich countries. Therefore, monetary authorities in emerging countries sold their own currencies in the currency markets, did not recover the increase supply of currency and left it as is causing "sterilized intervention" to try and control the increase in value of their country's currency. As a result, the money supply increased and created fears that this will be a factor in increasing the probability of an asset bubble[43].

Column Figure 5-1: Net Currency Positions of IMM Non-Commercial Investors



[43] Cited previously, Hiroyuki Fujihara (2010).



Sources: DATASTREAM (upper graph), CFTC (lower graph)

5th risk factor: Erratic fluctuations in the price of resources and food

There has been an underlying trend of increasing agricultural prices of mainly grains and resources including oil, coal and minerals in the last 10 years and erratic fluctuations could easily occur (Figure 1-1-1-37 Resources and foods). One reason given for this rise[44] is the tight supply and demand of resources and foods in emerging countries[45].

In other words, demand for energy is projected to grow in emerging countries due to future economic growth. Also, energy efficiency is generally lower in emerging countries than developed countries (Figure 1-1-1-38) and the proportion of total oil consumed by emerging countries is extremely large (Figure 1-1-1-39). Because of this, the growth in the consumption of oil by emerging countries is a factor which causes concerns that supply and demand will be tight and the price of oil will rise[46]. This anticipated rise in resource and food prices has moved funds from the financial markets to the commodities markets, increasing the size of price fluctuations and making erratic fluctuations easier to occur.

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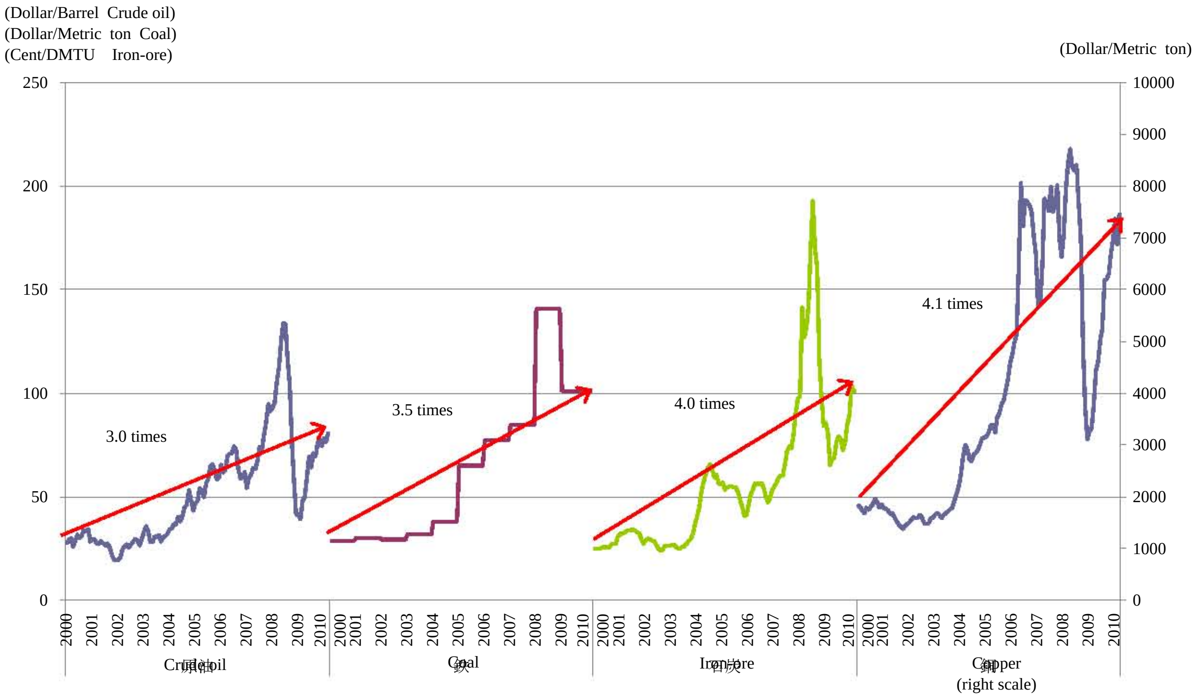
44 Keishiro Itagaki (July 2008), According to 'Why food prices soar: How food prices are determined.' (Tokyo University of Agriculture), other factors include the decrease in oil production and supply reserve capacity, political concerns in oil-producing countries, the increase in agriculture costs due to soaring oil prices, decrease in receipts for agricultural produce because of abnormal weather, the increasing global population and a rapid increase in demand for food in emerging countries.

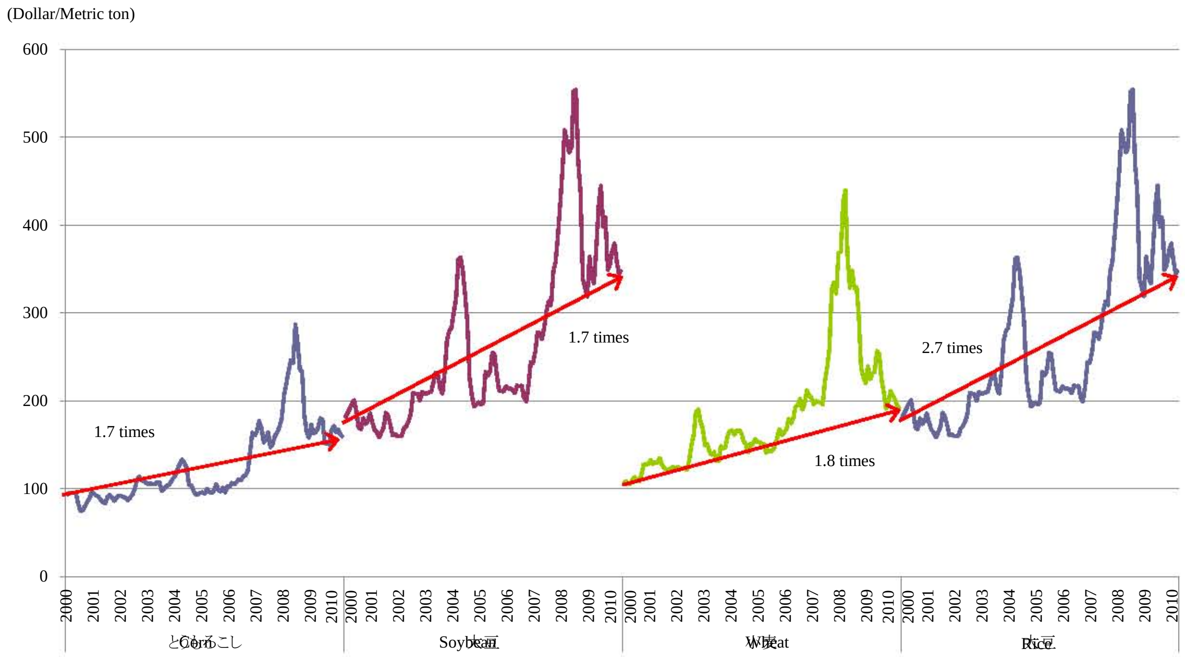
45 It is not exactly clear why prices in the marketplace fluctuate excessively. Therefore, international efforts are underway to deal with excessive fluctuations in prices by having various related authorities improve the transparency of markets and the function of how fair prices are formulated. More specifically, other than promoting talks between oil-producing countries and consuming countries through international work to develop JODI (Joint Oil Data Initiative), various regulatory agencies and the International Organization of Securities Commissions (IOSCO) are working together in order to strengthen the oversight and transparency of illegal transactions to manipulate the markets through securities exchanges and over-the-counter transactions (OTC transactions) outside of securities exchanges. In addition, in Japan, strengthening of the futures markets is designed to diversify market participants and increase the scale of transactions.

46 Bank of Japan (2009) "Factors in the Recent Fluctuations in the Price of Oil" (Bank of Japan Review).

Figure 1-1-1-37: Resource and Food Price Trends

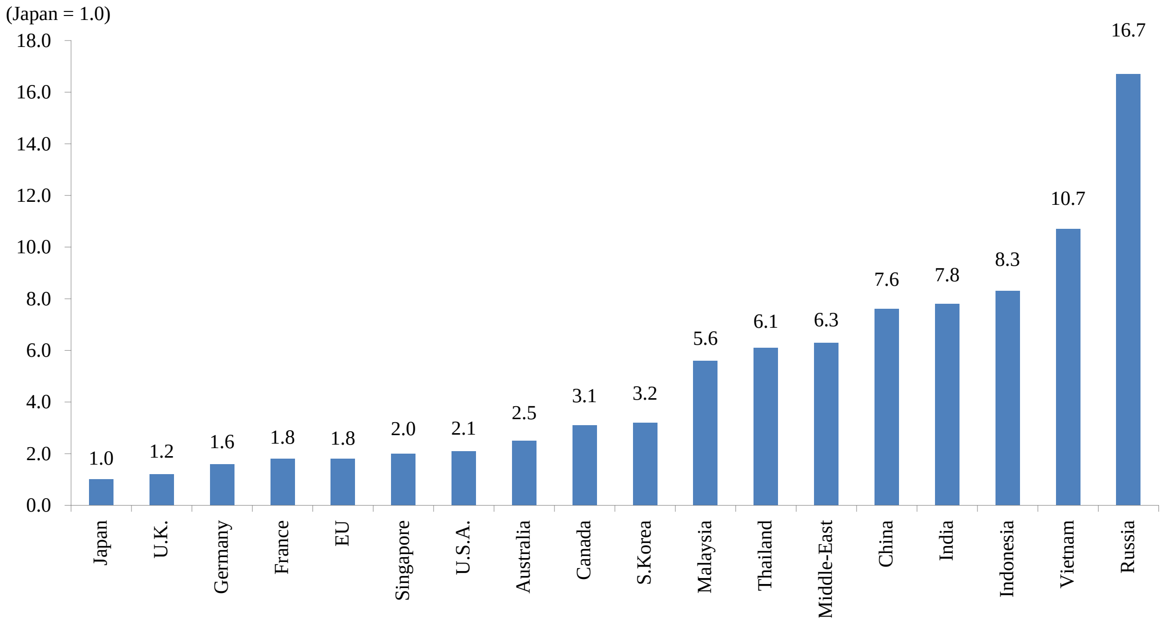


Data Source: IMF "Primary Commodity Prices"



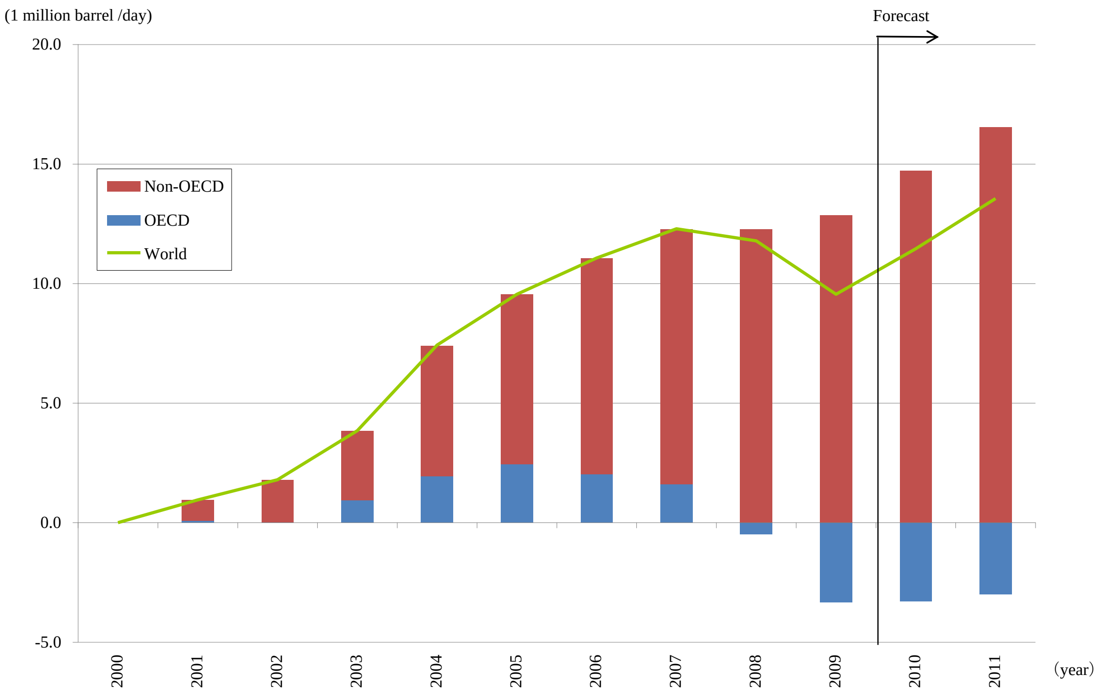
Remarks: Corn and wheat are produced in the U. S. A., the price is FOB Gulf of Mexico. The price of the soybean is CIF Rotterdom. The rice is produced in Thailand, the price is FOB Bangkok.
Data source: IMF "Primary Commodity Prices"

Figure1-1-1-38: Energy consumption volume per each country's GDP



Remarks: Index numbers were calculated by assuming Japan as 1 based on the value obtained by dividing total primary energy supply (TPES) by GDP. TPES/GDP = Total Primary Energy Supply/GDP. GDP = Average rate of exchange in 2000 was converted into dollar.
Data Source: IEA ENERGY BALANCE of OECD Countries(2009EDITION)/ENERGY BALANCE of Non-OECD Countries(2009EDITION) (Definite value of 2007)

Figure 1-1-1-39: Oil Consumption by Industrial Countries and Emerging Countries



Data Source: U.S. Energy Information Administration "Indepentent Statistics and Analysis"

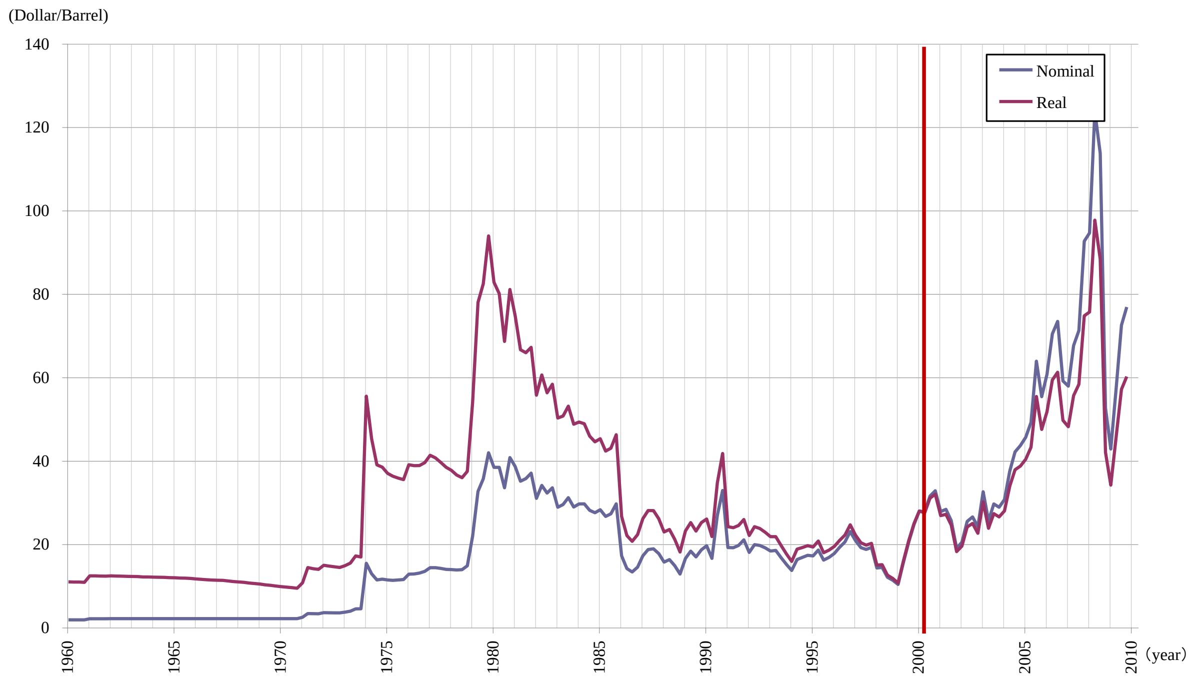
The supply and demand of food throughout the world is also projected to be tight[47] and the price of

[47] Policy Research Institute, Ministry of Agriculture, Forestry and Fisheries (2010) "2009 Forecast for World Food Supply and Demand in 2019".

food is projected to soar[48] on the premise that emerging countries will experience high economic growth. Reasons for this include an increase in population, increased demand due to higher incomes and an increase in demand of agricultural products which are used as raw materials for bio fuels. Soaring food prices due to abnormal weather such as floods and droughts, natural disasters and civil wars is also a large factor in aggravating the problem of starvation. Soaring food prices especially impact the lives of the poor and there are concerns that this will cause serious problems[49].

In addition, there are views that the flow of funds from the financial markets is one of the factors causing erratic prices and increases in the commodities markets[50].

Figure 1-1-1-40: Global Oil Price Trends (Nominal/Real)



Remarks: Price of Uinted Kingdom AVERAGE BRENT OIL (quater) was substantiated with the value as of Feb. 2000 by using the consumer price index of U.S.A.
Data Source: DATASTREAM

In other words, the credit insecurities brought about by the global economic crisis made it difficult for financial organizations to obtain cash which made them withdrawal operations from the commodities markets. As a result, while the prices of resources and food dropped rapidly directly after the global economic crisis began, the resulting liquid funds abundant throughout the world brought about a boom in investment for the commodities market for resources and foods[51]. Therefore, the

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48 Osamu Higuchi (2008) According to, "Soaring Grain Prices and International Food Supply and Demand" (National Diet Library, Issue Brief Number 617 (June 10, 2008), National Diet Library Agriculture and Forestry Survey Division), reasons for soaring prices of grains include, 1. decreased receipts due to abnormal weather, 2. increasing global population, 3. increasing demand for food in emerging countries, 4. rapid increase in demand of raw materials for bio ethanol, and 5. huge inflow of speculative funds to commodities markets.

49 According to the above, the soaring prices of food, especially south of the Sahara desert is an urgent problem that exacerbates starvation in addition to natural disasters such as floods and droughts due to abnormal weather, civil wars, chronic poverty and economic stagnation. Furthermore, the soaring price of food has directly hit the poverty stricken in developing nations which it is said that 60 to 80% of all living expenses are used to acquire food, and the poor and city dwellers that did not need food assistance in the past are now a new target for assistance.

50 Ministry of Economy, Trade and Industry (2009) 'White Paper on Energy'. The previously cited document by Higuchi named a huge inflow of speculative funds into the commodities market as one of the factors for the soaring food prices and with the subprime loan problem in 2007, he states that the speculative funds throughout the world that were invested in real estate loan related securities, broke away from dollar-related assets, flowing into the commodities market and the aggressive entrance of hedge funds and pension funds into the commodities markets was a structural factor of squeezing food prices, in addition to further causing energy and grain prices to soar.

51 Cited previously, Itagaki (2008). Cited previously, Policy Research Institute, Ministry of Agriculture, Forestry and Fisheries (2010). Cited

funds which flowed out of the financial markets into the commodities markets are once again raising the price of commodities and causing erratic fluctuations to be more flamboyant. For example, the price of world oil directly after the crisis dropped rapidly but is once again rising. When examined in the mid- to long-term, the price of oil after the oil shock of the 1970's was recognized as fluctuating erratically (Figure 1-1-1-40). On the eve of President Bush's announcement of measures to promote bio ethanol in January 2007, there are those that point out the professional speculators that anticipated the tight supply and demand of corn and bought a large amount of futures due to the rapid increase in the consumption of meat by China, the demand for food stuffs for animals and crop fears due to abnormal weather[52].

There are various views on price trends and this does not mean that concerns related to the tight supply and demand in emerging countries and flow of funds out of financial markets can be said to be the only causes. However, the price of resources and food is fluctuating erratically and is in an upward trend.

Something that has had a large impact on the price of commodities is the increased production by Shell Gas[53] in the United States. Because of this, as a result of America's dependency on the import of natural gas dropped significantly the forecast for the supply and demand of natural gas largely changed[54] and this pushed down the price of import LNG in the United States and Canada[55]. In addition, a large part of the LNG (liquid natural gas) that was previously bound for the United States became unnecessary, pushing the spot price of LNG lower[56] and that price pressure transitioned over into the European markets. As a result, Gazprom of Russia which had exported natural gas to Europe until now saw a large decrease in their exports to Western Europe. In this way the flow of natural gas (LNG) around the world is changing so much it is called the "Shell gas revolution"[57].

Resources and food is a vital component that supports the growth of the global economy. These erratic fluctuations in prices have the risk of holding down the economy which is on the brink of recovery.

Column 6　Disequilibrium in the balance of food supply and demand on a global scale

According to the Food and Agriculture Organization (FAO), the supply balance of grains to developing countries constantly falls short of demand and the lack of food is only projected to grow larger. However, in developed countries production outpaces consumption and the large surplus is

previously, Higuchi (2008). United Nations (2010), World Economic Situation and Prospects 2010, World Bank (2010), Global Economic Prospects 2010.

52 World Bank (2010), According to *Global Economic Prospects 2010*, the WTO fears that an increase in investment to the commodities market could invite wild fluctuations in prices.

53 Unconventional natural gas. The gas is trapped in deposited soil that has hardened into a layer of rock. This gas had been abandoned because of how difficult it is to extract, but in recent years the establishment of new extraction technologies has increased investment in development.

54 The estimated dependency on exports for long term energy forecasted by the U.S. Energy Department states in the 2004 edition that dependency will be 28% in 2025, compared to a dramatic drop in the 2009 edition stating that dependency will be 3% in 2030.

55 Ken Ihara (2010) According to "The Spread of Shell Gas" (Japan Oil, Gas and Metals National Corporation), the price of gas will tend to drop if steady increases in domestic gas production and increases in possible reserves, including unconventional natural gas of Shell gas, can be seen. However, the production of conventional gas fields (South Texas, Pinedale/Jonah in Wyoming, Powder River, East Texas and North Louisiana) is waning and the amount remaining by 2035 is estimated to be a total of 21 Tcf (60Bcf/d). There is a viewpoint that it will be difficult to put pressure on the price of gas within the United States to drop.

56 This is the market price that is established not by a long term contract but if transacted using a one time contract.

57 Cited previously, Ihara (2010).

projected to grow (Column figure 6-1)[58]. In Asia and Africa where the population is increasing, increases in domestic production cannot keep up with the increase in consumption of grains and this deficit is compensated by imports from developed countries including the United States.

According to the Ministry of Agriculture, Forestry and Fisheries, economic development in developing countries is forecast to continue growing at the current high rate in the future. Stringent supply and demand of grains is expected to continue due to the increase in demand of agricultural products from increased populations, improvements in incomes and growth in bio fuels, among other factors. In addition, the trend in the uneven distribution of grain exports is expected to continue to increase in the following ways (Column figure 6-2)[59].

1. In Asia, Africa and the Middle East, net imports are to rise because production cannot keep up with the growth in consumption.

2. Net exports will increase in Europe and Oceania and respond to net imports stated in 1.

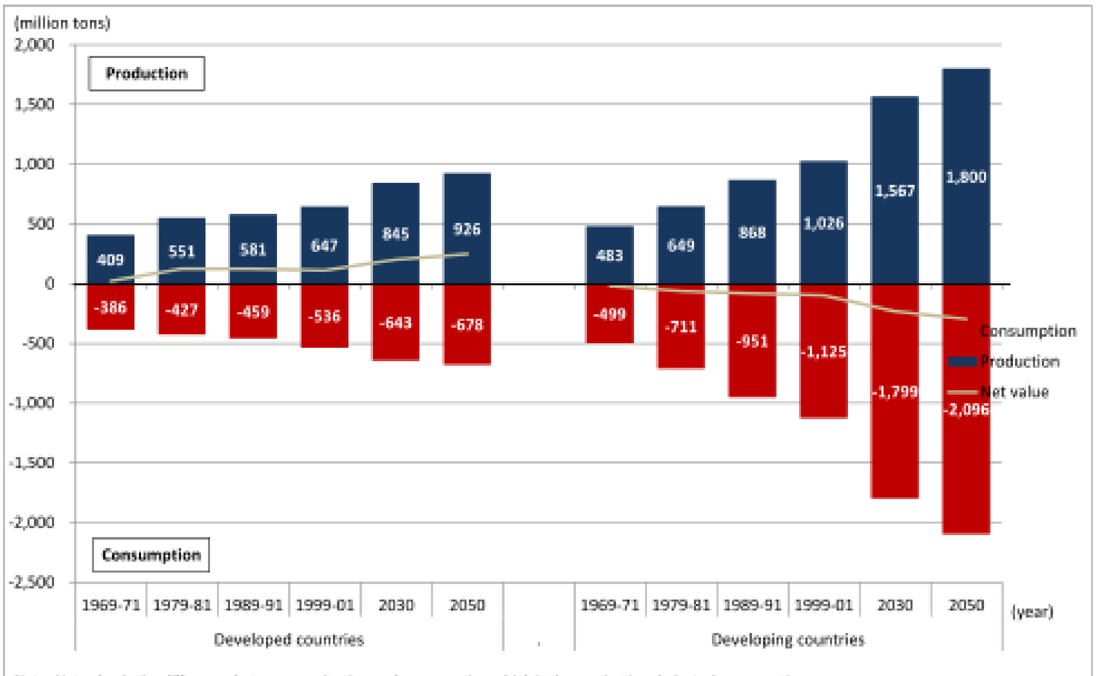
3. While net exports in North America will continue to decrease, Latin America which is an importer will transition into an exporting region.

In the future, excess amounts in developed countries will accommodate deficiencies in developing countries which will diversify supply and disperse the risk on the supply side related to bad weather, etc. Therefore, the export and import of grains, etc. between developed countries and developing countries is expected to accelerate in the future.

Column figure 6-1: Estimate of demand and supply for grains in advanced- and developing countries

[58] FAO (2006), World Agriculture toward 2030/2050.

[59] Cited previously, Policy Research Institute, Ministry of Agriculture, Forestry and Fisheries (2010), FAO (2009) "Special Report: Rising Prices of Food and Securing Safe Food – The Threat and Opportunity – (FAO News "World Agriculture, Forestry and Fishery Production No. 814" (Spring 2009)). United Nations (2010), World Economic Situation and Prospects 2010. Cited previously, Itagaki (2008).

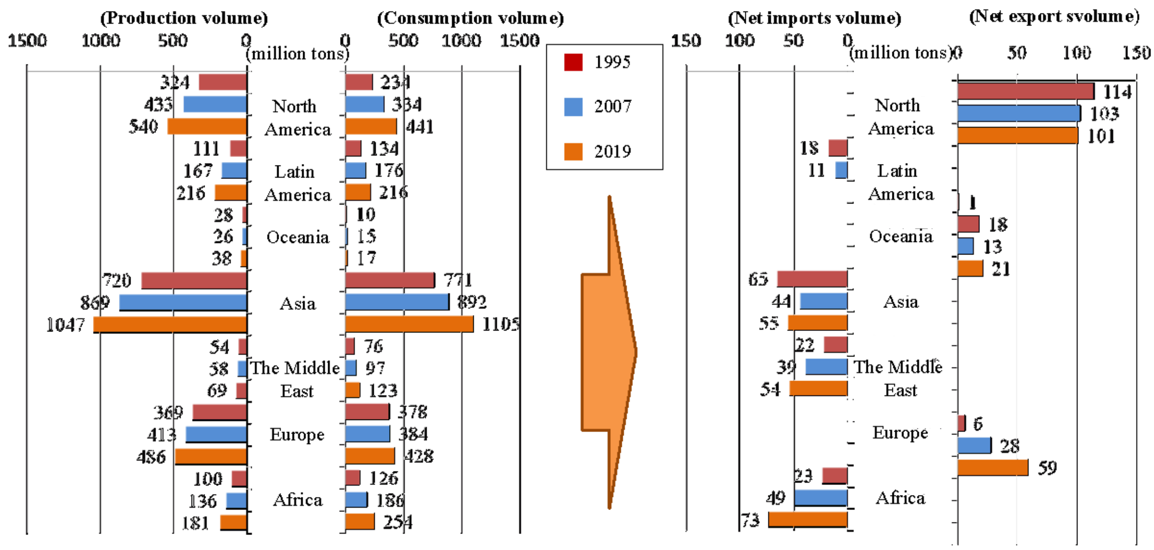


Note: Net value is the difference between production and consumption which is the production deducted consumption.
Source: FAO *"World agriculture: towards 2030/2050 Interim report"*

Column figure 6-2: White Paper Outlook for Global Foods

1. Grain production and consumption forecast by area

2. Grain trade volume (net imports and export volumes) by area



Source: Policy Research Institute, Ministry of Agriculture, Forestry and Fisheries "HEISEI 21 NENDO 2019NENNIOKERU SEKAINO SHOKURYOUJUKYUU MITOUSHI (World food forecast for 2019 in FY2009)" (March 2010)