### Chapter 1 Current status and problems of the world economy

In 2009, shortly after the beginning of the world economic crisis, the world economy was deteriorating on a global scale. But ever since the spring of 2010, it continued to recover gradually. However, this recovery process varied sharply by countries and regions. The gap of economic growth between the advanced and emerging economies further increased in 2011 and the imbalance in growth in various forms is emerging.

Chapter 1 presents an overview of the world economic situation 3 years after the last world economic crisis. Specifically speaking:

- 1) The world economy has been recovering moderately, but the gaps and imbalances are found, which are still volatile.
- 2) The risk factors related to the world economy must be addressed in order to achieve stronger and self- sustaining recovery;
- 3) Accompanying the widening of gaps and imbalances, friction among countries and regions has been heightened. Efforts have been made to solve these problems by G20, APEC, WTO and other world organization.
- 4) After the Great East Japan Earthquake, the world economy has shown largely stable upward movement through cooperative support provided by various countries. (Details of the earthquake disaster will be discussed later in Chapter 4 and Chapter 5).

### Section 1 The recovering world economy involves structural volatility

The world economy has been moderately recovering, but the rates of recovery between advanced and emerging economies are not evenly balanced. The world economy involves structural factors such as disinflationary (a situation where the rate of price increase falls) / deflationary (a situation where prices continuously fall) trend and increases in financial deficit in the advanced economies and economic overheating in some of emerging economies, which act to raise the prices of resources, further widening the global imbalance, and implying that the economic recovery is still unstable.

# 1. Emerging economies gaining power and advanced economies experiencing sluggish economic recovery

#### (1) Increasing presence of emerging economies

According to IMF forecast on world economy as announced in April 2011, it indicated that growth rate of the world economy in 2010 registered a 5.0% increase over that of the previous year following a record -0.5% decrease in 2009. It said that there was no double-dip recession. However, while growth of the world economy as a whole was accelerated again, the gap in the recovery rate between the advanced and emerging economies still remained great. It indicated that many of the advanced economies are still sluggish in their recovery while the emerging economies are achieving strong economic growth leading to overheating of their economy. According to IMF, while advanced economies including U.S.A., euro zone countries, U.K. and others registered a 3.0% increase over that of the previous year in 2010 compared to a -3.4% decrease in 2009, the emerging economies achieved a 2.7% higher growth in 2009 and a 7.3% increase over the previous year in 2010 (Table 1-1-1-1). The emerging economies were having a higher proportion of world nominal GDP. Especially, China's nominal GDP outran the Japanese one in 2010. It is forecast that China's nominal GDP will largely

outrun those of major advanced economies in 2011 and continue to do so thereafter (Figure 1-1-1-2).

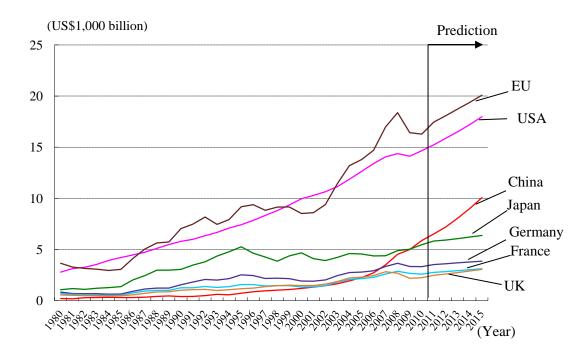
Table 1-1-1-1 World economy outlook (real)

	2009	2010	2011	2012
World economy	-0.5	5.0	4.4	4.5
Advanced economies	-3.4	3.0	2.4	2.6
United States of America	-2.6	2.8	2.8	2.9
Euro zone	-4.1	1.7	1.6	1.8
Japan	-6.3	3.9	1.4	2.1
United Kingdom	-4.9	1.3	1.7	2.3
Canada	-2.5	3.1	2.8	2.6
Emerging economies	2.7	7.3	6.5	6.5
Central and East Europe	-3.6	4.2	3.7	4.0
Russia	-7.8	4.0	4.8	4.5
Asian emerging economies	7.2	9.5	8.4	8.4
China	9.2	10.3	9.6	9.5
India	6.8	10.4	8.2	7.8
ASEAN5	1.7	6.9	5.4	5.7
Central and South America	-1.7	6.1	4.7	4.2
Middle East and North Africa	1.8	3.8	4.1	4.2
Sub-Sahara Africa	2.8	5.0	5.5	5.9

Notes: ASEAN5 is Indonesia, Malaysia, Philippine, Thailand and Vietnam.

Sources: IMF "WEO April 2011"

Figure 1-1-1-2 Transition of nominal GDP of major countries



Notes: Value is predicted after 2011. Sources: IMF "WEO April 2011

Meanwhile, IMF forecasts that economic downward fluctuation risk may exceed the upward

fluctuation probability in the future<sup>1</sup>, and the growth rates in 2011 and in 2012 will moderately change at rates of 4.4% and 4.5% respectively compared with 5.0% in 2010. Examining the advanced and emerging economies separately, the growth rate of the former was 3.0% in 2010 and will be 2.4% and 2.6% in 2011 and 2012 respectively, and those of the emerging economies was 7.3% in 2010 and will be 6.5% in 2011 and 2012 respectively. The recovery rates of 2011 to 2012 in both the economies are forecast to be moderate compared to that of 2010. But it is forecast that the emerging economies will continue to achieve twice as much or more economic growth than those of the advanced economies, and the trend will gather strength with the emerging economies growing 2.4 times larger than that of the advanced economies in 2010 and 2.7 times in 2011 (Figure 1-1-1-3). The structural ratio in world GDP of the emerging economies was 31.2% in 2010 and it is forecast to further expand to 34% in 2011, and it may be even 39.9% of the world economy in 2014 (Figure 1-1-1-4)<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> IFM indicates EU financial issues such as unhealthy balance sheets and stagnation of real estate markets as the downward fluctuation risks in the advanced economies. It also indicates political geographic instability, overheat in the real estate markets as well as raises in prices of goods, especially oil price as the downward fluctuation risks in the emerging economies.

<sup>&</sup>lt;sup>2</sup> <Reference> The revised forecast published by IMF in June 17, 2011.

<sup>•</sup> It recognizes that the world economy will continues to be growing, but the growth will be decelerated moderately as the downward fluctuation risks increase. World economic growth rate in 2011 is revised downward from that of April (from 4.4 to 4.3), but the rate for 2012 remains unchanged.

<sup>•</sup> The advanced economies growth rate in 2011 is revised downward from that of April (from 2.4 to 2.2) and that of 2012 remains unchanged.

<sup>-</sup> Growth of United States of America in 2011 is expected to be slower (from 2.8 to 2.5).

<sup>-</sup> As a result of the earthquake disaster, the Japanese growth rate is revised downward by -2.1% (from 1.4% to -0.7%). The growth rate for 2012 is expected to rise.

<sup>-</sup> Growth rate in the Euro zone in 2011 is revised upward (from 1.6% to 2.0%), but the growth rate for 2012 is expected to be decelerated.

<sup>•</sup> Most of the emerging economies are recognized to continue growing strongly. The growth in 2011 is revised upward from the estimation in April (from 6.5 % to 6.6%). The growth rate of 2012 is revised downward.

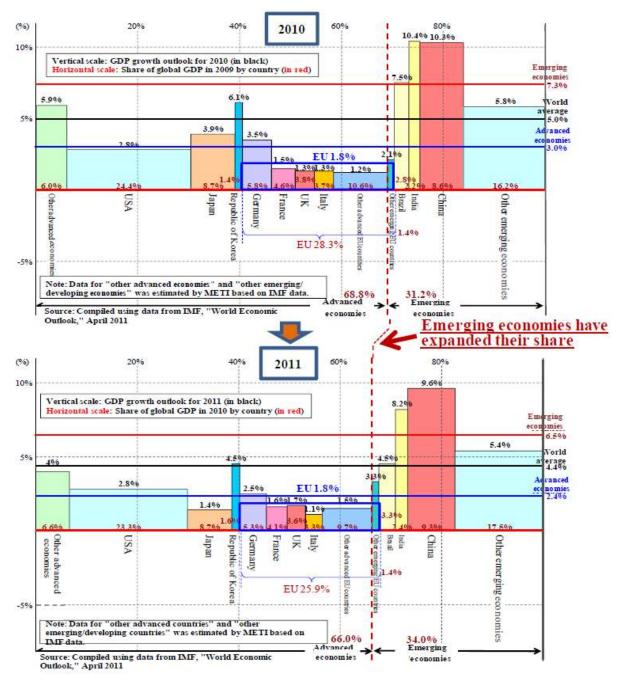
<sup>-</sup> Growth rate of China, India and ASEAN countries in 2011 and 2012 remains unchanged, but the growth rate of Central and South American countries in 2011 and 2012 are both revised downward. By -0.1%.

<sup>-</sup> Growth of Central and East Europe in 2011 is revised upward by 1.6% (from 3.7% to 5.3%), but the growth rate of 2012 is revised downward by-0.8%.

<sup>•</sup> It indicates an unexpected vulnerability of US economic activities, destabilization of financial markets caused by the debt crisis in Euro zone, sharpening the signs of overheating in the emerging economies and lengthening the imbalances in financial and monetary sectors in the advanced economies, which are taken as factors to cause downward fluctuation world economic situation.

Figure 1-1-1-3 GDP structural ratio and growth rate of all global nations by area

GDP structural ratio: Expanding in emerging countries (from 31.2% in 2010 to 34.0% in 2011) GDP growth rates: On average, twice or more for emerging countries than figures for developed countries (From 2.4 times in 2010 to 2.7 times in 2011)



Notes: There are no data on "other developed countries" and "other emerging countries". The Ministry of Economy, Trade and Industry estimated them based on the IMF data.

Sources: "World Economic Outlook, April 2011" IMF

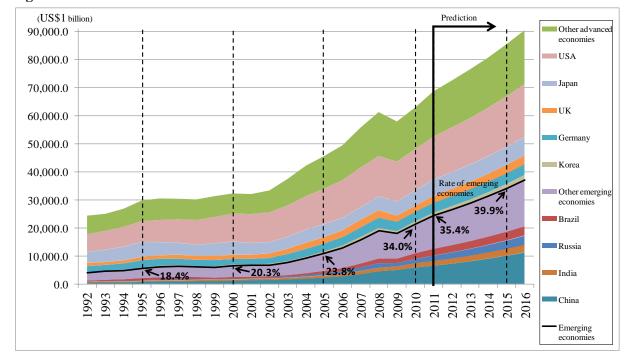


Figure 1-1-1-4 Transition of the world real GDP

Notes: Real GDP in US dollar based on that of 2005 was calculated from real GDP growth rate of each country's currency in each year and nominal GDP in US dollar.

Sources: IMF "WEO, April 2011"

Thus, the volume of growth rates in China and other emerging economies is expected to be more important.

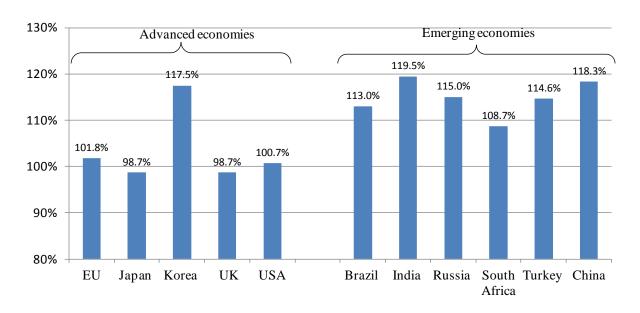
However, concerns over inflation and higher currency values of these countries are increasing. This is caused by injection of huge amount of money into the emerging economies by advanced countries due to the easing of monetary policy in their countries. As countermeasures, the emerging economies are taking measures such as strengthening the monetary policy, such as raising the interest rate and reserve deposit rate, restricting the capital inflow. If the economy in the emerging economies shows unexpected deceleration due to policy shifts from "monetary easing" to "monetary tightening", it may cause delay in the world economic recovery process, which depends on the growth of the emerging economies.

### (2) Economic trends in advanced and emerging economies

Movement of the world economy in one year is reviewed below focusing on economic trends in the advanced and emerging economies.

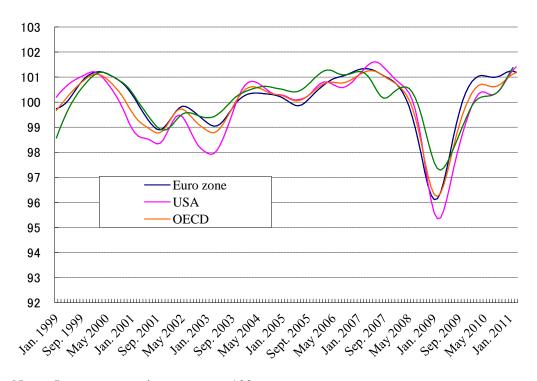
In 2010, economy in the advanced economies eventually recovered it's pre-financial crisis levels. Real GDP in United States of America, EU and Korea recovered to exceed the level in the first quarter of 2008 before the financial crisis supported by growth in consumer spending backed by high stock prices as well as recovery in capital investment. The GDP in Japan and U.K. recovered to the levels of 98.7% of their peak time (Figure 1-1-1-5). OECD's leading economic indicator, centering on United States of America, was improved before the end of 2010 (Figure 1-1-1-6). Thus, the advanced economies were maintaining or strengthening their recovery paces toward the end of 2010. Still, they had various problems.

Figure 1-1-1-5 Comparison of recovery to the level existed before the monetary crisis in the major advanced economies and emerging



Notes: In case the real GDP at the time of the first quarter of 2008 is the level existed before the monetary crisis, the recovery rates of real GDP of countries at the time of the fourth quarter of 2010 (the first quarter of 2011 for Korea and USA) are shown. Sources: Ministry of Internal Affairs and Communications, the United States Department of Commerce, Korea Central Bank, Africa Statistics Agency, IMF, Brazil Geographic and Statistics Board, Russia Federal National Statistics Bureau, India Central Statistics Bureau, South Africa Statistics Agency and Turkey Statistics Bureau

Figure 1-1-1-6 OECD economy leading indicator in the advanced economies



Notes: Long-term moving average = 100

Sources: OECD "Composite Leading Indicators (MEI)"

Meanwhile, most of the emerging economies such as China, India and Brazil continued their economic growth and recovered to a level over the first quarter of 2008 before the financial crisis (Figure 1-1-1-5). However, due to the tight monetary policy implemented in the second half 2010 to control overheating of the economy and inflation, some of the emerging economies including China and India showed decrease in the leading economic indicators (Figure 1-1-1-7).

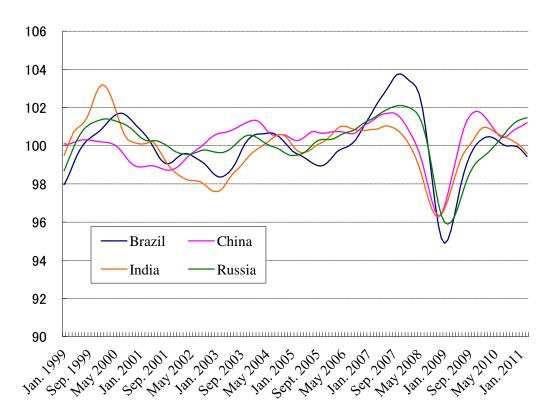


Figure 1-1-1-7 OECD economy leading indicator in the emerging economies

Notes: Long-term moving average = 100

Sources: OECD "Composite Leading Indicators (MEI)"

The auto and truck sales in United States of America, where economy is recovering, expanded from 10,600,000 in 2009 to 11,770,000 in 2010, but in the Euro zone, the sales were reduced from 11,120,000 in 2009 to 10,220,000 in 2010 reflecting weak recovery of the economy. In Japan, 4,960,000 automobiles and trucks were sold in 2010 It was a 7.5% increase over that of the previous year, but for two consecutive years, it could not reach 5,000,000 (Figure 1-1-1-8). Meanwhile, the auto and truck sales were expanding in the emerging economies, continuing their higher growth rate. Especially in China, the number of autos and trucks sold were 13,620,000 in 2009 and 18,040,000 in 2010, a significant increase of 32.5%. In Brazil, the sales reached the record high of 3,510,000 through the year of 2010, an 11.9% increase over that of the previous year. Moreover, the auto and truck sales in India and Russia significantly increased due to the strong consumer confidence of their citizens. In India, the sales reached the record high of 3,200,000 in 2010. a 28.7% increase over that of the previous year, and in Russia, the sales were 1,900,000 in 2010, a 29.6% increase over that of the

previous year.

(10,000 units) 2,000 18.04 million units 1,800 **2007** 1,600 **2008** 1,400 11.77 million units **2009** 10,22 million units 1,200 **2010** 1,000 3.2 800 4.96 million units 1.90 million 3.51 million units 600 million units 2.92 million units 0.85 0.77 400 1.47 million units -0.43million million million units 200 units 0 Japan USA Euro zone Germany Korea China Russia India Mexico South Africa Indonesia

Figure 1-1-1-8 Transition of number of automobiles sold in the advanced and emerging economies

Notes: Russia's data are in 2008 and later

Sources: The United States Department of Commerce, European Automobile Industry Association, European Business Association, Mexico National Statistics and Geographic Information Bureau and Automobile Industry Association of each country

Examining the household sector, it was discovered that the recovery conditions in the employment market largely differed in each country and region. The unemployment rates in major advanced economies remained high through 2010 (Figure 1-1-1-9). The unemployment rate in United States of America was lowered due to the improved business performances at the end of 2010. But the pace of job recovery was slow, and the unemployment rate remained high at 9%. Within Euro zone, the unemployment rate differed by countries and regions. In Germany, the unemployment rate improved to the historic low of 6.9% in 2010 due its continuous business recovery. Meanwhile, the recovery of unemployment rates in France (9.7%) and Italy (8.5%) were slow. And high unemployment rates existed in Greece (14.8%), Spain (19.4%) and Portugal (11.9%) mainly due to the financial crisis in the Euro zone. Examining the emerging economies, it was found that the unemployment rates in China (4.1%) and Korea (3.7) were low, supported by the strong economic recovery there. Also, in Brazil (6.7%), Indonesia (7.1%) and other emerging economies, the unemployment rates in 2010 had a tendency toward improvement (Figure 1-1-1-10). IMF estimate that the unemployment rates in the

advanced economies will show signs of improvement in 2011 compared to those in 2010. However, the unemployment rates in Portugal and Greece are expected to be worsening in 2011 due to their financial problems.

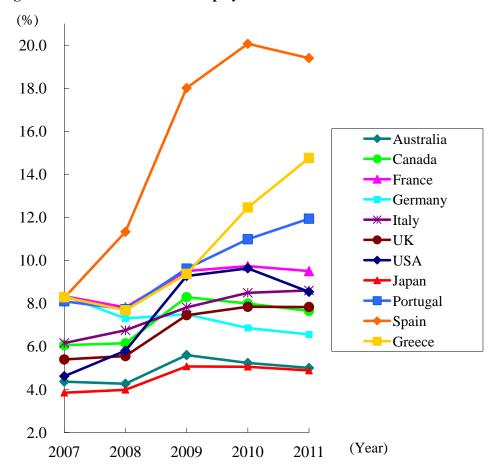


Figure 1-1-1-9 Transition of unemployment rates in the advanced economies

Notes: Data after 2010 are predicted by IMF for France, Italy, United Kingdom and Brazil and data after 2011 are predicted for the other

Sources: IMF "WEO April 2011"

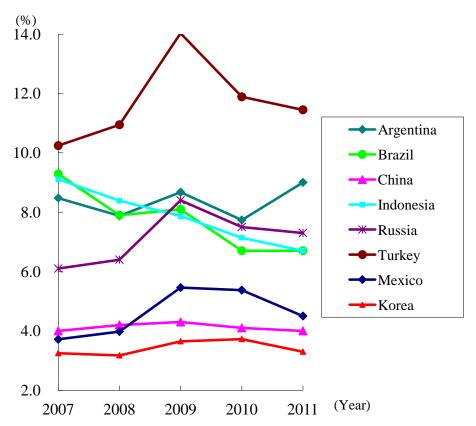


Figure 1-1-1-10 Transition of unemployment rates in the emerging economies

Notes: Data after 2010 are predicted by IMF for France, Italy, United Kingdom and Brazil and data after 2011 are predicted for the other countries.

Sources: IMF "WEO April 2011"

The consumer confidence index, as a whole, is presently improving in G7 countries, but still remaining at a level lower than 100, the long-term average, in difficult circumstances concerning severe employment environment (Figure 1-1-1-11).

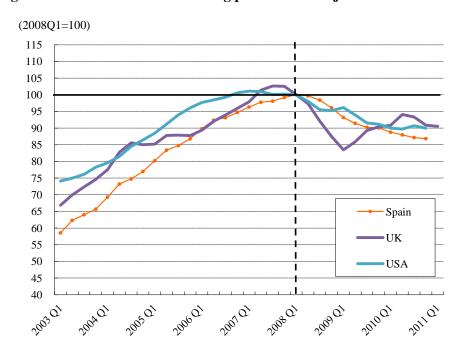
(Long term average = 100) 110.0 Australia Canada Denmark 105.0 France Germany Japan 100.0 Korea New Zealand 95.0 Sweden Switzerland 90.0 United Kingdom United States of 85.0 2010 . var. Kar. Kar, vrg. 20; 204. Sog Solo Solo Solo Solo Solo

Figure 1-1-11 Transition of consumer confidence index in the advanced economies

Sources: OECD Stat

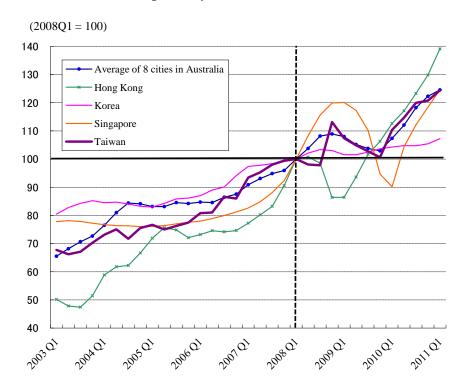
The house price situations differed by countries/ regions. The house prices in countries such as United States of America, UK and Spain, which suffered most from the financial crisis triggered by the bursting bubble of the real estate markets, are still hovering at a level lower than the peak existing before the world economic crisis due to their severe employment/ lower income environment. Asset impairment caused by destabilizing housing market prices is a factor to lengthen the balance sheet adjustment in the household sector (Figure 1-1-1-12). Meanwhile, real estate prices are soaring in resource-rich countries like Australia as well as emerging economies and regions such as China, Hong Kong and Singapore due to the increase in population and shortage in housing, booming economy and inflow of overseas funds. Policy makers are being cautious about the overheating housing markets (Figure 1-1-1-13 and Figure 1-1-1-14).

Figure 1-1-1-12 Transition of housing prices in the major advanced economies (quarterly)



Sources: CEIC Data Base

Figure 1-1-13 Transition of housing prices in the emerging economies/regions and resource-rich countries (quarterly)



Sources: CEIC Data Base

(%)
25
20
15
10
5
0
-5
-10
-15
-20
Shanghai

-20

Shanghai

Serico of her lock of her lock

Figure 1-1-14 Transition of housing prices in China

Sources: CEIC Data Base

In China, the price regulating measure was tightened to control the rise in real estate prices at the beginning of 2010. As a result, the real estate market recovered its composure and rises in real estate prices in major 70 cities slightly slowed down after the end of 2010 as shown in Figure 1-1-1-14. However, as prices were still increasing over that of the previous month, the government of China might still continue to maintain the price regulating measures.

Observing transition of the industrial production index on business sectors, it displays, as a whole, a tendency toward the recovery. But in the advanced economies, recovery has been delayed. At the end of 2010, the United States of America eventually recovered to the level existing before the world economic crisis, but Japan and Euro zone countries did not yet recover to - that level even in the period leading to the beginning of 2011 (Figure 1-1-1-15). Meanwhile, the emerging economies/regions in Asia including China recovered to the said level during the period starting from the spring to the middle of 2009. And the production activities expanded well over the said level in 2010. In other countries in Central and South America and Central and East Europe recovered to the said level during the spring and autumn of 2010 respectively (Figure 1-1-1-16).

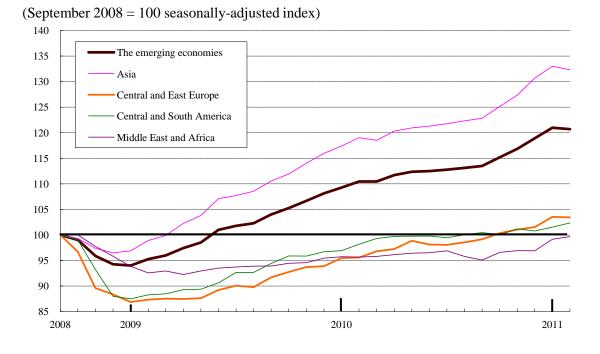
Figure 1-1-1-15 Transition of industrial production index in the advanced economies

(September 2008 = 100 seasonally-adjusted index) 105 100 95 90 85 Advanced 80 economies USA 75 Japan 70 65 2008 2009 2010 2011

Notes: The advanced economies are the member countries of OECD excluding Turkey, Mexico, Korea and Central and East European countries.

Sources: CPB "Netherland Bureau for Economic Policy and Analysis"

Figure 1-1-1-16 Transition of industrial production index in the emerging economies



Sources: CPB "Netherland Bureau for Economic Policy and Analysis"

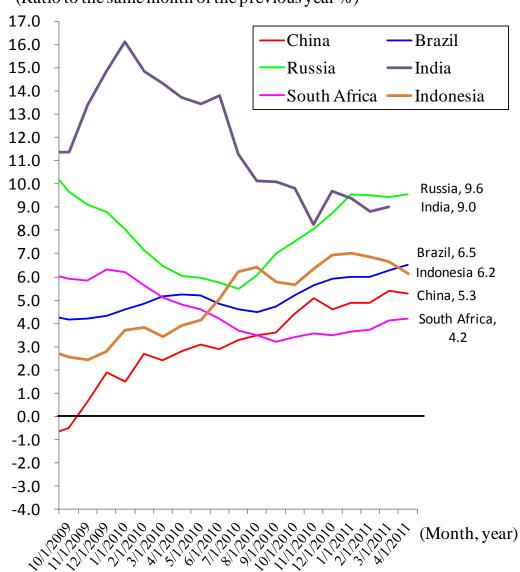
Examining price trends, many advanced economies continued balance sheet adjustment in 2010, which is being affected by such factors as the collapsing real estate prices. With weaker domestic economic environment represented by lower levels of the employment and income, the price increase rate remained low (Figure 1-1-1-17) with a tendency of deflation or disinflation ever present. Meanwhile, in the emerging economies, mainly in China and Brazil, the economy was overheated with vast inflow of overseas funds; and consequently, the consumer price index was raised and the inflation concerns increased (Figure 1-1-1-18). Since summer of 2010, the consumer price index increase rates have been accelerated in many of the emerging economies, and also, the inflationary forces became stronger in some of the advanced economies.

Figure 1-1-1-17 Consumer price index in the advanced economies

(Ratio to the same month of the previous year %) 17.0 16.0 15.0 14.0 13.0 **USA** Japan 12.0 France Germany 11.0 UK Italy 10.0 9.0 Canada Korea 8.0 7.0 UK, 4.5 6.0 Korea, 4.2 5.0 Canada, 3.3 4.0 USA, 3.2 3.0 Italy, 2.6 2.0 Germany, 2.4 France, 2.1 1.0 0.0 Japan, 0.0 -1.0 -2.0 -3.0 -4.0(Month, year)

Sources: DATASTREAM

Figure 1-1-1-18 Consumer price index in the emerging economies



(Ratio to the same month of the previous year %)

Sources: DATASTREAM

Examining monetary policies, it was found that since the Lehman shock in September 2008, the central bank of each country reduced interest rates (Figure 1-1-1-19 and 1-1-1-20), and offset the economy through monetary easing such as purchase of assets. However, being affected by recent rises in prices of food and resources, appropriate policy initiatives were undertaken to tighten the monetary flow mainly in emerging economies where remarkable economic recovery had been made (Figure 1-1-1-21 and Table 1-1-1-22).

(%) 18.0 USA Euro zone France 16.0 Japan Germany Italy -UK Australia 14.0 Canada Korea 12.0 10.0 8.0 6.0 Australia, 4.8 Korea, 3.0 4.0 Euro zone, 1.3 Italy, 1.3 Canada, 1.0 2.0 UK, 0.5 USA, 0.3 Japan, 0.1 0.0 11/1/2008 TITION 1200° 12009 3/1/2010 125/1/210 TINDIO 9/1/2010 11/12/11/2010 2009 2009 2010 (Month, year)

Figure 1-1-1-19 Policy interest rates in the advanced economies

Sources: DATASTREAM

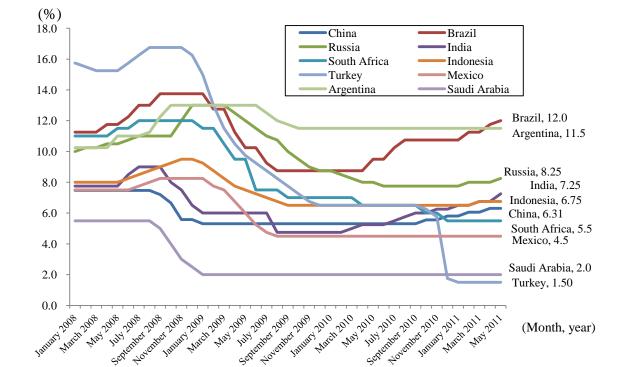


Figure 1-1-1-20 Policy interest rates in the emerging economies

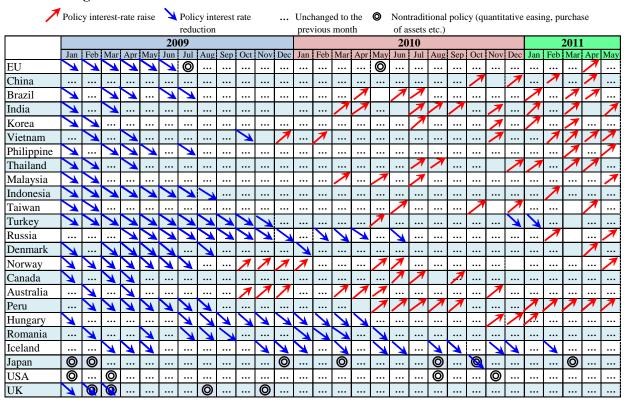
Sources: DATASTREAM

As shown in Figures 1-1-1-21 and Table 1-1-1-22, the central banks of advanced economies such as Japan, United States of America, Europe and UK, continued to implement untraditional monetary policies like quantitative easing, asset purchase and maintenance of low-interest policy. In this situation, at the beginning of 2011, the stance of being cautious on increased inflationary force became stronger in Europe. On April 7, European Central Bank (ECB) made a decision to raise the interest rate for the first time since the financial crisis. But unbalanced progress in economic growth was noted in countries in the Euro zone, and the countries in South Europe, which were shaken by financial crisis, lapsed into negative economic growth. ECB may continue to steer out of this difficult situation by controlling the inflation concerns caused by the rising crude oil prices. United States of America was still suffering from high unemployment rate and continued economic downturn in the real estate market. Due to this reason, the Federal Reserve Board (FRB) terminated its additional monetary easing policy<sup>3</sup> at the end of June as initially planned, but any immediate effect on it's hitherto tightened monetary policy is not expected<sup>4</sup>. In UK, while the inflation rate continued to exceed the target value set by the Bank of England (BOE), it hesitated to change its monetary tightening policy as there were concerns that it could make the economic recovery slower and weaker. In Japan, it was said that taking the serious impact of East Japan earthquake disaster on its domestic economy into consideration, the Bank of Japan, as the central bank of the country, should patiently continue to implement its current monetary easing policy.

<sup>&</sup>lt;sup>3</sup> This is also generally called Quantitative Easing 2 (QE2).

<sup>&</sup>lt;sup>4</sup> Ben S. Bernanke, chairman of Federal Reserve Board (FRB) clearly expressed his desire to continue to implement the monetary easing policy at a press conference on April 28, 2011. This was done after the Federal Open Market Committee (FOMC) meeting, showing that the funds providing program by purchasing \$600 billion medium and long-term U.S. government bonds continued from November 2010 would be terminated at the end of June as scheduled. However, maintenance of the extraordinarily low interest policy is expected to be continued for a long period; while the FRB balance sheet would be kept at its current level by reinvesting the MBS maturity redemption money into the long-term U.S. government bonds continuously after July.

Figure 1-1-1-21 Movement of policy interest rates and nontraditional monetary policies in countries/ regions



Sources: Data published by governments of the countries/ regions

Table 1-1-1-22 Outlines of nontraditional monetary policies in major advanced economies

	2 Outmes of nontraditional monetary poincies in major advanced economics		
United King	gdom (Bank of England: BOE)		
February	Implementation of assets purchase facilities (purchase of corporate bond and		
2009	commercial paper)		
March	Expansion of subject of the said facilities to medium and long term national		
	bond (upper limit of purchase frame is L150 billion)		
August	Expansion of the purchase frame of the medium and long term national bond		
	of the said facilities (the upper limit L175 billion)		
November	Expansion of the purchase frame of the medium and long term national bond		
	of the said facilities (the upper limit L200 billion)		
Europe (European Central Bank: ECB)			
July 2009	Implementation of purchase of covered bond (maximum EUR60 billion)		
May 2010	Decision was made to intervene to the aftermarkets for dysfunctional national		
	bond and corporate bond.		
United States of America (Federal Reserve Bank: FRB)			
January 2009	Purchase of agency bond and MBS (maximum US\$1,425 billion)		
•March	Purchase of national bond (maximum US\$300 billion)		
2009	Loan to holders of asset backed security (ABS) (TALF)		
August	Reinvestment of refund of principal of MBS to medium and long term national		
2010	bond		
November	Purchase of medium and long term national bond (a size of US\$600 billion) (QE2)		
Japan Bank	Japan Bank of Japan (BOJ)		
January 2009	Implementation of operation to purchase commercial paper		
February 2009	Implementation of operation to purchase corporate bond		
December 2009	Introduction of funds supply operation of term funds (3 months) with 0.1%		
	interest rate at the same level of policy interest rate as a new funds supply		
	measure (a size of ¥10,000 billion)		
March	Expansion of size of the 3 months funds supply operation from ¥10,000		
2010	billion to ¥ 20,000 billion		
August 2010	Introduction of funds supply operation of term funds (6 months) with 0.1%		
	interest rate at the same level of policy interest rate and expansion of the size		
	of funds from ¥20,000 billion to ¥30,000 billion		
October 2010	Decision was made to implement "comprehensive monetary easing policy".		
March 2011	Strengthening the monetary easing policy to cope with the earthquake disaster		
	→expansion of assets purchase funds to ¥40,000 billion with additional ¥500		
2011	billion		

Sources: Data published by governments of countries and various news reports

Contrarily, in resource-rich countries such as, Australia, Canada and Norway where economic recovery was solid, the interest rates were raised in early autumn of 2009 to deal with inflation concerns.

Additionally, strong economic recovery was achieved in many of the emerging economies, and some of them showed overheating economic tendency and inflation concerns surfaced since the last half of 2009. In this situation, upward pressure on prices heightened due to increase in prices of food and resources. Consequently, interest rates were increased in emerging economies mainly in Asia after the

middle of 2010.

Examining trade trends on quantitative basis, it is revealed that by February 2011, the world trade recovered to the level slightly over the peak before the financial crisis struck in April 2008 (Figure 1-1-1-23). Growth rate through the year of 2010 was as high as 15.1% over the previous year. Comparing by countries/ regions, each country and region in Asia, as well as Central and South America achieved high growth rates of 20.7% and 25.9% over those of the previous year in terms of import, and 23.1% and 14.1% respectively in terms of export. Among the advanced economies, the United States of America achieved about the same growth rate in the world trade both in terms of export and import. Rates of both export and import in the Euro zone remained low (Figure 1-1-1-24 and 1-1-1-25).

(2000=100)

180.0

170.0

April 2008
166.5

160.0

140.0

120.0

April 2008
166.5

120.0

April 2008
166.5

160.0

140.0

120.0

April 2008
160.8

April 200

Figure 1-1-1-23 Transition of the world trade volume

Sources: CPB "Netherland Bureau for Economic Policy and Analysis"

250.0

250.0

200.0

World import

Advanced economies

USA

Japan

Euro zone

Figure 1-1-1-24 Transition of import volume by counties/ regions

Sources: CPB "Netherland Bureau for Economic Policy and Analysis

100.0

50.0

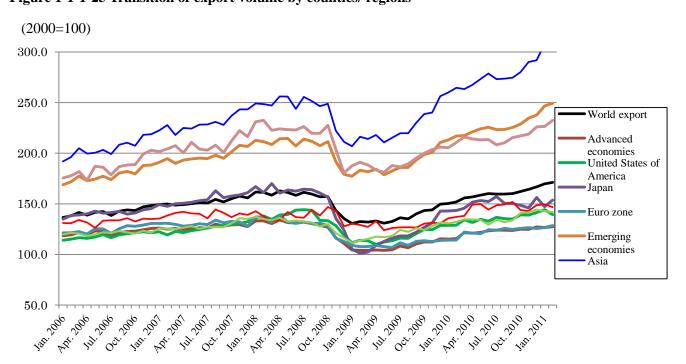
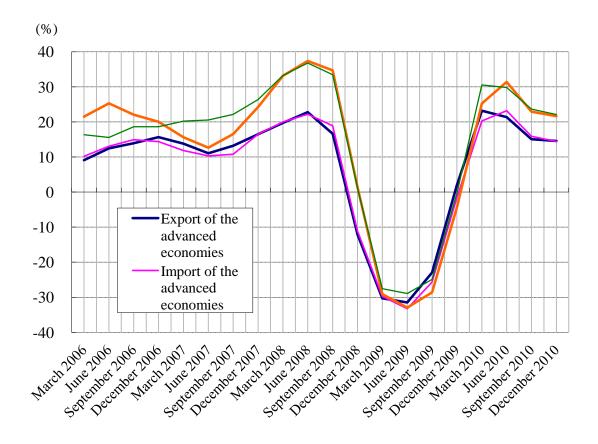


Figure 1-1-1-25 Transition of export volume by counties/ regions

Sources: CPB "Netherland Bureau for Economic Policy and Analysis"

Examining the trade trends on the basis of the amount of money earned, the advanced economies experienced a 30% decrease in the amount of money gained during the second quarter of 2009 from that of the previous year both in terms of export and import. However, shifting to growth afterward during the first half year of 2010, the advanced economies recorded a growth rate of 20% level both in their exports and imports. In the last half of 2010, the growth rates decreased to the level of 10% from the same period of the previous year. In terms of growth rates in exports and imports, the emerging economies achieved a high level of 20% increase during the last half of 2010 (Figure 1-1-1-26). Throughout the 2000s, the growth rates in the volume of trade achieved by the emerging economies exceeded those of the advanced economies both in arena of exports and imports, and the trade volume of the emerging economies increased from 22.9% of the total world trade (amount of export plus import) in the first quarter of 2000 to 37.5% in the last quarter of 2010 (Figure 1-1-1-27).

Figure 1-1-1-26 Transition of export and import amount of the advanced and emerging economies (ratio to the same period of the previous year)



Notes: The advanced and emerging economies are defined by IMF standard.

Sources: IMF "IFS"

(%) 90 The advanced 80 economies, December 2010, 70 62.5 60 The emerging economies, 50 December 2010, 37.5 40 30 20 The advanced economies 10 The emerging economies 0 2003

Figure 1-1-1-27 Share of the advanced and emerging economies account for the world trade

Sources: IMF "IFS"

Although it was necessary to note that exchange rates tended to fluctuate due to officially announced economic trend and monetary policy, the yen appreciated against all major currencies through the year of 2010 (Figure 1-1-1-28).

(Yen/Dollar, Euro) (Yen/Yuan) Against 180 17 Euro Against 170 Dollar East Japan Great 16 Earthquake 160 Disaster 150 On March 11 15 140 130 Against Euro, 14 2011/05/19, 116,5 120 110 Against Yuan, 13 2011/5/19. 100 90 12 80 Against Dollar 2011/5/19, 81.7 70 11 2008/04/01 2008/05/01 2008/06/01 2009/09/01 2009/10/01 2010/04/01 2010/05/01 2009/02/01 2009/03/01 10/20/600 008/11/0] 009/04/01 10/50/600 10/90/600 10/80/600 2009/11/01 2009/12/01 2010/01/01 2010/02/01 2010/03/01 2010/06/01 2010/09/01 0/20/800 0/80/800 0/60/800 0/01/800 008/12/0 2009/01/0 0/80/010 011/05/0

Figure 1-1-1-28 Transition of the exchange rate of Yen (against Dollar, Euro and Yuan)

Sources: Reuters 3000 Xtra

On the exchange rate of yen and dollar, appreciation of the value of yen against US dollar was expanding due to uncertainty about the United States future economic outlook, expected monetary easing by FRB and narrowing gap in the interest rates between Japan and United States of America. On September 15, 2010, after about 3 months and 15 years since May 1995, the level of appreciation of yen was renewed with a price tag of \(\frac{\frac{1}{4}}{82.92}\). Responding to this situation, the Government and Bank of Japan intervened in the yen-selling market first time after a period of 6 years from 2004. The appreciation of dollar against yen halted temporarily after the intervention, but the effect of the intervention did not last long and the exchange rate of yen and dollar continued to hover around \(\frac{1}{2}\)80 against the dollar afterward.

On the exchange rate of yen and euro, the yen became stronger against the euro starting from the end of 2009. It was due to financial risk in Europe especially in Greece. The appreciation of yen against the euro rapidly progressed to the level of ¥112 commencing from the last 10 days of April through May in 2010. Again, it was due to increase in debt concerns in Greece.

On the exchange rate of yen and Chinese Yuan, after it was announced by the People's Bank of China that it would make the exchange rate of Chinese Yuan, which was actually pegged to the US dollar, flexible in June 2010, the exchange rate of Chinese Yuan and US dollar gradually grew higher. With this, the exchange rate of the yen and Chinese Yuan also grew higher with the yen rising from \$13 to \$12 to a Chinese Yuan.

In 2011, after East Japan Great Earthquake Disaster hit Japan on March 11, the yen value suddenly rose to ¥76.25 against the dollar on March 17, the highest value recorded since ¥79.75 in April 1995. The yen value also rose against the euro and consequently, a higher yen situation against other

currencies occurred. For reasons against the background of the sudden rise in the value of yen, several factors like buying yen for avoiding the risk of large drop in share prices following the earthquake disaster, concerns over Middle East situation, and speculation on moving overseas assets into Japan by Japanese insurance companies to prepare for the payment of insurance for damages related to the earthquake disaster can be given. On March 18, responding to the sudden rise in the value of yen, the G7 countries took coordinated intervention steps to prevent the overheated appreciation Japanese yen. It was done for the first time in ten and a half years. Afterward, the market became conscious of the coordinated intervention, and due to increase in the interest rate in Europe in April and gap of viewpoints regarding monetary policies between Japan and United States of America where economy was on a firmer footing, the exchange rate of yen grew lower.

Examining trends of stock prices in the advanced economies, it was revealed that stock prices in United States of America, UK and Germany were recovered to the levels higher than those existing before the world economic crisis at the end of 2010. Stock prices in France and Japan were also recovered at the said levels at the beginning of 2011, and the markets appeared to become firmer with the expected economic recovery being supported by economic measures in the United States of America (Figure 1-1-1-29).

<sup>&</sup>lt;sup>5</sup> However, actually, there is no such fact that Japanese insurance companies have sold their overseas assets to prepare the payment of insurance claim relating the great earthquake disaster.

<sup>&</sup>lt;sup>6</sup> The previous coordinated intervention by G7 was implemented on September 22, 2000. Reason for the intervention was the sudden drop in the value of euro, which was caused by a monetary clause (decentralization of the percentage of investment in currencies outside the euro zone by investors belonging to the euro zone) set when the euro system was started in 1999.

(September 2008 = 100) 180 160 Nikkei 225 140 Eurostocks September 2008 120 France CAC 40 100 Germany DAX 80 UK FTSE100 60 40 USNYSE Composite 20 0

Figure 1-1-1-29 Transition of share prices in the advanced economies

Sources: CEIC Data Base

Recovery in stock prices was much faster in the emerging economies compared to the advanced economies. And by the middle of 2009, the countries other than Saudi Arabia and UAE, recovered their stock prices to levels before the world economic crisis. Some countries achieved stock prices amounting to 1.5 times higher than those in the said levels by the end of 2010. The reasons for the high stock prices can be attributed to the inflow of investment funds from the advanced economies for higher profits since slower economic recovery rates in the advanced economies was not conducing to making easy money (Figure 1-1-1-30).

Shanghai Shenzhen 300 (September 2008 = 100) Hong Kong Hansen 300 Mumbai SENSEX30 Jakarta general index 250 Korea KOSPI FTSE Bursa Malaysia 200 Philippine PSEI September 2008 Singapore ST index 150 Thailand SET Vietnam HCMC 100 Russia RTS Turkey ISE National 100 50 Saudi Arabia total share index TASI South Africa total share index Dubai monetary market general index Argentina Merval index Brazil BOVESPA index Mexico IPC index

Figure 1-1-1-30 Transition of share prices in the emerging economies

Sources: CEIC Data Base

Being supported by the world economic recovery from 2009 to 2010, the problems concerning the issue of nonperforming loans was improved. According to IMF, the amount of loss prediction recorded by the banking institutions worldwide from 2007 to 2010 was US\$2,800 billion as of autumn of 2009; and US\$2,300 billion as of spring of 2010, and it was reduced to US\$2,200 billion as of autumn of 2010<sup>7</sup>. Examining the estimations as of spring and autumn of 2010 by countries/ regions, the amounts of reserve allowance and charge-off were expanding and disposal of nonperforming loans was accelerated in United States of America, euro zone and UK (Figure 1-1-1-31). However, estimated amount of nonperforming assets were still large in size in the United States of America and euro zone, and adjustment of household balance sheets and low tone in the real estate market became a risk factor to the recovery of the banking sector<sup>8</sup>.

<sup>&</sup>lt;sup>7</sup> IMF, Global Financial Stability Report, October 2010.

<sup>&</sup>lt;sup>8</sup> However, IMF cautioned that these amounts of disposal and estimation contained uncertainty caused by data restriction by subject nations and difference in accounting rules.

(US\$1 billion) 1,000 Estimation of increase in bad asset 900 Estimation in spring of 2010: 2010Q1 - 201004 800 Estimation in autumn of 2010: 2010Q3 169 205 - 201004 700 Reserve/ depreciation amount Estimation in spring of 2010: 2007Q2 600 158 250 Estimation in autumn of 2010: 2007Q2 - 2010O2 500 100 400 56 709 680 300 472 415 200 375 355 74 74 100 92 92 82 82 0 2010 2010 2010 2010 2010 2010 2010 2010 2010 2010 Spring | Autumn Spring | Autumn Spring Autumn Spring Autumn Spring | Autumn Other European **USA** UK Euro zone Asia countries

Figure 1-1-1-31 Transition of the bad debt disposal in major countries

Sources: IMF "Global Financial Stability Report, October 2010"

Examining financial situations, after the world economic crisis, each country supported the economy by taking various economic measures such as tax reduction (purchasing automobile, housing acquisition, etc.), initiating public works (transportation infrastructure, energy/environmental concerns, etc.) and making benefit payments (unemployment/ suspension of employment, etc.). In the spring of 2010 and afterward, the world economy was steadily recovering, but debt issues grew into serious problems in Europe and the necessity was recognized to shift the emphasis to the fiscal soundness as means of responding to the economic crisis in the countries where financial expansion policy had been implemented.

Among the advanced economies, the budget deficit in Japan, U.S.A., UK and others were noticeable<sup>9</sup>. According to IMF, the budget deficit in United States of America reached 10.6% in relation to GDP in 2010. This was due to implementation of additional economic-stimulus measures. In Europe, some of the countries having debt problems were increasingly inclined to adopting tight fiscal policy, and mainly in South Europe, budget deficits exceeded the 7% level in relation to GDP. The budget deficit

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<sup>&</sup>lt;sup>9</sup> Data from IMF, Fiscal Monitor April 2011. The budget deficits are in "General government", which include the local governments.

in Japan was 9.5% in relation to GDP. This was due to decrease in tax revenues caused by prolonged economic downturn and increased government spending in economic measures. The budget deficit in the advanced economies of G20 as a whole reached 8.2% in relation to GDP in 2010<sup>10</sup> (Figure 1-1-1-32). Governments, and central banks of major advanced countries were terminating or reducing their economic-stimulus measures implemented after the crisis, as the private sector demands such as personal spending and business investment were rising. However, it is believed that repayment of the outstanding obligation accumulated by the economic-stimulus policy and normalization of vast budget deficit takes very long time. If the expanded budget deficit causes rise in the interest rate, the government's funding costs will increase. For example, medium and long term commitment on restoring fiscal health for future debt repayment is indispensable for such countries as Japan, Greece and Ireland, where government's vast outstanding obligations remain.

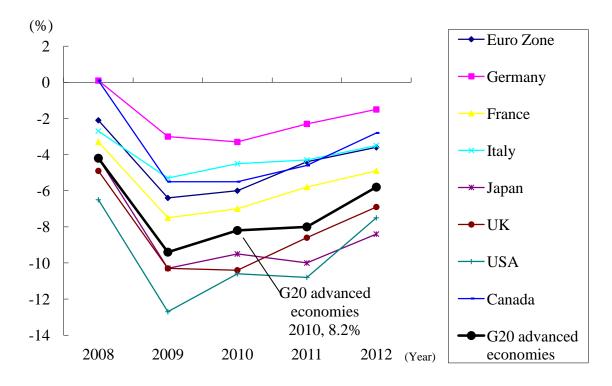


Figure 1-1-1-32 Transition of financial deficits in the advanced economies

Sources: IMF "Fiscal Monitor, April 2011"

On the other hand, the budget deficits in relation to GDP were within 3% to 5% in 2010 in most of the emerging economies, and the said percentage for the emerging economies of G 20 as a whole was 3.6%. Measures to improve the fiscal revenue and expenditure during the past high-growth period, and increased revenue from recent rises in prices of resources for the resource-rich countries enable the emerging economies to heighten the financial reserve capacity and to control the worsening of balance within limited ranges (Figure 1-1-1-33).

<sup>&</sup>lt;sup>10</sup> IMF, Fiscal Monitor April 2010.

(%) 6 4 **←** China 2 0 **-** India -2 Russia -4 G20 emerging **Brazil** economies -6 2010, -3.6 -Mexico -8 -10 G20 emerging economies -12 2008 2009 2010 2011 2012 (Year)

Figure 1-1-1-33 Transition of financial deficits in the emerging economies

Sources: IMF "Fiscal Monitor, April 2011"

# (3) Monetary easing policies by advanced economies and the flow of international financial resources

Under background of concern about decelerating economy, most of the advanced economies continued to adopt a stance of easing their monetary policies during 2010. For example, in United States of America, FRB lowered the target rate of the Federal Fund (FF) to 0 to 0.25% in December 2008 and maintained it at the same level afterward, and the credit easing and quantitative easing were continued to be implemented<sup>11</sup>. Also in Europe, European Central Bank (ECB) maintained its refinancing rate to 1.00% level, which was the lowest level since the euro was introduced in 2009<sup>12</sup>.

In Japan, zero interest policy was retained and the quantitative easing was implemented 13. (Figure

<sup>&</sup>lt;sup>11</sup> An example of easing credit in mortgage-backed securities (MBS), i.e. purchase of assets with relatively high risk, and that of the quantitative easing is purchase of US\$600 billion medium and long term national bonds. Ben S. Bernanke, chairman of the Federal Reserve Board (FRB) clearly expressed his stance to continue the current monetary easing policy at a press conference on April 28, 2011, which was held after the Federal Open Market Committee (FOMC) meeting was arranged earlier.

<sup>&</sup>lt;sup>12</sup> European Central Bank started to raise the interest rate on April 7, 2011. This was done for the first time since the financial crisis as the vanguard of other advanced economies.

<sup>&</sup>lt;sup>13</sup> Bank of Japan announced "Comprehensive Monetary Easing Measure" on October 5, 2010. The details are as follows:

<sup>1)</sup> Reduction of policy interest rate (acceptance of close-to-zero interest rate policy);

<sup>-</sup> Reduction of target rate of overnight call rate from "0.1% level" to "0 to 0.1% level";

<sup>2)</sup> Definition of "time axis" of the ultralow interest rate policy;

<sup>-</sup> Continuing the close-to-zero interest rate policy until situation is judged suitable for any change and

(%) 6.0 Japan USA Euro zone -UK Australia Canada Korea 5.0 Australia, 4.75 4.0 3.0 Korea, 3.0 2.0 Euro zone, 1.25 1.0 Canada, 1.0 UK, 0.5 USA, 0.25 Japan, 0.1 0.0 (Month year)

Figure 1-1-1-34 Policy interest rates in the advanced economies (short term)

Sources: DATASTREAM

Contrarily, most of the emerging economies implemented the monetary tightening policies intermittently in the background of basic tone of rising inflation rates (Figure 1-1-1-35).

price stability can be confirmed;

<sup>3)</sup> Establishment of funds in the amount of ¥35 trillion in size to purchase such monetary assets as national bonds;

<sup>-</sup> New establishment of funds consisting of a funds supply frame (¥5 trillion level) by purchasing various monetary assets such as national bonds, corporate bonds, exchange-trade funds (ETF), real-estate investment trust (JREIT), and creating a funds supply frame (¥30 trillion level) by executing a common collateral funds supply operation with a fixed interest rate of 0.1%.

China Brazil India (%) Russia South Africa Turkey Mexico Indonesia 14.0 Argentina Saudi Arabia Brazil, 12.0 12.0 Argentina,11.5 10.0 Russia, 8.25 8.0 India, 7.25 Indonesia, 6.75 China, 6.31 6.0 South Africa, 5.5 Mexico, 4.5 4.0 2.0 Saudi Arabia, 2.0 Turkey, 1.5 0.0 July 2010 Wiffiel Jolo (Month year)

Figure 1-1-1-35 Policy interest rates in the emerging economies (short term)

Sources: DATASTREAM

These monetary easing measures implemented by the advanced economies had their effects on the flow of funds worldwide. Specifically, the money supply in the advanced economies was increased by such monetary easing measures (Figure 1-1-1-36). These funds were becoming obvious as a financial structure that increased the flow of money from the monetary markets, concentrating on high risk assets with high-yield before having a significant effect on stimulating the economy in order to increase lending and borrowing practices and to activate business activities (Figure 1-1-1-37). Prices in international commodity markets have been rapidly rising since the middle of 2010. It was pointed out that price increments in agricultural markets were caused by not only adverse weather conditions worldwide such as droughts and famines and others, but also by funds inflow from monetary markets expecting tight supply and demand conditions caused by increasing demands mainly in the emerging economies.

(September 2008 = 100) 150 140 Australia 130 Canada EU 120 September Japan 110 Korea 100 New Zealand 90 UK 80 USA 70

Figure 1-1-1-36 Transition of money supply (M1) in major advanced economies

Sources: CEIC Database

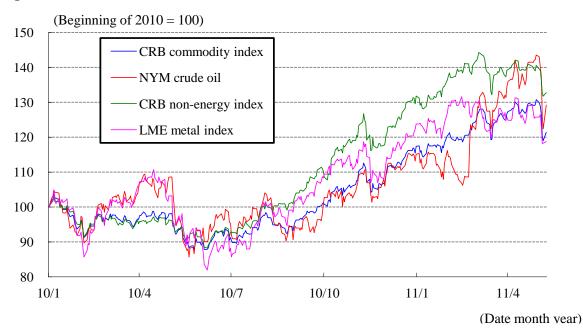


Figure 1-1-1-37 Transition of market conditions of international commodities

#### Notes:

- 1. Compositions of commodity index of Commodity Research Bureau (CRB) are 19 commodities including gold, silver, copper, aluminum, nickel, crude oil, heating oil, unleaded gasoline, natural gas, corn, soy bean, wheat, cotton, beef, pork, cocoa, coffee, orange juice and sugar.
- 2. New York Mercantile Exchange (NYM) crude oil is price of the WTI futures
- 3. Compositions of commodities of London Metal Exchange (LME) metal index are 6 commodities including aluminum, copper, nickel, lead, tin and zinc.

Sources: Bloomberg

Rises in prices of resources / energy became a factor in increasing prices of imported goods, which might delay the recovery of advanced economies. It could be said that rises in prices of food/ energy led to price inflation, and strengthened the inflationary pressure in combination with strong domestic economic performances in the emerging economies.

Capital flow into the emerging economies was also increasing. The amount of the inflow of private capital into the emerging economies (net basis) was about US\$1 trillion in 2007, but significantly decreased to US\$ 344.4 billion in 2009 due to the world economic crisis. This was about 1/3 of the capital inflow level in 2007. However, it was estimated that the amount of capital inflow was increased again at a level over US\$600 billion in 2010 (Figure 1-1-1-38)<sup>14</sup>.

Loan from nonbank

Loan from commercial bank

Private investment

Total private capital inflow

200

1,995, 1,996, 1,997, 1,998, 1,999,

Figure 1-1-1-38 Private capital flow to the emerging economies (whole)

Notes: The emerging countries are 30 countries including 7 countries in Asia, 8 countries in Europe, 8 countries in Central and South America and 7 countries in Middle East and Africa.

Sources: IIF "Capital Flows to Emerging Market Economies"

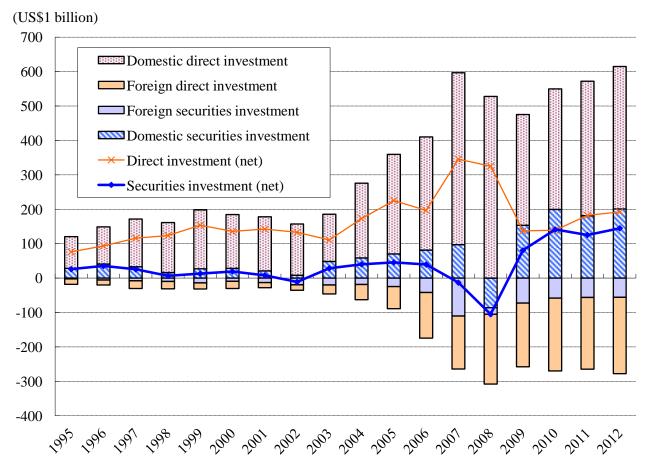
Examining the private capital invested into the emerging economies, the private investment continued to increase, but financing from commercial banks and non-banking sources largely fluctuated. Examining investment from private sectors, the amount of direct private investment was as

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<sup>&</sup>lt;sup>14</sup> Estimation by IIF: "Capital Flows to Emerging Market Economies".

large as about US\$350 billion, and the private stock investment was also US\$200 billion in 2010. Comparing to the minus US\$86 billion in 2008, the private stock investment amount was rapidly growing in 2009 and afterward (Figure 1-1-1-39).

Figure 1-1-1-39 Private capital flow to the emerging economies (details of private investment)



Sources: IIF "Capital Flows to Emerging Market Economies"

Examining the capital inflow to the emerging economies by regions, the inflow of capital in Asia was dominant, but large proportion of the inflow of money was also found to be invested in many countries in Central and South America in 2010 (Figure 1-1-1-40). It could be said that the outside capital was actively invested in the emerging economies, thereby contributing to their continued high growth (Figures 1-1-1-41 and 1-1-1-42).

(US\$1 billion) 600 ■Subsahara Africa 500 ■ Middle East and North Africa □ Central and South 400 America ■ Asian emerging economies 300 ■Central and East Europe 200 100 0 -100

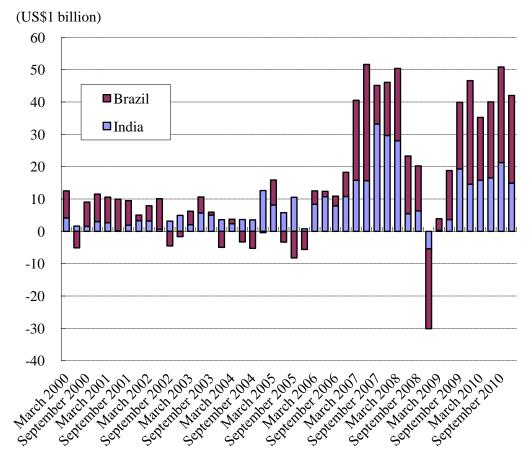
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Figure 1-1-1-40 Capital flow to the emerging economies (by regions)

Sources: IMF "WED April 2011"

1992

Figure 1-1-1-41 Capital flow to the emerging economies (Brazil and India)



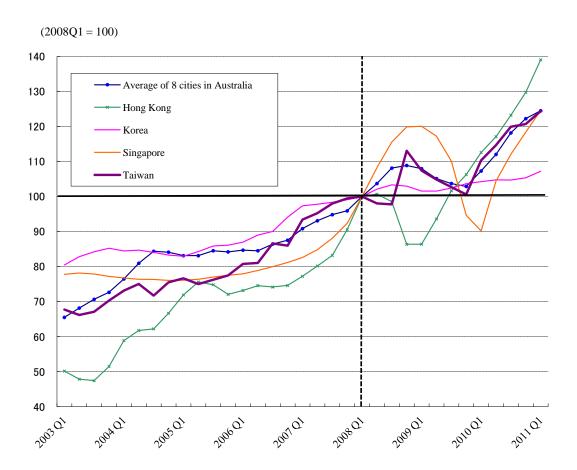
(US\$1 billion) 100 90 80 ■ China 70 60 50 40 30 20 10 December interperting when to the food dog to the food dog to the food to the June Tang Jang June Jun Joo] December Interpret Interpr

Figure 1-1-1-42 Capital flow to the emerging economies (China)

Thus, the increase in capital inflow from private sectors supported high economic growth in the emerging economies, and it also partly contributed to rises in stock prices in middle of 2010 and afterward. This was done by net buying of stocks by foreign investors in the emerging markets<sup>15</sup>. At the same time, there were concerns that it might cause sudden rise in real estate values, overheating in emerging economies and create bubble effect in asset values as described above (Figures 1-1-1-13 and 1-1-1-14 as quoted again).

<sup>&</sup>lt;sup>15</sup> Kobayashi S. and K. Yoshino (December 2010) "SHINKOUKOKU HENO SHIHON RYUNYU TO BEIKOKU HENO SHIKIN KANRYU NI TSUITE", (NICHIGIN REVIEW, December, 2010)

Figure 1-1-13 Transition of housing prices in the emerging economies/regions and resource-rich countries (quarterly)



(%) 70 cities as a whole Beijing 25 Shanghai Guangzhou Shenzhen 20 15 10 5 0 -5 -10 -15 -20

Figure 1-1-14 Transition of housing prices in China

As a result of increased capital inflow into emerging economies and international commodity markets, the emerging economies could face difficulties in their monetary/ exchange policies. Specifically, as a consequence of this kind of capital inflow, the emerging economies faced upward pressure in their currency exchange rates. And this might even cause rises in interest rates backed by this artificial economic growth. In this situation, the emerging economies had to expand their foreign currency reserves again in 2010, which had once been reduced by the financial crisis (Figure 1-1-1-43). It showed that they undertook measures to counter the upward pressures on their currency exchange rates by active intervention in the currency exchange markets.

(US\$1 billion)

1,000

800

400

200

<sub>eph</sub>, <sub>eph</sub>,

Figure 1-1-1-43 Foreign currency reserves in the emerging economies

Notes: The emerging countries are 30 countries including 7 countries in Asia, 8 countries in Europe, 8 countries in Central and South America and 7 countries in Middle East and Africa. Sources: IIF "Capital Flows to Emerging Market Economies"

With high domestic economic growth, infusion of foreign capital in the market, and sudden rises in commodity markets, inflationary pressure grew high in the emerging economies. Therefore, they were forced to take steps to mitigate the upward pressure on their currency exchange rates. And the same time, they were unable to avoid taking steps to implement monetary tightening policy. As the advanced economies' monetary easing and lower currency exchange rates caused these upward pressures to the emerging economies' currencies, the "lower currency exchange rates" competition increased worldwide in the middle of 2010.

# (4) Global imbalance to expand again

# (A) Multilayered expansion of the global imbalance

Since the speed of economic recovery between the advanced and emerging economies is different, this again led to expansion of global imbalance.

Backed by trade value reduction by worldwide financial crisis, the global imbalance was reduced temporarily in 2009. Changes from the previous concept of "overconcentration of consumption in the United States of America" to "multipolarization of consumption" were expected. But in 2010, it turned for expansion again (Figure 1-1-1-44). According to the prospect envisioned by IMF, the current balance deficit of the United States will spread 1.4 times starting from 2010 through 2016. On the other hand, the Chinese current balance surplus will expand 2.9 times in the same period, and any medium-term reduction cannot be anticipated.

(US\$1 billion) 2,000 Predicted 1,500 Other emerg. 1,000 Russia Other adv. Korea 500 Germany Japan China 0 USA UK Other adv. -500 Brazil India -1,000 Other emerg. -1,500 -2,000 1991 1993 1994 1995 1996 1999 2000 2001 2003 2004 2005 2006 2007 2008 2007 2008 (Year)

Figure 1-1-1-44 Transition of current account imbalance in major countries/regions

Sources: IMF "WEO, April 2011"

Now, external fiscal dimensions in the economic activities are to be confirmed focusing on United States of America and China, which represent current balance deficit and current balance surplus of global economic imbalance respectively.

### <United States of America>

Watching the transition of current balance of the United States, it is found that recently the current balance deficit rate in relation to GDP has decreased. On the other hand, seen on a quarterly basis, the deficit has increased again from the third-quarter of 2009 due to aggravation of the trade balance, and also, on an annual basis, it enlarged to -3.2% in 2010 from -2.7% of the previous year (2009) (Figure 1-1-1-45).

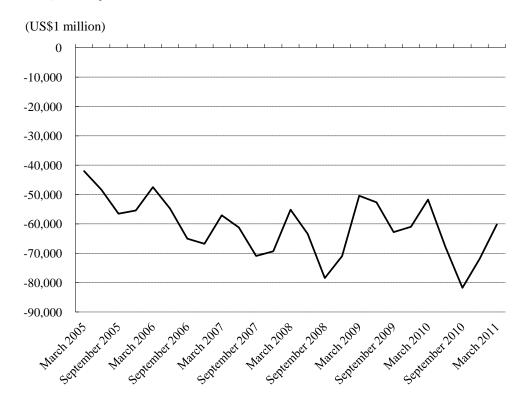
Balance of trade Balance of service 12% Balance of income Current account transfer 10% Balance of current account 8% **-2.7%** 6% Current account deficit (ratio to nominal GDP) 3.2% Before the crisis: the largest about -6.0% 4% In 2010: -3.2% increased from the previous year (-2.7%) -6.0% -5.1% 2% 0% -2% -4% -6% -8%

Figure 1-1-1-45 Transition of United States of America's current account deficits

Sources: US Department of Commerce

Watching the trend of the trade balance, it has been discovered that the deficit in US trade with China particularly increased both in scale and breadth (Figure 1-1-1-46).

Figure 1-1-1-46 Transition of balance of goods trade balance of United States of America (with China, Quarterly basis)



At his State of the Union Address in January 2010, President Obama disclosed his intention to let US exports double in the next 5 years, but presently, as mentioned above, it did not lead to any meaningful improvement in the trade imbalance (refer to Section 1.2 of Chapter 1 "Current status and problems of the US economy").

### <China>

Watching the transition of current balance of China, it has been found that at the beginning of the 2000s, the surplus in China's current balance increased rapidly, and the ratio for nominal GDP increased to 10.1% in 2007. It displayed a tendency of later reduction and reached 5.2% in 2010, while remaining at the same level of the previous year (2009). Watching the details of current balance, it shows that after middle of the 1990s, the service balance had deficits throughout, but the trade balance registered a great surplus (Figure 1-1-1-47).

Balance of trade Balance of service Balance of income Current account transfer 12.0% 10.0% China's current account surplus (ratio to nominal GDP) Before the crisis: the largest about 10% 8.0% In 2010: 5.2%, same level to the previous year (5.2%) 6.0% 4.0% 2.0% 0.0% -2.0% -4.0% -6.0%

Figure 1-1-1-47 Transition of China's current account surplus

Sources: China National Foreign Exchange Administration Bureau, IMF, CEIC

Judging from the current balance of China from the viewpoint of investment saving (IS) balance from 2003 through 2007, the saving/ investment rate in China soared, and this might suppress the consumption in the household sector<sup>16</sup> (Table 1-1-1-48). China's saving level exceeded OECD saving tendency in every sector, especially saving ratio to GDP in the household sector largely exceeded that of OECD (Figure 1-1-1-49).

 $<sup>^{16}</sup>$ Ohashi, H. (2011) "KEIZAI KYOUSHITSU, KAJOUCHOCHIKU NO KAISYOU KAGINI" Nihon Keizai Shinbun date on February 24,2011

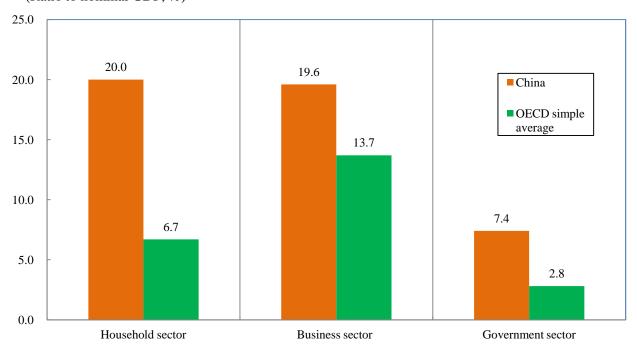
Table 1-1-1-48 Transition of China's IS balance (ration to nominal GDP) by sectors

		From 1993 to 1997	From 1998 to 2002	From 2003 to 2007	Changes in (% point) from (1998-2002) to (2003-2007)
Economy as a	Saving	37.0	37.3	46.9	9.6
whole	Investment	36.1	36.0	42.3	6.3
	IS balance	0.9	1.3	4.6	3.3
Household	Saving	19.6	18.6	20.0	1.4
sector	Investment	7.6	7.7	8.4	0.7
	IS balance	12.0	10.9	11.6	0.7
Business sector	Saving	14.1	15.3	19.6	4.3
Dusiness sector	Investment	25.5	25.3	29.1	3.8
	IS balance	<b>▲</b> 11.4	<b>▲</b> 10.0	<b>▲</b> 9.5	0.5
Government	Saving	3.2	3.3	7.4	4.1
sector	Investment	3.0	3.0	4.8	1.8
	IS balance	0.3	0.3	2.6	2.3
Overseas sector (reference)		<b>▲</b> 2.6	<b>▲</b> 1.9	<b>▲</b> 6.7	<b>▲</b> 4.8

Notes: Banking institution sector is added to the business sector. Sources: OECD (2010), "OECD Economic Surveys; China 2010"

Figure 1-1-1-49 China and OECD member countries' saving ratio to nominal GDP

(Ratio to nominal GDP, %)



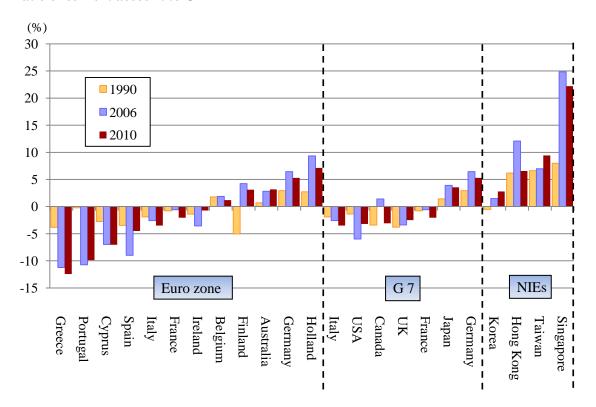
Notes: Values of China are from 2003 to 2007, of OECD from 2003 to 2008. Sources: OECD (2010), "OECD Economic Surveys; China 2010"

From the viewpoint of IS balance, China should transfer its economic development model by planning growth by expanding and spreading out domestic demand mainly in terms of consumption and reduce the excess saving standard in the household sector. It is thought that it lead to reduction of surplus, achieving the much needed balance in the economic sector.

Thus, looking mainly at the disproportional current account imbalances between United States of America and China, the said imbalances exist not only between USA and China, but also with many other countries in the world.

Examining the ratio of current balance in relation to GDP of major advanced and emerging countries / regions it was found that during the time span from 1990 through 2006 or 2010, there were large imbalances in trade with such countries/ regions as NIEs and Middle East country which let the scale of current-account surplus increase. The same thing happened in case of South European countries in the euro zone, which also allowed the current-account deficit to widen (Figures 1-1-1-50 and 1-1-1-51).

Figure 1-1-1-50 Expansion of imbalance in the major advanced economies/regions shown by the ratio of current account to GDP



Sources: IMF "WED Database, April 2011"

45 (%) 40 35 **1990** 2006 30 **2**010 25 20 15 10 5 0 (5) (10)(15)Central (20)Central and and South Asian emerging Middle East East Europe America **CIS** economies United Arab Emirate: Indonesia

Figure 1-1-1-51 Expansion of imbalance in the major emerging economies shown by the ratio of current account to GDP

Notes: No data of 1990 are found for CIS, and data of 1992 are used.

Sources: IMF "WEO Database, April 2011"

Thus, surpluses in the size of current account balance or deficits increased not only between United States of America and China but also between other countries. It can be said - that global imbalances increased as a result of piling up these deficits and account surpluses.

## (B) The durability of the global imbalance

#### <Medium-term prospect>

As discussed above, following the economic crisis, the ratios for GDP of the current balance deficit in United States of America temporarily decreased from -4.7% of 2008 to -2.7% of 2009, but increased again to -3.2% in 2010. On the other hand, in China, the ratio to the nominal GDP of the current balance surplus was -5.2% in 2010, remaining at the same level from 2009. The movements after 2011 should be watched.

Generally, the surplus and deficit in current account balance occur as a result of voluntary selection of the economic model, which always exists historically. The existence of deficit in current balance is not wrong in itself, but only when it becomes hard to last, it is thought that it causes problem<sup>17, 18</sup>.

<sup>17</sup> White Paper on International Economy and Trade in 2010.

<sup>&</sup>lt;sup>18</sup> Masaaki Shirakawa, Governor of the Bank of Japan pointed out that the trend of the current balance reflected a long-term trend of the saving/ investment balance, and it was strongly influenced by the developmental stage of the economy and population dynamics. As surplus and deficit in current balance occur as a result of voluntary selection of economic models, the existence of deficit itself should not be

Will the current global imbalance really enter into a sustainable state?

Now, examining movements of the international trade balances in the emerging economies, the current balance and balance of capital account are in the black, and the foreign currency reserves are piled up greatly (Figure 1-1-1-52). It is thought that these foreign reserves may be invested in highly fluid and safe assets like the United States national bond. Being led by United States of America, the monetary easing policy was advanced in the advanced economies, and abundant supply of money were flowing into the emerging economies, which were maintaining a high growth rate. Then, the foreign reserve increased in the emerging economies, and soon they started to invest in National Bonds circulated by advanced economies, mainly by the United States of America. This created a reverse cycle as funds from the emerging economies flowed back to the advanced economies. And it strengthened downward pressure to their long-term interest rate. With it, deficits of the current balance of the developed country (United States of America) were covered (Figure 1-1-1-53). If circulation of this type of international capital flow continues unabated, further expansion of t global imbalance cannot be avoided.

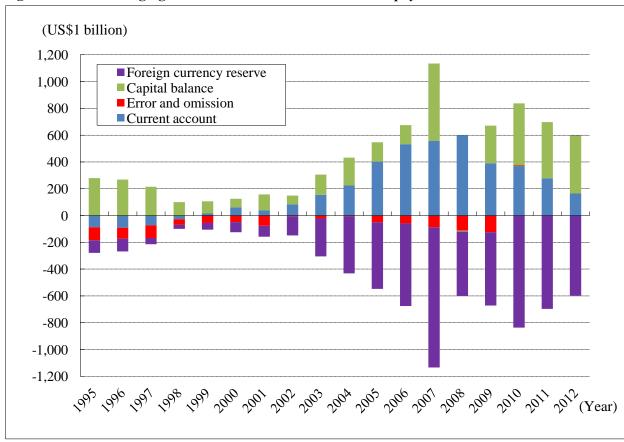


Figure 1-1-1-52 Emerging economies' international balance of payments

Notes: The emerging countries are 30 countries including 7 countries in Asia, 8 countries in Europe, 8 countries in Central and South America and 7 countries in Middle East and Africa.

regarded as wrong one. And only when it becomes hard to eliminate, it causes problems in "GLOBAL IMBALANCE TO KEIJOU SHUUSHI FUKINKOU" (Japanese translation of a lecture given at an event to publish "Financial Stability Review" by Bank of France, Bank of Japan, February 18, 2011).

<sup>&</sup>lt;sup>19</sup> Kobayashi, S. and K. Yoshino (December 2010) "SHINKOKOKU HENO SHIHON RYUNYU TO BEIKOKU HENO SHIKIN KANRYU NI TSUITE" (NICHIGIN REVIEW)

Capital inflow based on incentive to seek return of interest under the monetary easing environment Emerging Advanced economies economies Strengthening monetary easing Large scale intervention to currency exchange to environment reduce increasing pressure to the home currency Downward pressure to US long Further accumulation of foreign currency reserve term interest rate Advanced Emerging economies. economies especially USA Return flow to the United States as a form of investment to the US long term bonds

Figure 1-1-1-53 Circulation of international capital flow

Sources: Kobayashi, S. and Yoshino, K. "Capital flow to the emerging economies and return flow to the United States" ("Nichigin Review" December 2010)

In addition, according to the viewpoint of IMF, as medium-term reduction of global imbalance cannot be anticipated<sup>20</sup>, it is thought that factors such as, default by the unsustainable budget deficit, destabilization of financial institutions, higher inflation by increased capital inflow into emerging economies will create insurmountable problems exerting downward pressure to the world economy.

### <Long-term prospect>

#### (a) Possibility of re-balancing

In this way, the global imbalance is maintained over the medium term, but there is a viewpoint suggesting that any kind of reduction of imbalance cannot be anticipated at this point in time. On the other hand, another viewpoint points out that on a long term basis, the global imbalance can be reduced by taking the following factors into consideration.

At first, as the number of emerging economies increases in the amidst of growing investment demand worldwide, there will arise a situation in the realm of saving and investment balance in which investment will fall short of its demand. Then, the situation would look especially favorable to the emerging economies. Because, in the aftermath of the world economic crisis, the emerging economies succeeded in achieving higher economic growth than the advanced economies. In this circumstance, it is predicted that in view of the growing investment prospects, the newly emerging economies would increase more and more in number in the future, provided that the emerging economies grow faster to surpass the advanced economies. In addition, there is also another viewpoint that in the long term, the

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<sup>&</sup>lt;sup>20</sup> IMF, World Economic Outlook, April 2011.

preliminary saving in the emerging economies will decrease. Besides, considering the prospect of future economic development the emerging economies will need to invest in the improvement of safety net functions, such as social welfare and the medical insurance, development of the money market including the improvement of the foreign exchange market, and expand consumption by regulating the population dynamics (population growth). Speaking from such a background, it is thought that "saving excess" is improved by decreasing preliminary saving of the past in the family budget and increasing the portion transferred to consumption<sup>21</sup>.

If a possibility to reduce the global imbalance can be found in the movements of the world economy that we surveyed till now, those are: a) Changes from "overconcentration on United States of America for consumption" to "multipolarization of consumption" should be advanced; for this "multipolarization of consumption", b) The Transfer of economic development models from export-led to domestic demand-led growth focusing on the individual consumption should be planned in China; and c) by a surge of consumption in China, autonomous consumption in the East Asia area becomes active, as the ratio of the exports to Europe and America decrease. Re-balancing of global imbalance may be advanced by these structural changes.

In addition, it is pointed out that "the current balance provides useful information about the status of the economy" on the relation between the current balance and the global imbalance. However, at the same time, experiences from the past and present financial crisis show that it is at a potential risk just to simply use the current balance for an index to determine existence of unsustainable global imbalance<sup>22</sup>.

### (b) Concerns for durability of current balance deficit of the United States

Although the argument is divided into whether the emerging economies can or cannot continue to finance United States of America's large amount of current balance deficit for a long term, it is pointed out that it has some concerns that the current balance deficit might continue to increase for a long term in future.

First, the concern is due to constitution of the United States of America for foreign assets and the foreign debt. Though the United States of America is a pure foreign debtor country, the income balance (income gain) is in the black, and furthermore, according to the preceding study, the country gains a large amount of profit (capital gain) by the rise in property value. In a situation in which total foreign assets and total foreign debts increased rapidly after the 1990s, as most of American total foreign assets are held in the form of direct investment or stock acquisition. On the other hand, a high percentage of total foreign debts exist in the form of treasury notes, bonds and bank loan. It is a

<sup>&</sup>lt;sup>21</sup> Alan Taylor, and Manoj Pradhan, "Great Re-balance of the World Economy", (Morgan Stanley Research, "The Global Monetary Analyst", February 18, 2011). Additionally, the paper pointed out that expansion of the foreign reserve advanced in the emerging economies, and decreased pace to reserve foreign currency in the future will be one of the factors of the long-term reduction of the global imbalance.

<sup>&</sup>lt;sup>22</sup> Masaaki Shirakawa, Governor of the Bank of Japan pointed out that "the current balance provides useful information about the situation of the economy. However, at the same time, experiences from the past and present financial crisis show that it is at a potential risk to just simply use the current balance for an index to determine existence of the unsustainable global imbalance" in the "GLOBAL IMBALANCE TO KEIJOU SHUUSHI FUKINKOU" (Japanese translation of a lecture given at an event to publish "Financial Stability Review" by Bank of France, Bank of Japan, February 18, 2011) under the title of "Evaluation of the Global Imbalance".

composition for obtaining capital gain by differences in risk / rate of return between debt and assets. Besides, the foreign debts are not affected by the exchange fluctuations, because large portions of it are on a dollar basis. On the other hand, as for the foreign assets, the value increases in dollar denomination in the situation that weak dollar progresses because most of foreign assets are denominated in foreign currency. It is said that the aggravation of the foreign position of United States of America has been relieved or improved by the capital gain provided in this way<sup>23</sup>.

Such "success" in foreign assets operation cannot be necessarily continued. For example, as a large amount of capital loss was recorded at the world economy crisis of 2008, it has high volatility and a weak aspect. In addition, it leads to the increase of external debts in the high dollar situation. When taking such relatively high-risk assets operation into consideration, United States of America may be pressed to improve the continued large amount of current balance deficit in the future<sup>24</sup>.

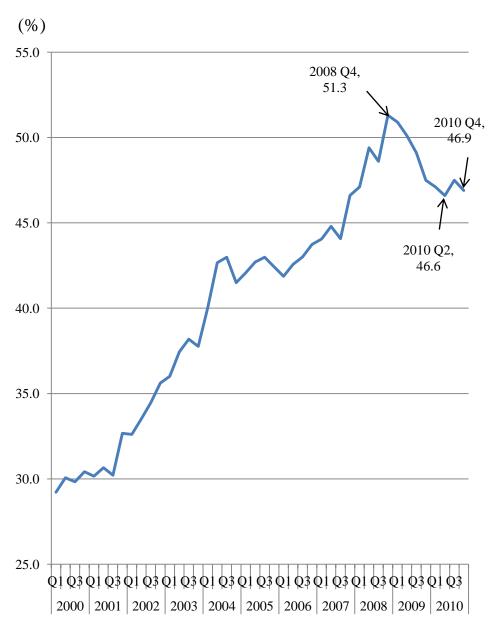
Secondly, examining changes in possession rate of the U.S. government bonds by the overseas foreign countries, it showed an upward trend from 2000 and afterward, but after having recorded the peak (51.3%) in the fourth-quarter of 2008, it had a tendency to decline and decreased to 46.6% in the second-quarter of 2010 (Figure 1-1-1-54). It recovered once in the next third-quarter, but decreased again in the fourth-quarter and became 46.9%. This was because the government bond possession rate in the United States rose backed by a rise of the savings rate in the United States. At the same time, it might suggest that the foreign reserve operation was diversified by transferring it from conventional dollar basis to other currencies backed by deepening recognition that status of dollar as a key currency was weakened after the financial crisis<sup>25</sup>. There may be no problem if such movements can be covered by the high domestic savings rate. However, when diversification of the foreign reserve operation further advances in future, concern thereby arises whether various foreign countries such as Japan, Germany, euro zone, Middle East oil-producing countries and emerging Asian economies including China, purchase the U.S. government bonds as in the past or not, and concern thereby occurs whether United States of America's budget deficit (current balance deficit) can continued to be financed by the funds in the way that is done before or not<sup>26</sup>.

<sup>&</sup>lt;sup>23</sup> Iwamoto, T. "Monetary Crisis and Global Imbalance – focusing on vulnerability of the United States of America's high leveraged type foreign position-" (Kokusai Chosashitsuho, No.3, November 2009).

<sup>&</sup>lt;sup>24</sup> Takekazu Iwamoto points out in his paper of "Monetary Crisis and Global Imbalance – focusing on vulnerability of the United States of America's high leveraged type foreign position-" (Kokusai Chosashitsuho, No.3, November 2009) that "the sustainability of the American foreign disproportion, which has been depending on a capital gain, is the vulnerability that the United States of America has in the balance sheet of the whole country as it is clear from a large amount of capital loss that has been recorded after the financial crisis". "If there is a nation target called "finance-oriented nation", and if it hangs high leverage not only to individual financial institution but also to the foreign position of the whole country and aims at the foreign position that depend on not only the income balance (income gain) but also the capital gain, there is doubt from a viewpoint of the soundness of foreign balance sheet". *White Paper on International Economy and Trade in 2010.* 

<sup>&</sup>lt;sup>26</sup> There is a viewpoint that when a central bank of the emerging economies judges that "The foreign reserve has been saved to an appropriate standard", then growth of the foreign reserve of the emerging economies becomes dull. (Alan Taylor, and Manoj Pradhan, "Great Re-balance of the World Economy", (Morgan Stanley Research, "The Global Monetary Analyst", February 18, 2011).

Figure 1-1-1-54 Transition of ratio of US national bonds held outside the country



Sources: FRB "Flow of Funds Accounts of the United States"

Today, as the financial globalization progresses, the global imbalance is not a local issue whether or not the relation lasts between some of the advanced economies and emerging economies that are financing the current balance deficit of the United States of America. It is an issue on the world economy, which involves other part of the advanced and emerging economies as well as the developing countries. For this reason, the re-expansion of the global imbalance causes concern for growth of the world economy in the future. If, as previously mentioned, the "circulation of the international funds flow" is once discontinued, the world economy may be greatly destabilized<sup>27</sup>.

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<sup>&</sup>lt;sup>27</sup> When disproportion of the current balance is adjusted, for adjustment of the U.S. dollar exchange rate in the process, the preceding study points out to classify it in two analysis such as a) The current account

### (C) Expectation on emerging Asian economies for re-balancing

As discussed above, taking risk accompanied by expansion of global imbalance into consideration, the conventional economic growth in countries/regions, which excessively depend on the United States of America for consumption, cannot be expected in future.

Therefore, as an engine (consumption market) driving growth of the world economy in the future, the expectations placed on the emerging Asian economies including China and India increasingly rises.

However, in an economic scale, the advanced economies account for higher proportion (66%) of the world GDP, and the emerging economies have only 34%. The difference is rather large. Examining the economic scales of the countries, United States of America account for 23.3% of the world GDP, while China and India respectively account for only 9.3% and 2.4% (Figure 1-1-1-3, as shown above). Therefore, the economic recovery of the United States of America and other advanced economies is essential for overall recovery of world economy, and the economic growth of both advanced and emerging economies is desirable so that the world economy achieves the powerful, sustainable and well balanced economic development.

In the emerging economies including China, the middle classes and higher socioeconomic groups are rapidly increasing backed by high economic development of their country and high degree of consumption<sup>28</sup>. Following this situation, the autonomous and sustainable economic growth mainly on the domestic demand is desirable in near future. And also it is desired that timely import by the emerging economies contribute to correct the re-expansion of global imbalance.

imbalance eventually goes to the zero balance and is associated with the large adjustment of the dollar rate, and b) The current account imbalance lasts for some period and the adjustment of the dollar rate remains moderate. (Hagiwara, K. "KEIJOUSHUUSHI FUKINKOU NO CHOUSEI KATEI: KINNEN NO RIRONNTEKI BUNSEKI NO TENBOU", "KINYU KENKYU" Institute for Monetary and Economic Studies, Bank of Tokyo, December 2008).

<sup>&</sup>lt;sup>28</sup> White Paper on International Economy and Trade 2010.