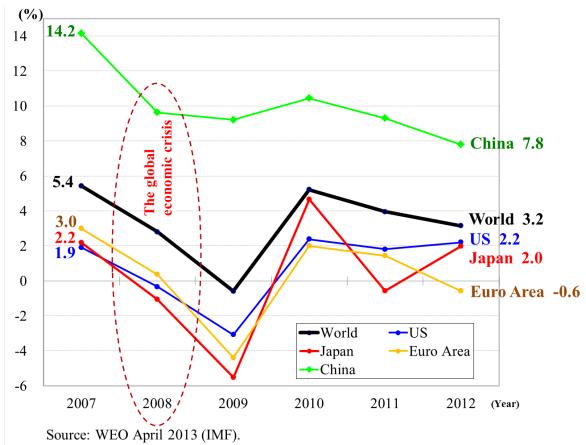
#### Part III Trends in the world economy

### Chapter 1 Outline - World economy still showing fragile recovery despite the mitigation of serious risks -

The world economy had been recovering from the worst condition in the spring of 2009, but it again stalled due to the occurrence of the European debt crisis in 2010, and after that, the economic growth rate has not yet recovered at the same level as it was before the global economic crisis (Figure III-1-1-1).

Figure III-1-1 Changes in real GDP growth rate of major countries and regions around the world (Annual rate)



Although a sign of recovery of the world economy was seen in the beginning of 2012, uncertainty regarding the problems such as the European debt crisis and the financial problem in the United States became a burden, and the recovery momentum gradually decreased towards the middle of the year (Figure III-1-1-2).

First, regarding Europe's economy had been temporarily quiet until March, however, the European debt crisis again became uncertain after April. For example in Spain, in addition to the possibility of capital injection to financial sectors that have concerns about their soundness, 9 out of 17 autonomous regions in the country asked for financial support to the central government from July to the end of October, which revealed a financial problem of the domestic autonomous regions. Based on this

background, market concerns toward Spanish financial outlook increased as seen in an increase in the Spanish government bond yield and downgrading of the Spanish government bond implemented by many rating organizations one after another. Also from May to June, during the general election in Greece, secession of Greece from the euro area was of concern and it accelerated the instability of the financial market. After the general election, financial restructuring did not proceed well as it has been planned due to a depression of the real economy, and then discussion regarding continuous financial support from the IMF and EU was prolonged.

Also in China, a decrease in export toward Europe became a burden, and economical deceleration continued from the first quarter of 2011 to the next year, causing its recovery delayed until the third quarter of 2012. Also in the United States, expectation for an economic recovery increased in the first quarter of 2012 based on a robust gain in the housing market as well as employment and consequent robust consumer spending, however, uncertainty of the politics outlook came out in summer with the presidential election in November and the financial problem known as the "fiscal cliff", worsening the business sentiment of companies and reducing the motivation to invest in equipment. Moreover, expor from the United States to many regions decreased due to the global sentiment of accelerated recession, and it became a hindrance for companies' activities along with reduced equipment investment.

Meanwhile, political strategies in the euro region and in the United States succeeded in the beginning of autumn, resulting in the relaxation of tension in the financial market, with reduced government bond yield and stabilized stock price.<sup>2</sup> In the fourth quarter, while emerging economies maintained high economic growth, recovery of advanced economies proceeded in a different and unstable way.

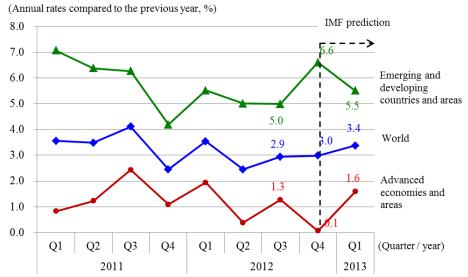
As above, the world economy is on the way to gradual recovery, but it is still slow-moving and its trend is weak.

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<sup>&</sup>lt;sup>1</sup> Spanish government bond yield temporarily climbed up to the higher 7% range.

<sup>&</sup>lt;sup>2</sup> Specifically, the European Central Bank (ECB) announced the outline of a new government bond-buying program (Outright Monetary Transactions, OMT) in September of the same year, and the European Stability Mechanism (ESM) launched in October. In Greece, continuous support and the extended target completion date of the fiscal restoration were approved. In the United States, Quantitative Easing 3 (QE3) was adopted.

Figure III-1-1-2 Changes in real GDP around the world (Quarter)



Notes: After seasonal adjustment. Values after the fourth quarter of 2012 are IMF prediction and do not certainly reflect problems in 2013 such as the Cypriot debt problem and weak economic indicators in the U.S. and China.

Source: World Economic Outlook January 2013 Update (IMF).

<Trends of major countries and regions>

oEconomy in the United States showed slow but continuous recovery in 2012, supported by the firm trend of consumer spending with the background of recovery in housing market and a sign of improvement in the employment environment. Economy in the United States proceeds gradually but firmly in 2013, avoiding the "fiscal cliff" problem temporarily. However, there are still concerns of political uncertainty regarding mid-term fiscal restoration plans and downturn influence caused by the financial strain.

oIn the European economy, financial market has stabilized since autumn in 2012, and the government bond yield has decreased. On the other hand, recovery of the real economy delayed due to weak demand condition and uncertain economic outlook. In 2013 economic performance is still fragile, including high unemployment rate and reduced equipment investment.

• Economy in China has been decelerating gradually since the beginning of 2012, and a recovery trend was observed temporarily in the fourth quarter, but deceleration is seen again in 2013.

oIn 2012, emerging economies were mostly concerned about the economic slowdown; however, a sign of restoration was seen due to exportation recovery in the fourth quarter. Meanwhile, the major countries of ASEAN maintained relatively high growth rates of 5 - 6% compared to the previous year as the firm growth of domestic demand covered the reduced exportation. Economies in India and Brazil showed a dramati fall in the growth rate, respectively due to deceleration of domestic demand and exportation, and to the stagnation in foreign demand. Slowdown of agricultural production caused by bad weather was a deceleration factor of these two countries. Russian economy also showed a sluggish growth rate due to decrease in exportation and reduced consumer spending and equipment investment. Overall trend of emerging economies in 2013 is still growing as ASEAN 4 countries

(Indonesia, Thailand, Malaysia and Philippines) are growing firmly based on domestic demand, and Brazil shows gradual recovery including good consumer spending conditions. However, recovery in Vietnam is delayed and India and Russia has continued to decelerate.

In the next section, the trend of the above world economy is overlooked based on major economic indicators.

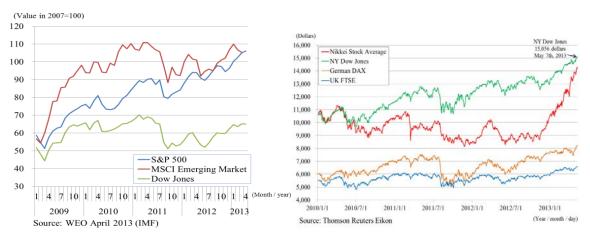
#### Section 1 Trends in the financial market

After the European debt crisis, while unstable global financial market conditions had been prolonged, each EU member state, EU as a whole, as well as international organizations took various actions as mentioned above. Furthermore, financial market stability improved globally and serious risk regressed in late 2012.

#### 1. Stock prices

Stock prices fluctuated in early 2012, but the market condition globally improved as monetary easing in major countries succeeded after June in the same year (Figure III-1-1-3). Also, based on the prediction that the "fiscal cliff" problem in the United States would be avoided and the situation where Greek support measures were reconsidered, global stock prices have still moved upward in 2013. Furthermore, the Dow Jones average in the New York Stock Exchange recorded the highest closing price of 15,056 dollars on May 8th, 2013, surpassing the line of 150,000 dollars for the first time in history. On May 10th, 2013, FTSE Euro first 300 Index in European stock market closed at 1,233.49, and this was the highest closing value in roughly five years since in the middle of 2008. Nikkei Stock Average also surpassed 15,000 yen on May 15th, which was the highest value in the last five years and four months since January 2008 (Figure III-1-1-4).

Figure III-1-1-3 Trends in stock prices in advanced and emerging economies
Figure III-1-1-4 Sudden rise of Nikkei Stock Average and trends in major stock prices

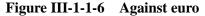


#### 2. Exchange

Exchange markets for currencies of various countries intensely fluctuated in 2012, reflecting the future prediction of the European debt crisis, trends of fiscal and financial policies in Japan, the United States, Europe, and changes in business sentiment of advanced economies. After March of 2012, the dollar turned to increase against the euro and turned to decrease against the yen, while the euro continued to drop against major currencies. Later, due to an expectation for Japanese active monetary easing and other movements, major currencies simultaneously turned to rise against the yen after November of 2012 (Figure III-1-1-5 - Figure III-1-1-7). These changes in currencies of advanced economies influenced currency prices of emerging economies against the yen, dollar and euro. Since late 2012, most of the representative currencies of emerging economies have been increasing against the yen and dollar but have continued to fall against the euro (Figure III-1-1-8 - Figure III-1-1-10).

### Trends of currencies of major countries

Figure III-1-1-5 Against dollar



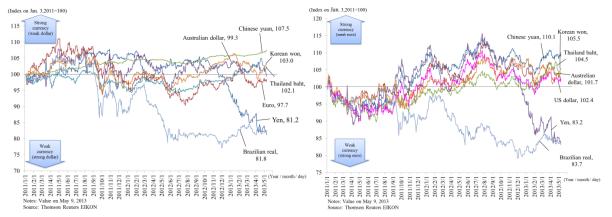
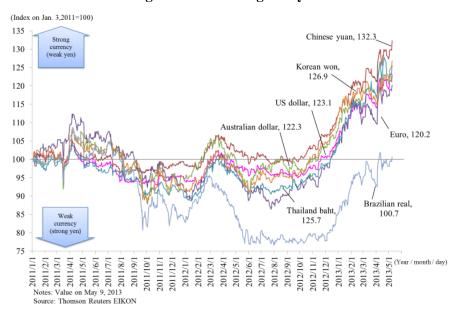


Figure III-1-7 Against yen



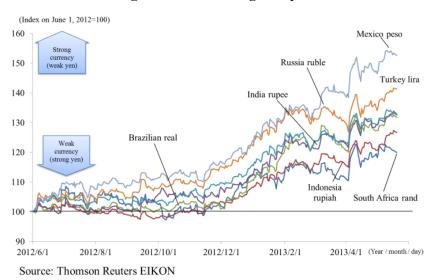
### Trends of currencies of emerging economies (after June of 2012)

Figure III-1-1-8 Against dollar

Figure III-1-1-9 Against euro



Figure III-1-1-10 Against yen



#### 3. Government bonds

Government bond yields of major countries have calmed down and the yields of peripheral countries in the euro region have also fallen (Figure III-1-1-11, Figure III-1-1-12).<sup>3</sup> Also, the spread of government bond still tends to widen in some peripheral countries in the euro region, but spread in Italy and Spain shrunk more than 200 bps since the middle of 2012 (Figure III-1-1-13). Also in emerging economies, the spread of government bond temporarily widened in 2012 due to the recurrence of the European debt crisis, but started to shrink again reflecting the countermeasures taken by the European Central Bank (Figure III-1-1-14 - Figure III-1-1-17).

<sup>&</sup>lt;sup>3</sup> Here, peripheral countries in the euro area are highly-indebted European countries including Portugal, Italy, Ireland, Greece and Spain.

#### Trends of long-term government bond yields

Figure III-1-11 Major countries

Figure III-1-12 Peripheral European countries

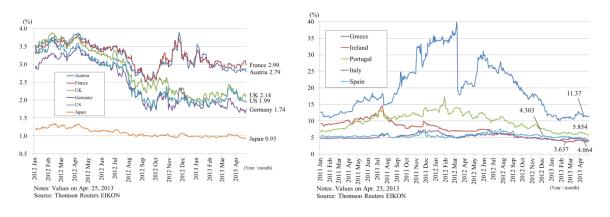
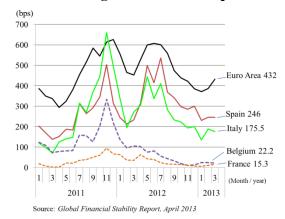


Figure III-1-13 Trends of government bond spread in the euro region



Trends of government bond spread in emerging economies

Figure III-1-14 Chinese government bonds Figure III-1-15 Brazilian government bonds

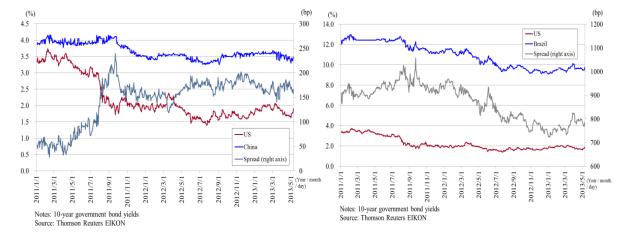
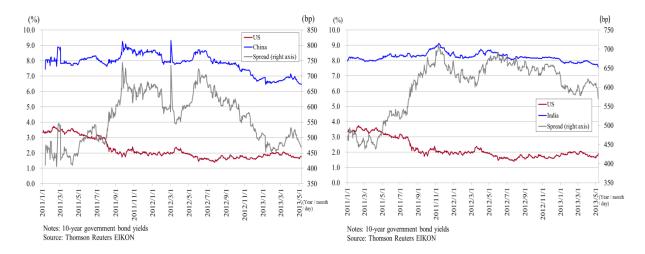


Figure III-1-16 Russian government bonds Figure III-1-17 Indian government bonds



Lowered risk in markets of emerging economies encouraged the recovery of capital inflow to those economies after late 2012 (Figure III-1-1-18). About 42 billion dollars of net capital flow came in the first quarter of 2012, which recovered most of the amount (about 44 billion dollars) that flowed out from August to December in the previous year (2011). After that, about 1.5 billion dollars flowed out in the second quarter in 2012 when tensions in euro region increased, however, about 26 billion dollars flowed in the third quarter of 2012 and about 56 billion dollars, the largest amount since the first quarter of 2010, flowed in the fourth quarter.<sup>4</sup> As a result, the net capital flow reached 122 billion dollars through year 2012, and therefore, capital flow into emerging economies significantly increased from the previous year 2011 (-22 billion dollars).

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<sup>&</sup>lt;sup>4</sup>IMF pointed out, "Emerging market economies face different challenges, one of which is handling capital flows," in "World Economic Outlook," published in April 2013." In other words, "Fundamentally attractive prospects in emerging-market economies and regions, together with low interest rates in advanced economies, are likely to lead to continuous net capital inflows and exchange rate pressure in many emerging market economies. This is a desirable process and part of the global readjustment that must take place if the world economy is to regain soundness. At the same time, as we have seen, capital flow can be volatile, making macroeconomic management more difficult. The challenge for recipient countries of capitals is to accommodate the underlying trends while reducing the volatility of the flow when they threaten macro or financial stability."

Countries' actions including the announcement of government bond-buying program (OMT) by European Central Bank, Quantitative Easing 3 (QE3) by FRB in the US and additional (Billion dollars) (QES) by FKB in the US and adultional monetary easing by the Bank of Japan on Sep. 2012, and launch of the European Stability Mechanism (ESM) in Oct. succeeded. International financial market improved toward 40 In May 2012, Greece confusion regarding general election and concern of succession occurred. Span bank problem aggravated. Italy and France faced a problem where austerity stepped back due to govern In Nov. 2010,Irish 30 financial market improved towarthe end of 2012 and the serious risks stepped back. Business sentiment in the US and China showed a sign of mprovement. Global change In Apr. 2010, aggravation In Mar., 2011, European Council agreed the detail of European Stability On Dec. 21, 2011 and on Mar. 1, 2012. the European Central Bank (ECB) 20 improvement. C stock prices ros Cash flows into Supervision. Meanwhile, Cyprus requested support to IMF -20 9 10 11 12 1 2 (Month / year) 6 7 8 9 10 11 12 1 2 3 4 5 6 7

Figure III-1-18 Capital flow into emerging economies (net)

Notes: a) Stastical Office of the European Communities shifted up Greece financial deficit to 13.6% on Apr. 22, 2010. S&P shifted down Greece bond to non investment grade on Apr. 27. b) Ireland got into financial crisis due to debt relief for all financial organizations on Nov. 21, 2010. Ireland requested financial support utilizing "the European Bailout Fund" lead by EU-IMF. Source: WEO, Apr. 2013 (IMF).

2011

2012

2013

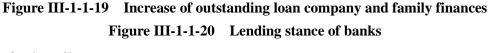
9 10 11 12 1 2 3 4 5

4 5 6 7

2010

#### 4. Trends of financial environment of financial institutions in advanced and emerging economies

While the market outlook in the euro region is weak, outstanding loan of companies and family finances has been shrinking in the European peripheral countries such as Italy and Spain (Figure III-1-1-19). The lending stance of banks became seriously restrictive in the first quarter in 2012 and improved after the second quarter. However, it is still restrictive compared to the year 2011 (Figure III-1-1-20). On the other hand, the United States has seen support by the recovery of housing prices and the improvement of balance sheets of family finances (Figure III-1-1-22), outstanding loans has been increased (Figure III-1-1-19). In emerging economies, shrinkage of outstanding loans was observed in some economies, but it stayed at a relatively high level in most emerging economies (Figure III-1-1-23, Figure III-1-1-24). The stance of banks on lending had been tightened since 2011, but there is an easing trend in reflecting the market improvement and the above cash flow recovery in emerging economies (Figure III-1-1-25).



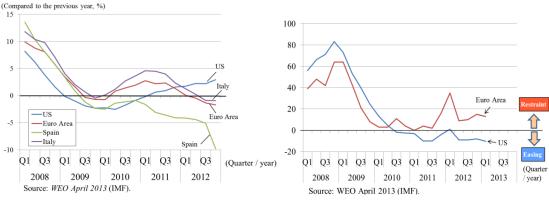


Figure III-1-121 Housing price index Figure III-1-122 Outstanding loans of family income

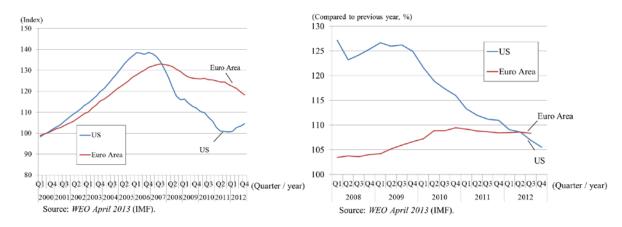


Figure III-1-23 Real outstanding loans increasing rates in emerging economies Figure III-1-24 Real outstanding loans increasing rates in emerging economies

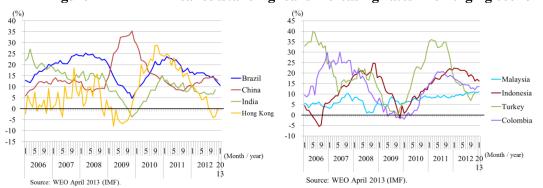
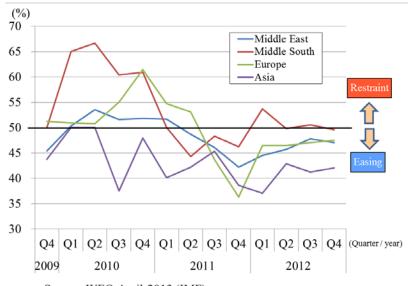


Figure III-1-25 Changes in lending standards of banks in emerging economies



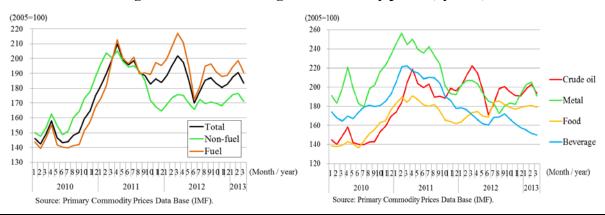
Source: WEO April 2013 (IMF).

#### 5. Commodities market

Both fuel and non-fuel prices in commodity prices significantly dropped from April to June in 2012, but by early 2013, the prices had recovered to the level of early 2012, and showed thoroughly calm movement in prices (Figure III-1-1-26).<sup>5</sup>

Crude oil has recovered since the price drop in June 2012 and the prices have been kept stable (Figure III-1-1-27). As for food prices, grain prices soared in August 2012 under the influence of the Russian drought, but the prices slightly recovered. Metal prices has been maintained the same at the end of 2012 since the middle of 2010. Beverage prices have continued to fall.

Figure III-1-26 Changes in commodity prices
Figure III-1-27 Changes in commodity prices (by item)



#### Column 12 Influence of the "shale gas revolution" on the global energy situation

In the United States, by the technical improvement in natural gas exploration (hydraulic fracturing, horizontal excavation, etc.), it has become possible to extract natural gas from shale layers, which had been difficult before. After 2006, commercial production was in well underway, and natural gas production has been increasing (Column Figure 12-1). Also, by applying those technologies, shale oil development became full-swing too, and crude oil production has increased in the last a few years and are expected to increase further (Column Figure 12-2, 12-3). International Energy Agency (IEA) pointed out on this situation, saying "a new global energy landscape is emerging."

With future expansion of production of shale gas and shale oil in the United Sates, (1) the United States will temporally be the largest oil production country surpassing Saudi Arabia by the middle of the year 2020. (2) Oil import volume into the United States will decrease continuously, and North America will be a genuine exporting county around 2030. (3) Energy dependence of the United States on the Middle East region will shrink. (4) Use of inexpensive natural gas produced from shale gas will improve industrial competitiveness, activate economic activity and expand domestic capital investment and employment in the United States. In addition, for Japan, the technology development

11

<sup>&</sup>lt;sup>5</sup> IMF suggested that the risks regression in financial markets due to policies pursued by major countries and the improved outlook is in the background of stabilized commodity prices.

<sup>&</sup>lt;sup>6</sup>World Energy Outlook 2012 (Nov. 22nd, 2012), International Energy Agency (IEA).

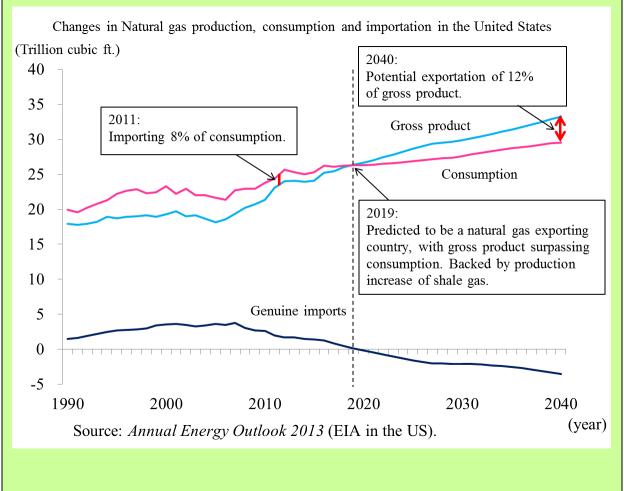
of shale gas and shale oil in the United States will bring opportunities for Japanese companies to utilize their advanced technologies and will cause importing price of LNG (liquid natural gas) to fall down, which has been a factor to expand Japan's trade deficit.<sup>7</sup>

On the other hand, potential environmental effects of chemical materials and large amounts of water used to excavate the shale layers have been discussed hot topic.

Still, it is pointed out that, "Tight oil development is still at an early stage, and the outlook is highly uncertain," and, "One of the most uncertain aspects of this analysis is the potential effect of different scenarios on the global market for liquid fuels, which is highly integrated.

Strategic choices made by leading oil-exporting countries could result in U.S. price and quantity changes that differ significantly from those presented here. Moreover, regardless of how much the United States reduces its reliance on imported liquids, consumer prices will not be insulated from global oil prices."

## Column Figure 12-1 Changes in natural gas production, consumption and importation in the United States



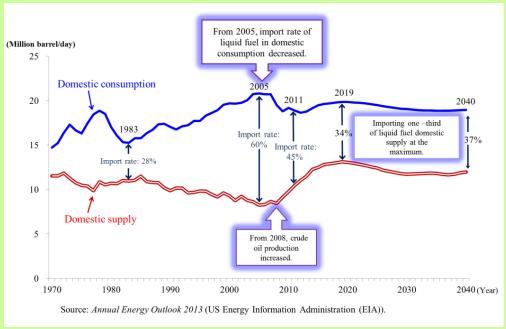
<sup>&</sup>lt;sup>7</sup>United States Department of Energy announced on May 17th, 2013 (the U.S. time zone), that they accept LNG exportation from Freeport LNG project in the United States, in which exportation toward Japan is expected.

<sup>8</sup>"Annual Energy Outlook 2013" (April 15, 2013), U.S. Energy Information Administration (EIA).

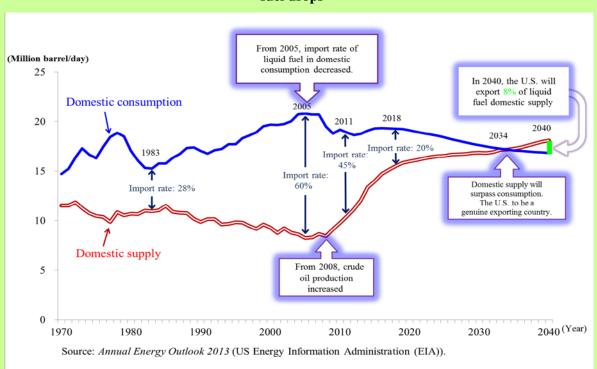
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## Two cases regarding importation rate of liquid fuel (including petroleum and crude oil) in the United States

(Column Figure 12-2) Reference case: The case if the U.S. continues to import one-third of domestic supply of liquid fuel at the maximum in future.



Column Figure 12-3 The case if shale oil production expands and importation rate of liquid fuel drops



As above, various kinds of financial markets recovered in 2012. OECD evaluates the risk-reducing handling of the United States, Europe and Japan, as well as improvement of financial markets by abundant capital fluidity, stock price improvement and lowered government bond spread in the European peripheral countries. However, OECD referred that especially in the euro area, improvement of fundraising environment in financial market does not infect real economy in which, employment rates stayed at high rates in many countries, and it lowers business sentiment and consumer confidence resulting in the weak real economy.

From the next section, the trend of the above real economy will be overlooked.

### Section 2 Trends of the real economy 1. GDP

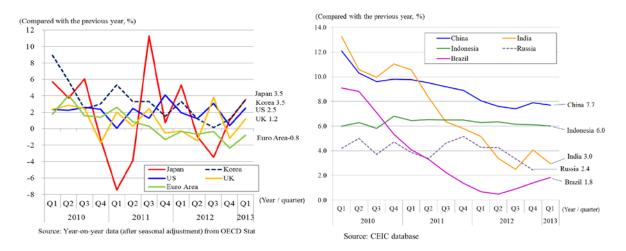
In the trend of GDP, a sign of recovery was observed in advanced economies in the early 2012, but the recovery decelerated toward the middle of the year. Towards the end of the year, a sign of improvement was again seen in some countries, but the trend was different depending on the country. Trends in the United States and the United Kingdom accelerated in the third quarter but fell down temporally in the fourth quarter. On the other hand, trends in Korea and Japan decelerated until the third quarter and recovered in the fourth quarter. Meanwhile, the euro area continued to record a negative growth and decelerated more in the fourth quarter of the year. After that, in 2013, economies including the euro area turned into a recovery trend (Figure III-1-1-28).

In emerging economies, the trend in China turned into recovery in the fourth quarter in 2012 but again decelerated in the first quarter of 2013. Indonesia kept a relatively high growth rate of above 6%. India and Brazil had continued to decelerate significantly since 2011, however, Brazil showed recovery towards the end of 2012. The Russian economy decelerated throughout 2012 (Figure III-1-1-29).

### Trend of GDP growth rates

Figure III-1-2-1 Advanced economies

Figure III-1-2-2 Emerging economies



<sup>&</sup>lt;sup>9</sup>"Interim Economic Assessment" (March 28th, 2013), OECD.

#### 2. Investment

In advanced economies, with a background such as deterioration of business sentiment and the serious stance of banks on lending mentioned above (Figure III-1-1-16, above-shown), capital investment of companies decelerated. OECD<sup>10</sup> pointed out that inferior transparency of markets (stock price volatility, etc.) has been controlled significantly compared to late 2011, however, uncertainty of the economic policies (the "fiscal cliff" and the movement of the debt-ceiling increase in the United States) might be delaying investment issues.

Meanwhile, in emerging economies, after capital investment of companies improved widely in the first quarter in 2012, it dropped substantially as it canceled this improvement after the second quarter, where capital investment saw an increase. (Figure III-1-1-30).

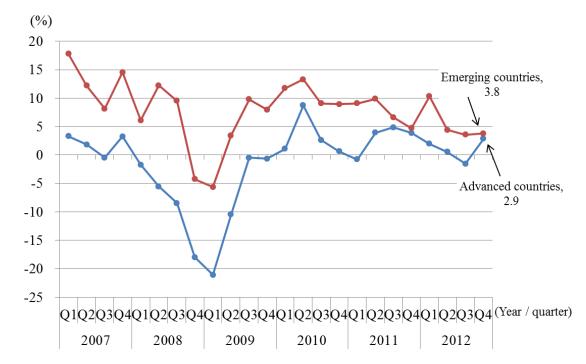


Figure III-1-2-3 Changes in gross fixed capital formations (advanced and emerging economies)

Source: WEO, April 2013 (IMF).

<sup>&</sup>lt;sup>0</sup> Economic Outlook No92, on December 27, 2012 (OECD).

#### 3. Consumption

Consumer spending in advanced economies dropped temporarily in the second quarter but resulted in positive growth, in which they recovered in the third quarter. Meanwhile in emerging economies, the trend moved in a better mood compared to advanced economies throughout the year (Figure III-1-131).

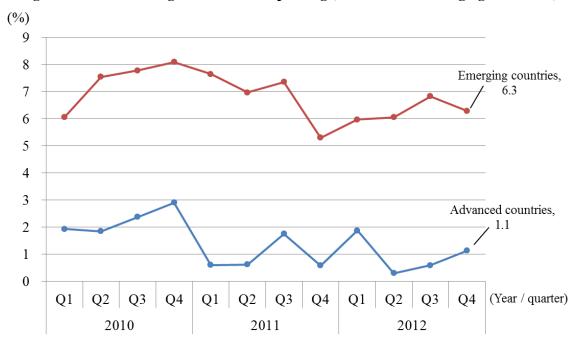


Figure III-1-2-4 Changes in consumer spending (advanced and emerging economies)

Source: WEO, April 2013 (IMF).

The trend of consumer spending for auto sales did well and reached 78.96 million in the whole world in 2012, rising in at 5.4% (4.03 million) from 74.93 million in the previous year (2011) (Figure III-1-1-32).

Auto sales in the United States surged by 13% from the previous year backed by firm consumer spending. In Japan, auto sales drastically increased 27% reflecting eco-car tax reduction and eco-car subsidy. Meanwhile in Europe, where recession has been prolonged, slumps in auto sales in major countries stood out with the rates of -3.2% in Germany, -13.6% in France, -20.9% in Italy and -15.4% in Spain compared with the previous year (Figure III-1-1-33). In emerging economies, auto sales in all major countries extended in the rate of 4.3% in China, 4.6% in Brazil, 8.9% in India and 10.6% in Russia compared to the previous year. Moreover, sales in Thailand jumped up by 82.1% and sales in Indonesia also jumped up by 24.3% compared with the previous year, both surpassing the line of one million for the first time. Mexico (9% up) and the Philippines (10.6% up) were also in the favorable trend. On the other hand, auto sales in Vietnam dropped drastically in the rate of -27.4%.

Now, auto sales in emerging economies surpassed the one in advanced economies in 2011 (Figure III-1-32), and the auto sales ratio of emerging economies in the global market has increased (Figure

(Thousand) (Thousand) 90,000 50,000 43,603 43,041 42,649 42,730 80,000 40,403 38,759 40,000 36,066 70,000 34,833 38,556 60,000 35,713 26,762 30,000 50,000 21,846 40,000 World total (right axis) 17,332 20,000 14,589 30,000 12,560 Emerging economies 20,000 10,000 Advanced economies 10,000 55,291 59,981 65,449 63,111 61,594 71,779 74,931 78,960 57,629 0 (Year) 2004 2005 2006 2007 2008 2009 2010 2011 2012

Figure III-1-2-5 Changes in auto sales in advanced and emerging economies

Notes: 1. Major advanced economies includes Ireland, Israel, Italy, the United Kingdom, Australia, Austria, Netherlands, Canada, South Korea, Greece, Singapore, Switzerland, Sweden, Spain, Slovakia, Taiwan, Czech Republic, Denmark, Germany, Japan, New Zealand, Norway, Finland, France, the United States, Belgium, and Portugal. Major emerging economies includes UAE, Argentina, Iran, India, Indonesia, Ukraine, Uzbekistan, Uruguay, Egypt, Croatia, Colombia, Saudi Arabia, Thailand, China, Chile, Turkey, Pakistan, Philippines, Brazil, Vietnam, Venezuela, Belarus, Poland, Malaysia, South Africa, Mexico, Romania and Russia.

2: Auto sales in some countries was calculated from the middle of the year.

Source: Database of MarkLines Co., Ltd

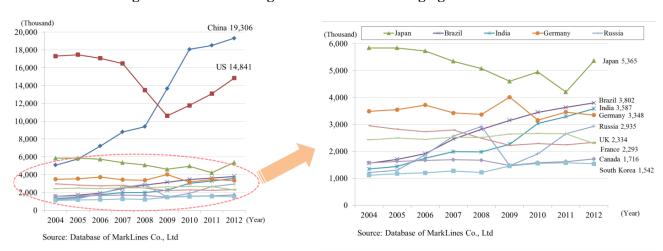
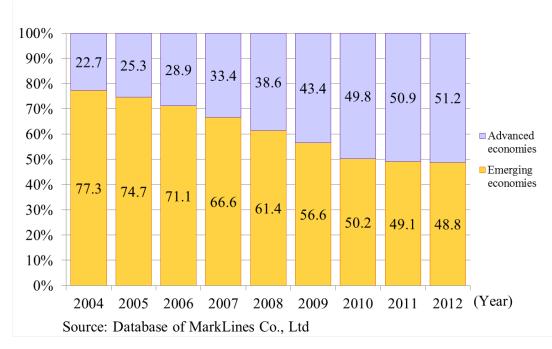


Figure III-1-2-6 Changes in auto sales in emerging economies

Figure III-1-2-7 Auto sales ratio of advanced and emerging economies in the global market



#### 4. Production

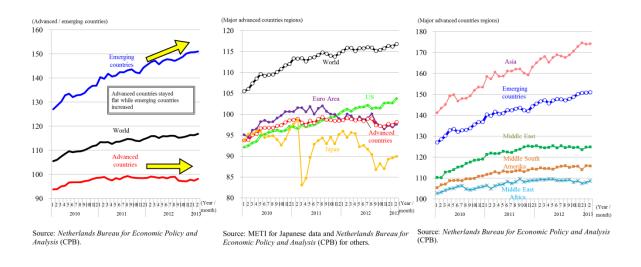
The Industrial Production Index, which indicates comprehensive activity trend of mining and manufacturing industry, increased in emerging economies, while it stayed almost flat in advanced economies (Figure III-1-1-35). Trends in advanced economies differed (Figure III-1-1-36), and the index of the United States increased while the index of Japan and the euro area decreased. Meanwhile, the favorable trend in Asia stood out in emerging countries and regions (Figure III-1-1-37).

Changes in the Industrial Production Index of major countries and regions

Figure III-1-2-8 Advanced and emerging countries

Figure III-1-2-9 Advanced countries and regions

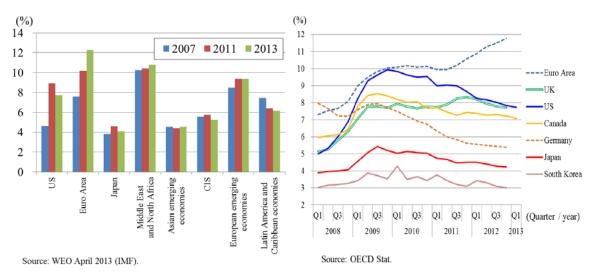
Figure III-1-2-10 Emerging countries and regions



#### 5. Unemployment rates

Unemployment rates in Europe continued to rise (Figure III-1-1-38). Unemployment in Japan and Korea almost recovered to the level before the global economic crisis. The rate in the United States still remained high but moved in a gradual recovery trend. On the other hand, in the euro area, unemployment rates did not stop to rise significantly and continued to renew to the highest level in history. In such a situation, the rate in Germany continued to improve (Figure III-1-1-39).

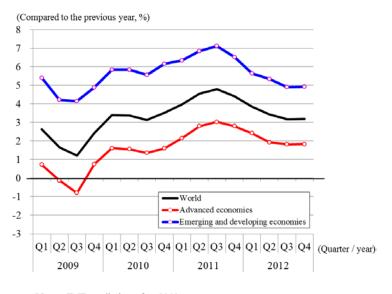
Figure III-1-2-11 Changes in unemployment rates (comparing three points in time)
Figure III-1-2-12 Changes in unemployment rates (major advanced economies)



#### 6. Prices and financial policies

Prices turned to decrease in the fourth quarter in 2011 and kept decreasing in 2012, almost becoming stable in the fourth quarter (Figure III-1-1-40).

Figure III-1-2-13 Changes in consumer prices (advanced, emerging and developing economies and the world)



Notes: IMF prediction after 2013 Source: WEO April 2013 (IMF) Prices in advanced economies moved under mid-term inflation target (about 2%) in 2012 (Figure III-1-1-45), the IMF indicated that there is larger scope for further monetary easing measures. In 2013, inflation rates in all advanced economies decreased strongly (Figure III-1-1-41).

Also in emerging economies, inflation rates fell down in 2012<sup>11</sup> (Figure III-1-1-45). However, it differed depending on countries (Figure III-1-1-42). In China, prices dropped widely in the early 2012 and have stayed around 2% since the late 2012 and in 2013. In Russia and Brazil, inflation rate turned to rise in the middle of 2012. On the other hand, prices in India stayed high in 2012, but suddenly dropped in early 2013. In other emerging economies, inflation rates in Vietnam and Turkey widely fell down into or around the inflation target range and the rates in other countries also moved stably. The decreasing trend has been recently observed in some countries (Figure 1-1-43).

#### Changes in consumer prices index

Figure III-1-2-14 Major advanced economies Figure III-1-2-15 Major emerging

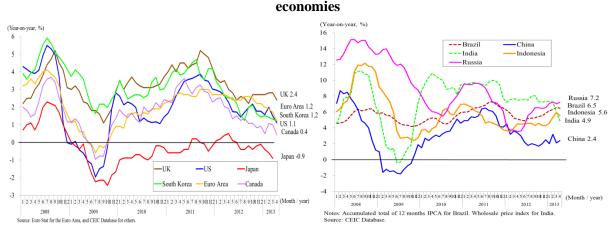
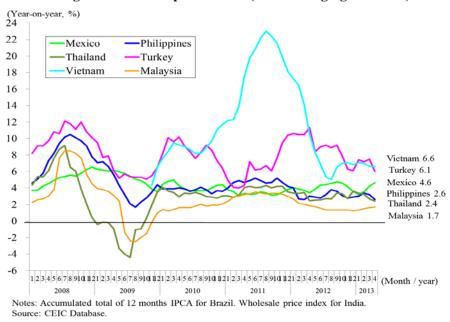


Figure III-1-2-16 Other emerging economies

#### Changes in consumer prices index (other emerging countries)



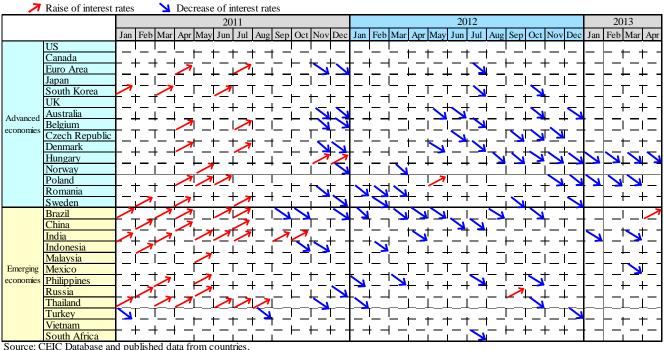
<sup>&</sup>lt;sup>11</sup> IMF pointed out that it was backed by stabilized commodity prices in "WEO, April 2013."

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After between October and December in 2011, along with loosening of the inflation pressure, most financial stances turned from tight monetary to easing (Figure III-1-1-44 - Figure III-1-1-48).

Figure III-1-2-17 Changes in policy rates (major countries)



#### Changes in policy rates

Figure III-1-2-18 Major advanced countries and areas

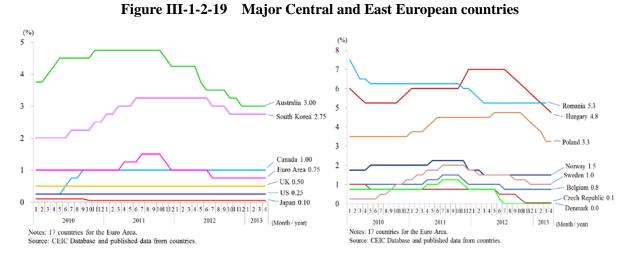
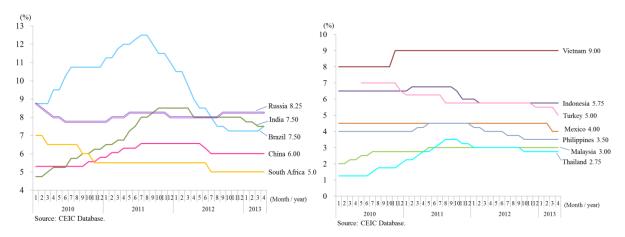
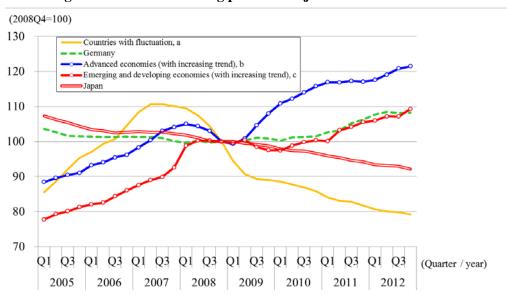


Figure III-1-2-20 Major advanced economies Figure III-1-2-21 Major emerging economies



Moreover, trend of housing prices in 2012 differed depending on countries and areas. In Asian emerging economies such as China, India and ASEAN countries and in resource-rich countries such as Australia, Canada and Norway, housing prices continued to rise. On the other hand, in the countries that suffered the influence of the global economic crisis, housing prices continued to fall <sup>12</sup>. Inflation of housing prices was a concern in Germany while the prices continued to fall in Japan (Figure III-1-1-49).

Figure III-1-2-22 Housing prices in major countries and areas



Notes: a=Countries where housing prices increased more than 10% before the global economic crisis (during 2002-2007).

Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Greece
Iceland, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, New Zealand, Poland,
Russia, Slovakia, Slovenia, South Africa, Spain, Turkey, Ukraine, the United Kingdom, and the United States.
b=Australia, Austria, Belgium, Canada, Hong Kong, Israel, Norway, Switzerland, Singapore and Sweden.
c=Columbia, China, Hungary, India, Malaysia, Philippines and Uruguay.

Source: WEO April 2013 (IMF).

<sup>1:</sup> 

<sup>&</sup>lt;sup>12</sup> In the United States, housing prices had dropped significantly by the occurrence of the subprime mortgage problem in 2007 and had been in a long-term recession, but a sign of restoration came in 2012. Especially from the late 2012, recovery speed increased, and firm improvement of housing market has continued recently in 2013 (Refer to 4. "Housing market," in Section 1. "The United States," in Chapter 2).

Thus, direction of financial policies changes depending on the progress of the mitigation of inflation of each country, region and trend of the real estate market.

In addition, both fiscal deficit and outstanding government bond of major countries in 2012 were rising compared to 2008, when the global economic crisis occurred (Figure III-1-5-50, Figure III-1-5-51). In general, fiscal condition in emerging economies is better than the one in advanced economies (Figure III-1-5-52). However, many countries including India have large amounts of fiscal deficit, or outstanding government bond to GDP ratio in many countries also has increased compared to when the global economic crisis occurred. Considering those situations, if market sentiment were to deteriorate again at the global scale by any risk factor, it would not be thought of to leave scope of fiscal support to maintain economic growth both in advanced and emerging economies.

Figure III-1-2-23 Fiscal deficit to GDP ratio
(Major advanced economies) (European peripheral countries)
(Major emerging economies) (ASEAN)

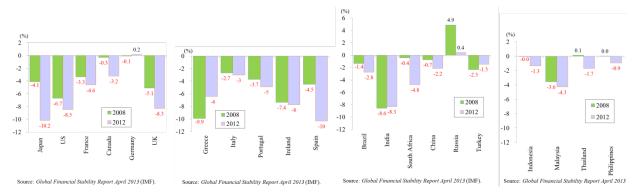
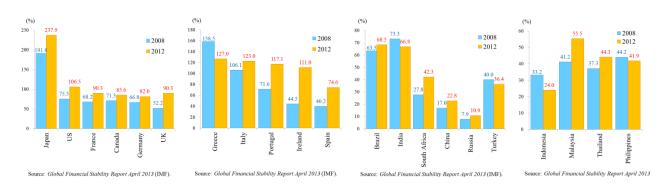


Figure III-1-2-24 Outstanding government bond to GDP ratio
(Major advanced economies) (European peripheral countries)
(Major emerging economies) (ASEAN)



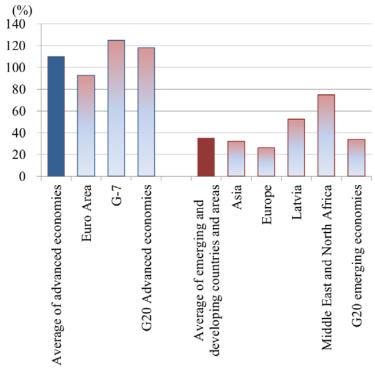


Figure III-1-2-25 Outstanding government bond to GDP ratio

Source: Global Financial Stability Report April 2013 (IMF).

#### 7. Risk factors in future

#### (1) Slow-down of policy implementation in the euro area

If a shock occurred when more actions did not proceed toward the alliance of the banks, there still would be a possibility for financial capital market to become unstable again.

Also as a mid-term or long-term outlook, this possible risk causes a risk in which high government bond spreads especially in the European peripheral countries would remain, and the inferior growth would be prolonged combined with excessive debt of companies.

In addition, business sentiment could be suppressed reflecting the deteriorating influence of the fiscal restoration and continuously high unemployment rate.

#### (2) Slow progress of actions to domestic fiscal problems in the United States

Automatic budget cut was implemented on March 1, 2013, which is estimated to suppress domestic GDP in the United States in the future. For a breakthrough of the debt-ceiling increase problem and the forming of 2014 budget, a rapid handling is needed, but in both problems, opinion gap between the Republican Party and the Democratic Party is huge, and the negotiation is estimated to be difficult to proceed. Depending on the result, it would cause deceleration of economy in the United States as well as harm the stability in the financial market, which is a risk to damaging the global economy.

#### (3) Deceleration in economic growth of major emerging economies including China

In China, real GDP growth rate in the fourth quarter of 2012 increased for the first time in the previous eight quarters, but it again decelerated in the first quarter of 2013, and then, inferior

transparency has lain on the economic outlook.

The slowdown of major emerging economies including China, which are leading forces of recovery from the global economic crisis, could be a risk factor in which recovery speed of the global economy would be suppressed.

## (4) Suspension of crude oil supply caused by geometrical factors and increase in crude oil prices and general prices

Crude oil prices have stayed in a relatively stable range since summer in 2012 (Figure III-1-1-53). Meanwhile, situation around the Middle East area has not proceeded well. In future, if anything should happen and the Middle East Situation becomes tense, global short supply of crude oil and surge in price could possibly occur. In this case, it would be worrying that market sentiment would be suppressed by increasing pressure of prices.

(US dollar/barrel) 130 North Sea blend Dubai 120 North Sea blend WTI 109.2 110 Dubai 105.5 100 90 WTI 93.1 80 70 (Month / year) 1 2 3 4 5 6 7 8 9 101 11 2 1 2 3 4 5 6 7 8 9 101 11 2 1 2 3 4 5 6 7 8 9 101 11 2 1 2 3 2011 2012 2013 Source: Primary Commodity Prices Data Base (IMF).

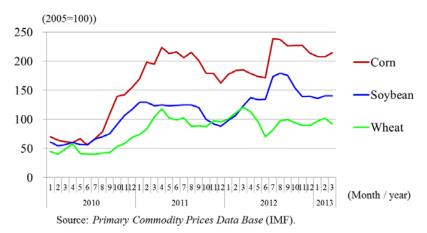
Figure III-1-2-26 Changes in crude oil prices

# (5) Increasing prices pressure of producer goods and food raw materials caused by surge of international prices of grains

While international prices of grains such as corn, wheat and soybean have stayed high by the global tightened supply and demand, they jumped up further in 2012 by the drought in the United States (Figure III-1-1-54).

As international prices of grains change depending on the weather and crop prospects in major production countries, in the case that international grains prices surges again, more increased prices of producer goods including feed mixtures and food raw materials would occur.

Figure III-1-2-27 Changes in international price index of grains



#### 8. Conclusion

As reviewed in this section, political actions in Japan, the United States and Europe succeeded in 2012, and short-term unstable risks in the global financial markets decreased. As a result, the global economy is on the way to gradual recovery, but it is still slow-moving and its trend is weak in 2013.

As the future global economy outlook, IMF estimated that in advanced economies, fiscal restoration, high unemployment rate and low business sentiment would continue to be a burden for economic growth in 2013, but recovery trend would be certain in the same year, and after that, more economic growth would be expected towards 2014 and 2015<sup>13</sup>. Meanwhile in emerging economies, although deceleration trend was observed, higher economic growth rates compared to the ones in advanced economies would continue (Figure III-1-1-56).

Real economic growth rate outlook of major countries and regions

Figure III-1-2-28 Short-term outlook Figure III-1-2-29 Mid-term outlook (2008-2018)

	2011	2012	2013 (Forecast)	2014 (Forecast)
World (Purchasing Power Parity base)	4.0	3.2	3.3	4.0
Advanced economies	1.6	1.2	1.2	2.2
US	1.8	2.2	1.9	3.0
Euro Area	1.4	-0.6	-0.3	1.1
Germany	3.1	0.9	0.6	1.5
France	1.7	0.0	-0.1	0.9
Italy	0.4	-2.4	-1.5	0.5
Spain	0.4	-1.4	-1.6	0.7
Japan	-0.6	2.0	1.6	1.4
UK	0.9	0.2	0.7	1.5
Canada	2.6	1.8	1.5	2.4
Emerging economies	6.4	5.1	5.3	5.7
Central and Eastern Europe	5.2	1.6	2.2	2.8
ASEAN5*1	4.5	6.1	5.9	5.5
Brazil	2.7	0.9	3.0	4.0
Russia	4.3	3.4	3.4	3.8
India	7.7	4.0	5.7	6.2
China	9.3	7.8	8.0	8.2
Middle East and North Africa	3.9	4.7	3.1	3.7
South Africa	3.5	2.5	2.8	3.3

Notes: \*1 ASEAN5 is Indonesia, Malaysia, Philippines, Thailand and Vietnam. Source: WEO April 2013 (IMF).

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<sup>&</sup>lt;sup>13</sup> *WEO April 2013* (IMF).

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	90~99	00~09	04~07
	Result	Result	Result	Result	Result	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Result	Result	Result
World	2.8	-0.6	5.2	4.0	3.2	3.3	4.0	4.4	4.5	4.5	4.5	3.1	3.6	5.1
Advanced economies	0.1	-3.5	3.0	1.6	1.2	1.2	2.2	2.6	2.6	2.6	2.5	2.7	1.7	2.9
US	-0.3	-3.1	2.4	1.8	2.2	1.9	3.0	3.6	3.4	3.3	2.9	3.2	1.7	2.8
Euro Area	0.4	-4.4	2.0	1.4	-0.6	-0.3	1.1	1.4	1.6	1.6	1.6	-	1.4	2.5
Japan	-1.0	-5.5	4.7	-0.6	2.0	1.6	1.4	1.1	1.2	1.2	1.1	1.5	0.6	1.9
Emerging and developing economies	6.1	2.7	7.6	6.4	5.1	5.3	5.7	6.0	6.1	6.1	6.2	3.7	6.1	8.0
Brazil	5.2	-0.3	7.5	2.7	0.9	3.0	4.0	4.1	4.2	4.2	4.2	1.7	3.3	4.7
Russia	5.2	-7.8	4.5	4.3	3.4	3.4	3.8	3.7	3.6	3.6	3.6	-	5.5	7.6
India	6.2	5.0	11.2	7.7	4.0	5.7	6.2	6.6	6.9	6.9	7.0	5.6	6.8	9.0
China	9.6	9.2	10.4	9.3	7.8	8.0	8.2	8.5	8.5	8.5	8.5	10.0	10.3	12.1
South Africa	3.6	-1.5	3.1	3.5	2.5	2.8	3.3	3.4	3.3	3.1	3.1	1.4	3.7	5.2

The ratio of emerging economies in the global economy reached to 36.5% in 2012, increasing from 35.6% in 2011 (Figure III-1-57). In the future, their presence is estimated to become stronger backed by the global improvement in the financial environment and recovery trend in advanced economies (Figure III-1-1-58), therefore, they are expected to continue to be a leading force for the global economy.

Figure III-1-2-30 Economic growth rates and real GDP ratio of countries and regions

