

Chapter 1 Trends in the World Economy

Section 1. Sluggish recovery of the world economy amid persistent global uncertainty

The world economy fell into global recession following the subprime loan problem that surfaced in the United States in the summer of 2007 and the September 2008 failure of Lehman Brothers (the so-called Lehman Shock). The world economy hit bottom in the spring of 2009 and then began to recover mildly as a whole. At the start of 2011, however, the world economy began to slow again due to the deepening sovereign debt crisis in Europe and a sputtering recovery of the U.S. economy. Although concerns about a sharp economic downturn eased in the early days of 2012, the world economy is currently in the midst of instability as it continues to be supported by policy measures implemented by various countries. Emerging economies, meanwhile, continue to be firm, albeit slightly decelerating, and are expected to underpin the growth of the world economy.

Chapter 1, Section 1 will give an overview of such a status of the world economy.

1. Overview of the world economy as a whole

(1) The world economy to the end of 2010

The world economy fell into the “worst recession in 100 years” due to the subprime mortgage crisis (home loan delinquencies) that shook international financial and capital markets in the summer of 2007 and then September 2008 failure of Lehman Brothers. Then, moves began to spread principally among emerging economies in Asia halting a further deterioration of the world economy, which hit bottom around the spring of 2009. The subsequent months saw the world economy recovering at a faster pace supported by the fiscal stimulus measures implemented by countries around the world and intensifying production activities spurred by a rapid inventory build-up.

In October 2009, however, it was found that the published amount of Greece’s budget deficit had been understated. The discovery led to increased concerns about the credibility of Greek government bonds throwing financial markets into turmoil, principally in the eurozone. On April 23, 2010, the Greek government formally requested financial aid from the IMF, the EU and other international organizations. In May, the IMF and the eurozone created a financial aid package for Greece; however, rising concerns about fiscal conditions prevalent in Ireland, Portugal and some other countries dampened the mind of markets, principally in Europe and the United States.

Thus, from mid 2010 onwards the world economy lost part of the momentum it had gained, though it was still on a recovery trend. Amid this, China and other emerging economies have maintained comparatively high growth rates, further enhancing their presence in terms of size and other aspects of economy.¹

(2) The world economy in 2011

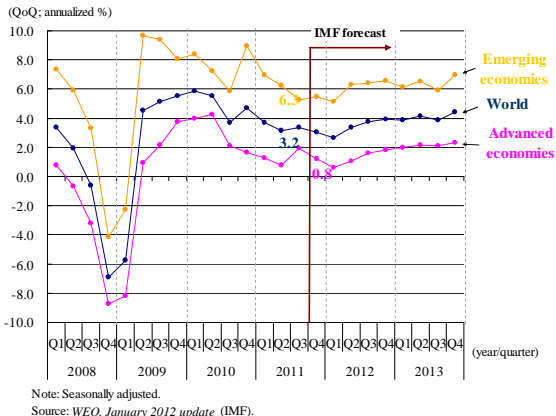
In early 2011 the recovery of the world economy began to sputter. Growth slowed notably in the latter half of the year in both advanced and emerging economies, which added to increased concerns

1 White Paper on International Economy and Trade 2011

about the global fiscal and financial stability. The months subsequent to June 2011 saw Greek default fears continue unabated amid conflicting opinions among involved eurozone countries. Market fears spread to Italy and Spain, while the United States faced an actual possibility of temporary default due to political confrontations over raising the country’s debt ceiling. Although the United States avoided defaulting on its debt as a compromise was reached in the Congress, on August 5, one of the major rating agencies downgraded U.S. government bonds from AAA to AA+ for the first time in U.S. history. Reflecting such fears regarding the U.S. fiscal situation and the deepening eurozone debt crisis, global financial markets were thrown into turmoil in the summer to autumn of 2011 as stock prices plunged around the world, government bond prices fell, and currency markets violently fluctuated. From August 2011 onwards international organizations and analysts successively revised downward their outlook for the growth of the world economy.

Further, a slowing trend was becoming increasingly apparent also in emerging economies on the back of the financial market turmoil stemming from the European debt crisis and decreased exports to European countries, in addition to tight money policies adopted to curb price increases experienced to the first half of 2011. As of the second quarter of 2011, the GDP growth rate in emerging economies (up 6.3% from the same quarter of the previous year) was far greater than the rate achieved in advanced economies (up 0.8%). Emerging economies are expected to maintain robust growth in future months (Figure 1-1-1-1). They are recovering price stability, and in 2012 they increasingly shifted toward underpinning economic growth by means of monetary easing. Emerging economies are expected to continue performing the role of the driving force of the world economy.

Figure 1-1-1-1
World real GDP growth rates



In April 2012,² the IMF indicated that “the outlook of the world economy is gradually becoming strong again” because of the improved U.S. economy and some stability observed in the European debt crisis, and raised by 0.2% its January outlook of the world economy growth rate to 3.5%. The IMF raised its growth outlook for both advanced and emerging economies by 0.2% to 1.4% and 5.7%,

2 IMF (2012a)

respectively. While the IMF revised upward its outlook for most of the countries/regions anticipating positive growth, its outlook for Spain and India was revised downward. The IMF outlook for the eurozone as a whole as well as for Italy and Spain indicates negative growth (Table 1-1-1-2). The IMF says, “Major advanced countries/regions will see their economy recover growth slowly, and emerging economies will continue to enjoy relatively robust growth,” adding, however, that “the pace of improvement is very weak.” Thus, the IMF indicates that there continues to exist a high downside risk to the world economy, such as a further deepening of the European debt crisis and an oil price surge.

Table 1-1-1-2

World economic outlook (real GDP growth)

	2010	2011	2012 (IMF forecast)	2013 (IMF forecast)
World (on a PPP basis)	5.3	3.9	3.5	4.1
Advanced economies	3.2	1.6	1.4	2.0
U.S.	3.0	1.7	2.1	2.4
Euro area	1.9	1.4	-0.3	0.9
Germany	3.6	3.1	0.6	1.5
France	1.4	1.7	0.5	1.0
Italy	1.8	0.4	-1.9	-0.3
Spain	-0.1	0.7	-1.8	0.1
Japan	4.4	-0.7	2.0	1.7
UK	2.1	0.7	0.8	2.0
Canada	3.2	2.5	2.1	2.2
Asian NIEs	8.5	4.0	3.4	4.2
Emerging economies	7.5	6.2	5.7	6.0
Central and East Europe	4.5	5.3	1.9	2.9
ASEAN5	7.0	4.5	5.4	6.2
Brazil	7.5	2.7	3.0	4.1
Russia	4.3	4.3	4.0	3.9
India	10.6	7.2	6.9	7.3
China	10.4	9.2	8.2	8.8
Middle East and North Africa	4.9	3.5	4.2	3.7
South Africa	2.9	3.1	2.7	3.4

Note: ASEAN5 are Indonesia, Malaysia, Philippines, Thailand and Vietnam.
Source: WTO, April 2012 (IMF).

(3) Overview of major economies

(A) Europe

In May 2010, the IMF, the EU and some other international organizations agreed on extending financial aid to Greece. However, even after the agreement was reached, concerns rose in financial markets about the fiscal conditions of PIIGS,³ and financial aid was extended also to Ireland at the end of 2010, and Portugal in April 2011. The Greek debt crisis was reignited in mid-June 2011, whereupon the involved eurozone countries had much difficulty in coordinating their policies.⁴ It caused fears of the deepening European debt crisis to spread to financial markets worldwide. Market fears that initially were related to the fiscal conditions of some of eurozone countries grew into concerns about the stability of the global financial system, which resulted, among others, in the global stock market downturns of August 2011 and capital flight from emerging economies in the early autumn of the same year.

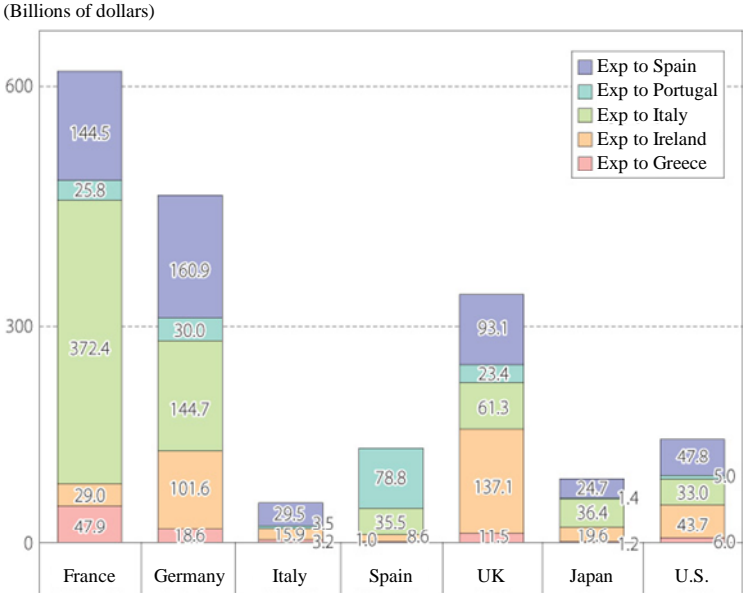
3 Portugal, Italy, Ireland, Greece and Spain.

4 In August 2011, Finland requested collateral for a new urgent rescue package being extended to Greece. Some other countries followed suit. Procedures for implementing the rescue package were delayed and caused the Greek default fear to be reignited in the market (deepening the European debt crisis).

Fears spread that these situations would be likely to prompt financial institutions to cut back lending or that there would be massive capital flight from emerging economies, while decreased imports by eurozone countries adversely affected the real economies of exporting countries.

In December 2011 and February 2012, the European Central Bank (ECB) made an unlimited supply of funds. In March 2012, the ECB agreed to grant additional financial aid to Greece and saved the country from defaulting on its debt. Although these efforts helped market fears of the European economy recede in 2012, the eurozone is currently in a tough economic situation, not being free yet from fiscal uncertainty. For instance, as of the end of September 2011, the outstanding balance of loans made to PIIGS is at a high level principally among French and German financial institutions (Figure 1-1-1-3). Should the European debt crisis be reignited in the future, such an outstanding balance may throw financial markets into turmoil and cause the world economy to diverge downward.

Figure 1-1-1-3
Major economies' exposure to heavily-indebted PIIGS



Note: Preliminarily reported foreign claims (including relating to public and private sectors) as of Sept.30, 2011.
Source: Consolidated Banking Statistics (BIS).

The above figure shows that the outstanding balance of loans made by Japanese financial institutions to PIIGS amounts to about US \$83 billion, far smaller than the balance held by institutions in France (US \$620 billion), Germany (US \$460 billion) and some other countries. In case the European debt crisis is reignited, Japanese financial institutions will suffer only limited direct impacts. However, if external demand becomes sluggish in the real economy, or a credit contraction spreads on a global basis, it will likely deal a heavy blow to the Japanese economy.

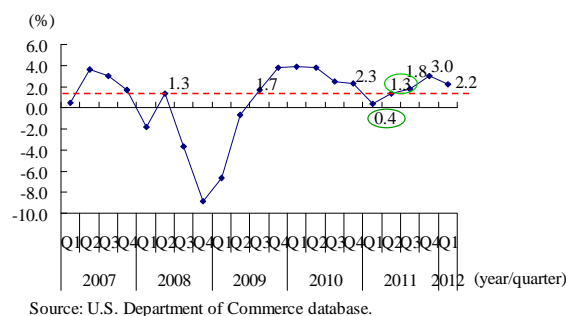
The European debt crisis continues in 2012 and remains a major issue of the world economy that needs to be addressed (refer to Chapter 1, Section 2).

(B) United States

In 2011, the U.S. economy saw its pace of recovery slowing. Oil price surges that started in the summer of 2010 dampened corporate and consumer sentiment, causing demand to continue sluggish. In May 2011, the United States reached its statutory federal debt limit of US \$14.3 trillion, being on the verge of defaulting on its debt. In the Congress political confrontations over raising the debt limit necessary for avoiding the default continued until immediately before August 2 of the same year, the deadline for reaching agreement. In the meantime, fears grew in the market that should the United States actually default and fall into another recession, it would cause substantial impact on other countries' economies and markets. As things actually worked out, a compromise was reached and default was avoided; however, the political confusion that prevailed in the meantime served to deepen uncertainty over the future of the U.S. fiscal conditions. On August 5 of the same year, one of the U.S. rating agencies downgraded long-term U.S. debt by one notch from the highest AAA grade to AA+ for the reason that "the content of the sound fiscal policy agreed on between the Obama administration and the Congress is insufficient for the medium-term stability of the U.S. finances," causing investors to doubt fiscal sustainability of the U.S. On another front, at the end of July, the U.S. government announced revised GDP data, where the actual GDP growth rate for the first quarter of 2011 was revised substantially downward (from up 1.9% to up 0.4% over the same quarter a year ago) and the rate forecast for the second quarter was put at 1.3%, a percentage lower than the market forecast (Figure 1-1-1-4). These revised numbers revealed that the U.S. economy had already lost steam in the first half of 2011 as its GDP was below that of 2008 before the financial crisis occurred.

Figure 1-1-1-4

U.S. GDP growth rate (quarter-on-quarter, in annualized percentage)



These successive events added further uncertainty to the prospects of the U.S. economy through the delayed recovery of the labor market, a prolonged slump in the housing market, and other factors.

Then, signs began to appear that the U.S. economy started recovering in the fourth quarter of 2011. What contributed to the recovery were: Improvement in industrial production, principally car production that was now free from the supply restraints caused by the Great East Japan Earthquake, signs of employment picking up, solid consumer spending, and a recovery in U.S. exports. The U.S. economy continues on a moderate recovery trend in 2012 as exports are growing and business sentiment is improving both in manufacturing and nonmanufacturing industries. On the other hand, the

employment situation continues to be weak and unstable, with the April 2012 job growth rate falling short of market forecasts. The IMF forecasts a very moderate U.S. job growth rate for 2012-13. U.S. home prices remain sluggish, too. In the autumn of 2011 oil prices started to rise on growing expectations of the global economic recovery and the increasingly tense situation in Iran. Gasoline prices are also rising. Consumer spending may be dampened by declining consumer purchasing power and deteriorating consumer sentiment. What is worse, the U.S. Congress failed to reach agreement by the deadline of November 23, 2011 on the budget deficit reduction plan that was imposed as a requisite for raising the federal debt ceiling agreed on August 2, 2011. So in the coming months government spending will be forcibly cut, principally in the area of defense spending, concurrently with the expiration of the Bush-era tax cuts (at the end of 2012), the expiration of the temporary cut in the Social Security tax and of the extended duration of unemployment insurance benefits (at the end of 2012). Thus, it is feared that the U.S. economy may see its recovery trend turn down.

As seen above, there remains a downside risk to the U.S. economy while it will maintain a moderate recovery trend (see Chapter 1, Section 3).

(C) China and other emerging economies: Expected to strongly grow though on a slowing trend

Emerging countries saw their economies overheating due to massive capital inflows generated by monetary easing implemented in advanced countries, in addition to a strong rebound from the second half of 2009 onwards. Concerns grew over worsening inflation because of soaring global resource and food prices, which prompted emerging economies to raise policy interest rates and reserve requirement ratios from mid-2010 onwards (Figure 1-1-1-5). These policy changes to “monetary tightening” turned out so successful that inflation fears began to calm down in emerging countries in the second half of 2011.

Meanwhile, continuing tight money policies gave rise to the slowing of growth in the second half of 2011 in some emerging economies, such as Brazil, India, Russia, South Africa and Turkey; further, these emerging economies were impacted by the European debt crisis. In what concerns financial aspects, it was feared that business activities and consumer spending might be curbed by a decrease in inflow of foreign capital that has supported high growth in emerging countries should Europe’s private financial institutions withdraw capital from emerging economies in Asia for a prolonged period of time.⁵ With respect to trade, emerging economies saw their exports lose steam as the result of reduced imports by the EU, their principal export destination (see “3. Stagnation and recovery of world trade following the Lehman Shock”). Thus, 2011 saw growth dampen also in emerging economies that had driven the world economy toward recovery, as they were impacted by the tight money policies and the European debt crisis.

5 Principal backgrounds are indicated as being: (A) European banks withdrew loans to businesses in emerging Asian countries or sold shares or bonds issued by them in order to increase dollar funds on hand and be prepared for a possible credit crunch should the credit crisis deepen further; and (B) the increased risk-off stance on the part of investors.

Table 1-1-1-5

Policy interest rates (PIR) and reserve requirement ratios (RRR) in major emerging economies

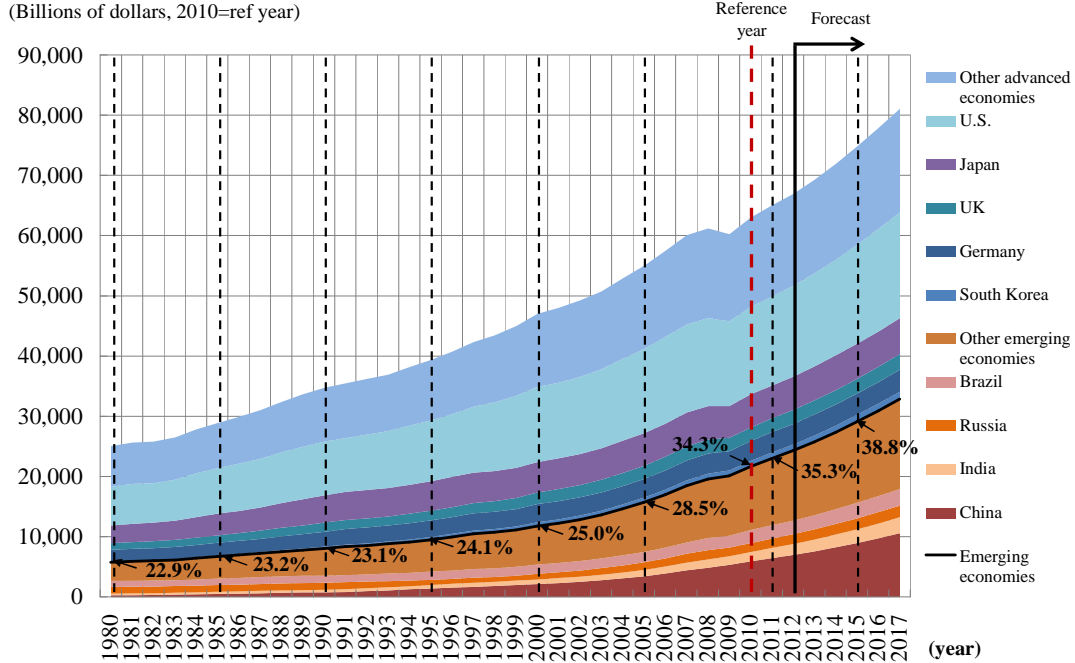
↑ PIR raised;
↓ PIR cut;
↑ RRR raised;
↓ RRR cut

		2011												2012				
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Emerging economies	Brazil	↑ 11.25	11.25	↑ 11.75	↑ 12.00	12.00	↑ 12.25	↑ 12.50	↓ 12.00	12.00	↓ 11.50	11.50	↓ 11.00	↓ 10.50	10.50	↓ 9.75	↓ 9.00	9.00
	Vietnam	↓ 9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00
	India	↑ 6.50	6.50	↑ 6.75	6.75	↑ 7.25	↑ 7.50	↑ 8.00	8.00	↑ 8.25	↑ 8.50	8.50	8.50	↓ 8.50	8.50	8.50	↓ 8.00	8.00
	Russia	7.75	↑ 8.00	8.00	8.00	↑ 8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.00	8.00	8.00	8.00	8.00	8.00
	China	↑ 5.81	↑ 6.06	↑ 6.06	↑ 6.31	↑ 6.31	↑ 6.31	↑ 6.56	6.56	6.56	6.56	6.56	↓ 6.56	6.56	↓ 6.56	6.56	6.56	↓ 6.56
	Indonesia	6.50	↑ 6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	↓ 6.50	↓ 6.00	6.00	6.00	↓ 5.75	5.75	5.75	5.75
	Turkey	6.25	6.25	6.25	6.25	6.25	6.25	6.25	↓ 5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
	Philippines	4.00	4.00	↑ 4.25	4.25	↑ 4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	↓ 4.25	↓ 4.25	↓ 4.00	4.00	4.00
	Thailand	↑ 2.25	2.25	↑ 2.50	↑ 2.75	2.75	↑ 3.00	↑ 3.25	↑ 3.50	3.50	3.50	↓ 3.25	3.25	↓ 3.00	3.00	3.00	3.00	3.00

Source: CIEC database and government-published data.

Meanwhile, on the back of the inflation easing that started in the second half of 2011, moves are continuing in 2012 in emerging economies for a policy transition from price control by means of tight monetary policies to propping up their economies through monetary easing. The IMF, the OECD and some other international organizations forecast that emerging economies will maintain strong economic growth. Even if another crisis occurs, emerging economies are generally believed to have a relatively greater capacity for implementing both monetary and fiscal policies in comparison to advanced countries. The IMF estimates the contribution of emerging economies to the world economy at 34.3% in 2010, 35.3% in 2011, and at a higher 38.8% in 2015. They are expected to continue supporting the growth of the world economy (Figure 1-1-1-6).

Figure 1-1-1-6
World nominal GDP



Source: WEO, April 2012 (IMF).

2. Trends in principal economic indicators

Considering the general overview made under 1 above we may organize principal causes of the 2011 slowdown of the world economy into the following:

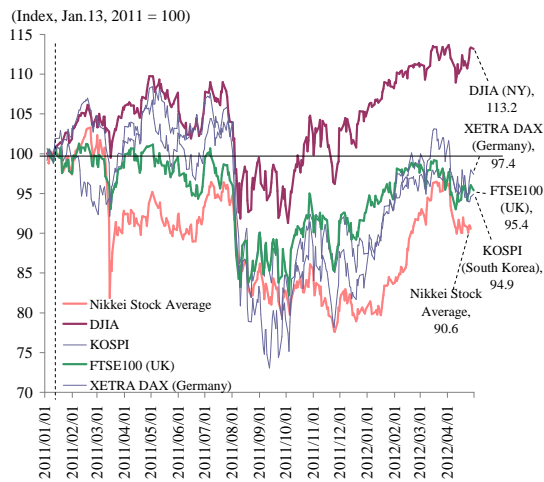
- Turmoil in financial markets caused by the deepening European debt crisis.
- Political confusion over raising the debt ceiling and the slowdown in the United States.
- Sputtering high growth in emerging economies because of monetary tightening.
- Soaring oil prices due to unstable political situations in the Middle East.

Below we will examine economic trends in principal countries/regions that gave rise to these causes by way of principal economic indicators.

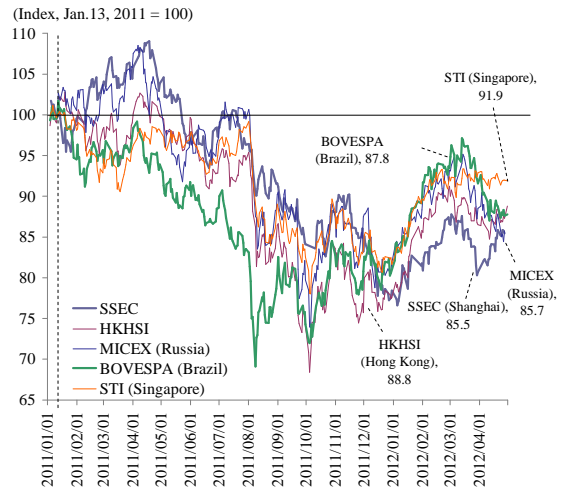
(1) Trends in financial markets: Turmoil created by fears of the European debt crisis spreading
(A) Impact of a debt crisis caused by a fiscal problem of peripheral countries spread to European financial markets and further to markets outside the eurozone

In 2011, major countries saw stock prices continue to rise into April, and then lose steam. August saw concerns growing over prospects for the U.S. economy and Europe’s deepening debt crisis, causing stock prices to plunge (Figure 1-1-2-1).

Figure 1-1-2-1
Stock prices in major economies

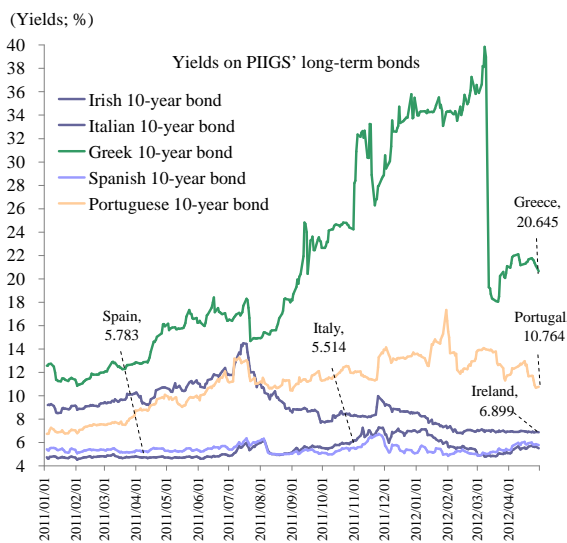


Note: Index for Nikkei Stock Average as of Apr.27, 2012; Other indices as of Apr.30.
Source: Thomson Reuters Eikon.

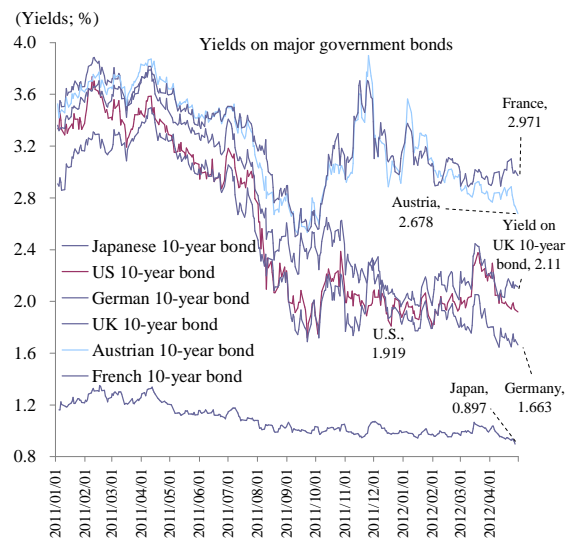


Note: Index for SSEC and MICEX as of Apr.27, 2012; Other indices as of Apr.30, 2012.
Source: Thomson Reuters Eikon.

Figure 1-1-2-2
Yields on major government bonds



Note: Yields as of Apr.30, 2012.
Source: Thomson Reuters Eikon.



Note: Yield on Japanese bond as of Apr.27, 2012; Yields on other bonds as of Apr.30, 2012.
Source: Thomson Reuters Eikon.

A look at government bond yields reveals that from the summer of 2011 onwards they sharply rose on Greek bonds over default fears (Figure 1-1-2-2). Also revealed is the fact that on several occasions the yield on Italian and Spanish bonds rose past 7% (a rough measure for requesting financial aid) over concerns about the two countries' credibility (Figure 1-1-2-3). Changes in credit default swap rates are consistent with the yield's fluctuations on PIIGS bonds (Figure 1-1-2-4).

Figure 1-1-2-3

Yields on Italian and Spanish 10-year bonds

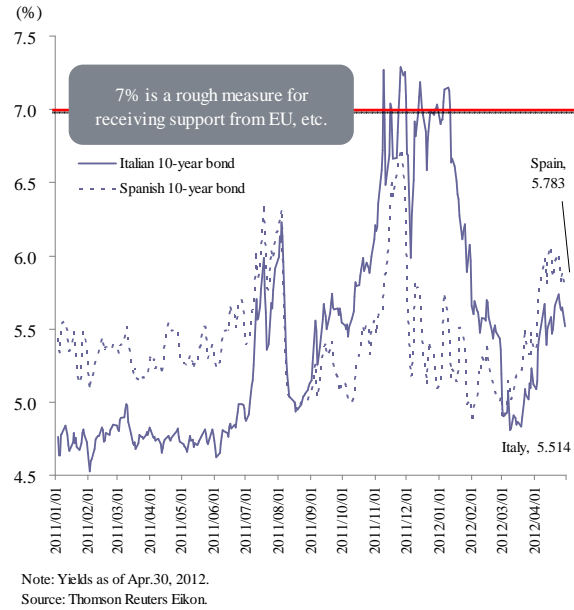
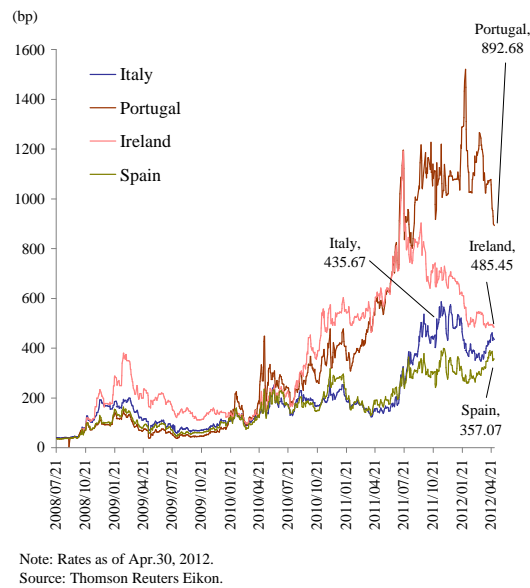


Figure 1-1-2-4

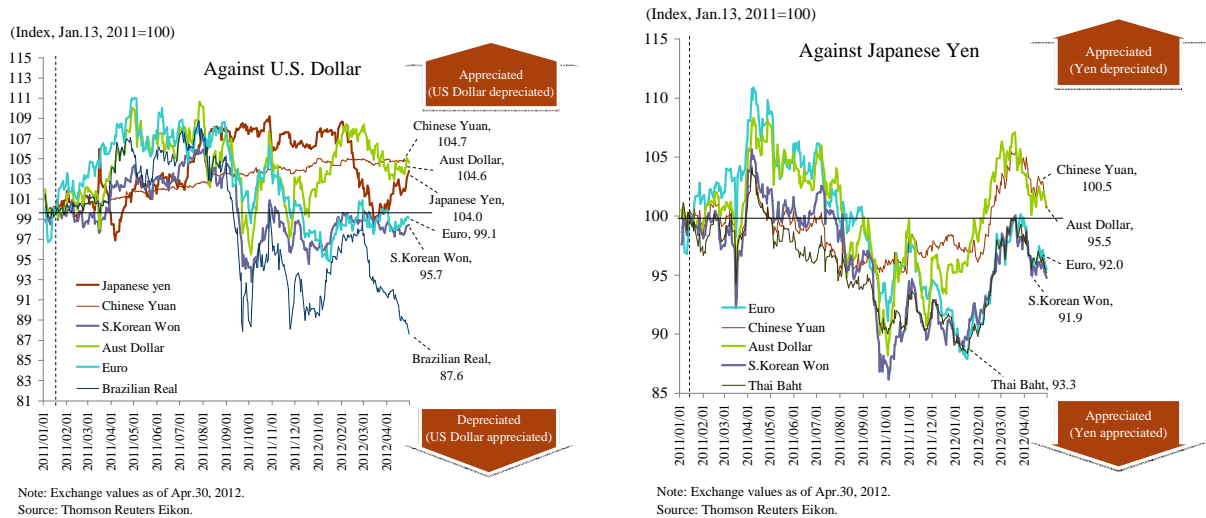
CDS rates for PIIGS



In foreign currency markets the euro continued to depreciate from August onwards, while investors bought the yen as safe assets sending the currency further appreciating (Figure 1-1-2-5). On August 19, the yen rose to touch 75.95 per U.S. dollar in the New York foreign exchange market, renewing the post-war high of 76.25 logged on March 17 of the same year.

Figure 1-1-2-5

Foreign exchange values of major currencies (against U.S. Dollar and Japanese Yen)

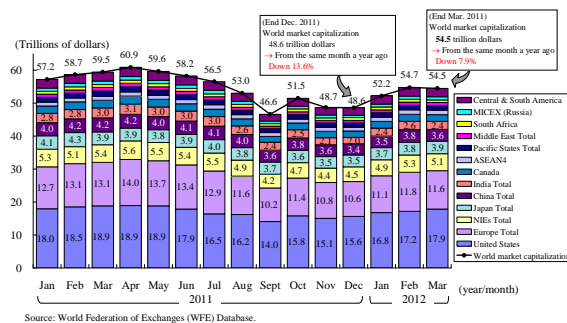


Thus, the fiscal crisis that started in some of PIIGS countries grew into the problem of the financial markets of the entire eurozone as it led to growing concerns about the fiscal conditions in Italy and Spain. The problem then spread further to the countries outside the eurozone. Markets were affected by an increasingly strong risk-off stance, giving rise to significant capital outflows from Europe and economies countries and capital flight to Japan. According to the fund flow data for October-December 2011 released by the Bank of Japan (preliminary report), foreign investors' holdings of Japanese government bonds at the end of 2011 rose to a record 78 trillion yen (up 37.8% from a year ago). Following the start of 2012, market fears of the European economy receded, but in March of the same year concerns grew about Spain's fiscal condition. The sense of uncertainty about potential fiscal crisis in Spain and Italy has not been dispelled yet in the markets, given a sharp increase in the yield on their government bonds.

The world stock market capitalization as of December 31, 2011 was down 13.6% from a year ago. In 2012, the capitalization increased during January-February, only to fall again in March (Figure 1-1-2-6).

Figure 1-1-2-6

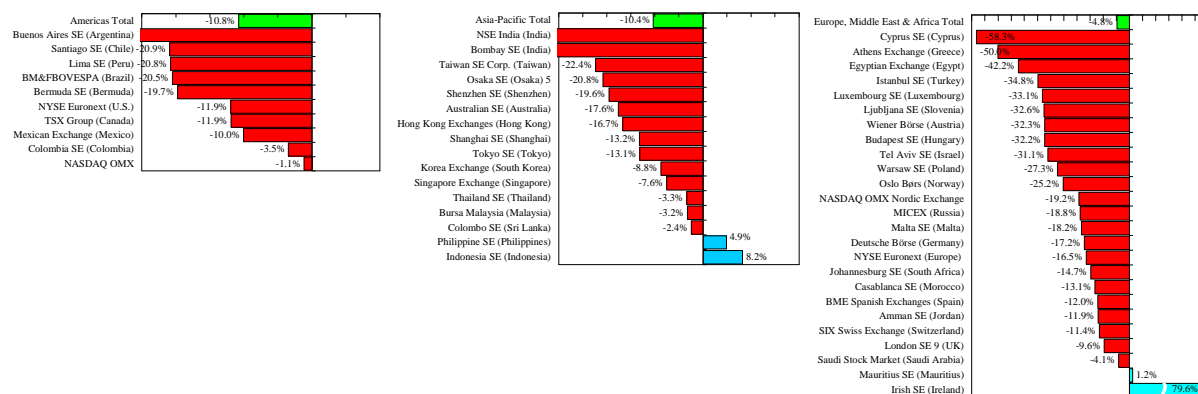
World market capitalization (Jan. 2011-Mar. 2012)



A look at the market capitalization by country/region shows that in December 2011 a majority of countries/regions found that their market capitalization had decreased from the previous year (Figure 1-1-2-7). It clearly tells us how in 2011 the economy slowed globally while uncertainties were felt about the future of the world economy amid the deepening debt crisis in Europe, a slumping economy in the United States, and a slowdown in emerging economies.

Figure 1-1-2-7

Market capitalization by country/region (as of December 2012, shown as year-on-year percent changes)



Source: World Federation of Exchange (WFE) Database.

(B) European debt crisis impacted emerging financial markets, which were thrown into turmoil by capital inflow/outflow

Following the occurrence of the world economic crisis, large amounts of external capital flowed into emerging economies in pursuit of high economic growth and interest rates. Such capital inflows supported the development of their stock markets and stable economic growth.⁶ In August 2011, however, investors began to withdraw capital from China, India, Brazil and some other emerging economies on the deepening European debt crisis (Figure 1-1-2-8, Figure 1-1-2-9).

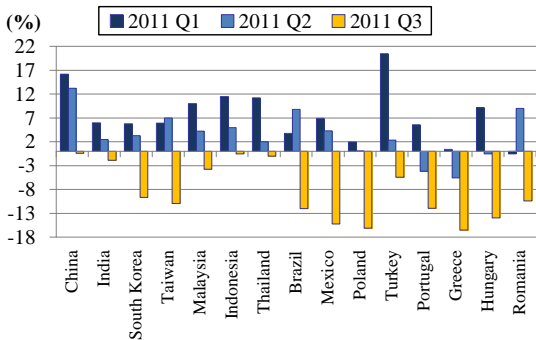
What lay behind such capital withdrawals are, among others: (A) Private banks of Europe withdrew from emerging economies loans that had been made to businesses, sold their stocks, government bonds, commodities and other items to get cash, and thereby secured dollar funds on hand and prepared themselves for a possible credit crunch due to arrive upon a further deepening of the debt crisis; and (B) investors strengthened their risk-off stance and sold volatile stocks issued in emerging economies. These actions led to stock price plunges in emerging countries (Figure 1-1-2-10), while prompting their currencies to sharply drop as investors convert emerging currencies obtained by selling emerging market stocks into their own currencies for repatriation (Figure 1-1-2-11). Emerging countries took measures to curb these capital outflows,⁷ while intervening in foreign exchange

6 At the same time, capital inflows brought about problems, such as pressure for currency appreciation, high inflation, and steep rises in real estate prices.
 7 India, for instance, on January 15, 2012, lifted restrictions on foreign investors' direct purchase of Indian stocks, while, on December 1 of the same year, Brazil announced measures to exempt or cut

markets by selling foreign exchange reserves (Figure 1-1-2-12).

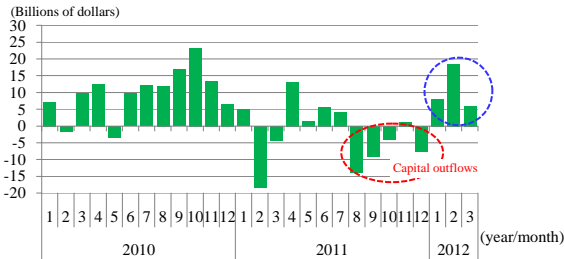
Such a significant decrease in capital inflows into emerging economies caused their banks' cash position to deteriorate and therefore their lending standards to tighten, and consequently demand for loans to decrease (Figure 1-1-2-13, Figure 1-1-2-14). Worries grew that if such a situation continues for a prolonged time, it will put downward pressure on emerging economies, and consequently result in a slowdown of the world economy.

Figure 1-1-2-8
European financial institutions' lendings to emerging economies in Asia and other regions (year-on-year percent changes)



Source: BIS.

Figure 1-1-2-9
Capital flows to emerging economies



Source: WTO, April 2012 (IMF).

It turned out, however, that capital inflows into emerging markets intensified again after outflows had calmed down in and after October 2011 and the European debt crisis had somewhat eased in early 2012. Such a phenomenon is considered to indicate that the impact of capital outflows observed in the early autumn of 2011 was limited when compared with the impact caused by the outflows subsequent to the Lehman Shock.⁸

Downside risks still exist, however, that are derived from advanced countries/regions. A major issue for each emerging economy, it is believed, is to implement appropriate macroeconomic measures that

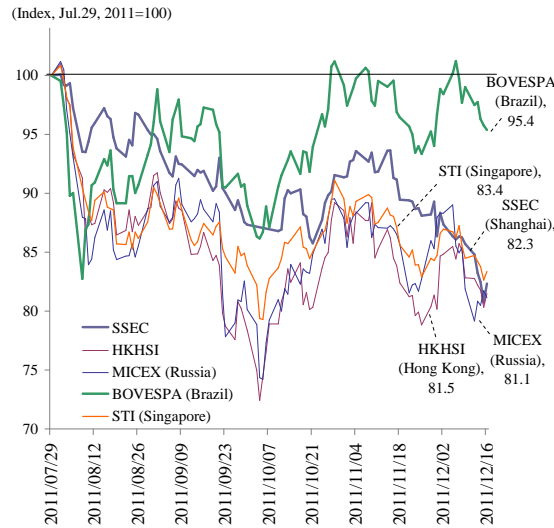
the financial transaction tax, including reduction to zero percent of the tax imposed on foreign investors' investments in Brazilian stocks.

8 IMF (2012a)

meet its proper needs.⁹

Figure 1-1-2-10

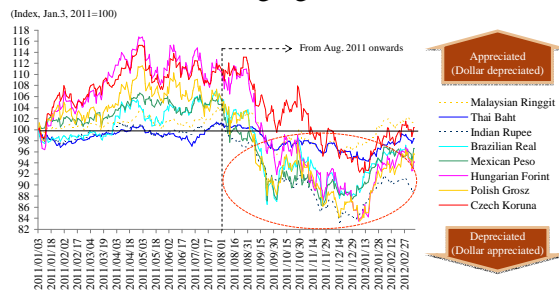
Stock prices in emerging economies



Source: Thomson Reuters Eikon.

Figure 1-1-2-11

Exchange rates between the U.S. dollar and emerging currencies



Source: Thomson Reuters Eikon.

(C) Changes occurring in global money flows

Changes occurred in global money flows during 2011-2012 reflecting above-mentioned trends in international financial markets. If we follow such changes keeping in mind the trends in the world economy we have seen above, we notice the following:

9 Ditto as above.

Figure 1-1-2-12

Foreign exchange reserves and exchange rates in major economies

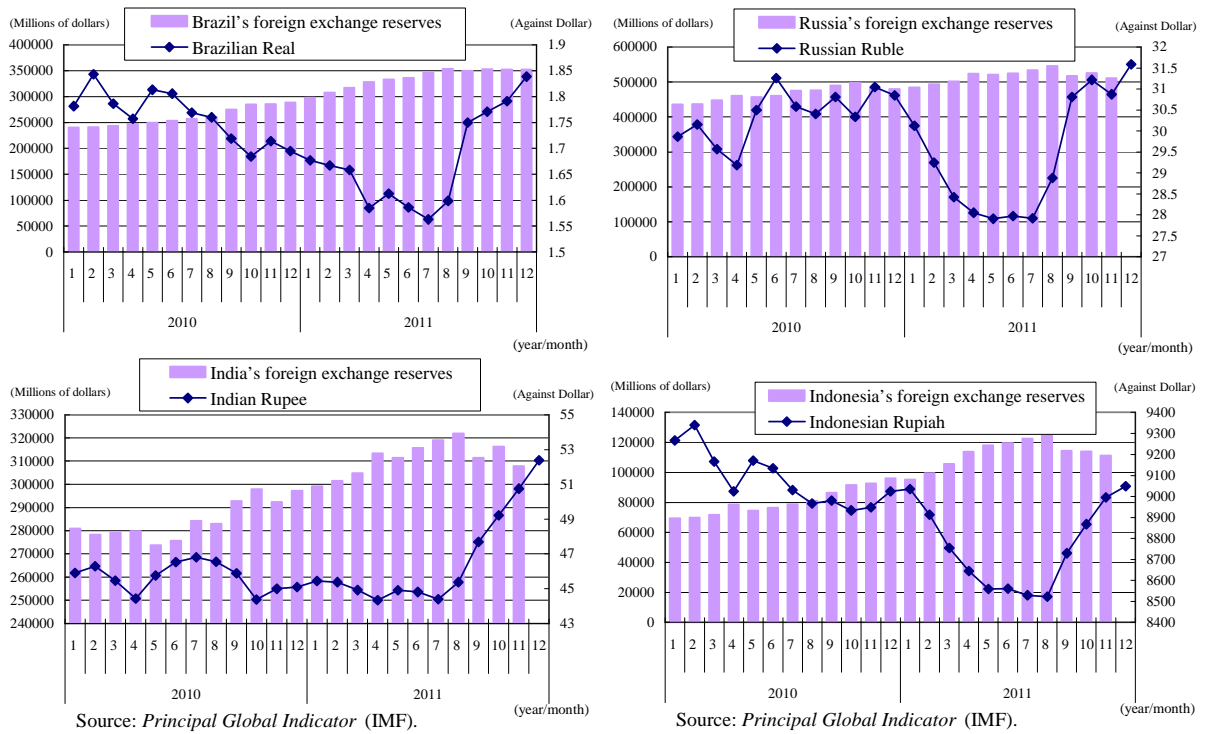


Figure 1-1-2-13

Lending standards at banks in emerging markets

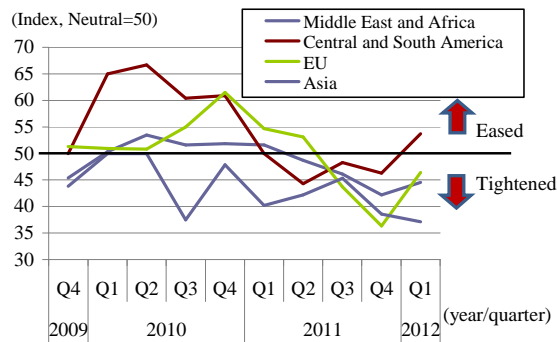
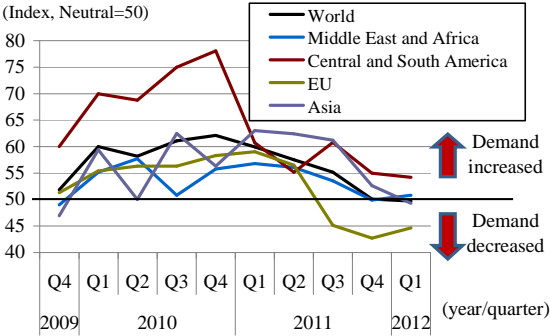


Figure 1-1-2-14

Loan demand at banks in emerging markets



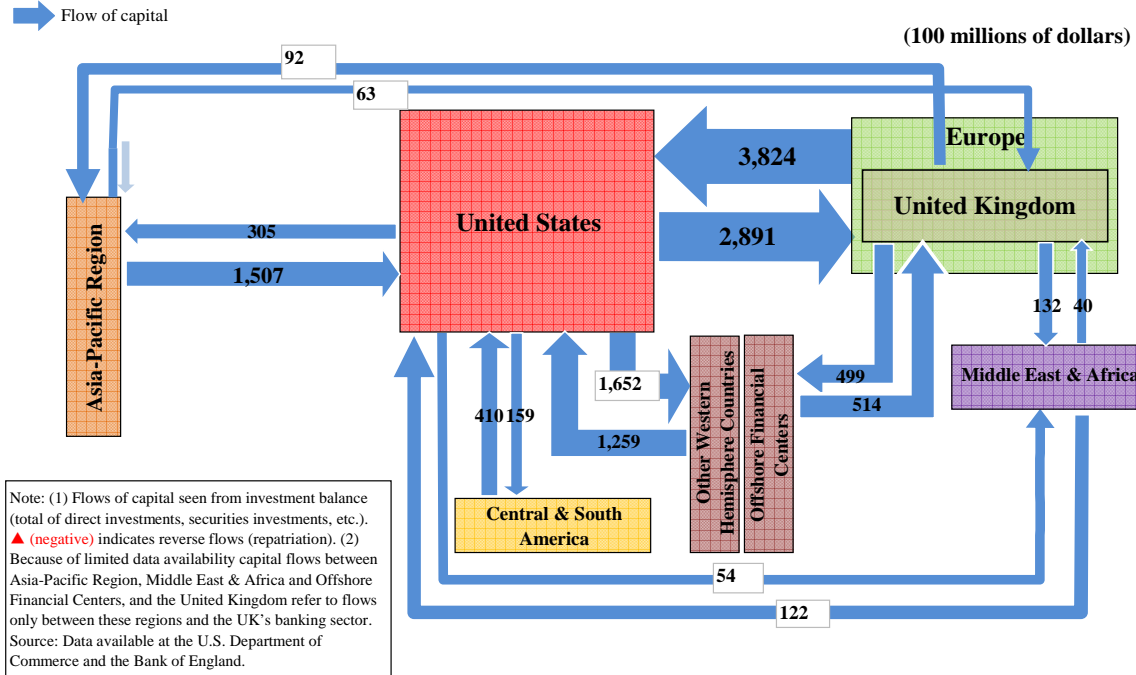
Source: WEO, April 2012 (IMF).

(a) Pre-crisis situations (2007Q2): Figure 1-1-2-15

In the pre-crisis second quarter of 2007, the United States was the recipient of capital inflows from all regions. The amount of capital that flowed into the United States from each of the regions was greater than the amount that flowed out of the United States into such region. Larger amounts of capital flow between the United States and Europe than between the United States and any other region occurred.

Increased amounts of capital flowed into emerging economies by the summer of 2007 on the back of the increased risk-on stance on the part of global investors as they invested larger amounts in securities (stocks and bonds) or made more direct investments.

Figure 1-1-2-15
 Capital flows between major countries/regions (2007Q2)



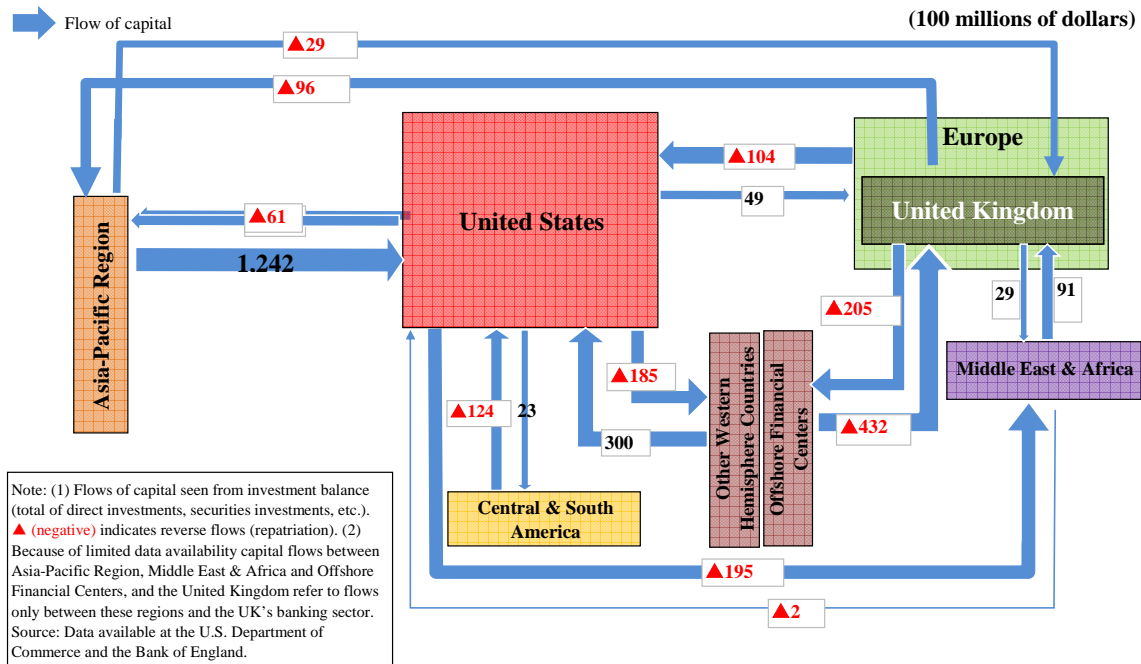
Offshore financial markets are 14 countries/regions in total: Aruba, Bahamas, Bahrain, Barbados, Bermuda, Cayman Islands, Guernsey, Isle of Man, Jersey, Lebanon, Macao, Mauritius, Netherlands Antilles, Panama and Vanuatu.

(b) Capital flows upon the occurrence of the crisis (2008Q3): Figure 1-1-2-16

From the summer of 2007 onwards, investors' risk-taking stance rapidly weakened on the back of the occurrence of the subprime lending problem and further, of the failure of Lehman Brothers in the autumn of 2008, leading to significant moves toward capital withdrawal. As a result, the amount of capital that flowed into the United States from Europe, Central and South America, the Middle East and Africa, and the amount of the capital that flowed out of the United States toward Asia-Pacific countries, Middle East, Africa or offshore regions, both turned negative (withdrawals being greater than inflows). It is notable here that capital flows from the Asia-Pacific region to the United States fell less than 20% from the same period a year ago during the period referred to above.

Figure 1-1-2-16

Capital flows between major countries/regions (2008Q3)



Offshore financial markets are 14 countries/regions in total: Aruba, Bahamas, Bahrain, Barbados, Bermuda, Cayman Islands, Guernsey, Isle of Man, Jersey, Lebanon, Macao, Mauritius, Netherlands Antilles, Panama and Vanuatu.

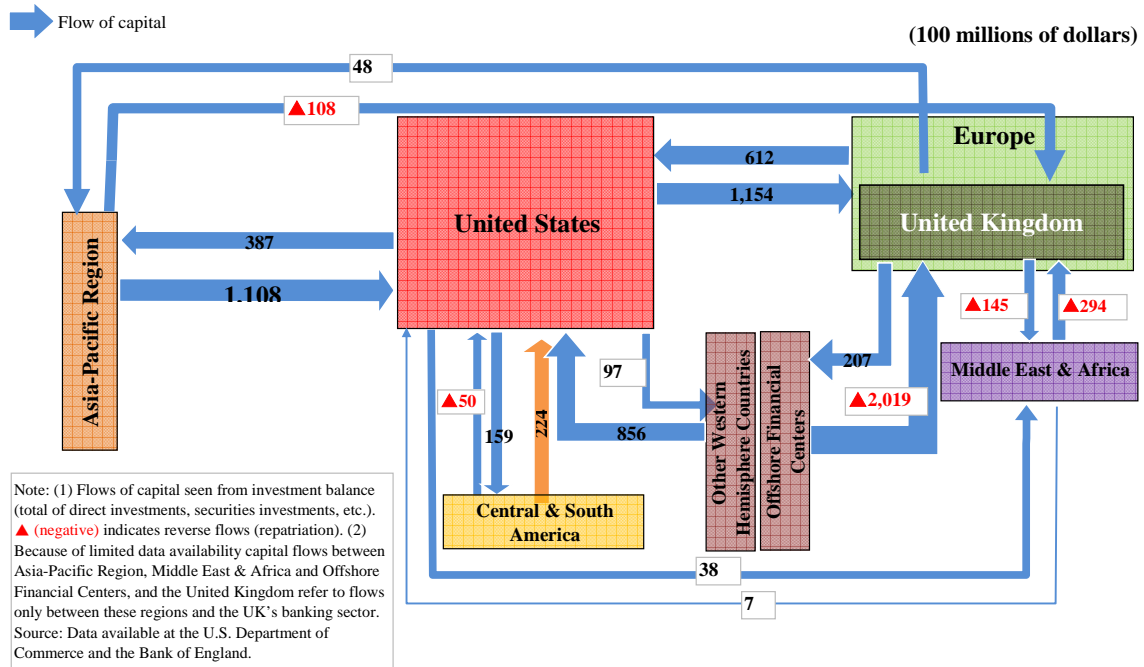
(c) Capital flows one year after the occurrence of the crisis (2009Q3): Figure 1-1-2-17

The world economy began to improve principally in Asian emerging economies and hit bottom in the spring of 2009. In the third quarter of 2009, one year after the crisis occurred, recovery started in the flows of capital to and from the United States. Most notably, investors recovered a risk-taking stance, which caused capital to flow from the United States to the Asia-Pacific region in amounts larger than before the global economic crisis. Central and South America also saw capital inflows from the United States recovering to the pre-crisis level.

(d) Two years after the occurrence of the crisis (2010Q3 and Q4): Figure 1-1-2-18, 1-1-2-19

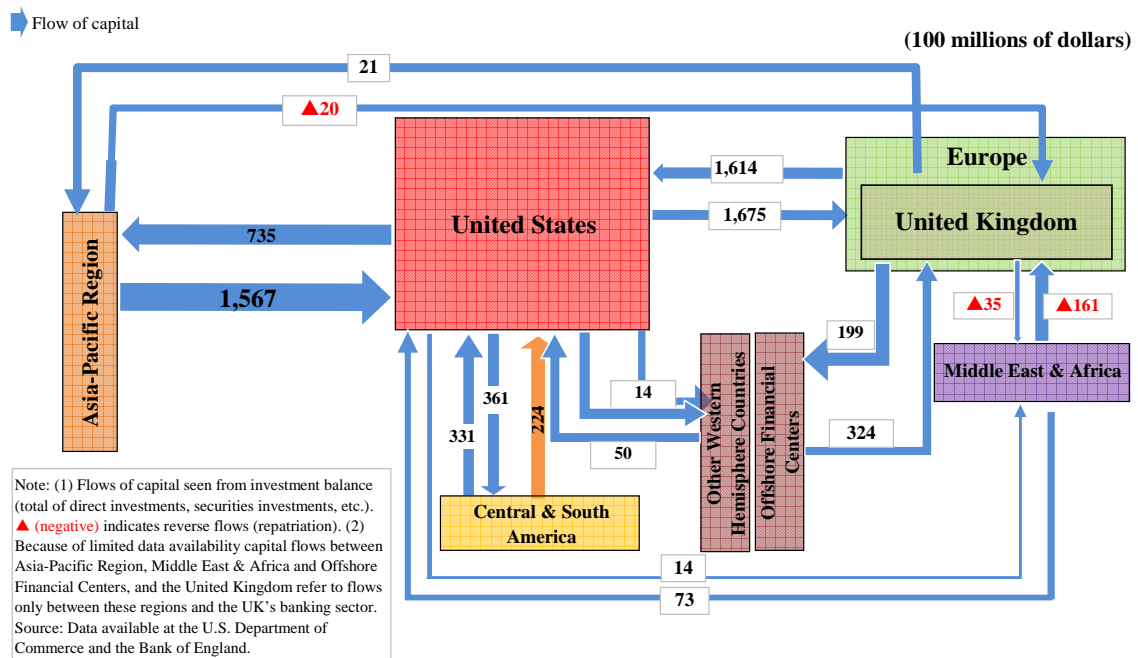
In the third quarter of 2010, two years after the occurrence of the crisis, capital flows to the United States became more intensive than one year ago (2009Q3). Amid the growing presence of China and other emerging economies, there are increasing capital flows especially between the United States and the Asia-Pacific region. Inflows from the region to the United States are greater than they were before the crisis (2007Q2), while flows from the latter to the former increased more than twofold and threefold in the third and fourth quarter of 2010, respectively. Flows between the United States and other regions also recovered, except in the case of the Middle East and Africa.

Figure 1-1-2-17
Capital flows between major countries/regions (2009Q3)



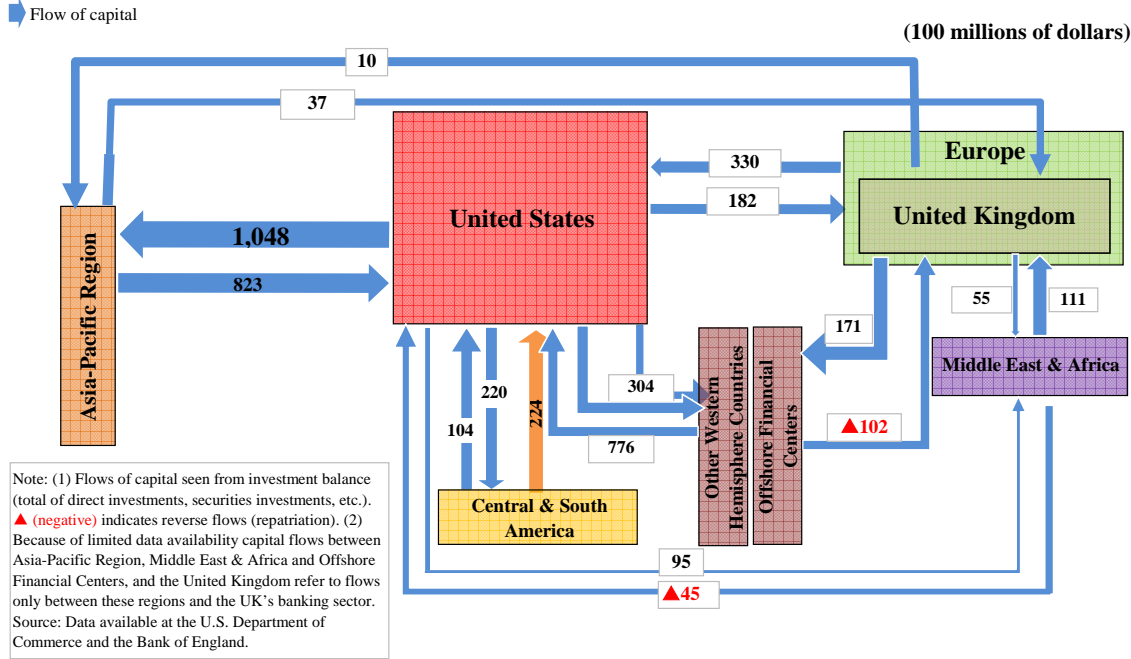
Offshore financial markets are 14 countries/regions in total: Aruba, Bahamas, Bahrain, Barbados, Bermuda, Cayman Islands, Guernsey, Isle of Man, Jersey, Lebanon, Macao, Mauritius, Netherlands Antilles, Panama and Vanuatu.

Figure 1-1-2-18
Capital flows between major countries/regions (2010Q3)



Offshore financial markets are 14 countries/regions in total: Aruba, Bahamas, Bahrain, Barbados, Bermuda, Cayman Islands, Guernsey, Isle of Man, Jersey, Lebanon, Macao, Mauritius, Netherlands Antilles, Panama and Vanuatu.

Figure 1-1-2-19
 Capital flows between major countries/regions (2010Q4)

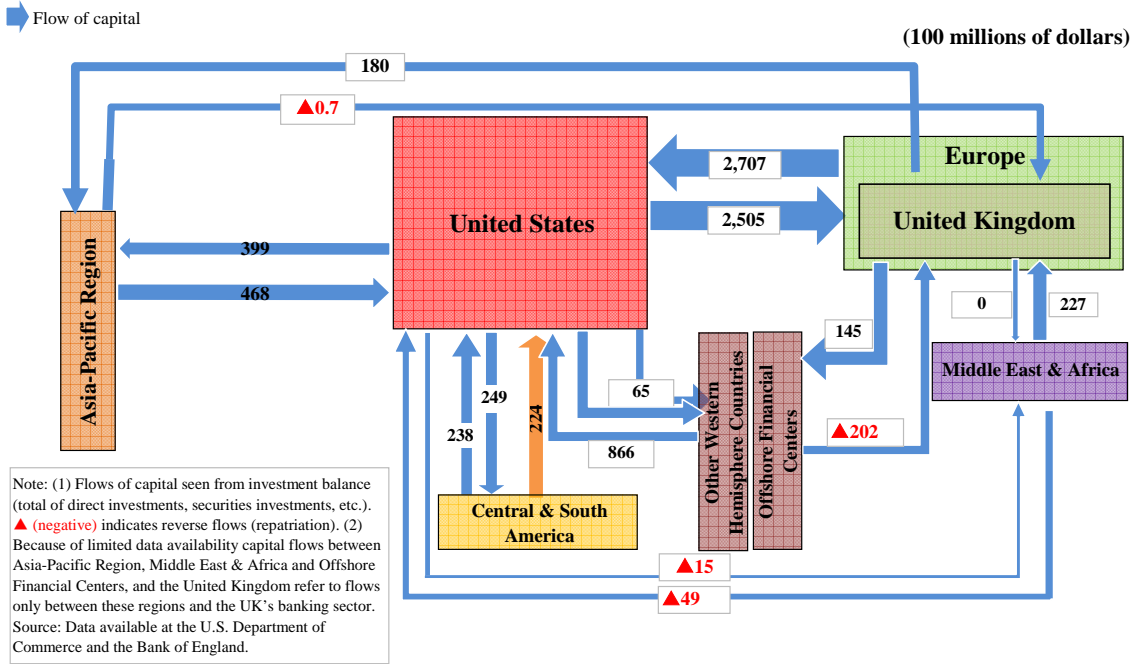


Offshore financial markets are 14 countries/regions in total: Aruba, Bahamas, Bahrain, Barbados, Bermuda, Cayman Islands, Guernsey, Isle of Man, Jersey, Lebanon, Macao, Mauritius, Netherlands Antilles, Panama and Vanuatu.

Europe saw a recovery in inflows from offshore financial centers and countries in the Western Hemisphere in the third quarter of 2010, but in the fourth quarter they saw capital was being withdrawn again by the offshore centers and the Western hemisphere. In the same fourth quarter, capital flows between Europe and the United States decreased from the previous quarter. Especially notable is a substantial decrease from US \$167.5 billion (Q3) to US \$18.2 billion (Q4) in inflows from the United States to Europe. These declines in capital inflows to Europe are presumably attributable to concerns about Ireland's fiscal situation becoming manifest to the end of 2010, which served to deteriorate market confidence principally in Europe and the United States.

The world as a whole saw capital flows during the third and fourth quarters of 2010 as stable as they were in the second quarter of 2007.

Figure 1-1-2-20
 Capital flows between major countries/regions (2011Q1)



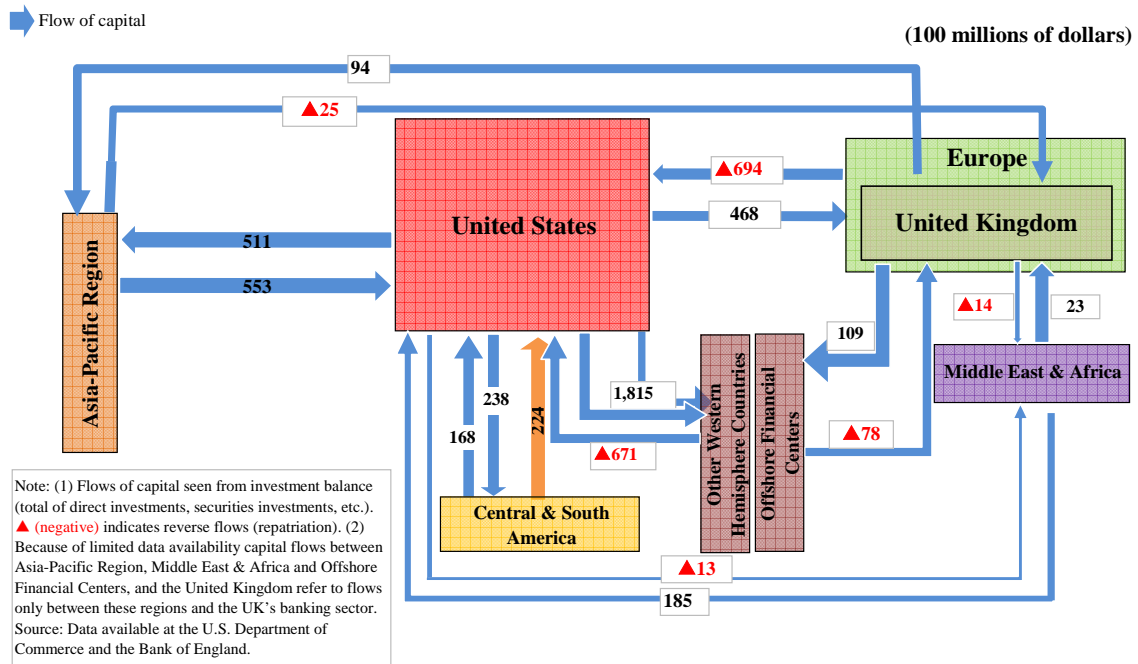
Offshore financial markets are 14 countries/regions in total: Aruba, Bahamas, Bahrain, Barbados, Bermuda, Cayman Islands, Guernsey, Isle of Man, Jersey, Lebanon, Macao, Mauritius, Netherlands Antilles, Panama and Vanuatu.

(e) Deepening European debt crisis (2011Q1-Q4): Figure 1-1-2-20, 1-1-2-21, 1-1-2-22, 1-1-2-23

Capital flows between the United States and Europe significantly increased in the first quarter of 2011 reaching the highest level since February 2007 (Figure 1-1-2-20). Then, amid growing concerns about the European debt crisis, there occurred accelerating withdrawals of capital from Europe by the United States, offshore financial centers, countries in the Western Hemisphere, and the Asia-Pacific region. Upon deepening of the crisis in the third quarter of 2011, the amount of withdrawals by the United States from Europe reached US \$111.2 billion dollars.

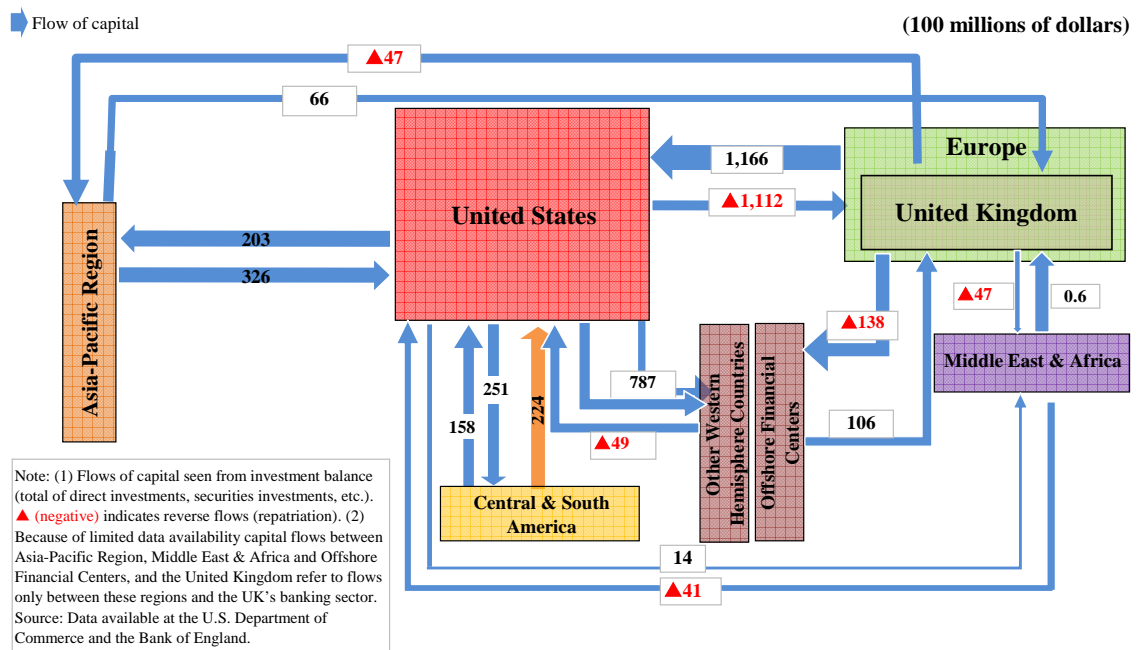
Also noticeable were withdrawals of European capital. European banks withdrew capital from emerging economies in an effort to have as much funds as possible on hand and be prepared for a possible credit crunch, while markets saw investors stepping up their risk-aversion stance. In such circumstances, the third and fourth quarters of 2011 saw intensifying capital outflows from the United States, Asia-Pacific region, offshore financial centers, countries in the Western Hemisphere, Middle East, Africa, etc.

Figure 1-1-2-21
Capital flows between major countries/regions (2011Q2)



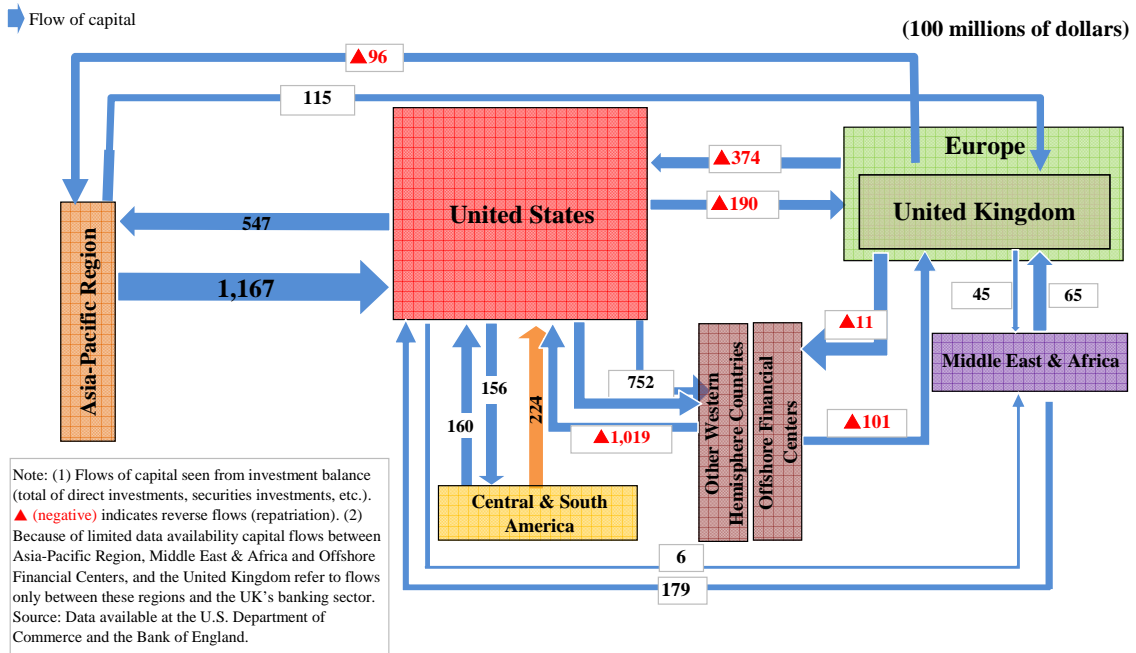
Offshore financial markets are 14 countries/regions in total: Aruba, Bahamas, Bahrain, Barbados, Bermuda, Cayman Islands, Guernsey, Isle of Man, Jersey, Lebanon, Macao, Mauritius, Netherlands Antilles, Panama and Vanuatu.

Figure 1-1-2-22
Capital flows between major countries/regions (2011Q3)



Offshore financial markets are 14 countries/regions in total: Aruba, Bahamas, Bahrain, Barbados, Bermuda, Cayman Islands, Guernsey, Isle of Man, Jersey, Lebanon, Macao, Mauritius, Netherlands Antilles, Panama and Vanuatu.

Figure 1-1-2-23
 Capital flows between major countries/regions (2011Q4)



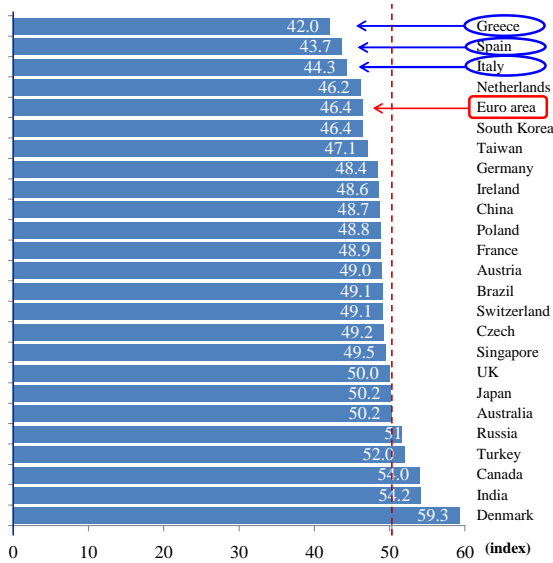
Offshore financial markets are 14 countries/regions in total: Aruba, Bahamas, Bahrain, Barbados, Bermuda, Cayman Islands, Guernsey, Isle of Man, Jersey, Lebanon, Macao, Mauritius, Netherlands Antilles, Panama and Vanuatu.

(2) Business sentiment and index of leading indicators: Worsening on the growing downside risk

As seen above, financial markets continued to be confused and the downside risks to the world economy rose throughout 2011, causing business sentiment to worsen across the world. Notably weak was the Purchasing Managers' Index (PMI) in the eurozone as it remained below 50 — a turning point towards “improving” or “worsening” — for four consecutive months to November 2011 (46.4), and stood at slightly higher (46.9) in December of the same year. Notably low was the index of Greece (42.0), Spain (43.7), and Italy (44.3) (Figure 1-1-2-24).

In and after December 2011, the PMI improved in both advanced and emerging economies (Figure 1-1-2-25). What lay behind the improvement were: The impact of the the floods experienced by Thailand was being resolved; there were signs of the U.S. economy improving; and concerns about the European debt crisis eased to a certain level. Presumably, these factors gave momentum to industrial production and trade in many countries.

Figure 1-1-2-24
 PMI of major economies

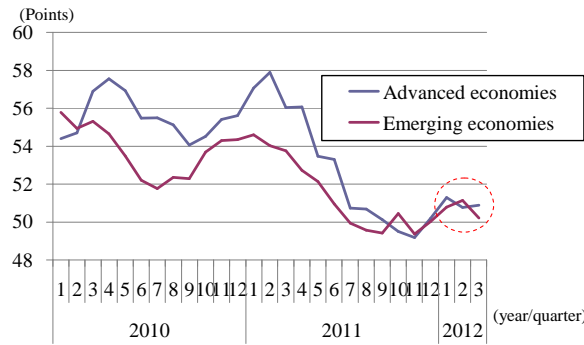


Note: Index as of Nov. 2011. “50” is a turning point towards “improving” or “worsening.”
 Source: *Global Economic Prospects January 2012* (World Bank).

The OECD composite leading indicators (released in April 2012) continued to fall to the second half of 2011 on both advanced and emerging economies; however, on OECD member economies, as of February 2012 the index of the indicators rose for four consecutive months from December 2011 indicating a recovery trend (Figure 1-1-2-26), although varying from one country/region to another. On Japan and the United States, the index improved for six consecutive months, while beginning to improve also on South Korea in 2012, rising above 100 — borderline between growth and recession — on each of the three countries. The index continued below 100 on the eurozone from October 2011 onwards. On each of four major eurozone economies, or Italy, France, Germany and the United Kingdom, the index continued to stay below 100, but turning upward on Germany and the United Kingdom, while keeping downward on France and Italy (Figure 1-1-2-27). Among emerging economies, China and India saw the index moving upward for six consecutive months, and Brazil, for three consecutive months. On Russia the index has been above 100 since July 2010, while on Indonesia it continues below 100 in 2012 to date (Figure 1-1-2-28).

Figure 1-1-2-25

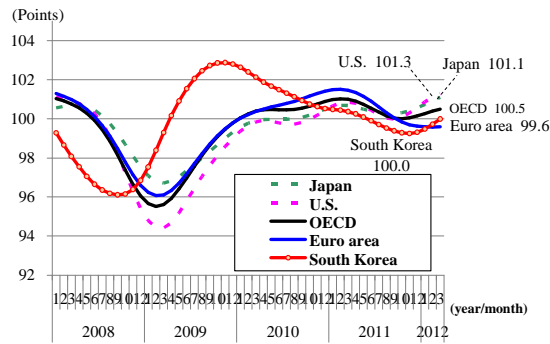
PMI (advanced and emerging economies)



Source: WEO, April 2012 (IMF).

Figure 1-1-2-26

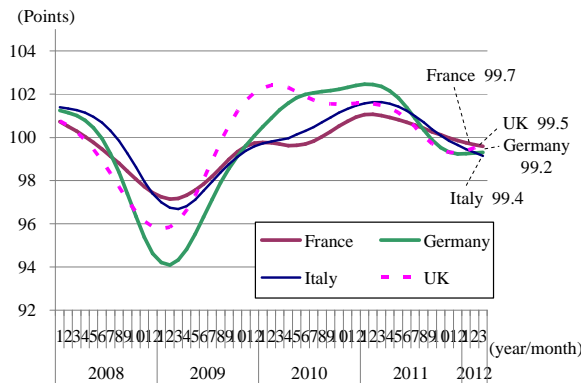
OECD Composite Leading Indicators (major advanced economies)



Source: OECD Stat.

Figure 1-1-2-27

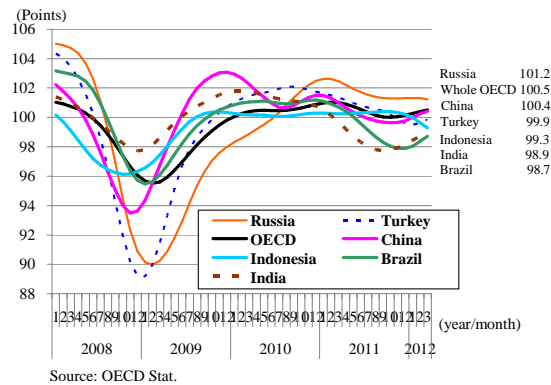
OECD Composite Leading Indicators (major EU economies)



Source: OECD Stat.

Figure 1-1-2-28

OECD Composite Leading Indicators (major emerging economies)



(3) Production trends: In a slump because of sagging economy

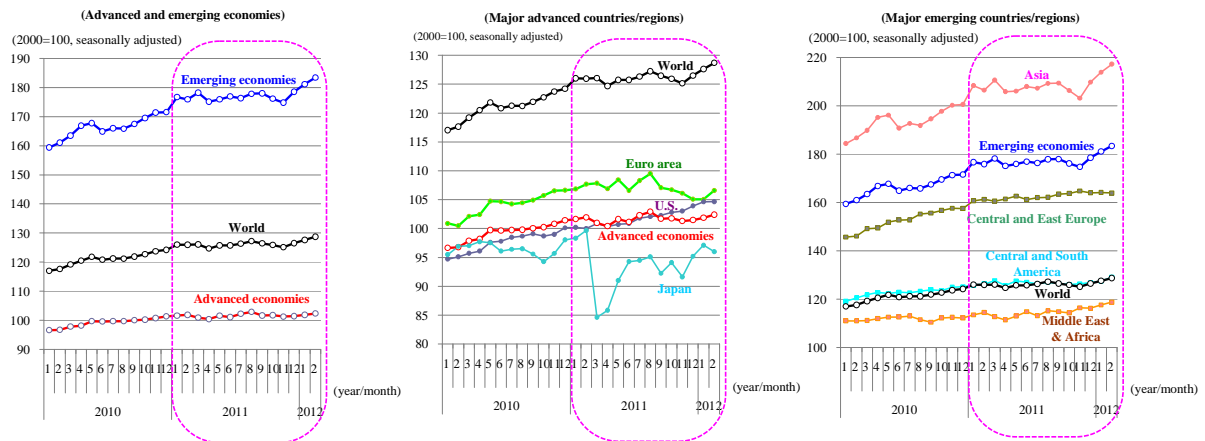
(A) Industrial production: Staying flat through 2011 to pick up in 2012

The industrial production index that indicates overall mining and manufacturing activities moderately improved through 2010. But the index stayed largely flat through 2011 (Figure 1-1-2-29) because of various factors that caused downward pressure, including the impact of the Great East Japan Earthquake on supply chains, concerns about the U.S. economy slowing down from the summer of 2011 onwards over the problem related to raising the debt ceiling, and the European debt crisis. In the case of Japan, the index sharply declined on the impact of the Great East Japan Earthquake of March and on the damage caused on its supply chains by the devastating the floods experienced by Thailand in the latter half of the year. The index, however, is sharply rising in 2012. In the eurozone, the index was on a downward trend amid the deepening debt crisis, but has slightly improved in 2012. The index has kept rising for emerging economies since the end of 2011.

(B) Number of cars sold

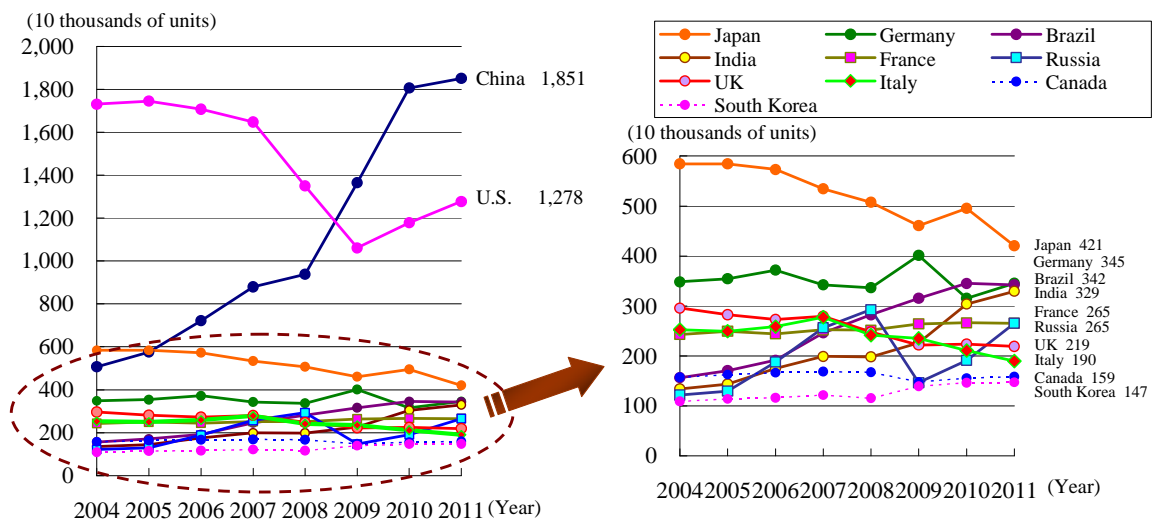
The global economic slowdown notably led to sluggish 2011 car sales in principal countries of the world (Figure 1-1-2-30). Of the major car markets, China (No.1 market), the United States (No.2 market), India, and Canada respectively saw car sales increase over the previous year, but the rate of growth was lower than a year ago (Figure 1-1-2-31). In Japan, Brazil, France, the United Kingdom and South Korea, both the number of cars sold and the growth rate were lower than in the previous year, while in Germany and Russia the year-on-year growth rate increased. This is presumably because consumer appetite for cars increased on the improved employment environment (Germany), or because consumer spending continues strong supported by increased real income resulting from energy price hikes (Russia).

Figure 1-1-2-29
Industrial production index



Note: Advanced economies are OECD member economies excluding Turkey, Mexico, South Korea and Central European economies.
Source: Netherlands Bureau for Economic Policy and Analysis (CPB).

Figure 1-1-2-30
New car sales in major economies



Note: Only passenger cars are counted for Germany, France, United Kingdom and Italy.
Source: MarkLines automotive database.

The number of new cars sold in emerging economies strongly grew, reaching in 2011 a total that is only 1.71 million units short of the number sold in advanced economies (Figure 1-1-2-32). If we compare the number of new cars sold by leading members of advanced and emerging economies as of 2004 and 2011 in terms of share of the total sold by all of them, we learn that new cars sold in emerging economies increased more than twofold from 22.7% to 48.8% (Figure 1-1-2-33). As a result, in the number of new cars sold, China rose to first place above the United States and Japan. Brazil, India and Russia each also rose to higher places (Figure 1-1-2-34).

Figure 1-1-2-31

Number of new cars sold and growth rate (year-on-year) in major economies



Note: Only passenger cars are counted for Germany, France, United Kingdom and Italy.
Source: MarkLines automotive database.

Figure 1-1-2-32

New car sales in major advanced and emerging economies

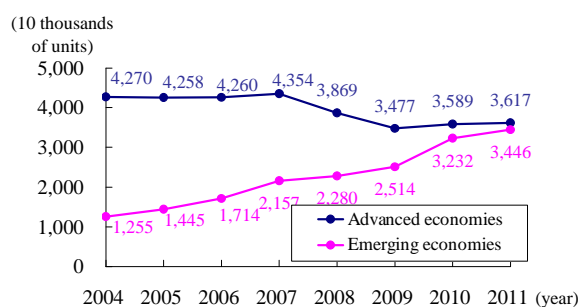
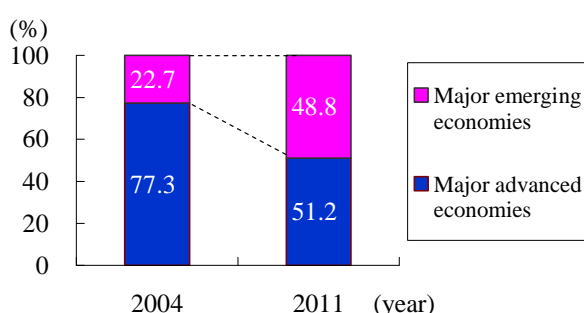


Figure 1-1-2-33

Shares of new car sales held by major advanced and emerging economies (2004, 2011)



Note: Major advanced economies are: Canada, Czech Republic, United States, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Netherlands, Norway, New Zealand, Portugal, Spain, Sweden, Switzerland, United Kingdom, Australia, Japan, South Korea, Singapore and Taiwan. Major emerging economies are: Argentina, Brazil, Chile, Colombia, Mexico, Uruguay, Venezuela, Poland, Romania, Russia, Turkey, China, India, Indonesia, Malaysia, Pakistan, Thailand, Vietnam and South Africa.
Source: MarkLines automotive database.

Figure 1-1-2-34

Upper ranking countries in new car sales and their shares of the total sold (comparison between 2004 and 2011)

2004			2011		
Country	Number of new cars sold	Ratio to Total	Country	Number of new cars sold	Ratio to Total
U.S.	17,310,401	36.4	China	18,505,114	31.4
Japan	5,843,687	12.3	U.S.	12,776,341	21.6
China	5,071,071	10.7	Japan	4,205,721	7.1
Germany	3,481,849	7.3	Germany	3,453,722	5.9
UK	2,957,192	6.2	Brazil	3,423,472	5.8
Italy	2,528,872	5.3	India	3,294,289	5.6
France	2,430,485	5.1	France	2,653,563	4.5
Canada	1,573,072	3.3	Russia	2,653,408	4.5
Brazil	1,564,169	3.3	UK	2,191,316	3.7
India	1,344,317	2.8	Italy	1,896,679	3.2
Russia	1,218,585	2.6	Canada	1,587,086	2.7
Mexico	1,095,736	2.3	South Korea	1,474,637	2.5
South Korea	1,093,652	2.3	Mexico	905,886	1.5
Total	47,513,088	100.0	Total	59,021,234	100.0

Note: Only passenger cars are counted for Germany, France, United Kingdom and Italy.
Source: MarkLines automotive database.

(4) GDP growth rates and trends in labor market

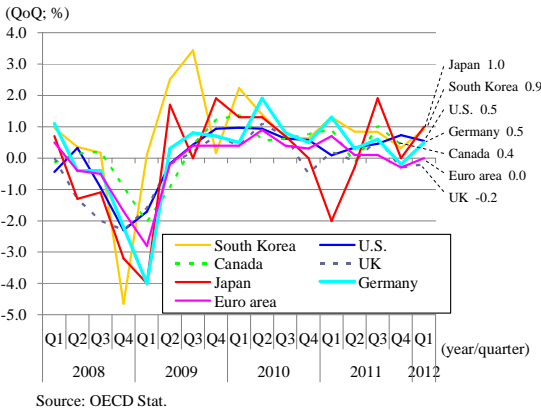
Against the backdrop of the weak global business sentiment referred to above and sluggish production activities major countries/regions saw their GDP grow generally at a slow pace in 2011.

Among advanced countries, the United States saw signs of its economy moderately recovering in and after the second half of 2011, while uncertainty continues about the future of its economy relating principally to the job and housing markets. The eurozone saw its economy slow down in the fourth quarter affected by the deepening debt crisis. While its economy has become stable to a certain degree in 2012 another slowdown is anticipated for the time being.¹⁰ The United Kingdom came through a negative growth period for two consecutive quarters (3rd quarter 2011 and 1st quarter 2012), which

10 IMF (2012a)

should be seen as a “recession.” Japan suffered a delayed or deficient supply of some primary goods and parts because of the March 2011 Great East Japan Earthquake, which led to a significant negative growth in the first quarter. Such a situation also served to decelerate overseas economies though in a limited manner. Japan registered a negative growth period also in the fourth quarter of 2011 due to the the floods experienced by Thailand and slowing external demand, but the first quarter of 2012 saw a better-than-expected growth on increased consumer spending encouraged by resumed subsidies for purchases of eco-friendly cars, increased public works spending prompted by surfacing reconstruction demand, and a rebound in exports (Figure 1-1-2-35).

Figure 1-1-2-35
 GDP growth rates (advanced economies)



Emerging economies saw their economies slow down in 2011 affected by the tight money policy implemented to curb inflation and by the impact of the European debt crisis on global finance and trade. Emerging economies in Asia suffered, in addition to the above, the impact of the supply chains disrupted by the Great East Japan Earthquake, the floods experienced by Thailand, and other events. China, the expected driver of the world economy, saw its economy slightly slow down, though still growing at a robust rate. India raised its policy interest rate to contain accelerating inflation, pushing up borrowing costs and therefore curbing business activities. In the case of Brazil, they implemented tight fiscal and monetary policies to cool the overheating economy, which, together with lower exports accompanying the higher Real, caused the economy to decelerate. Russia, meanwhile, enjoyed a notable growth underpinned principally by domestic demand generated by increased income resulting from high oil prices (Figure 1-1-2-36).

In such a global environment also labor markets delayed in recovery. Major countries saw their jobless rate continue to improve in 2011 after peaking in 2009. Yet, the rate has not dropped to a satisfactory level when compared with the pre-Lehman Shock level (Figure 1-1-2-37). In France, the United Kingdom and Australia, the jobless rate rose in the second half of the year. The United States, with a delaying employment improvement, saw the jobless rate decline for two consecutive quarters from the fourth quarter of 2011. Although the market expects such improvement to be a sign of a full-fledged job recovery, the rate is still at a high level. In such global circumstances, Germany stands out

with a notably improved jobless rate (Figure 1-1-2-38).

Figure 1-1-2-36

GDP growth rates (emerging economies)

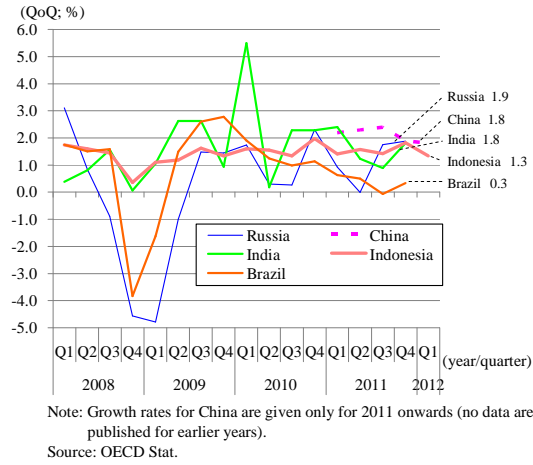


Figure 1-1-2-37

Jobless rates (major economies)

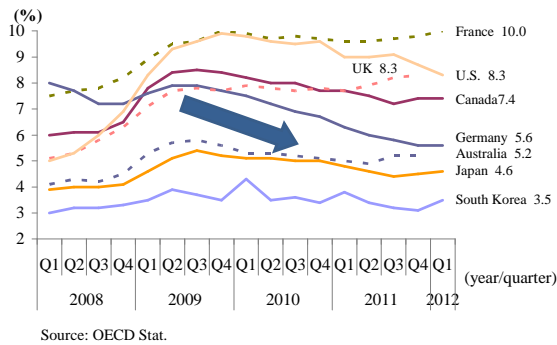
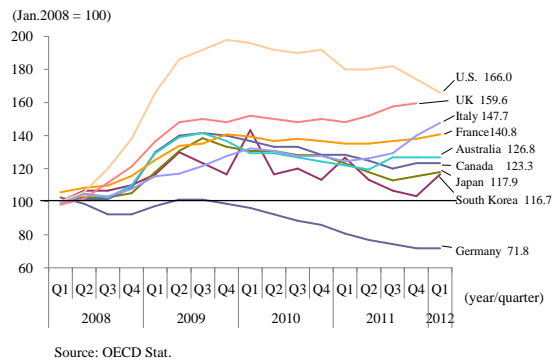


Figure 1-1-2-38

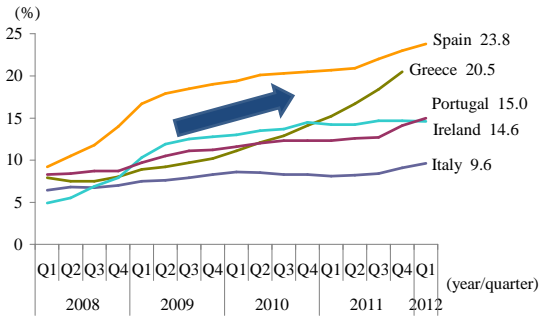
Jobless rates in major economies (index-based)



The jobless rate in the eurozone economies afflicted with a sovereign debt problem, including Spain, Greece, Ireland, Portugal and Italy, continues to rise after the Lehman Shock without any sign of

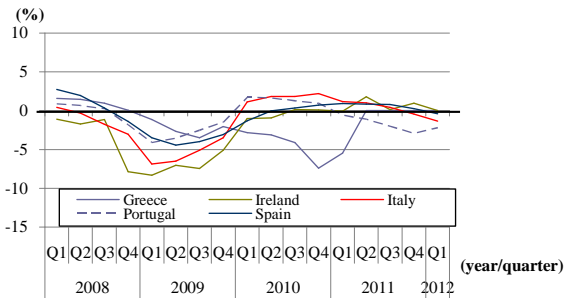
improvement (Figure 1-1-2-39). The adverse impact caused by such a deteriorating jobless rate is observable in their economic growth as compared with the growth achieved by major economies (Figure 1-1-2-40).

Figure 1-1-2-39
Jobless rates (PIIGS)



Source: OECD Stat.

Figure 1-1-2-40
GDP growth rates (year-on-year percent changes; PIIGS)



Source: OECD Stat.

(5) Price trends and monetary policies

Major advanced economies, such as Japan, the United States, the eurozone, and the United Kingdom, have maintained their respective easy monetary stance for fear of a deflationary trend or an economic slowdown, by adopting a low interest rate policy plus non-traditional monetary policies including quantitative easing and asset purchases (Figure 1-1-2-41, Figure 1-1-2-42). In Europe they raised policy interest rates in April 2011 for the first time since the debt crisis occurred, and thus made a step toward monetary tightening. In November of the same year, however, they again lowered policy interest rates in view of the deepening debt crisis and a slowdown. The United States began to see a mild recovery in the early autumn of 2011 to 2012 as employment and home prices showed signs of improvement from a long slump. Yet such improvement lacks momentum, and the FRB has indicated the course it will follow by continuing the current ultra-low interest rate policy to the end of 2014.

Figure 1-1-2-41
 Consumer Price Index (major advanced economies)

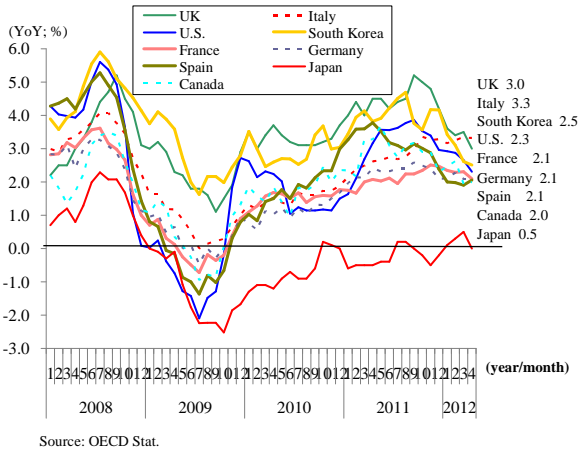
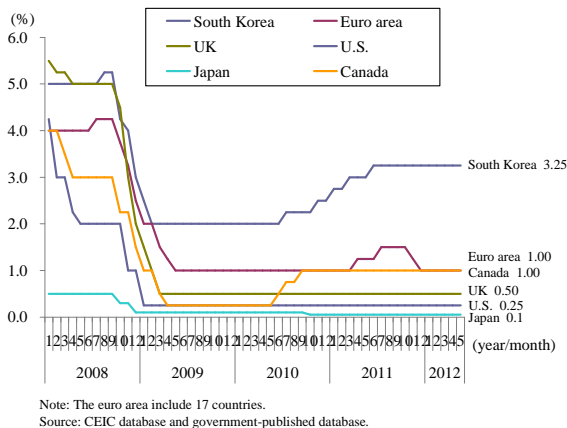


Figure 1-1-2-42
 Policy interest rates (major advanced countries/regions)



Emerging economies saw a strong recovery since the second half of 2009 and massive capital inflows due to monetary easing adopted in advanced economies, and consequently faced strong fears of higher inflation and the appreciation of their currencies. Added to this were globally soaring resource and food prices, which put upward pressure on prices. In an effort to cope with such situations, emerging economies, principally Asian, raised policy interest rates or reserve requirement ratios, or tightened control on capital inflows in and after mid-2010 (Figure 1-1-2-43). These tight money policies worked effectively, and in the second half of 2011, started to curb an increase in the consumer price index of emerging economies (Figure 1-1-2-44). Then, noticing increasing concerns about the future prospects of their economies due to the tight money policies implemented thus far and the slowing of the world economy, some emerging economies turned toward monetary easing in the second half of 2011. Such trends continued into 2012 as India cut interest rates for the first time in three years while Brazil and Thailand made additional interest rate cuts. Shifts toward monetary easing continue.

Figure 1-1-2-43

Policy interest rates (major emerging economies)

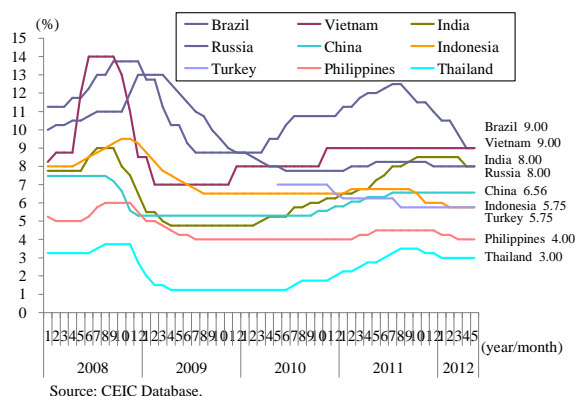
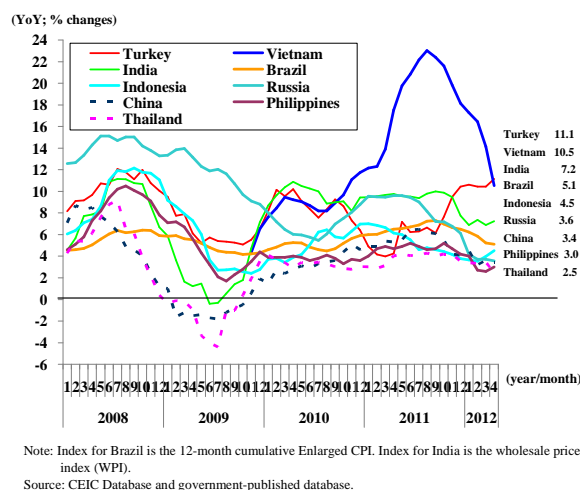


Figure 1-1-2-44

Consumer price index (major emerging economies)



(6) Home prices

Advanced economies saw home prices continuing to slump into 2011 over concerns about deflationary trends and an economic slowdown (Figure 1-1-2-45). In the United States, there are signs that home prices began to improve in the second half of 2011 as the economy began to pick up, but uncertainty about future prospects is yet to be dispelled.

In Australia and some of Asian NIEs, home prices, which had continued to rise for the past months, began to decelerate reflecting the slowing economy in 2011 (Figure 1-1-2-46).

China saw home prices sharply rise from 2009 onwards, principally in urban areas, staying at high levels in and after 2010 (Figure 1-1-2-47). Factors indicated as responsible for increased home prices are higher demand for houses due to population increases in urban areas, increased investments in real estate on the back of easier loans available from domestic banks, inflows of capital from overseas, and aggressive urban development promoted by local governments. In 2011, the central government of China reinforced its policy of controlling real estate prices that had been in force since 2010, causing real estate prices to begin to drop from the previous-year level by the beginning of 2012 in many

regions. Thus, the government control put a brake on increases in real estate prices for the moment. It is possible, however, that upward pressure on real estate prices will continue, given that the Chinese economy and urban population are expected to continue growing.

Figure 1-1-2-45
Home prices in major advanced economies

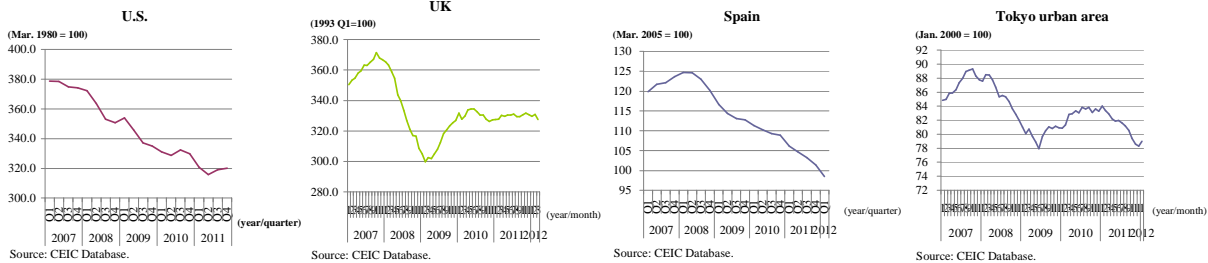


Figure 1-1-2-46
Home prices in Asian NIEs and Australia

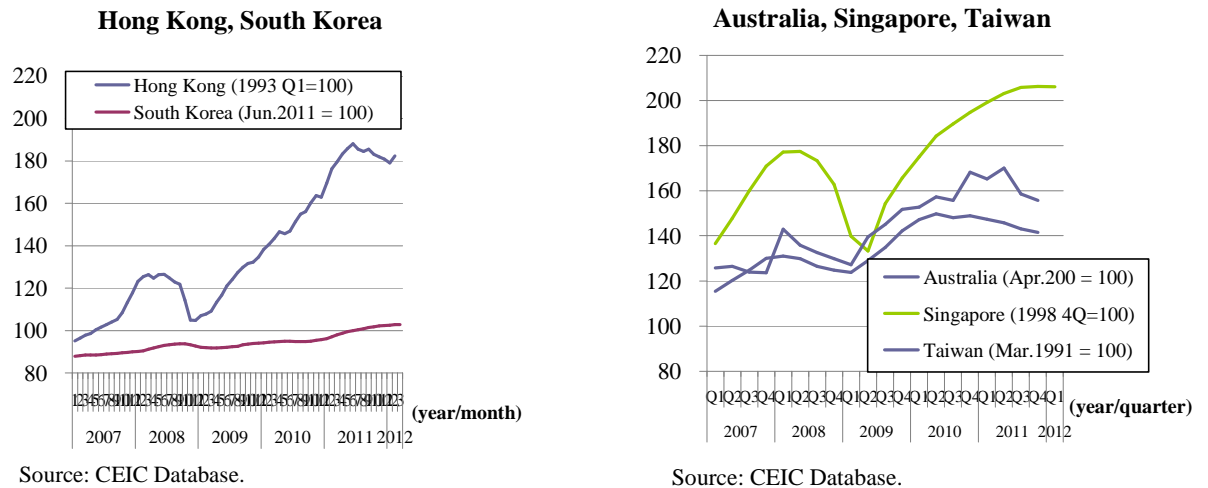
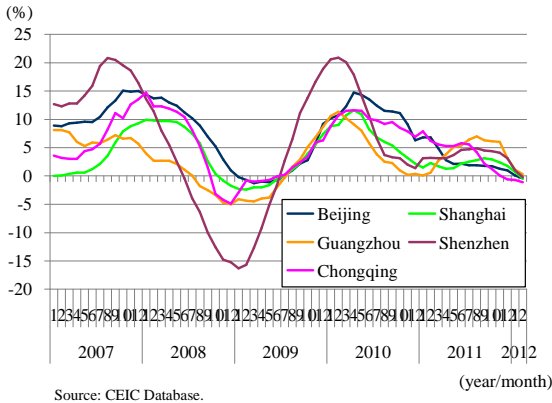


Figure 1-1-2-47
Home prices in China (year-on-year percentage change)



(7) Commodities market: Oil price surge impacted the economies of many countries

After suffering in 2010 with sharp price increases the commodities market saw prices drop from the second half of 2011 onwards over an uncertain world economic outlook and fears of the economic slowdown in emerging economies. From the early autumn of 2011 onwards, however, oil prices soared over political uncertainty in the Middle East and Africa. Also, food prices continue to be on an upward trend though they have calmed down to a certain extent. In such circumstances, growing inflationary pressure and the impact of higher commodities prices on people’s life in mid-to-low income countries that are highly dependent on commodities imports have led to the instability of the world economy.

(A) Increased geopolitical risk and oil price surge

The December 2010 riots in Tunisia served to destabilize the political situation in the Middle East, sending oil prices skyrocketing. It was one of the major factors responsible for a global slowdown that started in early 2011. Then, in May 2011, oil prices plummeted and stabilized at lower levels for some time. But in November of the same year, the increasingly tense Iranian situation put greater pressure on the international demand-supply of oil, whose price soared again to remain high into 2012 (Figure 1-1-2-48, Figure 1-1-2-49). If such high prices continue for a prolonged time, it will add to household expenses and business costs, being likely to weigh on the economic recovery.

Figure 1-1-2-48

Oil prices

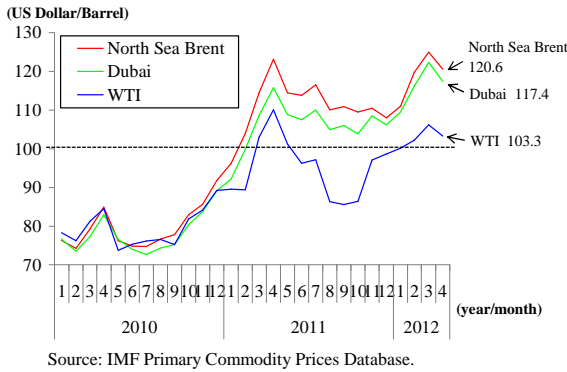
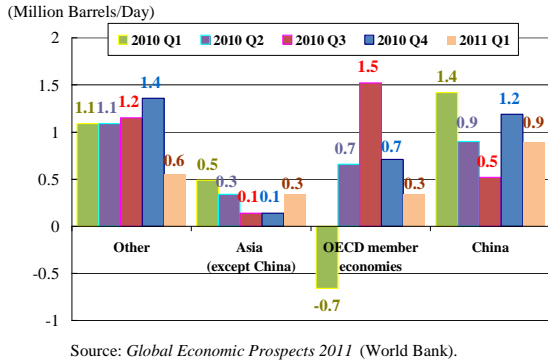


Figure 1-1-2-49

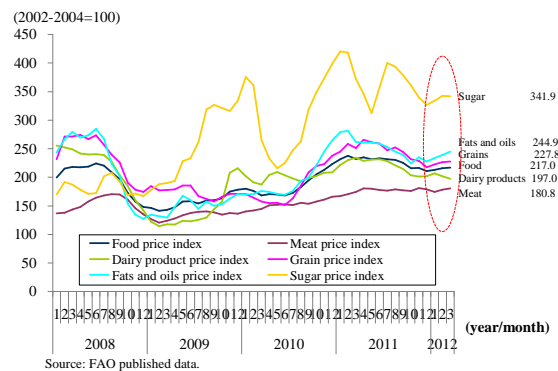
Oil demand



(B) Food prices

Food prices skyrocketed in 2010, and then dropped from the second quarter of 2011 onwards (Figure 1-1-2-50). The principal reason for declines in international prices of grain, sugar, and fats and oils is the speculation that global production and supply will greatly improve and generate a substantial production surplus in 2012 on the back of a bumper harvest expected in India, the EU, Thailand and Russia.¹¹

Figure 1-1-2-50
Food price index



Food prices began to rise again in 2012 on the back of the oil price surge at the end of 2011. Food prices are expected to be on an upward trend as global food demand will likely rise on strong economic growth expected in emerging economies.

On November 4, 2011 the Development Working Group set up under the G20 released a report on substantial changes in commodities prices being a cause of the instability of the world economy. The report says:

- The main cause of changes in commodities prices is substantial change that occurs in the demand- supply balance. Specifically, commodities supply is unable to catch up with a sharp increase in demand because of the economic growth in emerging economies, and decreased stock and deficient supply capacity cause commodities prices to rise.
- In addition, policy factors (subsidy policy, biofuel policy) and financial factors (conversion of commodities into financial products) also serve to raise commodities prices.
- The effect caused by financial investors' participation in commodities trade has not been adequately assessed yet.
- It is necessary in the future to implement measures aimed at prompting commodities markets to improve their capability, analyze the impact of the commodities market on financial markets, and implement policy measures from a global perspective.

11 Food and Agriculture Organization (FAO) Media Center, "FAO Food Price Index ends year with sharp decline" (Jan.12, 2012) <http://www.fao.org/news/story/en/item/119775/icode/>

(8) Summary

So far, by means of various economic indicators we have reviewed and summarized trends observed in the world economy from 2011 onwards. The recovery of the world economy as a whole is weak. Concerns about a further slowdown in major advanced economies and growing downside risks thereto have yet to be dispelled. The World Bank warns: “Risk, which has not surfaced yet, remains that in the future funds will be stalled in a wider range of spheres, which may give rise to a disaster as severe and devastating as the failure of Lehman Brothers.”¹²

The world economy continues to be weak and fragile. Concerns exist as to which route should be followed by the world economy for recovery.

3. Slumping world trade since the Lehman Shock and its recovery

(1) Trends in world trade: Still unstable despite signs of partial recovery

World trade sharply declined in the half year following the September 2008 Lehman Shock, but began to pick up smoothly from mid-2009 onwards. Volume-wise, world trade peaked in April 2008, and then dropped nearly 30% by May 2009. Thereafter, it recovered to reach in November 2010 its pre-financial crisis level (April 2008). Upon the start of 2011, however, moves toward the recovery stalled as supply chains were disrupted by the Great East Japan Earthquake of March, concerns grew about the U.S. economy slowing in and after August of the same year, and the European debt crisis deepened. World trade had been on a mild recovery trend since the end of 2011, but the recovery began to sputter in February 2012, turning negative on a month-on-month basis (Figure 1-1-3-1). Seen in terms of 3-month moving averages, world trade volumes have grown for three consecutive months since December 2011 just as its momentum has been (Figure 1-1-3-2).¹³ Consequently, world trade volumes are considered to be mildly growing. If we follow these movements in relation to changes in the values (expressed in dollars) obtained by multiplying trade volumes by unit prices, we learn that in the second half of 2011 the trade value momentum sharply fell as compared with that of trade volume (Figure 1-1-3-2). From December 2011 onwards, however, the trade value momentum has been on a recovery trend. We should carefully watch if in future months trade values will continue to be on a growing trend along with trends in trade volumes.

12 World Bank “Global Economic Prospects” (Jan. 2012)

13 Momentum is the value obtained by dividing the current 3-month backward moving average by the immediately preceding 3-month backward moving average. The Netherlands Central Bureau of Statistics (CBS) says it is preferable to measure trends in trade volumes in terms of moment, not based on too variable monthly trade data.

Figure 1-1-3-1
World trade volumes

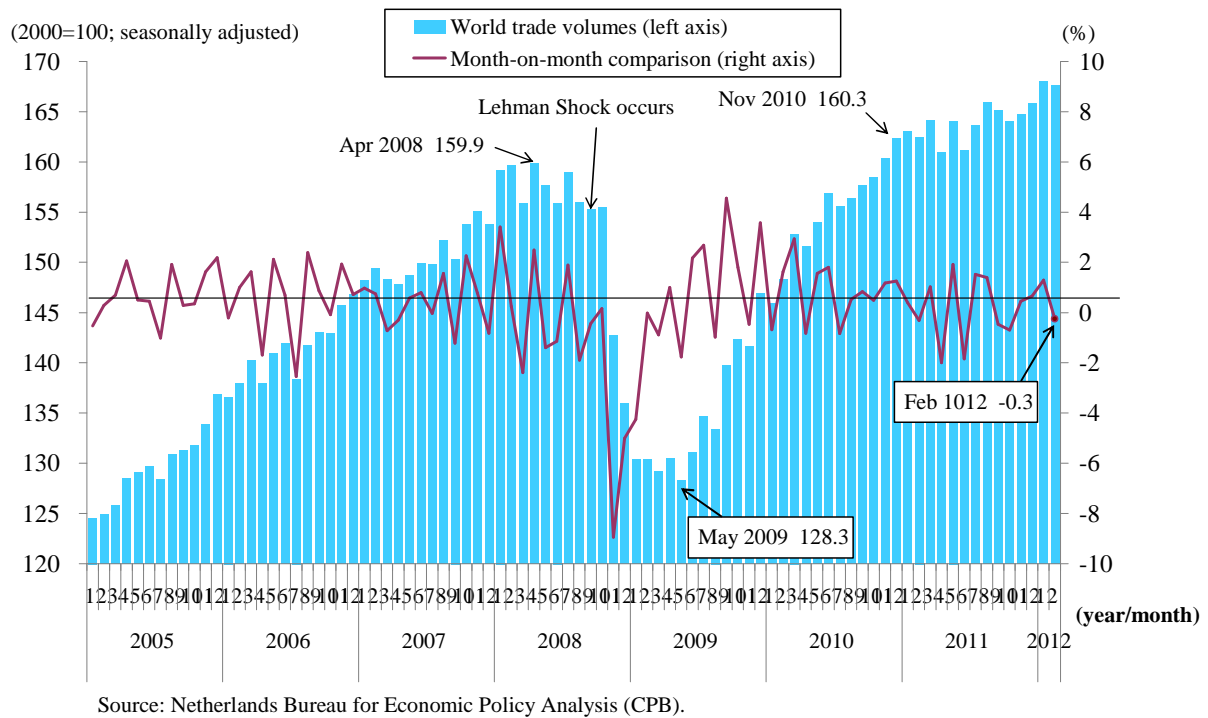
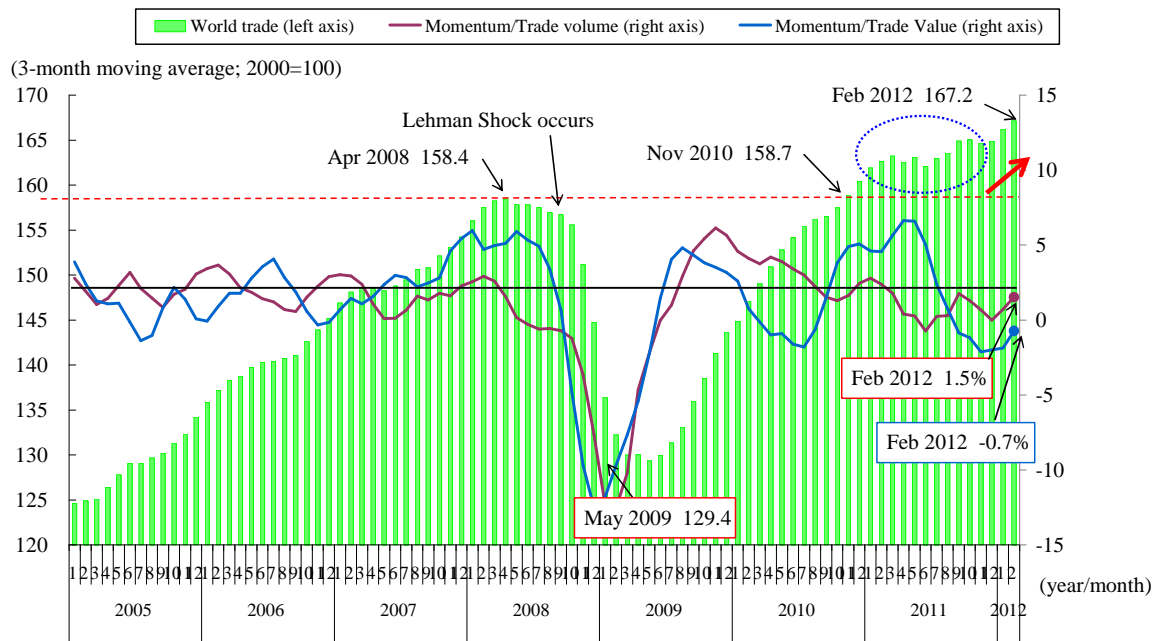


Figure 1-1-3-2
World trade volumes (3-month moving average)



Note: Momentum is the value obtained by dividing the current 3-month backward moving average by the immediately preceding 3-month backward moving average. The Netherlands Central Bureau of Statistics (CBS) says it is preferable to measure trends in trade volumes in terms of the moment, not based on too variable monthly trade data.

Source: Netherlands Bureau for Economic Policy Analysis (CPB).

In relation to import volumes by country/region we find that emerging economies in Asia and other

regions have enjoyed a strong recovery in and after mid-2009, while among advanced economies recovery is notable in the United States (Figure 1-1-3-3). Generally speaking, recovery in import volumes slowed in 2011, particularly in the euro area where a sovereign debt crisis continued. Then, following the start of 2012, import volumes began to recover principally among emerging economies while decreasing in the euro area on a month-to-month basis (Figure 1-1-3-4).

Export volumes, meanwhile, saw in 2011 a substantial recovery in emerging economies in Asia and other regions, while strongly rebounding in the United States among advanced economies. The euro area continued to suffer slumping exports, while Japan came through a substantial decline, which reflects the impact of the March 2011 Great East Japan Earthquake and the the floods experienced by Thailand in October of the same year (Figure 1-1-3-5). In 2012, export volumes are on a recovery trend, notably in emerging economies (Figure 1-1-3-6), while advanced economies continue to see stalling exports, including Japan whose export volumes are decreasing.

Figure 1-1-3-3
Import volumes by major country/region

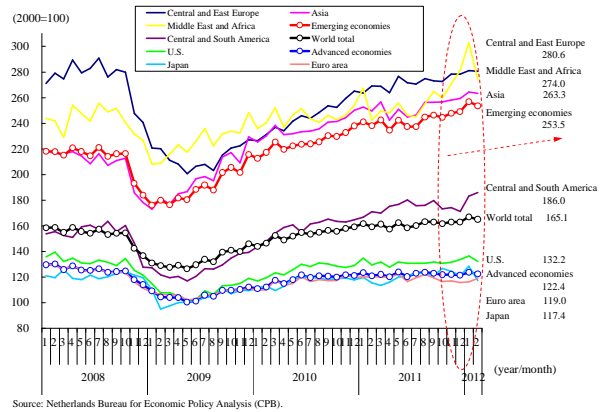


Figure 1-1-3-4
Import volumes by major country/region (in terms of momentum; October 2011- February 2012)

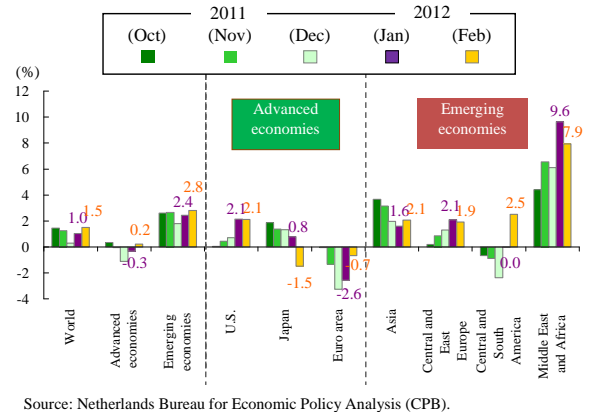


Figure 1-1-3-5
Export volumes by major country/region

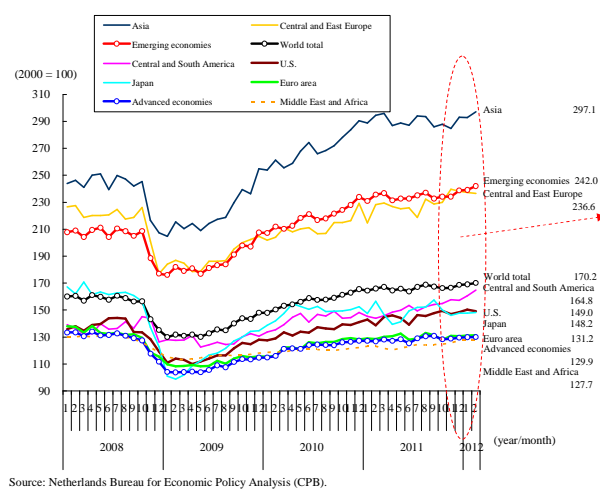
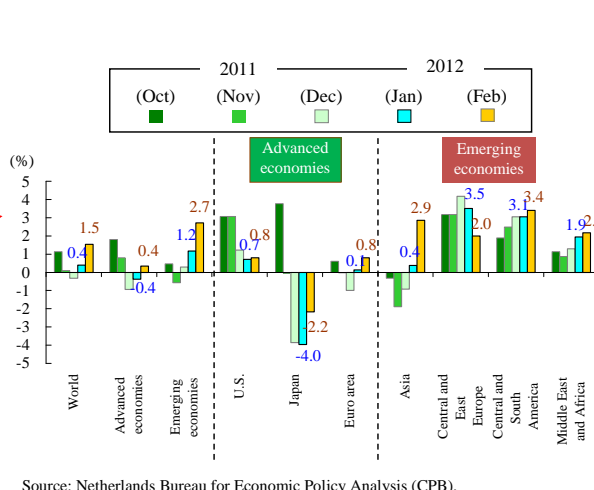


Figure 1-1-3-6
Export volumes by major country/region (in terms of momentum; October 2011- February 2012)



As shown above, world trade continued stalled in 2011 but began to show some signs of mild recovery in 2012, except in the euro area where imports continue decreasing, adversely affecting the recovery of exports of emerging economies that depend on the area as a principal export market. The WTO April forecast¹⁴ says that world trade will grow only 3.7% in 2012 (against 5.0% in 2011) in view of the impact of the moderate recession in the EU on emerging economies. Furthermore, should the currently more or less stable European debt crisis be reignited in 2012 it will likely further decelerate the world economy by way of trade routes.

(2) Trade trends in Europe: Decreased EU imports are affecting major exporting countries to EU

The EU27 is a large trade zone that accounts for some 34% of world imports and exports as expressed in dollars (as of 2011) (Table 1-1-3-7).

Table 1-1-3-7
Ratio of EU27 exports/imports to world exports/imports (2011)

	2011	
	Exports	Imports
World export/import values (trillions of dollars)	18,064	18,274
EU27 export/import values (trillions of dollars)	6,028	6,241
Ratio of EU27 exports/imports to world exports/imports (%)	33.4	34.2

Source: Short-term merchandise trade statistics, Quarterly World Trade Estimate (WTO).

In 2011 the euro area saw its trade volume growth stall from mid-2011 onwards against the backdrop of the reignited Greek debt problem and the ensuing deepening of the European debt crisis. Trade volume growth stalled. Particularly notable is a drop in import volumes (Figure 1-1-3-8). There are signs that imports began to pick up in January 2012, but very weakly. We must carefully watch future developments. Also value-wise, imports in the EU as a whole stalled in 2011 and began to decline in December of the same year (Figure 1-1-3-9). Presumably, such declining imports in the EU have adversely affected overall exports of major exporting countries to the euro era.

We will see below export trends in ten largest exporters to the EU27 (value-wise).¹⁵

14 WTO “WORLD TRADE 2011, PROSPECTS FOR 2012” (12 April 2012)
15 China, Russia, United States, Switzerland, Norway, Japan, Turkey, India, Brazil and South Korea.

Figure 1-1-3-8
Euro-area export/import volumes

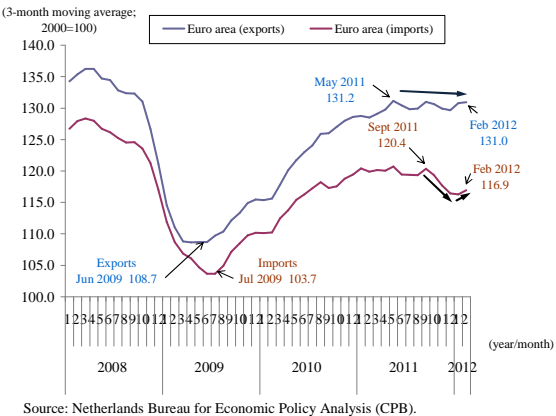
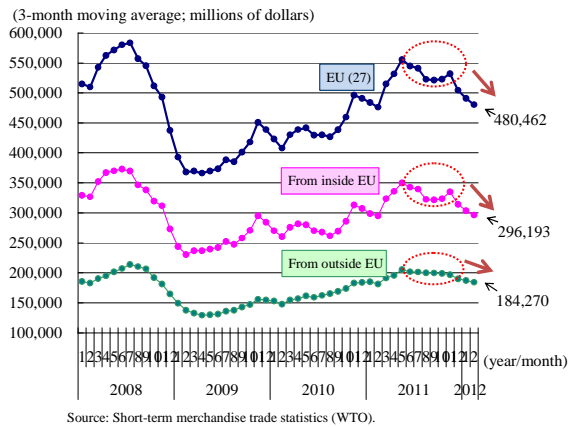


Figure 1-1-3-9
EU27 import values (indices; 3-month moving averages)



With respect to trends in overall export values of the target countries we see that export values generally continued growing to the third quarter, but notably topped out thereafter, beginning to decrease noticeably in the fourth quarter. There are signs, however, that exports have stopped falling or begun to increase at these moments (Figure 1-1-3-10).

If we focus on the exports to the EU of major exporting countries thereto we can see how they have been affected by the deepening European debt crisis. Figure 1-1-3-11 shows trends in exports to the EU among those of major exporting countries to the EU27 on whom data on monthly exports to the EU are available. Exporting countries to the EU27, with the exception of Russia,¹⁶ saw exports to the EU decline from the early autumn of 2011 onwards, most notably in the case of China. In 2012, the United States and South Korea saw their exports to the EU slightly picking up, but still lacking in momentum. Other economies continued to see declining exports to the EU.

16 About 80% of Russia’s major export items to the EU are mineral-fuel related items. The decrease in Russia’s exports to the EU in and after June 2011 and the increase in and after October of the same year is presumably attributable to the drop and surge in oil prices during the same period.

Figure 1-1-3-10

Trends in export values to the EU among top ten exporting countries to the EU

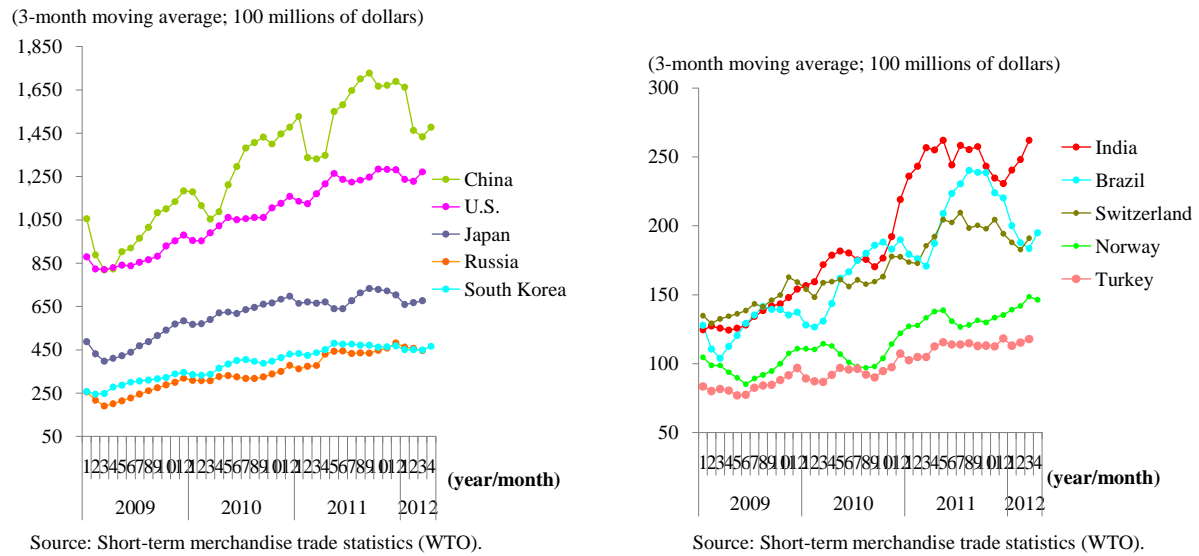
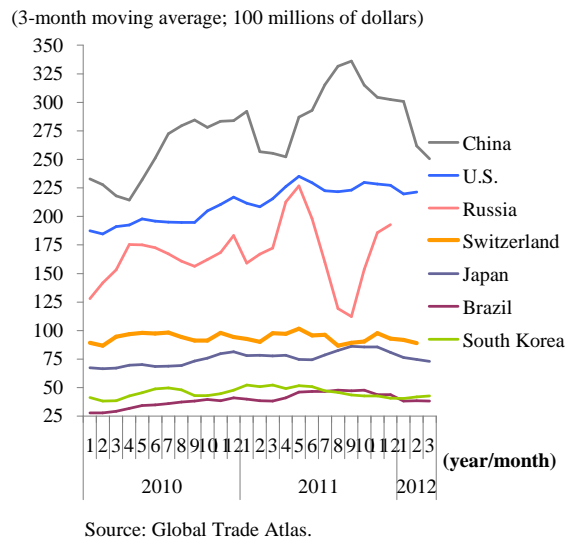


Figure 1-1-3-11

Trends in export values in major exporting countries to the EU



As seen above, exports to the EU dropped among major exporting countries thereto, indicating the adverse effects of the European debt crisis. Their exports began to show some signs of recovery in 2012, but the potential impact on non-EU countries to be caused by the EU's probable decrease in imports upon the reigniting of the European debt crisis remains a risk factor to the world economy.

(3) European debt crisis and world trade: What is suggested by a comparison of its impact on world trade and subsequent recovery with the impact of the Lehman Shock on world trade and subsequent recovery?

So far we have examined the impact of the European debt crisis on the exports of principally major

exporting countries to the EU27. Below we will see the degree of impact caused by the European debt crisis on the recovery of exports on a wider range of countries that export to the EU27.

Let us first compare the impact caused by the September 2008 Lehman Shock on world trade and the subsequent recovery, with the developments observed so far in world trade under the European debt crisis, and attempt to learn suggestions for the future.

(A) Degree of Lehman Shock's impact on world trade and recovery

Figure 1-1-3-12 shows changes in values of exports by major exporting countries between 2007 and February 2007 (on a 3-month moving average basis) organized by region. Many of the target countries saw their exports immediately prior to the Lehman Shock (which occurred in September 2008) peak in July 2008. So, hereinafter we will refer to this month as the "Reference Time" for measuring and determining the degree of the impact caused by the Lehman Shock on world trade and the recovery therefrom.

Please note that herein we will analyze changes in the values of world trade as expressed in the U.S. dollar and before seasonal adjustments. We must be careful because if an analysis is made in the target exporting countries' own currencies the result obtained will differ to a certain degree from the result being obtained in this paper.

Figure 1-1-3-12

Export values (by region)

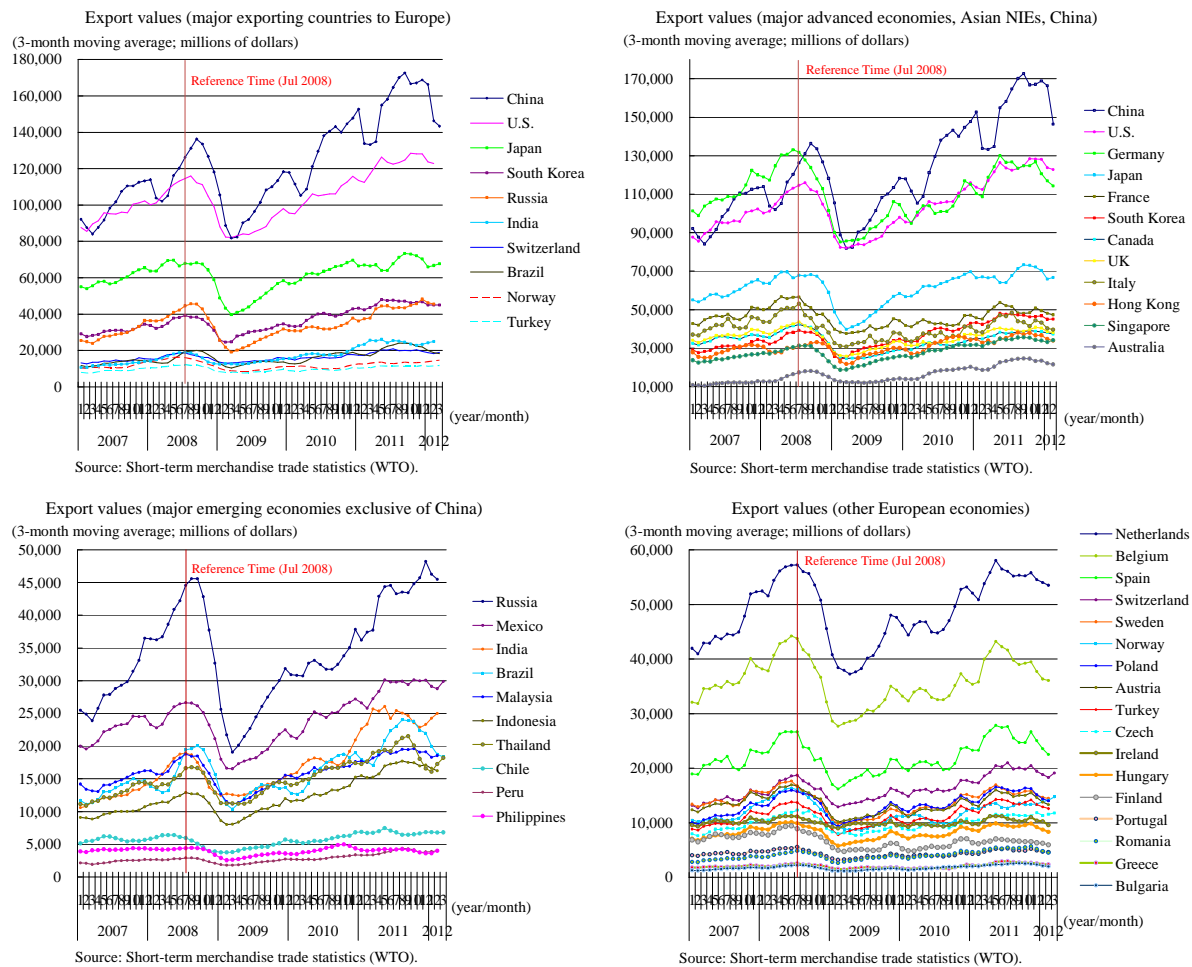


Table 1-1-3-13 shows on each of the target 40 countries/regions down to January 2008 its share of exports to the EU (expressed as a ratio of export values to the EU27 to export values to the world), the degree of drop in its export values (expressed as a percentage of drop in export values registered at the bottom time from the export values as of July 2008 which are taken as 100), the number of months elapsed from the Reference Time to the Bottom Time (the month when its export values fell deepest after the Lehman Shock), and the number of months it required for recovering its export values to the level as of the Reference Time.

The table shows that after the Lehman Shock it took generally seven to eight months for the target countries' export values to hit bottom dropping from the values as of the Reference Time. No substantial time difference is noticeable among the target countries. If we take the export values as of the Reference Time (July 2008) as 100, the drop in export values experienced by many of the target countries was a significant 30 to 50. It reaffirms that the target countries' export values fell deeply, simultaneously, and globally over a short period of time.

Substantially variable at the same time is the time required by the target countries for returning their export values to the values they had at the Reference Time ("Reference Value") after their export values hit bottom. Who first returned to the Reference Value are emerging economies in Asia, such as

Hong Kong, NIEs, China and ASEAN members, and resource-rich countries such as Australia. Russia, Mexico, Spain, and Central and Eastern European countries were so severely damaged by decreased exports to the United States that they experienced delays in recovering exports.

Table 1-1-3-13

Major economies' share of exports to EU, degree of drop in exports, period required for recovering exports, number of months elapsed from Reference Time to Bottom Time

	Share of exports to EU		Degree of drop in export values to Bottom Value from Reference Value (Reference Time : Jul 2008=100)		Period required for recovery to Reference Value (number of months)		Number of months elapsed for dropping from Reference Value (Jul 2008) to Bottom Value
Mexico	5.5	Ireland	-19.5	Hong Kong	22	Indonesia	7
Australia	7.5	U.S.	-28.4	Australia	23	Austria	7
Canada	9.4	Hong Kong	-30.1	South Korea	23	South Korea	7
Singapore	9.4	Australia	-30.8	China	23	Greece	7
Indonesia	10.1	Switzerland	-31.0	Thailand	24	Singapore	7
South Korea	10.1	Thailand	-32.7	Philippines	24	Switzerland	7
Hong Kong	10.2	France	-33.4	Indonesia	25	Sweden	7
Malaysia	10.4	India	-34.4	Peru	25	Spain	7
Thailand	10.5	Netherlands	-34.9	Chile	26	Czech	7
Japan	11.6	China	-35.2	Singapore	27	Chile	7
Philippines	12.4	Germany	-35.4	India	28	Germany	7
U.S.	18.1	Belgium	-36.7	Japan	28	Hungary	7
Chile	18.2	South Korea	-37.4	Mexico	28	Philippines	7
Peru	18.2	Turkey	-37.4	U.S.	29	Belgium	7
India	18.6	Indonesia	-37.8	Romania	32	Poland	7
China	18.7	Mexico	-37.9	Ireland	33	Portugal	7
Brazil	20.7	Peru	-37.9	Switzerland	33	Romania	7
Turkey	47.0	Spain	-39.3	Bulgaria	33	Ireland	8
UK	49.4	Austria	-39.4	Poland	33	Italy	8
Greece	50.5	Singapore	-40.0	Netherlands	34	UK	8
Finland	51.3	Poland	-40.5	Greece	34	Canada	8
Russia	53.5	Chile	-40.5	Sweden	34	China	8
Sweden	54.6	Malaysia	-40.6	Czech	34	Japan	8
Italy	55.4	UK	-40.6	Brazil	34	Finland	8
Switzerland	56.9	Sweden	-41.0	Malaysia	34	Brazil	8
Ireland	58.0	Japan	-41.5	Russia	39	France	8
Germany	58.6	Philippines	-41.6	Spain	40	Bulgaria	8
France	60.5	Canada	-41.6	Italy		U.S.	8
Bulgaria	62.2	Italy	-42.0	UK		Peru	8
Spain	65.1	Hungary	-42.0	Austria		Hong Kong	8
Austria	68.2	Portugal	-42.6	Canada		Malaysia	8
Romania	70.8	Greece	-42.6	Germany		Mexico	8
Belgium	72.1	Czech	-42.9	Turkey		Russia	8
Netherlands	72.4	Norway	-46.1	Norway		India	9
Portugal	72.5	Brazil	-46.6	Hungary		Netherlands	9
Hungary	75.5	Romania	-46.7	Finland		Thailand	10
Poland	79.1	Finland	-47.0	France		Turkey	10
Norway	81.0	Bulgaria	-47.9	Belgium		Australia	11
Czech	82.7	Russia	-57.2	Portugal		Norway	11

Note: Degree of drop is the ratio of the Bottom Value to the Export Value immediately preceding the Lehman Shock (taken as 100). "Period required for recovery" indicates the number of the month from the Reference Time (Jul 2008) in which the drop in export values following the Lehman Shock recovered and surpassed the Reference Value.

Source: Short-term merchandise trade statistics, Quarterly World Trade Estimate (WTO).

Furthermore, as of February 2012, three and a half years after the occurrence of the global economic crisis, there are not a few countries, principally European, that have been unable to recover the pre-Lehman Shock export values. Many of the countries that required 30 or more months for recovery of the Reference Value had experienced a 40% or deeper drop. Not a few countries including France and Germany are found among those that have yet to recover the Reference Value although they suffered a relatively shallow drop in export values. They are the countries that began to recover their export values after hitting bottom in February-March 2009, but saw their recovery trend interrupted as they

were placed under the impact of the downward pressure caused by the European debt crisis and other factors before recovering in full.

(B) Deceleration and recovery of trade amid the European debt crisis

Next, we will see how trade was affected by the European debt crisis and then recovered, and compare the impact of the debt crisis and the recovery therefrom with the impact and recovery experienced at the time of the Lehman Shock. For comparison we will use export values as compared on a year-on-year basis.

Figure 1-1-3-14 graphically represents export values compared on a year-on-year basis by country/region for the January 2008-January 2012 period.

The figure shows that all countries/regions simultaneously saw their export values substantially drop from a year ago due to the Lehman Shock. It took them generally one full year to see their export values recover and then exceed the pre-Lehman Shock level (Table 1-1-3-15).

Figure 1-1-3-14
Year-on-year changes in export values (by country/region)

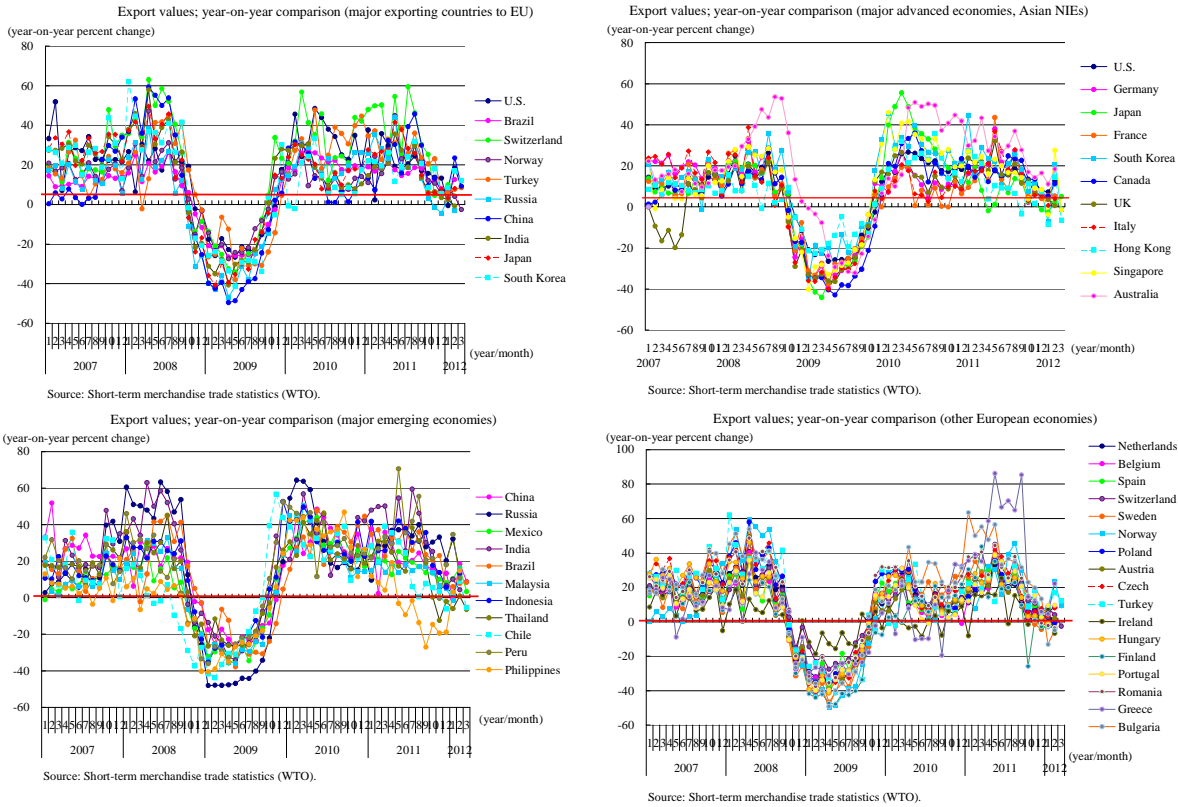


Table 1-1-3-15

Number of months required for export values to recover from below to above previous-year level after the Lehman Shock

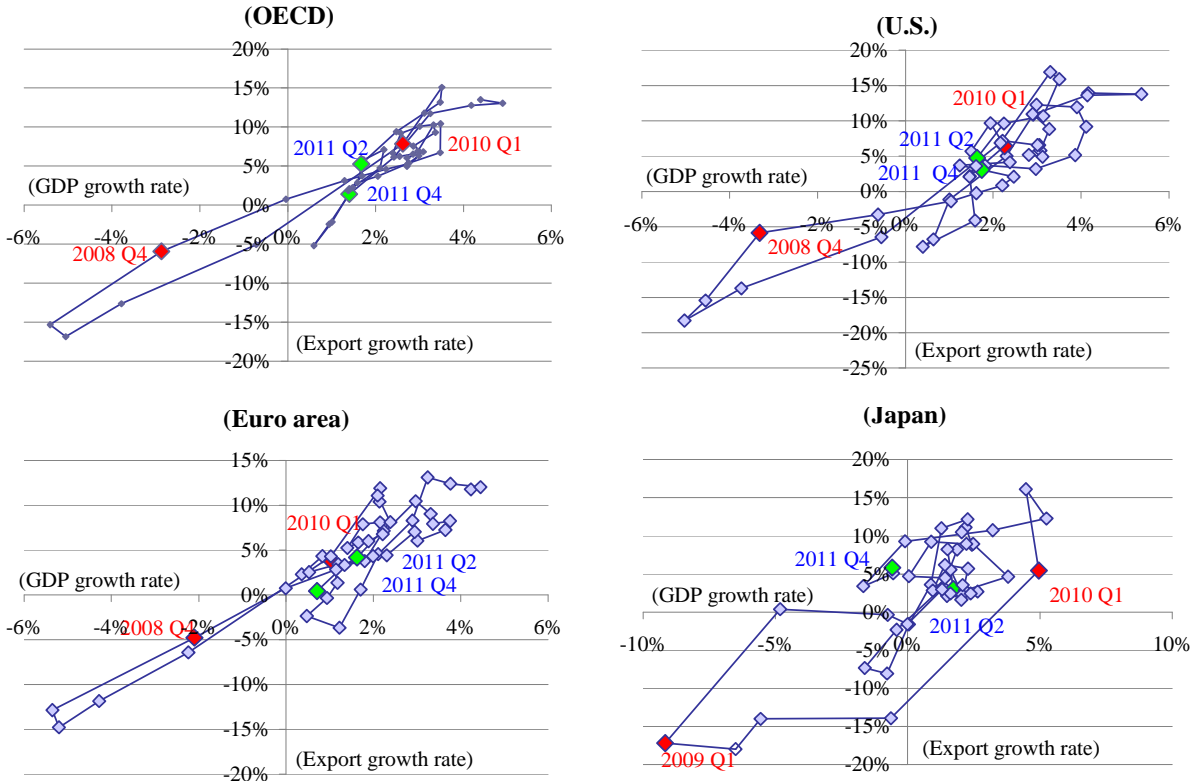
15 months	Italy, Finland
14 months	Ireland, Canada, Turkey
13 months	UK, Austria, Netherlands, Greece, Singapore, Sweden, Czech, China, Germany, Norway, Hungary, Philippines, France, U.S., Belgium, Portugal, Mexico
12 months	India, South Korea, Switzerland, Thailand, Chile, Japan, Brazil, Bulgaria, Peru, Poland, Malaysia, South Africa, Romania, Russia
11 months	Indonesia, Australia
10 months	South Korea, Hong Kong

Source: Short-term merchandise trade statistics, World Trade Atlas (WTO).

Meanwhile, in the early autumn of 2011 when the European debt crisis deepened, we find that although many of the target countries were suffering a slowing growth of export values, the drop they experienced in export values is far milder than the drop they suffered at the time of the Lehman Shock. In many cases, their export values stayed above the preceding year’s level. This is considered attributable to the deceleration of the world economy being much less than it was at the time of the Lehman Shock, at least at the present moment. Generally, the rate of growth of a country’s exports is closely correlated to the rate of its economic growth. The unusually great drop in trade experienced at the time of the Lehman Shock can be primarily attributed to the unusually great decline of the economy, rather than to any particular factors related to the then-trade environment. The currently experienced trade deceleration stays within the scope of the linear relationship that has been observed over the past ten years or so between the rate of economic growth and the rate of growth of trade values (Figure 1-1-3-16).

Figure 1-1-3-16

Export growth rates and GDP growth rates (year-on-year comparison) (2000Q1-2011Q4)



Note: ◆ At the time of Lehman Shock
◆ At the time European debt crisis
 Source: OECD Quarterly National Accounts.

Column 1 Causes of a sharp trade drop following the Lehman Shock

A dramatic drop in world trade values was recorded between the fourth quarter of 2008 and the first quarter of 2009 following the Lehman Shock. The drop is so unprecedentedly severe and simultaneous as it occurred across all countries that it attracted worldwide attention being termed the “Great Trade Collapse” from its early stage.

The cause of the drop cited in the first place is the decline in the world economy. We have learned in the body text that a stable long-term relationship exists between changes in the entire economy and changes in trade values. In the situations subsequent to the Lehman Shock we find that, in light of the great decline experienced by the world economy, the drastic trade drop kept within the scope of the traditionally known fluctuation pattern (OECD, (2010), Crowley and Luo (2011)).

We see, however, that the pattern of the post-Lehman Shock trade drop and recovery therefrom substantially varied from one item to another. According to Crowley & Luo (2011), trade values experienced a greater drop in: (A) goods trade than in service trade; (B) product trade than in oil trade; and (C) durable goods trade than in nondurable goods trade. The analysis made by Eaton et al. (2011) shows that decreases in demand account for 80% of decreases (in terms of the ratio to GDP) in actual trade values, and particularly, decreases in demand for durable goods (machinery, metals, wood products, etc.) accounts for 64% of the decreases in trade values.

Furthermore, causes of a trade drop can be decomposed into four factors; namely, quantity, price,

entry of new trade items, and exit of existing trade items. The analysis made by Haddad et al. (2011) finds that entry of new trade items or exit of existing trade items has little impact on a trade drop and that a substantial part of a drop is attributable to a quantity factor. Particularly when they examined the cause of trade drop separately on commodities and products, they found that the drop in commodities trade is largely attributable to a price factor, while the drop in product trade, to a quantity factor.

An interesting thing seen here is that there occurred even an increase in prices of products. If a decrease in demand is responsible for a decrease in trade, there should then occur a decrease in the prices of products traded, and consequently, there might have been a price-related problem, not only on the demand side but also on the supply side, in relation to product trade.

What is generally viewed as a supply-side factor for a trade drop is a possibility that any problems may have occurred in trade finance and a possibility that trade may have become difficult because of trade protection measures. Proliferation of protectionism has been intensely watched out for since shortly after the occurrence of the Lehman Shock. The WTO set up a monitoring system against protectionist measures. The system has revealed to a considerable extent protectionist measures actually adopted in various countries and leads us to generally believe that world trade as a whole is affected by such measures only in a limited manner (OECD, 2010; Crowley and Luo, 2011). Eaton et al. (2011) shows that a substantial part of the drop in trade values that occurred following the Great Depression of the 1930s was attributable to factors other than a demand decrease, indicating that the modern world trade system has proved to be resistant to protectionism. It was also found, however, that while the effect of protectionist measures remained limited because they had been implemented only in a limited manner, when they were actually implemented, they effectively reduced trade (Henn and McDonald, 2011).

Trade finance was another issue of great attention as is seen in the agreement on ensuring support for trade finance reached at the London G20 summit held in April 2009. It is difficult, however, to demonstrate for lack of data whether trade finance actually caused trade to decline. Amundson et al. (2011) finds that the results of an independent questionnaire survey do not attribute principal causes of a trade drop to trade finance.

Lastly, we would like to refer to Shioji and Uchino (2011). They examined and analyzed the automotive industry in particular, and found that the sharp drop in car exports Japan experienced during this period cannot be properly accounted for only by a demand decrease or contraction of trade credit referred to above; they find that production for exports was caused to sharply decrease because the progressing financial crisis in the United States adversely affected and because domestic car manufacturers strongly adjusted downward their production in order to trim at a dash their inventory that had sharply built up in the autumn of 2008.

(4) Trade relationship with EU and the degree of import recovery

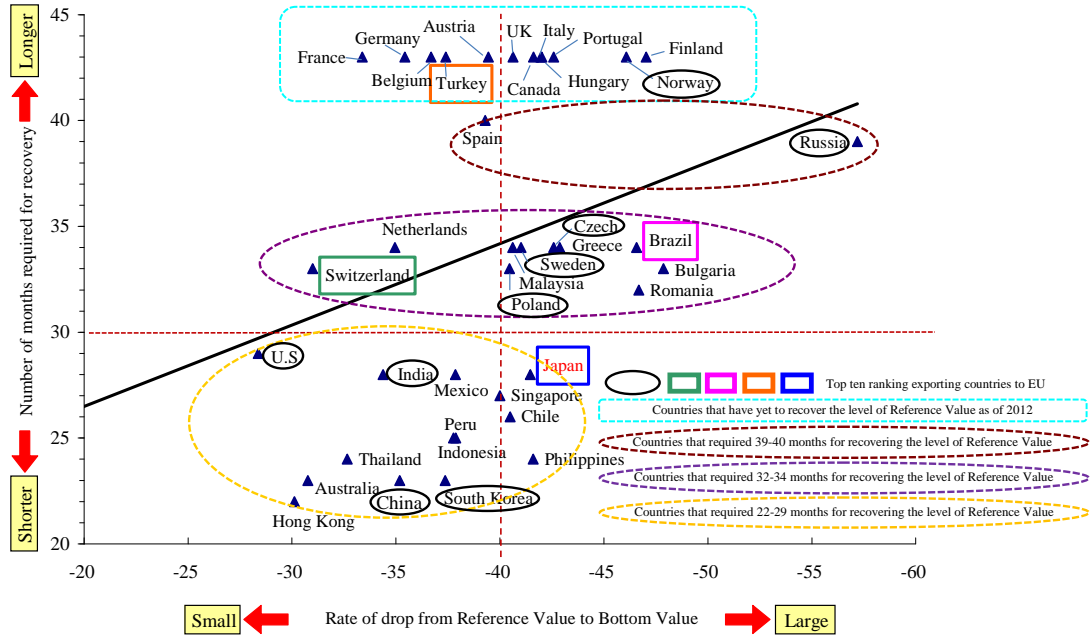
So far we have examined in detail the trends that developed in world trade since the Lehman Shock till the European debt crisis. And we have seen that as shown in Figure 1-1-3-12 above the degree of drop in export values and the speed of recovery therefrom vary from one country/region to another.

The degree of impact caused by a demand decrease in the EU on export values of an exporting

country is considered to vary depending upon its share of exports to the EU and other factors.¹⁷ Here we will examine to see how an exporting country's share of exports to the EU affects a decrease in its exports and a recovery therefrom due to the European debt crisis.

For the above purpose we will review all available data back to 2008 in view of the fact that not a few countries have yet to recover from the impact of the European debt crisis of 2008. For our review, examination and analysis we will take up the same countries that we examined in relation to the impact of the Lehman Shock on exports referred to in 3 (1) above.

Figure 1-1-3-17
Degree of drop from Reference Value and the period required for recovery

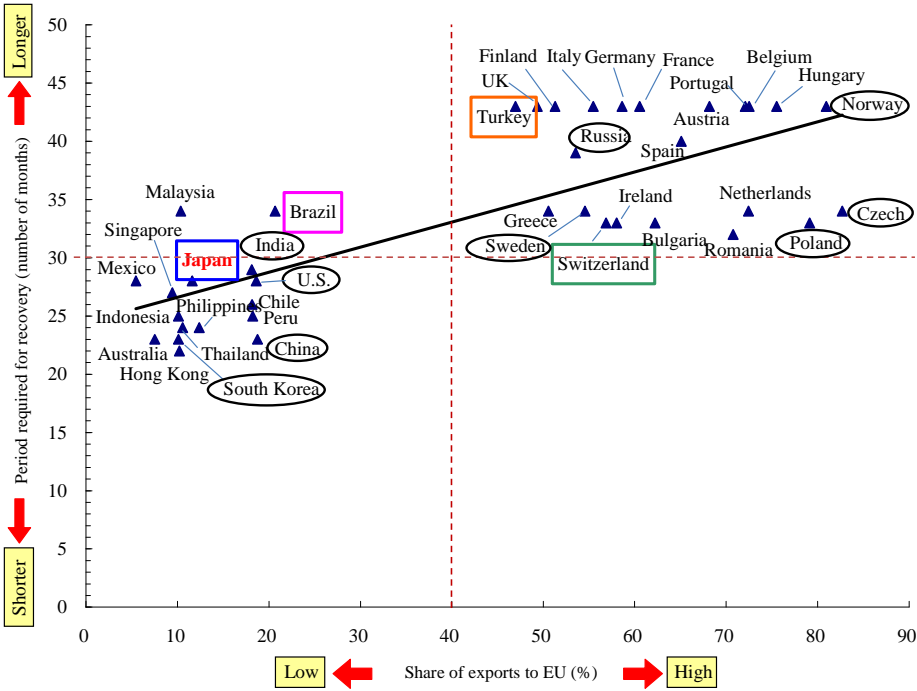


Source: Short-term merchandise trade statistics, World Trade Atlas (WTO).

17 In “Global Economic Prospects” (Jan. 2012) the World Bank indicates as factors affecting the degree of impact caused on an exporting country by a decrease in demand in the EU its share of exports to the EU and the composition of items for export to the EU.

Figure 1-1-3-18

Countries' shares of exports to EU and the period required for recovery



Source: Short-term merchandise trade statistics, World Trade Atlas (WTO).

Figure 1-1-3-17 and 1-1-3-18 above show relating to each target country the relationship that exists among and between three factors: The period (number of months) it required for recovery of its export values to the level of the Reference Value, the ratio of its EU export values to its total export values, and the percentage of the drop of its export values from the Reference Value to the Bottom Value.

The two graphs drawn therein show clearly that the deeper the drop from the Reference Value is, and the higher the share of its exports to the EU is, the longer the time required for recovery of export values to the pre-Lehman Shock level. The graphs show that for recovery a long time was required by advanced European economies, Central and East European economies, Russia and some other economies while advanced countries/regions other than European as well as major emerging economies/ regions made a recovery in a comparatively short period.

For further verifying such trends we divided 10 major exporting countries to the EU in three groups based on the required recovery period as shown below.

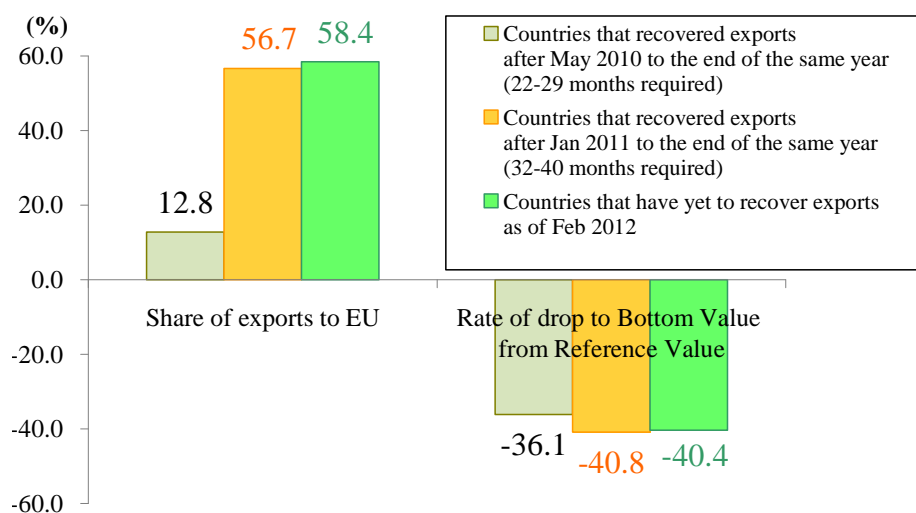
- Countries that recovered the level of the Reference Value between May and the end of 2010;
- Countries that recovered the level of the Reference Value between January and the end of 2011;
- Countries that have yet to recover as of February 2012 the level of Reference Value.

Then, on each of the groups we found the average¹⁸ of the ratio of its EU export values to its total export values, and of the degree of its drop in export values from the Reference Value to the Bottom Value. The comparison of the three groups is shown below (Figure 1-1-3-19).

18 We use here simple arithmetic averages regardless of the value of trade.

Figure 1-1-3-19

Comparison of shares of exports to EU and degrees of drop, by period required for recovering export values



Note: The rate of drop is a rate of drop to the lowest export value (Bottom Value) from the export value immediately preceding the Lehman Shock, which is taken as 100 (Reference Value). The period required for recovery indicates the number of the month counted from the Reference Time (Jul 2008) in which a country's export value surpassed the Reference Value. The number is a simple arithmetic average regardless of the trade value.

Source: Short-term merchandise trade statistics, World Trade Atlas (WTO).

As is shown by the graph, if we compare the share of exports to the EU on the group that recovered exports within 2010 and on the group that had yet to recover exports as of February 2012 we find a significant difference between the shares held by the two groups. The share of the former is 12.8% and that of the latter is 58.4%. Thus, we find that the period required by a target country for recovering exports to the level of the Reference Value tends to be related to its share of exports to the EU (i.e., the lower is the share of exports to the EU, the quicker is the recovery of export values).

With respect to the relationship between the period required for recovery of export values and the depth of drop in export values we find that the deeper the drop is, the longer is the time required for recovery, given that the group that recovered export values within 2010 had a 36.1% drop while the drop of the group that have yet to recover as of February 2012 was 40.4%.

On the basis of the above result we will check and verify the relationship that exists between such three factors as the share of exports to the EU, speed of recovery and the degree of drop on ten major exporting countries to the EU,¹⁹ which was the epicenter of the European debt crisis.

In each of Figure 1-1-3-17 and Figure 1-1-3-18 above we divide the graph drawn therein into four faces and see where each of the ten target countries belongs. We find China, United States, South Korea and India positioned in the lower left face (for countries with a lower share of exports to the EU or a less deep drop in exports to the EU and therefore required a shorter period for recovery), and Russia and Norway in the upper right face (for countries with a higher share of exports to the EU or a

¹⁹ China, Russia, United States, Switzerland, Norway, Japan, Turkey, India, Brazil and South Korea.

deeper drop in exports to the EU and therefore required a longer period recovery). Such positioning is consistent with the afore-mentioned trends whereby the deeper its drop from the Reference Value is, and the higher its share of exports to the EU is, the longer is the period required for recovery.

Different from the above countries, in a notable manner the following four countries belong in different faces in the two graphs, deviating from the above trend.

- Japan : Deeper drop; lower share of exports to EU; shorter recovery period.
- Brazil : Lower share of exports to EU; deeper drop; longer recovery period.
- Switzerland : Less deep drop; higher share of exports to EU; longer recovery period.
- Turkey : Less deep drop; higher share of exports to EU; recovery yet to be made.

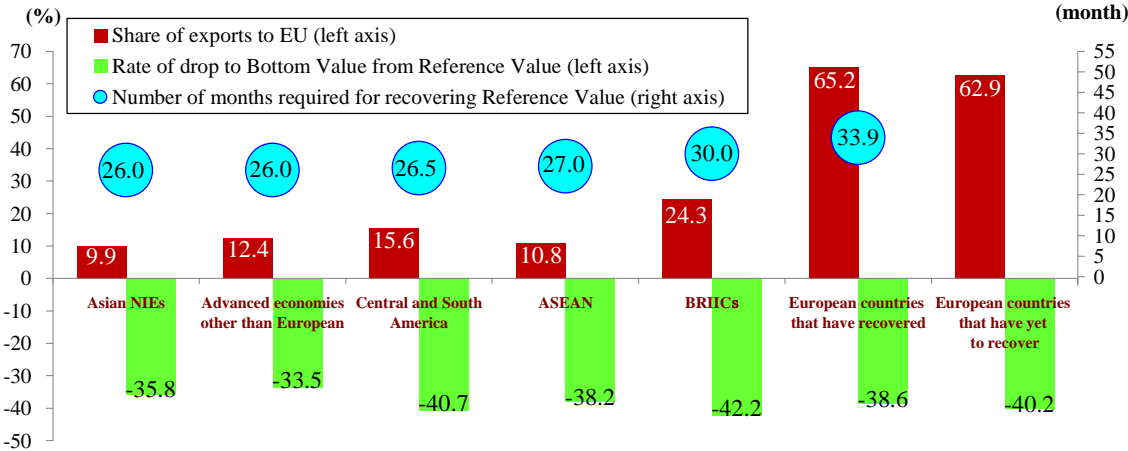
Presumably one of the causes of these trends is the item composition for exports to the EU. Let us examine the upper ranking items for exports to the EU on each of the four countries mentioned above. In the case of Japan, upper ranking export items to the EU are general machinery, electric machinery and cars; in the case of Brazil, they are precious metals, iron ores, fodder and crude oil; and for Switzerland, pharmaceutical products, jewelry and general machinery. Presumably Japan suffered a severe drop because of a substantial decrease in car exports, while Brazil did so due to a drop in prices of resources and energy. For its part, Turkey is considered to have delayed in recovering exports because its car exports were in a slump, while Switzerland saw only a slight decline because its export of pharmaceutical products was relatively stable.

By comparison, among the ten target countries the United States comes in first place both in the degree of drop in exports to the EU and in the period required for recovery of its exports. What explains such a situation of the United States is presumably the quick recovery in exports to the EU of top ranking export items to the EU, such as general machinery, precision machinery and pharmaceutical products.

Next, Figure 1-1-3-20 compares by region and on the countries composing each region, the average share of exports to the EU, the degree of drop in export values from the Reference Value to the Bottom Value, and the time required for recovery.

Figure 1-1-3-20

Comparison by region of shares of exports to EU, degrees of drop, and periods required for recovery



Note: The rate of drop is a rate of drop to the lowest export value (Bottom Value) from the export value immediately preceding the Lehman Shock taken as 100 (Reference Value). The period required for recovery indicates the number of the month counted from the Reference Time (Jul 2008) in which a country's export value surpassed the Reference Value. The number is a simple arithmetic average regardless of the trade value.

Following are the countries that compose each region:

- Asian NIEs: Singapore, Hong Kong, South Korea.
- ASEAN: Philippines, Indonesia, Malaysia, Thailand.
- Advanced economies other than European: Japan, Australia, United States (Canada is not included as it has yet to recover).
- Central and South America: Brazil, Mexico, Peru, Chile.
- BRIICs: Brazil, Russia, Indonesia, India, China.
- European countries that have recovered: Romania, Switzerland, Netherlands, Bulgaria, Czech Republic, Sweden, Poland, Ireland, Greece, Spain
- European countries that have yet to recover: France, Germany, Belgium, Turkey, Austria, United Kingdom, Italy, Hungary, Portugal, Norway, Finland.

Source: World Trade Atlas, Short-term trade statistics (WTO).

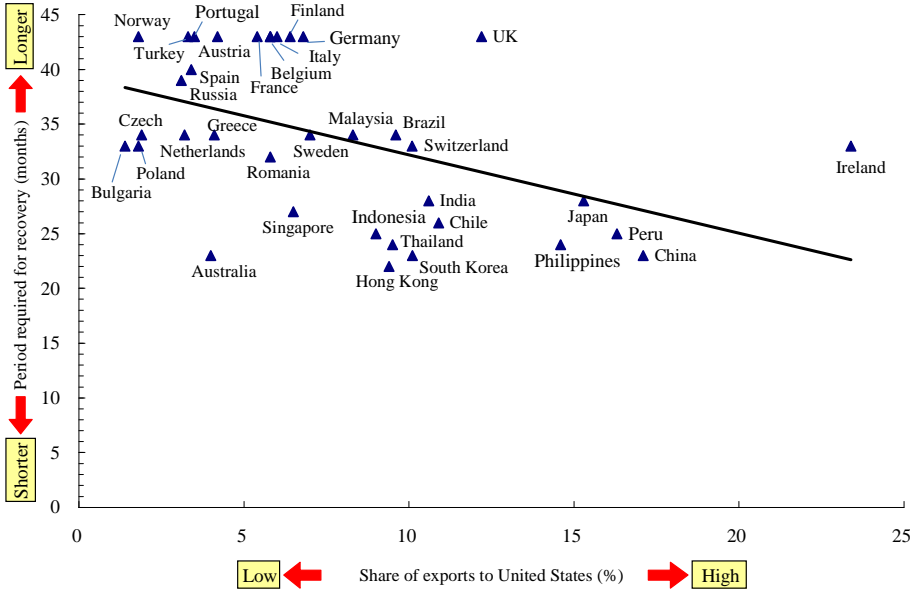
How many months did each region require for recovering export values? Notable are the periods required by Asian NIEs (26 months), “advanced economies other than European” (26 months), followed by Central and South America (26.5 months) and ASEAN (27 months), and one step later, by BRIICs (30 months), indicating a strong recovery generally among Asian regions. By comparison, Europe needed a longer period of time. The shortest recovery was made by “European countries that recovered” (33.9 months), about eight months later than the first-to-recover Asian NIEs (26 months), not to mention “European countries that have yet to recover.” What lies behind such a difference is presumably the fact that: The share of exports to the EU was low among Asian NIEs (9.9%), ASEAN (10.8%), “advanced countries other than European” (11.7%) and Central and South America (15.6%), and comparatively low in BRIICs (24.3%), while the share was high among “European countries that have yet to recover” (62.9%) and “European countries that recovered” (65.2%), these last two having been directly affected by a decrease in imports by Europe. Another reason for the delayed recovery of exports in “European countries that have yet to recover” and “European countries that recovered” is presumably that these countries have export destinations inside the euro area and therefore have not sought to attract growth and domestic demand of emerging economies.

As seen above, we have verified the tendency whereby “the higher a country’s share of exports to the EU is, the longer is the period required by the country for recovery of export values to the pre-Lehman Shock level.” Contrastingly, a tendency opposite to the above is given by a study of the relationship between the period required by a country for recovery of its exports to the pre-Lehman

Shock level and its share of exports to the United States. The study indicates: The higher a country's share of exports to the United States is, the shorter is the period required by the country for recovery of export values (Figure 1-1-3-21). The recent European debt crisis led to sluggish EU imports, adversely affecting the countries with a high share of exports to the EU because they suffered a drop in exports to the EU. Contrastingly, three and a half years after the Lehman Shock occurred, U.S. imports continue on a recovery trend. Thus, it is possible that the higher an exporting country's share of exports to the United States is, the greater is the positive contribution made by such share to the country's trade, thereby making up for the decrease in exports to the EU. Given such a possibility, the sustainability of the U.S. economic recovery may affect the recovery of world trade in the future.

Figure 1-1-3-21

Countries' shares of exports to the United States and the period required for recovery of exports



Source: World Trade Atlas, Short-term trade statistics (WTO).

(5) Summary

Thus far we have examined the impact of the European debt crisis on countries' exports and how they have recovered exports, tracing the relevant data back to 2008 because the recovery of exports is inseparably related to the impact of the Lehman Shock. As seen above, not a few countries exist, principally in Europe, that have yet to recover the pre-Lehman Shock level of export values three and a half years after the occurrence of the world financial crisis. In the early months of 2011 the world saw serious events occurring or developing in the world, such as the Great East Japan Earthquake, the worsening political situation in the Middle East that sent oil prices soaring, the slowing economy in the United States, and the sovereign debt crisis in Europe. All these events served to frustrate positive developments in the world economy on its recovery track from the Lehman Shock.

The World Bank tentatively calculates that even if world volume-wise exports grow at an average annual rate of 7.5% surpassing the rate expected by the bank, the world will need four more years until it recovers export volumes that the world should have if it had not been for the Lehman Shock (Figure

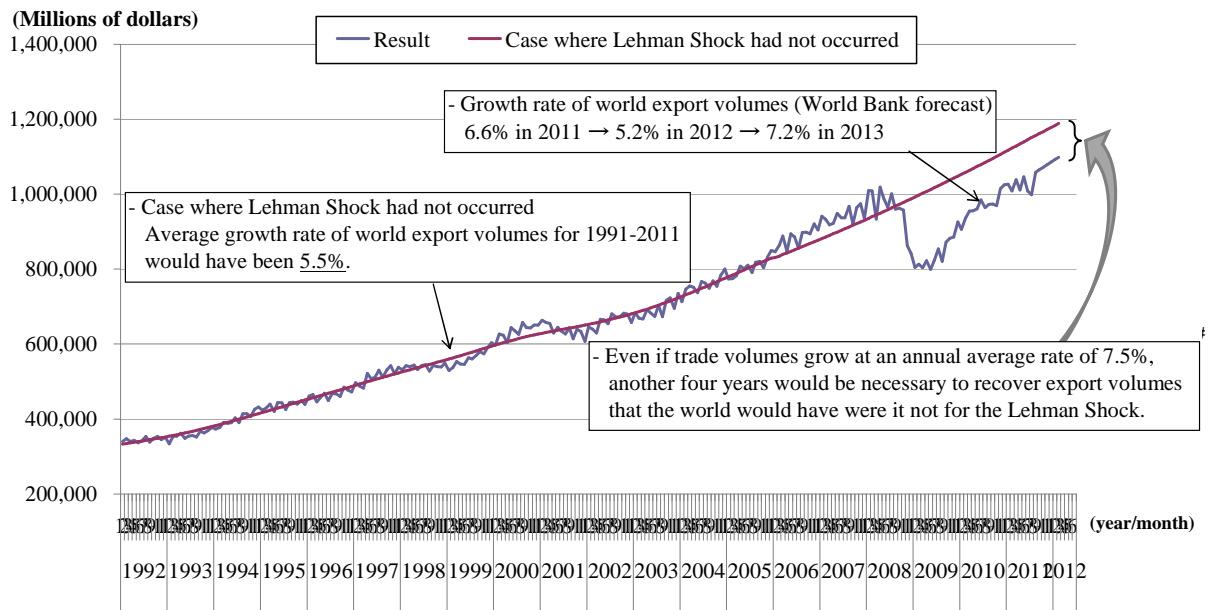
1-1-3-22).

Future risk factors are considered to be oil price surges, uncertainty about the full-fledged recovery of the U.S. economy, slowdown of the Chinese economy, re-emergence of protectionism, etc. The future of world trade allows for no optimism.

We need to continue carefully watching the course of the world economy toward a recovery track that experienced a stall in 2011, along with new developments in the European debt crisis and the prospects of the recovery of the U.S. economy.

Figure 1-1-3-22

World trade volumes (as compared with the volumes were it not for Lehman Shock)



Source: *Global Economic Prospects 2012* (World Bank).

4. Future remarkable points and risk factors

(1) Expansion of European debt crisis

(A) Effect of asset reduction by major European banks

The euro-area summit held on October 26, 2011 required 70 major euro-area banks to meet by the end of June 2012 the new capital adequacy ratio (core Tier 1 ratio) which was raised from 5% to 9% as one of the measures to address the European debt crisis. So, all major European banks will seek to shore up their capital base inside or outside Europe by the end of June 2012. If their recapitalization gives rise to asset reduction or other unfavorable situations as mentioned below, it will likely dampen the world economy:

- Outflows of capital resulting from sale of subsidiaries or other properties, or withdrawal of investments in securities; currency depreciation; plunges in stock prices.
- Stricter lending stance in countries/regions due to tighter lending control.

(B) Higher interest rates due to stepped-up risk-off stance

If interbank lending rates or corporate bond yields rise, it will add to the cost of corporate or

household financing, and may curb household spending or corporate investments.

(C) Fears of hasty measures for fiscal consolidation being likely to dampen the economy

If concerns grow again about the sustainability of countries' public finances and urge them to take hasty measures for fiscal consolidation, it will further add to downward pressure on the economy.

(D) Reigniting of fears of the financial system

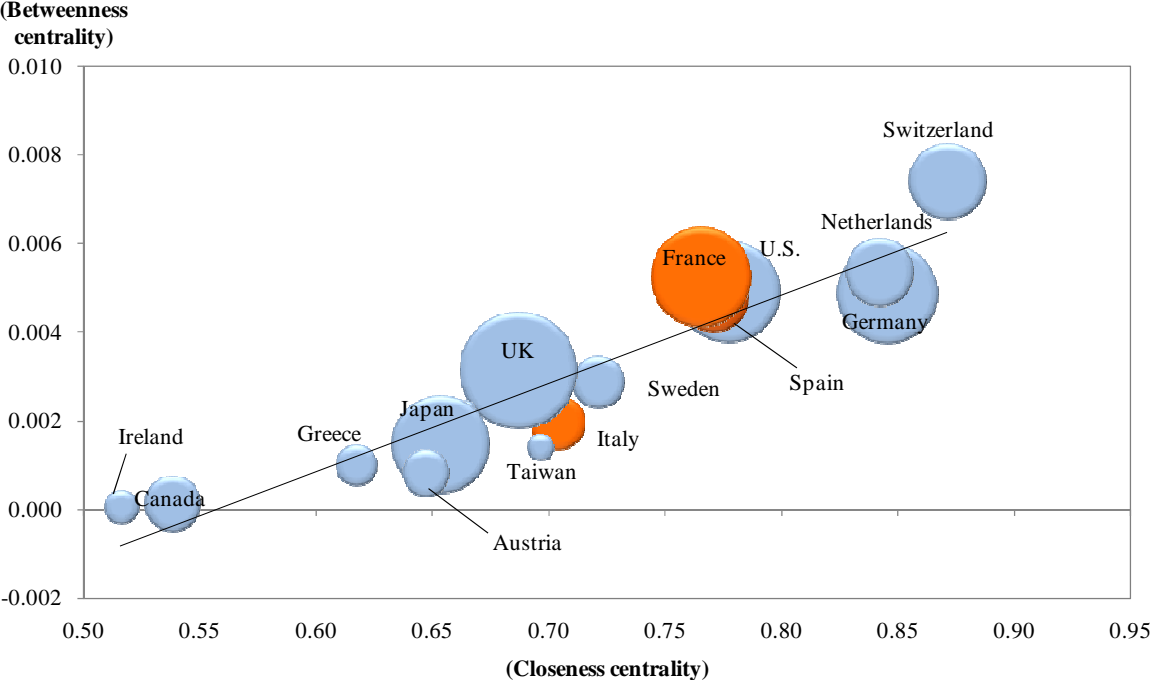
If fears are reignited over the credibility of euro-era government bonds and spread to involve Italian or Spanish bonds in particular, such fears may seriously affect the world economy again via euro-area financial markets. Figure 1-1-4-1 shows the importance of financial institutions in each country's financial system using two network indicators.²⁰ The figure shows that France, Spain and Italy each have a higher closeness centrality and a higher betweenness centrality than Greece, and therefore are assigned a higher degree of importance in financial networks.

The EU authority and its member countries have been discussing expansion of their emergency firewall (EFSF, ESM) to create a framework for extending bailout funds in case in the future Italy, Spain or any other member country is forced into full-scale debt restructuring. At the March 30 meeting of euro-area finance ministers they agreed to raise their emergency firewall to 700 billion euros from the currently available 500 billion euros. We should carefully watch if this measure will serve to dispel market fears.

In case any of the situations (A) through (D) above should actually occur, it may act as a factor that further dampens the world economy reflecting the destabilization of financial markets.

20 Closeness centrality is an indicator of the sense of closeness with other countries. The higher its value, the fewer are the steps required for transferring funds to different places. Betweenness centrality is a concept that represents the role performed by the "hub" in a financial market. The higher its value, the greater is the role of intermediating in transactions between other regions.

Figure 1-1-4-1
 Network indicators of banks in each country (end of September 2011)



Note: ○ represents the size of external claims owed to banks of each country.
 Source: *International Consolidated Banking Statistics January 2012* (BIS).

(2) Limits to room for further macroeconomic policies in Europe and United States and the impact of such limits on the economy

In an effort to cope with the U.S.-originated financial crisis triggered by the 2007 subprime lending problem and the 2008 Lehman Shock, countries resorted to large-scale fiscal measures aimed at supporting their economies and stabilizing their financial system. While greatly contributing to the recovery of the world economy these fiscal measures weighed on countries’ fiscal conditions. In the early months of 2011 the United States faced political confusion over raising its debt ceiling, which added to the existing uncertainty about the future of its fiscal problem. In addition, many of the advanced economies are preserving easy monetary policies and have little room left for implementing monetary or fiscal policies designed to stimulate domestic demand as they had at the time of the world economic crisis (Figure 1-1-4-2, 1-1-4-3).

Emerging economies have larger room for cutting policy interest rates than advanced economies. They are generally in a good fiscal condition, too. But some emerging economies now have a larger debt balance than the balance they had at the time of the global financial crisis. So now they have narrower room for implementing monetary or fiscal policies aimed at stimulating domestic demand.

Thus, should another global economic crisis hit the world, neither advanced nor emerging economies may be expected to adequately address the crisis. It may cause the world economy to be in a slump longer than seen in the 2008-2009 financial crisis. It is also likely that fragilities that are latent in a normal economic situation will become manifest and require to be addressed by new policy measures.

Figure 1-1-4-2

Policy interest rates (major advanced and emerging economies)

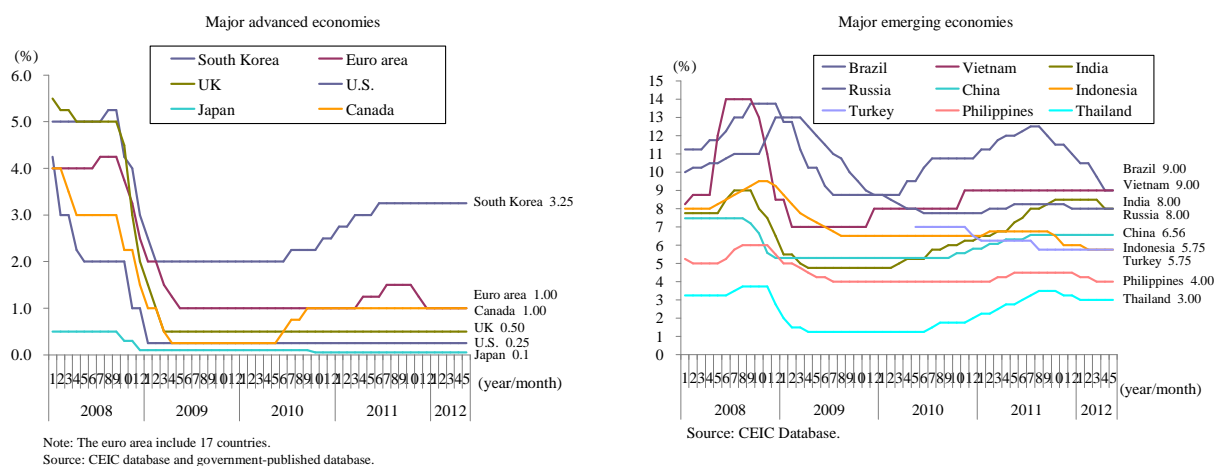
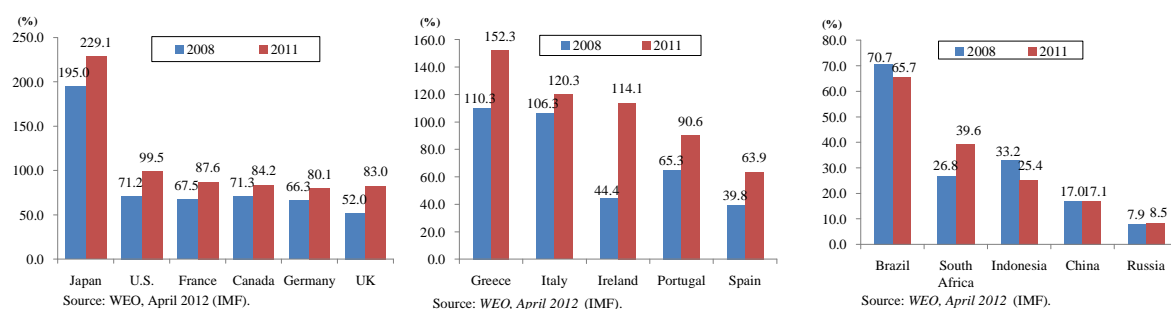


Figure 1-1-4-3

Government debt-to-GDP ratios (major advanced and emerging economies, PIIGS)

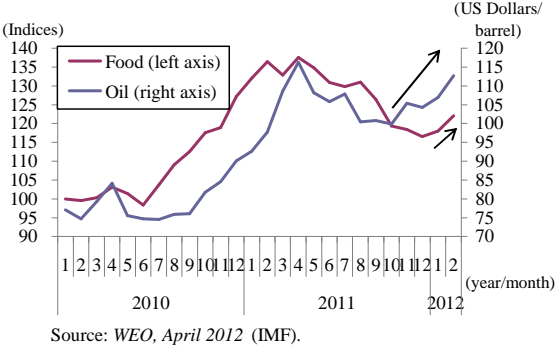


(3) Volatility in international commodity markets

The past few years have seen international commodity markets violently fluctuate. In 2011, commodity prices generally dropped on the global economic slowdown (Figure 1-1-4-4). It happened, however, that in November of the same year oil prices surged again over an increasingly unstable situation in the Middle East surrounding Iran, and have continued to stay at high levels in 2012. In addition, also commodity prices have risen following oil price surges, giving rise to various macroeconomic problems, such as growing upward pressure on inflation, decreased real income, and impact on people's life in low-income countries that are highly dependent on commodity imports.

Figure 1-1-4-4

Prices of resources and food



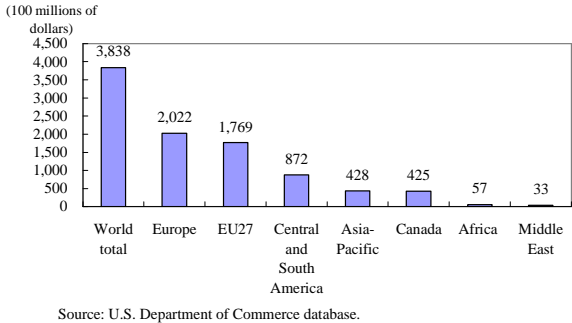
(4) Uncertainty about full-fledged recovery of the U.S. economy

(A) Impact of the European debt crisis

If the European debt crisis deepens again, also the U.S. economy is likely to be affected through financial markets. In trade, 14% of U.S. exports are bound for the euro area. A slowdown in exports may exert strong downward pressure on its economy. Half of U.S. direct investments are bound for Europe, exceeding in 2011 the US \$200 billion mark (Figure 1-1-4-5). As half of the U.S. income from direct investments is derived from Europe, a slowdown of the European economy is likely to result in a decrease in U.S. corporate income.

Figure 1-1-4-5

U.S. foreign direct investment (2011)



(B) Balance sheet adjustment in the household sector

The United States has seen progress in household balance sheet adjustments and signs of consumer loan balances increasing. These are positive economic signs. However, a substantial part of household debts is home loans, and it will be more than a few years before the current glut of housing stock is adequately trimmed. Although from the second half of 2011 onwards there has been some improvement in U.S. economic indicators, job and housing markets have yet to be in a full-fledged recovery, which does not allow for optimism. Attention is now focused on if or when consumer spending that accounts for 70% of GDP moves toward a full-fledged recovery.

(C) Political confrontations ahead of November presidential election

Because of political confrontations it will be difficult to implement timely policy measures designed to cut taxes, boost employment and the housing market. Uncertainty may grow about the continuity of policies.

(5) Concerns about process of recovery that is dependent upon emerging economies amid their growing presence

The rate of growth of emerging economies (as of 2011Q2) is eight times as high as that of advanced economies. Emerging economies continue to grow at a high rate, albeit currently on a slowing trend. As the result of the high growth of China and other emerging economies, the contribution of emerging economies to the world GDP rose to 35.3%, getting closer to the 64.7% contributed by advanced economies (Figure 1-1-4-6). Amid the slowing of advanced economies and the EU with a 25.4% contribution to the world real GDP falling into another recession, China is further enhancing its presence and is expected to perform the role of supporting the growth of the world economy. Following the start of 2011, however, the growth rate of emerging economies began to decelerate, and international organizations revised downward their forecast for emerging economies (Table 1-1-4-7). Particularly on China, they indicate that its economy will slow, given that its GDP growth for the fourth quarter of 2011 fell to 8.9% over the same quarter a year ago. As China is assigned an important position as the driving force of the post-Lehman Shock world economy, there are concerns about the impact of its deceleration.

Figure 1-1-4-6

Rate of economic growth and share of world real GDP by country/region

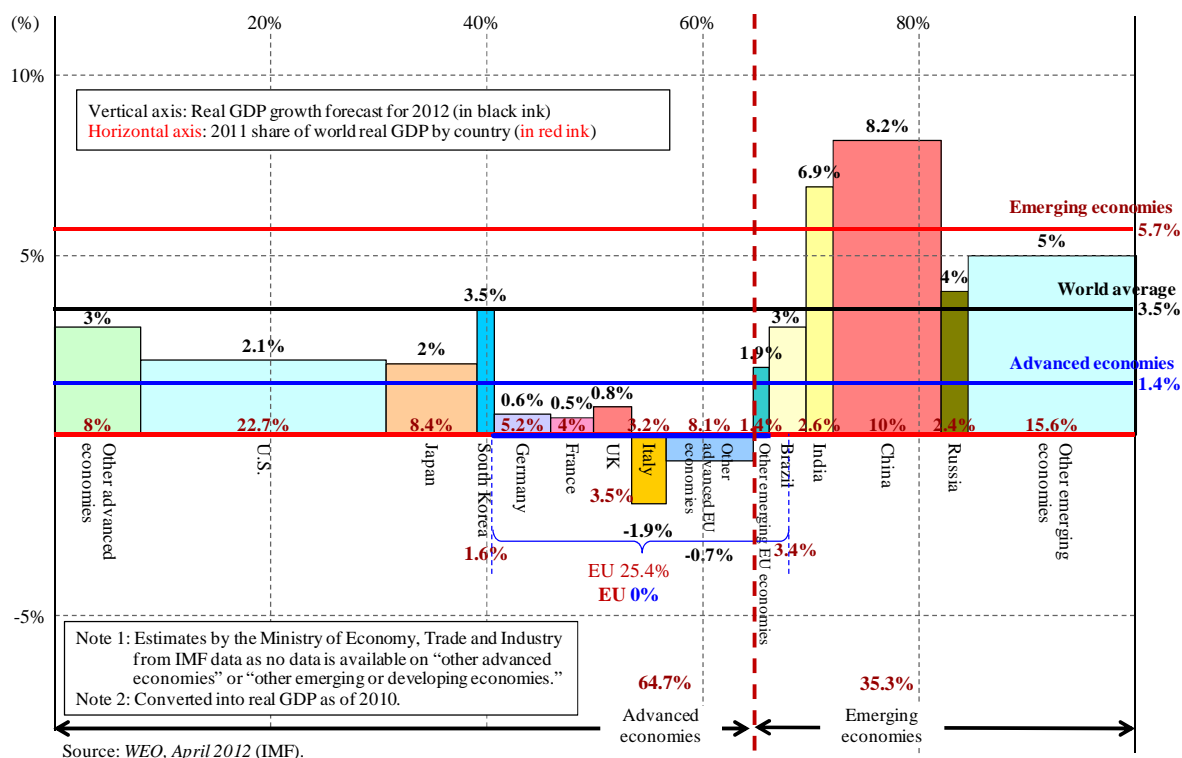


Table 1-1-4-7

Outlook for the economies of emerging countries

	2010	2011	2012 (Forecast)	2013 (Forecast)
World (on PPP basis)	5.3	3.9	3.5	4.1
Advanced economies	3.2	1.6	1.4	2.0
Emerging economies	7.5	6.2	5.7	6.0
Central and East Europe	4.5	5.3	1.9	2.9
ASEAN5	7.0	4.5	5.4	6.2
Brazil	7.5	2.7	3.0	4.1
Russia	4.3	4.3	4.0	3.9
India	10.6	7.2	6.9	7.3
China	10.4	9.2	8.2	8.8
Middle East and North Africa	4.9	3.5	4.2	3.7
South Africa	2.9	3.1	2.7	3.4

Note: ASEAN5 are Indonesia, Malaysia, Philippines, Thailand and Vietnam.
 Source: WEO, April 2012 (IMF).

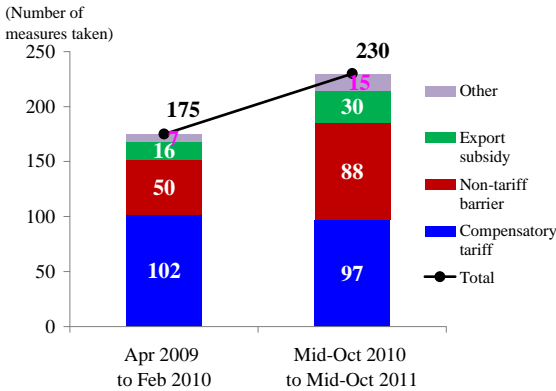
(6) Fears of re-emergence of protectionism

Concerns are growing about the possibility that protectionist activities will be spurred by economic slowdown. The WTO (2011) shows that the number of new trade-restrictive measures taken by G20 member countries rose to 175 for the eleven months from April 2009, and to 230 for the twelve months from mid-October 2010 (Figure 1-1-4-8). The ratio of the items subject to trade restriction under the measures taken for a half-year period from May 2011 to the total number of import items grew twofold over the same quarter of the previous year (Figure 1-1-4-9).

The first G20 trade minister meeting was held in Puerto Vallarta (Mexico) on April 19-20, 2012. At the meeting they discussed curbing protectionism. Japan’s State Minister of Economy, Trade and Industry Seishu Makino suggested that in order to counter protectionist measures flourishing in G20 member countries, all G20 member countries should fully comply with “standstill” for not taking any new restrictive measures and with “rollback” for correcting measures already in effect. State Minister Makino further maintained that Japan backs up an analysis that shall be conducted by the WTO, OECD and UNCTAD on the impact caused by protectionist measures, for the purpose of starting constructive discussions against trade-restrictive measures. Makino’s suggestions were incorporated into the chairman’s oral summary statement.

Figure 1-1-4-8

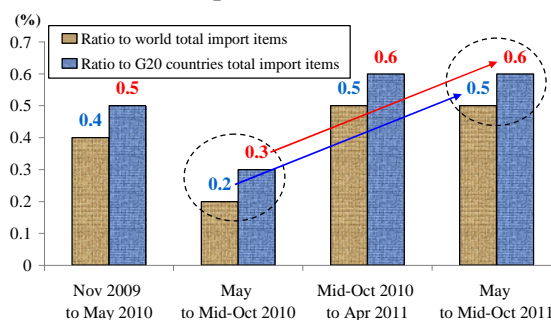
Number of trade-restrictive measures taken by G20 member countries



Source: REPORT ON G-20 TRADE MEASURES (MAY TO MID-OCTOBER 2011), 25 October 2011 (WTO).

Figure 1-1-4-9

Ratio of trade-restrictive items to the total import items in G20 member countries



Source: *REPORT ON G-20 TRADE MEASURES (MAY TO MID-OCTOBER 2011)*, 25 October 2011 (WTO).

(7) Current account imbalances

(A) Current situation and future outlook

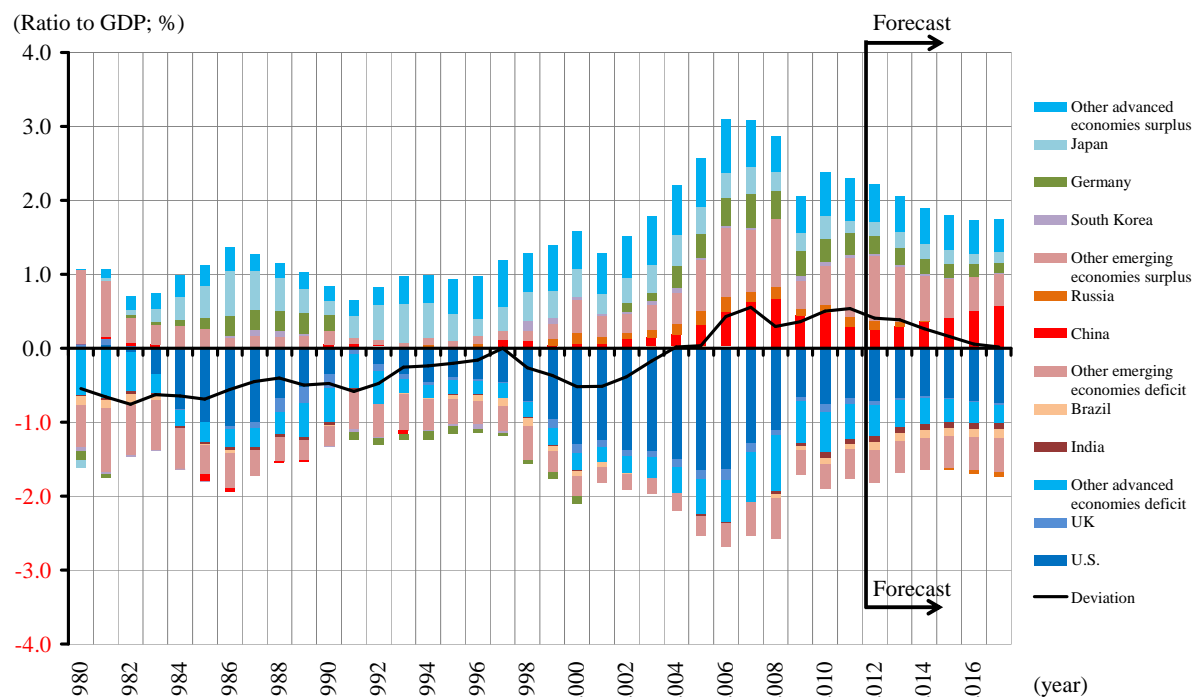
Following the world economic crisis, trade globally decreased value-wise. It caused the global imbalance to temporarily narrow in 2009, only to widen again in 2010, and then to narrow again in 2011 (Figure 1-1-4-10).

In its April forecast for the world economy²¹ the IMF says it does not expect the global current account imbalance to widen for the reason that consumer spending in the United States and some other economies with current-account deficits has dropped more than expected from the pre-crisis level and that Japan's current-account surplus has been reduced. In case of China, the real effective exchange rate of the yuan has risen 6%-7% after the previous forecast (September 2011). The IMF substantially revised downward the medium-term outlook for China's current-account surplus.

At the same time, the IMF predicts that China's current-account surplus will continue to grow once cyclical factors have disappeared, and will account for a relatively large percentage of the world GDP. And if China sees its current-account surplus shrink before the country improves its unbalanced situation where high-level investments continue and consumer spending remains sluggish in the domestic market, it will likely increase internal tension. Thus, the IMF says it is necessary for China to introduce further structural reforms and adjust the value of its currency to an appropriate exchange rate in the area of trade, while shifting its policy stance from "investment-oriented" to "income increase" and "consumption expansion."

21 IMF (2012a)

Figure 1-1-4-10
Global current-account imbalance



Note: On "other advanced economies" and "other emerging economies" values were divided by "economies with current account surpluses" and "economies with current account deficits."

Source: *WEO, April 2012* (IMF).

The IMF attributes the reduction in China's current-account surplus to: Sluggish demand in the United States and the euro area that together buy 40% of Chinese exports; increased importance of investments in supporting the economic growth; increased commodity imports and their soaring international prices; deteriorated terms of trade resulting from a sharp increase in machinery exports and declining export prices; and increasing domestic costs prompted by rising wages, all of which contribute to shrinking trade surplus. Such a decrease in China's current-account surplus serves to improve global imbalances; however, the improvement is not the result of growing domestic consumption, but of the extremely high level of domestic investments. The implementation of the structural reforms contemplated in the 12th 5-year plan will provide a longer-lasting opportunity to the Chinese economy that seeks to shift to a consumption-driven growth, and to the world economy as well, the IMF says.

(B) Addressing the problems using international frameworks

At the April 2011 Meeting of the G20 Finance Ministers and Central Bank Governors held in Washington, D.C. they agreed to draw up an action plan for cooperative policies among member countries that are aimed at promoting a robust, sustainable and well-balanced growth. In the subsequent October 2011 meeting they agreed to include in the action plan the following measures for correcting imbalances:

- Advanced economies will take specific measures aimed at achieving fiscal consolidation. Economies with large current-account surpluses will also implement policies for expanding

domestic demand. Economies with large current-account deficits will implement policies to increase national savings.

- Emerging economies will adjust macroeconomic policies (where needed) to enhance resilience in the face of volatile capital flows. Emerging economies with current-account surpluses will accelerate the implementation of structural reforms for rebalancing demand toward domestic consumption, which will be supported by efforts to move toward more market-determined exchange rate systems and thereby achieve greater exchange rate flexibility to reflect economic fundamentals.

The subsequent November 2011 Cannes G20 summit agreed to adopt the Cannes Action Plan (Cannes Action Plan for Growth and Jobs²²) that organized policy commitments by member countries to address short-term vulnerabilities and strengthen medium-term foundations for growth. Prior to drawing up the Cannes Action Plan the IMF prepared an analysis and evaluation report on the economies and policies of G20 member countries on the basis of the “indicative guidelines,”²³ which is designed for grasping the imbalances and agreed on at the April 2011 Meeting of G20 Finance Ministers and Central Bank Governors. The “Sustainability Report” that makes up the above-mentioned analysis and evaluation report indicates as the causes of the imbalances of those economies that have continuing massive imbalances and therefore should be evaluated in detail (Japan, China, India, Germany, United Kingdom, France and the United States): Prolonged low growth and aging population (Japan), delayed development of safety net (China), massive social expenditure against the backdrop of poverty (India), sluggish investments (Germany), consumption-dependent nature of economy (United Kingdom), decreasing export competitiveness (France), and decreased revenue because of tax cuts and increased social security benefits (United States).

<Reference information> Efforts for addressing short-term vulnerabilities and strengthening foundations for medium-term growth specified in the “Action Plan for Growth and Jobs” drawn up in Cannes in November 2011 (summary)

(Short-term efforts for addressing vulnerabilities and restoring financial stability)

- We commit to take all necessary actions to preserve the stability of banking systems and financial markets. We will ensure that banks are adequately capitalized and have sufficient access to funding to deal with current risks.
- Central Banks continue to stand ready to provide liquidity to banks as required.
- G20 members agree to implement an appropriate mix of measures to secure the recovery.
- We affirm our commitment to move more rapidly toward market-determined exchange rate systems and exchange rate flexibility to reflect underlying fundamentals and refrain from competitive devaluation of currencies.

22 The Cannes Action Plan for Growth and Jobs at:
http://www.mofa.go.jp/mofaj/gaiko/g20/cannes2011/actionplan_ky.html

23 G20 Finance Ministers and Central Bank Governors Joint Statement (provisional translation) (Washington, DC, April 14-15, 2011)
http://www.mof.go.jp/international_policy/convention/g20/g20_230415.htm

(Medium-term efforts for strengthening foundations for growth)

- We have agreed to a six-point plan to strengthen the medium-term foundation for growth: (A) commitments to fiscal consolidation; (B) commitments to boost private demand in countries with current account surpluses, and, when appropriate, to rotate demand from the public to the private sector in countries with current account deficits; (C) structural reforms to raise growth and enhance job creation across G20 members; (D) reforms to strengthen national/global financial systems; (E) measures to promote open trade and investment, rejecting protectionism in all forms; and (F) actions to promote development.

5. Toward continuing growth of the world economy

As we have overviewed and learned throughout Chapter 1, Section 1, the world economy that had been returning to a recovery trend from the recession following the global economic crisis slowed down again in 2011. Its recovery continues being weak into 2012, and there are concerns about growing downside risks to the world economy.

The Meeting of G20 Finance Ministers and Central Bank Governors held in Washington, D.C. on April 19-20, 2012 issued a joint statement that says, “Recent economic developments point to the continuation of a modest global recovery, supported by some significant policy actions that have taken place since our last meeting. The tail risks facing the global economy only months ago have started to recede,” and adds, “However, growth expectations for 2012 remain moderate, deleveraging is constraining consumption and investment growth, volatility remains high, partly reflecting financial market pressure in Europe, and downside risks still persist.”

In order for the world economy to return to a recovery track, continuing efforts toward economic growth are indispensably required both of advanced economies that contribute about 65% to the world GDP and of emerging economies that are expected to support the growth of the world economy.

