

Sayuri Shirai: Recent global economic developments and monetary policy in Japan – growing uncertainty over the European sovereign debt issues

Speech by Ms Sayuri Shirai, Member of the Policy Board of the Bank of Japan, at a meeting with business leaders, Yamanashi, 2 November 2011.

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I. Global economic and financial developments

The world currently faces two pressing macroeconomic issues: one is a slowdown in global economic growth, and the other is increased instability in international financial markets triggered largely by fiscal and financial problems in Europe.

A. Outlook for the global economy

Let me start with the outlook for emerging economies. These economies continue to be the main engine for global economic growth, although the pace of growth has slowed somewhat in recent months. Their sources of economic strength arise mainly from (1) robust domestic demand reflecting rising incomes and employment generation – phenomena commonly observed in developing countries, (2) considerable leeway for expansionary fiscal policies thanks to their relatively sound public finances, (3) abundant labor forces, and (4) the potential for high labor productivity growth as part of the process of technological catch-up. At the same time, some emerging economies are experiencing inflationary pressures, which have been placing them in the dilemma of containing inflation or decelerating the pace of economic growth when making a monetary policy decision.

By contrast, the pace of economic growth in advanced countries remains moderate. In the case of the United States, economic growth so far has been slower than originally expected, as exemplified by substantial downward revisions made by a number of international organizations and think tanks – including the International Monetary Fund (IMF) – to their projections for 2011 and 2012. U.S. economic growth declined sharply in the first half of 2011, due mainly to (a) a decline in automobile production caused by supply-chain disruptions following the Great East Japan Earthquake and (b) a drop in real household incomes reflecting the hike in gasoline prices. On the bright side, corporate profits have been substantially strong, and production, business fixed investment, and exports have continued to rise. Although some economic indicators suggest a deterioration in business sentiment in recent months, the pessimism suggested by sentiment indicators appears to be greater than actual corporate business conditions warrant.

Overall, the pace of economic recovery in the United States has remained modest, because the deleveraging process or the adverse impact of the burst housing bubble on household balance sheets persists. As housing loans and other debts remain excessive, debt servicing exerts a huge burden on households, particularly since employment generation and income growth have been sluggish. Moreover, given that about 30 percent of household financial assets have been invested in stocks, the negative wealth effect caused by the recent downturn in stock prices is likely to be considerable. Against this background, President Obama in September 2011 proposed a jobs package worth 447 billion U.S. dollars – about 3 percent of GDP, although it is not clear whether the proposal will gain approval in Congress. If not, fiscal stimulus to the economy in the coming year may be limited.

B. Instability in international financial markets

Not only has the pace of global economic growth been decelerating, in international markets investors have been increasingly risk averse. This reflects growing concerns over the

economic performance of the United States as well as the worsening fiscal and financial problems in Europe, which I will touch upon later.

Strains in international financial markets have intensified since the middle of 2011, in part due to the prolonged debate in the U.S. Congress over the fiscal debt ceiling and deficit reduction, and the resulting downgrading of the credit rating for U.S. Treasuries. Moreover, high-level meetings of the European Union (EU), the Group of Seven (G-7) countries, and the Group of Twenty (G-20) countries all failed to come up with a decisive solution to the fiscal and financial problems in Europe. This series of events prompted global investors to become even more risk averse. As a result, international financial markets have become highly volatile: the prices of stocks – perceived as riskier assets – fell substantially around the globe, while the prices of government bonds of major advanced economies – perceived as safer assets – rose (or yields declined). Since October this year, however, stock prices have recovered somewhat and yields on government bonds have risen.

Regarding corporate bond markets, credit spreads have widened, particularly in the United States and Europe, and issuing conditions for low-rated corporate bonds have continued to remain unfavorable. The number of initial public offerings (IPOs) also dropped sharply around the globe. What is more, since September the price of gold – generally perceived as a safe asset – as well as the prices of other commodities have declined as well. In the foreign exchange market, meanwhile, the yen, together with the U.S. dollar, has appreciated against a wide range of currencies of emerging and commodity-exporting economies on the basis of the perception that it is a relatively safe international currency. Moreover, in some emerging economies, cross-border capital flows have reversed, leading to a decline in stock and bond prices as well as foreign exchange rates.

The main reason that instability in international financial markets has increased is a lack of confidence in measures undertaken by the EU to resolve the fiscal and financial problems in Europe. As I will explain in the next section, the problems in Europe are unlikely to be resolved in the short term. Therefore, international financial markets are expected to face continued strains for a while.

II. The fiscal and financial problems in Europe

So far, I have presented an overview of the outlook for global economic and financial developments. Now, I would like to take a closer look at the fiscal and financial problems in Europe, which have become the epicenter of the growing strains in international financial markets.¹

Before I go into details, I would first like to make sure that the difference between the EU and the euro area is well understood. The EU is an economic partnership between 27 countries and constitutes the world's largest economic zone. It has a population of about 500 million and accounts for more than 20 percent of global GDP. People and money can move without restrictions in the region. The euro area, on the other hand, is presently comprised of the 17 EU member states that have adopted the single currency called the euro. Countries with large economies, such as Germany, France, Italy, and Spain, are among the members of the euro area. The area has a population of about 330 million and accounts for about 15 percent of global GDP. It is an economic zone almost as large as the United States. I will follow the standard practice of distinguishing between “core countries” (such as Germany, France, the Netherlands, and Belgium) and “peripheral countries” (such as Greece, Ireland, Portugal, Spain, and Italy).

¹ This speech is based on information available as of October 31, 2011.

A. *The three problems faced by the euro area*

The fiscal problems in the euro area have now reached a critical stage. Looking back, the fiscal problems of Greece surfaced in spring 2010, followed by those of Ireland in fall 2010 and Portugal in early 2011. As these countries – with large fiscal deficits and/or government debts – faced a sharp increase in the cost of funding, they had no choice but to ask the EU and the IMF to provide them with financial support. With regard to Greece, it became clear from the middle of 2011 that its fiscal consolidation and economic reform program, to which it had internationally committed itself, was far behind schedule. As a result, the Greek debt crisis resurfaced.

In addition, market concerns over the fiscal position of peripheral countries intensified. This, in turn, adversely affected the creditworthiness of European financial institutions with large holdings of government bonds of these countries. As a result, these institutions faced a sharp increase in their funding costs as well.

In response, the EU announced a comprehensive set of measures to address the sovereign debt and financial problems at the end of October. This may be considered a step forward. The measures appear to have won some support from financial markets. Nevertheless, more time is needed to see whether they will help restore stability in international financial markets by reviving the risk-taking appetite of investors in general. The euro area is not only a large economic zone, but, like the United States, it is also home to the headquarters of many large, globally active financial institutions. Given Europe's close economic and financial linkages with other regions, the possible effects of volatile developments in the euro area on the global economy and international financial markets are a matter of great concern. I would next like to talk about the three main problems confronting the euro area.

1. *Fiscal consolidation and economic reform in Greece*

The first problem is the loss of market confidence in the ability of the Greek government to pursue the fiscal consolidation and economic reform program, which triggered the problems that the euro area is facing now. Greece had a high level of government debt even before joining the euro. Moreover, in the latter half of 2009 it emerged that the Greek government had understated the scale of its fiscal deficit by falsifying official statistics. The discovery of such an act has given rise to skepticism toward the Greek government's capacity to properly manage its economic and fiscal affairs, resulting in the successive downgrading by rating agencies of its government bonds. The downgradings in turn brought about a hike in bond yields, making it difficult for the government to raise funds from the market, and forced it to ask the EU and the IMF for financial assistance in May 2010.

The financial assistance has been provided in installments on condition that the program is monitored by the IMF and the EU through quarterly reviews and makes progress on schedule. The disbursement of the sixth tranche was due to be approved in September 2011; however, the approval was suspended following findings that Greece would be unable to achieve its budget deficit target for both 2011 and 2012. The Greek economy is in the middle of a severe recession, and there is a strong likelihood that after facing four successive years of contraction it will continue to shrink. As a result, tax revenues have not grown despite increases in tax rates, thus undermining the government's fiscal reconstruction efforts. Additionally, it has been pointed out that, partly because of problems associated with the government's capacity to collect taxes, it is difficult to devise effective measures to raise tax revenues. Against this background, financial markets are conscious of the possibility that the program of fiscal consolidation and economic reform could stall unless the government conducts more drastic expenditure cuts and takes decisive measures to raise revenues through, for example, the privatization of government enterprises. The sixth tranche is likely to be disbursed during the first half of November, following the passage in late October of a bill by the Greek Parliament that provides for further reductions in the fiscal deficit, including layoffs of public employees. Yet, how things develop remains to be seen.

When it was agreed in May 2010 to provide financial assistance to Greece, it was expected that from 2012 Greece would be in a position to raise funds from the market on the assumption that steady progress would be made in fiscal consolidation and economic reform. This scenario looks increasingly unlikely now with Greek government bond yields remaining at prohibitively high levels.

The EU, the IMF, and Greece, therefore, agreed on a second bailout package for Greece – separate from the financial assistance mentioned so far – to provide funds from 2012 onward. In addition, it was agreed that given the sheer size of the government debt, the provision of financial assistance alone was not enough to bring the Greek government debt position to a sustainable level. Therefore, through the intermediation of the Institute of International Finance (IIF), a global association of financial institutions, financial institutions – private-sector creditors – with large holdings of Greek government bonds were asked to bear a part of the burden on a voluntary basis. More specifically, holders of Greek government bonds due to mature by 2020 were asked to exchange most of their holdings into new bonds at a discount of some 20 percent of the present value; in other words, the debt was to be cut by roughly 20 percent. In turn, the principal of the new bonds would be guaranteed and it is reported that a large number of the bond holders represented by the IIF agreed.

More recently, however, some EU member countries voiced the view that, with Greece's fiscal situation deteriorating more rapidly than had been anticipated, a steeper write-down of Greek government bonds was necessary. In other words, it became increasingly clear that reducing Greek debt by some 20 percent of the present value would be insufficient to sustain the Greek government's ability to repay its debts. In view of this, meetings were held at the end of October between the EU and the IIF, and it was agreed in principle that creditors would write off 50 percent of their Greek bonds. At the same time, it was agreed that Greece should implement further fiscal consolidation measures. In order to meet its international commitments, Greece, with the economy already in a prolonged recession, was thus required to introduce additional restrictive fiscal measures, which may intensify the vicious cycle of economic contraction. Policies for the reduction of national debt are unavoidable, but what the Greek economy needs more than anything else to break out of its vicious cycle is to press ahead with growth-generating economic reforms and build a path toward credible fiscal consolidation to regain market confidence.

2. *Mechanisms to stop the Greek fiscal crisis from spreading*

The second problem concerns mechanisms to stop the crisis in Greece from spreading to other euro area member states. In response to the financial turmoil triggered by the collapse of Lehman Brothers in 2008, European countries introduced various measures to help boost the economy and rescue banks. Such measures inevitably led to increases in fiscal deficits and government debts. It is in this context that the crisis in Greece spread to some peripheral European countries, such as Ireland and Portugal, which were perceived to have relatively greater difficulties in proceeding with fiscal consolidation and/or economic reforms.

In order to prevent the current fiscal and financial problems in the region from triggering a chain reaction, the EU created the European Financial Stability Facility (EFSF) in 2010. The EFSF can raise funds through the issuance of bonds, the proceeds of which can then be used to provide loans at below-market interest rates to financially troubled euro area countries. These bonds are effectively guaranteed by euro area member states that remain financially healthy. So far, loans in this form have been extended to Ireland and Portugal, which requested financial assistance, and the second bailout package for Greece is due to use funds from the EFSF.

Subsequently, at the Meeting of Heads of State or Government of the Euro Area, it was agreed to increase the size of guarantees for EFSF bonds, thereby raising the ceiling of the facility's lending capacity. The EFSF is now able to purchase government bonds from the market and to inject more funds into the banking system by, for example, recapitalizing financial institutions. The agreement was ratified in October 2011.

In financial markets, however, concerns emerged about possible contagion of the crisis to other euro area member states such as Spain and Italy. These countries have much larger economies, and therefore the lending capacity of the facility already agreed at the Meeting of Heads of State or Government of the Euro Area was perceived to be insufficient to fend off a further spread of the crisis. However, an additional increase in the lending capacity was difficult due to strong opposition led by Germany. At the Euro Summit, a meeting of EU and euro area leaders held at the end of October, it was therefore agreed to leverage the resources of the EFSF to enhance its ability to deal with critical situations.² It will probably take a while for the leverage plan to actually take effect, as details have to be worked out in November and then need to be approved by each member state. Needless to say, building mechanisms to prevent the fiscal crisis from spreading to the euro area as a whole is extremely important for the stability of international financial markets. What matters is whether the mechanism succeeds in gaining the confidence of the market.³

3. *Fiscal problems leading to problems in the financial system*

The third problem is that the fiscal problems in Europe are threatening the stability of the financial system. What started out as a fiscal problem in Greece, coupled with concerns over its ability to consolidate its finances and carry out economic reforms, has spread to other European countries, with doubts arising regarding their creditworthiness. This, in turn, raised concerns about the balance sheets of European financial institutions holding large volumes of government bonds of peripheral countries. Consequently, European financial institutions, including financial institutions from France and Belgium – core countries – began to find it difficult to raise funds from markets. The fiscal problems in Europe have thus begun to seriously undermine the stability of the financial system in the region.

In July 2011, the results of a stress test for financial institutions performed by the EU confirmed that progress was being made in strengthening their capital bases. However, the results did not mitigate investors' concerns over the soundness of the financial system. In fact, the IMF has stressed the need for European financial institutions to make a substantial capital enhancement based on its estimate of potential losses of 200 billion euros that European financial institutions could suffer in the event of a collapse in the prices of government bonds of peripheral countries such as Greece. However, given the current weakness in stock markets, it is not easy for financial institutions to increase capital on their own. As a result, concerns about counterparty risk have increased, causing some financial institutions to reduce interbank market trading activities. In addition, uncollateralized interbank trading, particularly of term instruments, has been declining, leading to an increase in funding costs for European financial institutions, mainly for longer-term and U.S. dollar-denominated funds. In a comprehensive set of additional measures agreed at the end of October, the EU decided to require European financial institutions to attain a Core Tier 1 capital ratio of 9 percent by end-June 2012, after accounting for market valuation of sovereign debt exposures. It was also decided that when financial institutions are unable to increase capital by themselves, national governments should provide support or, if they are unable to do so, the EFSF should do so.

It would have been easier to come up with a solution if the problem had been contained to fiscal deficits, as was the case for Greece at the beginning. The appropriate response would

² Leverage here refers to, for example, “guarantees” to be provided by the EFSF, which could amount to many times over what the facility can directly lend. If approved, the EFSF could be given more flexibility over the measure to prevent a crisis from spreading to major euro area member states.

³ In addition, it has already been decided to make the EFSF a permanent institution and set up in mid-2013 the European Stability Mechanism (ESM) with the aim of facilitating a smooth restructuring of government debt issued by countries in financial difficulties. It has also been reported that discussions are underway to bring forward the starting date of the ESM by a year.

have been to increase government revenue and reduce expenditure in the short term, while pushing through a wide range of economic reforms in the medium to long term aiming to achieve sustainable growth. However, when it comes to measures to stabilize the financial system, things become much more difficult, because the impact on international financial markets cannot be ignored. A major factor currently destabilizing international markets lies in the daunting situation of having to deal with two crucial issues simultaneously – fiscal imbalances and instability in the financial system.

B. Effects on economic activity in Europe

The problems in Europe have started to affect activity in the real sector of the economy (such as production, business investment, and consumption), setting off a downward spiral among the economy, the fiscal situation, and the financial system. Keeping this in mind, I will now touch upon the current situation of and outlook for economic activity in Europe.

At present, the recovery in the European economy seems to be stalling due to the slowdown in the domestic and global economies. Growth in exports, which had been the main engine of economic growth, has slowed sharply, while growth in production and consumption has also decelerated. Furthermore, corporate and consumer sentiment has worsened. Nevertheless, the economies of core countries, particularly Germany with a strong manufacturing sector, remain relatively robust on the back of firm business fixed investment. The employment and income situation in Germany has also been improving, with the unemployment rate declining to about 7 percent. In contrast, peripheral countries, such as Greece and Portugal, have been suffering from short-term downward pressure on the economy due to additional austerity measures following the downgrade of their sovereign debt ratings. Their international competitiveness has long been weak, so that it will be a challenge for them to achieve economic growth, and – as we have already seen – the market remains deeply concerned about the sustainability of government finances in these countries.

With regard to the economic outlook for Europe, a very moderate recovery is expected on the whole. Although private consumption is unlikely to grow because household incomes remain under severe pressure, exports are expected to increase gradually based on steady growth in emerging economies. In addition, business fixed investment in core countries is expected to remain firm.

Nevertheless, restoring fiscal health is a challenge faced by all euro area countries. The government-debt-to-GDP ratio for the euro area as a whole was 85.4 percent in 2010, well above the euro convergence criterion of 60 percent. This wide gap highlights the need for continued efforts to reduce fiscal deficits and the limited scope for expansionary fiscal measures for the euro area as a whole. As for monetary policy, the policy interest rate is already low at 1.5 percent, leaving little room for further reductions. In view of the limited room for fiscal and monetary policy, it is necessary to be aware of the possibility of economic instability continuing for a while.

III. Japan's economy and the Bank of Japan's policy measures

Based on the developments in the global economy and international financial markets described so far, I will now talk about the current situation of and outlook for Japan's economy and measures taken by the Bank. For details, please refer to *Outlook for Economic Activity and Prices* released by the Bank on October 28, 2011.

A. Japan's economy

Following the earthquake on March 11, 2011, Japan's economy contracted sharply. This was due to the following factors: (1) production activity fell significantly nationwide due to the physical damage caused by the earthquake and tsunami to production facilities and the

distribution infrastructure as well as the disruption of supply chains in the manufacturing sector, especially in the automobile industry; (2) the nuclear power plant accident led to electricity shortages, which affected both manufacturing and non-manufacturing industries; and (3) consumer sentiment weakened as a result of voluntary restraint following the disaster and the problem of radiation due to the nuclear power plant accident.

1. *The current situation*

Japan's economic activity has been picking up steadily as the supply-side constraints caused by the disaster have been gradually resolved. Supply-chain disruptions, for example, have been easing at a faster pace than expected thanks to the efforts made by those involved. Production and real exports have returned to their pre-quake levels, although their rates of growth have moderated recently. While exports, particularly of automobiles, have increased, those of iron and steel products as well as digital cameras have declined. Business fixed investment has been increasing moderately and the results of the September 2011 *Tankan* (Short-Term Economic Survey of Enterprises in Japan) showed that business fixed investment plans, including those of small firms, were relatively firm. While the overall damage caused by the flooding in Thailand is not clear at this stage, the impact on supply chains warrants careful attention, given that Japanese firms, especially in automobile-related industries, have expanded their overseas production facilities for finished goods and parts and components, including in Thailand, in recent years. Meanwhile, although private consumption has almost returned to its pre-quake level, weakness remains in some areas as indicated by, for example, the fact that restaurant sales have not returned to their pre-quake levels. Also, the number of foreigners visiting Japan has remained below pre-quake levels.

2. *Outlook for economic activity and prices*

Although adverse effects from the slowdown in overseas economies and the appreciation of the yen may continue for the time being, Japan's economy is expected to return to a moderate recovery path as reconstruction demand following the disaster gradually materializes. Business fixed investment is likely to expand, provided that corporate profits improve, domestic and overseas demand recovers, and government economic policies are effective. Private consumption is also expected to gradually become firmer against the backdrop of a gradual recovery in the employment and income environment.

The year-on-year rate of change in the consumer price index (CPI) has recently been around 0 percent, partly due to the change in the base year for the CPI in August 2011. As for the outlook, the year-on-year rate of change in the CPI is expected to remain at around 0 percent for the time being, with a factor in addition to the base-year change being that the positive contribution from the rise in the tobacco tax and in charges for accident insurance has dissipated since October 2011. Surveys of households, firms, and economists suggest that medium- to long-term inflation expectations remain stable; however, future developments warrant continued attention.

3. *Risks to the outlook*

While there are many uncertainties regarding the outlook for economic activity and prices, the three risks that I think warrant the most attention are the following: (1) the risk that if the fiscal and financial problems in Europe intensify they may affect Japan's economy through various channels; (2) downside risks with regard to overseas economies other than those of Europe; and (3) the possibility that firms' and households' medium- to long-term growth expectations may decline in the longer run.

As for the first risk, there are two main channels through which Japan's economy could be affected: an international financial markets channel and an international trade channel.

Let us start by considering the international financial markets channel. Japan's financial markets have remained stable as a whole despite the instability in overseas markets.

Moreover, so far Japanese financial institutions' funding costs have not been affected by developments overseas, because their exposure to Greece, Portugal, and Ireland in the form of investment and lending is relatively limited. However, given the growing international linkages in financial markets, if global investors' appetite for safe assets intensifies further, prices of riskier assets (such as stocks) could decline globally. With global financial markets being increasingly integrated, stock prices in Japan could fall as a result of developments in other markets, and the foreign exchange rate of the yen – which is seen as a relatively safe currency – against the U.S. dollar and the currencies of commodity-exporting and emerging countries might rise further. Thus, there is a risk that, as a result, business and consumer sentiment may deteriorate, pushing down economic growth. In fact, the diffusion index for overseas supply and demand conditions in the September 2011 *Tankan* suggests that there is a growing perception of excess supply.

With regard to the export channel, as I have already stated, there is a possibility that Japan's exports to Europe might be directly affected if economic activity in Europe decelerates as a result of the worsening of fiscal and financial problems in the area. It is important to bear in mind that in this case the impact could be substantial, since Europe accounts for about 10 percent of Japan's exports. Moreover, there is the risk that Japan's exports might be indirectly affected through a decrease in exports to Europe from Asian economies.

As for the second risk, there is concern that the slowdown in the U.S. economy could continue given the weaker-than-expected employment situation and sluggish activity in the housing market due to the persistent downward pressure on housing prices as seen in the increasing number of home foreclosures. On the other hand, emerging and commodity-exporting economies, despite declining demand from the United States and Europe, are likely to continue to grow thanks to potentially large domestic demand; however, with inflationary pressures remaining strong, whether they can achieve a soft landing, that is, achieve both price stability and economic growth at the same time, requires continued attention. Attention also needs to be paid to a possible economic slowdown in emerging and commodity-exporting economies as a result of capital outflows from these economies if investors' risk aversion intensifies further due to contagion of the fiscal and financial problems in Europe.

With regard to the third risk concerning firms' and households' medium- to long-term growth expectations, Japan's economy has long been facing the challenge of a decline in the growth rate due, among other things, to the shrinking and aging of the population. In addition, Japan is now confronted with new challenges, such as uncertainty regarding the supply and demand of electric power and the reconstruction effort needed following the earthquake. I am of course anxious about the uncertainty regarding reconstruction-related demand, but what concerns me more is the uncertainty surrounding electricity supply. Electricity supply during this past summer, which was a cause of great concern, turned out not to impose considerable constraints on the economy, not only because this summer was cooler than the extremely hot summer last year, but also because of efforts by firms and households to save electricity. In the longer run, however, the resumption of operations at nuclear power plants that are or will be under regular inspection is still unclear. Given this and the possibility that we might have an extremely cold winter or a heat wave next summer, uncertainty regarding the supply of electricity therefore remains, and as long as this uncertainty lingers, corporate activity could be restrained. In addition, attention needs to be paid to the possibility that a further appreciation of the yen could exert downward pressure on corporate profits, employment, and income, or accelerate the shift to overseas production, which could in turn lead to a decline in firms' and households' medium- to long-term growth expectations and increase the downside risks to the economy.

B. The bank's conduct of monetary policy and responses to the earthquake

Taking into account the situation mentioned above – economic conditions abroad and in Japan, the outlook for Japan's economy, and the various risk factors – the Policy Board of

the Bank, consisting of nine members including myself, at the Monetary Policy Meeting on October 27, 2011 decided to enhance monetary easing. I will now explain the policy measures currently implemented by the Bank as well as the background of the decision.

1. Enhancement of the comprehensive monetary easing policy

The first of the measures is a strengthening of the comprehensive monetary easing policy that the Bank has been implementing in order to pursue powerful monetary easing and underpin Japan's economy from the financial side. As part of the comprehensive monetary easing, the Bank has set its policy interest rate at an extremely low level of around 0 to 0.1 percent, and made a commitment that it would basically continue with the low policy interest rate until it judged that price stability was in sight.

Moreover, in October 2010, the Bank established the Asset Purchase Program (hereafter the Program), a new framework through which the Bank purchases various risk assets, such as government securities, commercial paper (CP), corporate bonds, exchange-traded funds (ETFs), and Japan real estate investment trusts (J-REITs) in order to encourage a decline in longer-term interest rates and various risk premiums. The Bank increased the total size of the Program by about 5 trillion yen to about 40 trillion yen in March 2011, immediately after the earthquake, and by about 10 trillion yen to about 50 trillion yen in total in August in light of various risks, such as the effects of uncertainty regarding overseas economies and of the rapid appreciation of the yen on business sentiment as well as on economic activity.

In addition, at the end of October 2011, the Bank decided to increase the total size of the Program by about 5 trillion yen to about 55 trillion yen reflecting the fact that some more time would be needed to confirm that price stability was in sight and that due attention was needed to be paid to the risk that the economic and price outlook would further deteriorate depending on developments in global financial markets and in overseas economies. Such asset purchases will continue to be made through the end of 2012, and since further monetary easing is still in progress, the effects of monetary easing will continue to appear hereafter.

2. Ensuring stability in financial markets

Second, the Bank has been making efforts to ensure stability in financial markets in order to maintain the smooth conduct of economic and financial activities in Japan. Immediately after the earthquake, the Bank provided ample funds to meet demand in financial markets for several successive days to preempt concerns about potential liquidity shortages in the interbank money market. Thus, on March 14 – the first business day after the earthquake – the Bank conducted funds-supplying operations totaling 21.8 trillion yen. As a result of measures such as this, money market rates, which had temporarily risen immediately after the earthquake, soon regained stability. Since then, with the Bank continuing to provide ample funds and Japan's financial system relatively sound, financial markets in Japan have remained relatively stable despite the heightened strains in European financial markets.

3. Providing support to strengthen the foundations for economic growth

Third, as part of the efforts to strengthen the foundations for economic growth – a more medium- to long-term challenge – the Bank has introduced the Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth, which aims to act as a catalyst for firms and financial institutions working toward this end. Under this measure, the Bank provides loans at a low interest rate of 0.1 percent for, if rolled over, up to four years to financial institutions for financing of and investment in projects that help to strengthen the medium- to long-term growth potential of Japan's economy. The Bank has been working on new initiatives such as the establishment in June 2011 of a new line of credit, which expanded the range of eligible investments and loans to encompass loans without real estate collateral or guarantees (including asset-based lending, or ABL).

4. Funds-supplying operation to support financial institutions in disaster areas

Fourth, following the earthquake and tsunami, the Bank introduced the funds-supplying operation to support financial institutions in disaster areas in April 2011 with the aim of supporting financial institutions in these areas in their initial response efforts to meet the demand for funds for restoration and rebuilding. Although there has been some demand for credit for rebuilding in disaster areas, it is still subdued. However, as the six loan disbursements that have been carried out by the Bank show, there is sufficient credit demand and the operation is having some effect, since around 490 billion yen of the total of 1 trillion yen initially set by the Bank has been disbursed. The Bank has been closely monitoring the funding situation of financial institutions in disaster areas, which has made some progress reflecting the inflow of funds to support disaster areas and of insurance payments. The deadline for new applications for loans under this scheme had originally been set for the end of October 2011, but on October 7 the Bank announced the extension of the deadline to April 30, 2012 in order to continue to support financial institutions in disaster areas in their efforts to meet demand for funds for restoration and rebuilding.

5. U.S. dollar funds-supplying operations against pooled collateral

Fifth and finally, given the turmoil in international financial markets, the Bank established a framework to supply U.S. dollar funds in emergency situations with the aim of providing reassurance to market participants and, in coordination with major central banks abroad, has been conducting U.S. dollar funds-supplying operations against pooled collateral on a regular basis, with one-week funds being supplied weekly and three-month funds, in principle, monthly. As I mentioned when discussing the fiscal and financial problems in Europe, European financial institutions have seen their U.S. dollar funding costs rise. However, U.S. dollar funding conditions for Japanese financial institutions do not appear to have tightened substantively when compared with their counterparts overseas. Nevertheless, given the growing interconnectedness among financial markets worldwide, there is a risk that volatility in global financial markets could spill over to Japan in a short period of time. From this perspective, the U.S. dollar funds-supplying operations against pooled collateral is also important in that it functions as a safety net for Japanese banks conducting business abroad.