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Bank of Japan

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**Economic Activity and Prices in Japan and  
Monetary Policy**

*Summary of a Speech at a Meeting  
with Business Leaders in Oita*

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## **Introduction**

It is my honor today to talk to Mr. Kugimiya, Mayor of Oita City, and business leaders in Oita Prefecture. And I express my gratitude for your understanding and cooperation in various business operations of the Bank of Japan's Oita branch.

First, I extend my deepest condolences to the people hit by the Tohoku-Pacific Ocean Earthquake, particularly those who have lost their loved ones. The earthquake was the biggest on record, and the damage has been geographically widespread. The quake has exerted various adverse effects on daily life and economic activity, as seen in the heightened problem of power supply shortages associated with the damage. Although the situation may be deemed a national crisis, it is important for us to have our determination to overcome the difficulties and rise from the disaster.

In my remarks today, I will talk about the upheaval caused by the earthquake and the Bank's responses, followed by an overview of Japan's economic and financial developments as well as monetary policy. I will conclude by offering my impression of the regional economy of Oita Prefecture.

## **I. Effects of the Tohoku-Pacific Ocean Earthquake and the Bank's Responses**

### **A. Settlement Systems and Financial Markets**

Looking first at the settlement systems following the quake, there were incidents -- mainly in the Pacific coastal areas in the Tohoku region -- including the destruction of some branches and disruption of automated teller machines at financial institutions. Moreover, on the day the earthquake occurred, there were system troubles at some financial institutions. Financial institutions have been making strenuous efforts to combat the situation by utilizing their undamaged branches and/or making deposit withdrawals through operations on weekends and holidays. Some clearing houses in the quake-stricken areas continue to suspend their bill and check clearing (15 clearing houses as of March 18), but through the efforts I have just mentioned, the settlement systems, including the Bank of Japan Financial Network System (BOJ-NET), in other areas have been operating smoothly as a whole.

The Bank has also been striving to ensure its own business continuity through, for example,

setting up a disaster management team immediately after the quake occurred and making sure that the BOJ-NET is running as normal. The Bank has provided, through its branches and offices, cash to the quake-stricken areas on Saturdays and Sundays as well (the amount of cash provided through branches and offices in the Tohoku region was 55 billion yen for Saturday, March 12 and Sunday, March 13, and 256 billion yen during March 14-18). Also, in response to the subsequent planned power outage on concerns over power supply shortages, the Bank has been taking all possible measures to stem an interruption in the settlement of funds, partly by continuing its business using in-house power generation at some branches. The BOJ-NET has been provided with a stable power supply, as it is the cornerstone of Japan's settlement system infrastructure. Since various financial needs are expected to arise in the quake-stricken areas, such as demand for cash and exchange of damaged banknotes and coins, the Bank will do its utmost to support these areas. Through such aggressive responses, the Bank will continue to ensure smooth BOJ-NET operation and cash supply and make every effort to ensure the stability of Japan's settlement system as a whole.

In the money market, fund providers have increasingly held back their fund provisions since the morning of Monday, March 14, and it has become difficult to make transactions in the call market. In response, the Bank conducted same-day operations, the first since May of 2010, and offered 82.4 trillion yen in one week (21.8 trillion yen on March 14, 20.0 trillion yen on March 15, 13.8 trillion yen on March 16, 15.6 trillion yen on March 17, and 11.15 trillion yen on March 18), of which 57.8 trillion yen was actually provided to the market. As a result, the overnight call market has been relatively stable in recent days.

By contrast, in the CP and corporate bond markets, investors' risk aversion has been strong and underwriting of CP and corporate bonds has declined, resulting in a significant rise in the issuing rates. The issuing rates have recently been somewhat high, which seems to be attributable in no small part to the protracted problem of the quake-stricken nuclear plant as well as the effects of the earthquake. In addition, in stock and bond markets, stock prices and long-term interest rates have fallen, reflecting investors' risk aversion due to heightened uncertainty regarding the future. In particular, stock prices declined significantly, and on May 15, the Nikkei Stock Average plunged by 1,015 yen from the previous day. This rate

of decline was the third largest in history, following only the declines recorded on Black Monday in 1987 and after the failure of Lehman Brothers in 2008. Moreover, in the foreign exchange market, while the yen depreciated immediately after the earthquake occurred, it then appreciated -- reflecting the trend of risk aversion -- and reached the range of 76.0-76.5 yen against the U.S. dollar in the early morning of March 17. Subsequently, due mainly to the concerted intervention by G-7 countries on Friday, March 18, the yen has been hovering around 80-81 yen against the U.S. dollar and stock prices have also recovered somewhat.

## **B. Economic Activity**

As for the effects of the earthquake on economic activity, the damage has been geographically widespread, with social infrastructure including ports and roads having been heavily damaged in the Tohoku region, and some large-scale factories being damaged in the Tokyo metropolitan areas. It is expected that a return to normal for the distribution system will take some time and that concerns regarding stable power supply, including in the metropolitan areas, will continue. In the meantime, restoration efforts have been made day by day.

In this situation, the following could be pinpointed, albeit qualitatively, as three future effects.

First, for some time, the effects of the damage will be seen substantially on the supply side, including production capacity, which will have an impact on economic activity, mainly in production and distribution. Since there are many parts manufacturers for automobiles and electronic devices in the quake-stricken areas, supply chains at home and abroad will be forced to be cut off, albeit temporarily. Second, uncertainty over the future could put downward pressure on economic activity through a deterioration in household and business sentiment. And third, while various forms of demand associated with restoration should emerge in the medium term, the timing and size of such demand is uncertain at present and quite difficult to envisage.

While it is difficult to quantitatively gauge the effects of the earthquake at present, it is very

much a situation in which the restoration of lifelines, utilities, and distribution has been slow, given that the earthquake was the biggest on record for Japan and accompanied by enormous *tsunami*. With that in mind, at least the extent to which economic activity will be pushed downward from the supply side could be larger and might be prolonged compared with, for example, the Great Hanshin-Awaji Earthquake of 16 years ago, and this warrants due attention.

### **C. Policy Responses**

With these things in mind, the Bank recognized that, in ensuring stability in public sentiment and in financial markets, it will be critical to examine the effects of the earthquake on Japan's economic and financial conditions in the immediate future as well as promptly announce its guideline for money market operations. Therefore, the Bank shortened the duration of its Monetary Policy Meeting to one day from an initially scheduled two days and, upon examining the current situation, judged it necessary to further enhance monetary easing. In particular, given that preventing any deterioration in business sentiment or any increase in risk aversion in financial markets from adversely affecting economic activity was considered to be the most appropriate policy response at present, the Bank decided to increase the amount of the Asset Purchase Program, mainly of the purchases of risk assets, by about 5 trillion yen to about 40 trillion yen in total. Specifically, the 5 trillion yen increase in asset purchases will be made mainly in risk assets -- namely, CP, corporate bonds, exchange-traded funds (ETFs), and Japan real estate investment trusts (J-REITs) -- for about 3.5 trillion yen and in government securities for about 1.5 trillion yen.

While there remains uncertainty over the future, the Bank will endeavor to gauge the effects of the earthquake on financial institutions and the financial system, as well as take all possible measures in order to secure stability in settlement systems and financial markets (Chart 1).

## **II. Developments in Economic Activity and Prices and Monetary Policy in Japan**

### **A. Overview**

The Bank has judged that Japan's economy will get out of the soft patch and, from a

longer-term perspective, continue to recover moderately (Chart 2). At the same time, the impact of the earthquake on Japan's economy is projected to be by no means small, at least in the short run. It is necessary to examine with vigilance how the earthquake will affect the Bank's previous outlook for economic activity and prices, together with the risk factors the Bank has highlighted. Next, I will examine those issues -- although most are judgments made prior to the earthquake -- starting with overseas economies.

## **B. Overseas Economies**

Let me first talk about the U.S. economy. The economy has continued to recover, coupled with additional stimulus measures both from the financial and fiscal sides (Chart 3). Business sentiment has improved among manufacturing and nonmanufacturing firms, and stock prices have been improving as a trend supported also by the good performance of global businesses. In this situation, business fixed investment has been on a recovery trend, albeit a moderate one, and private consumption has been recovering, exceeding the level before the Lehman crisis (Chart 4). On the other hand, balance sheet adjustments in the household sector are likely to take more time and housing investment has been at a low level, especially in terms of sales of newly constructed houses (Chart 5). The employment and income situation has improved somewhat, but the pace of improvement has remained moderate (Chart 6).

In such circumstances, due attention should be paid to how the recent rise in commodity prices will affect the U.S. economy. Inflation expectations perceived by the market have been on an uptrend since the autumn of 2010 (Chart 7). Household inflation expectations have risen since the turn of the year and the recent indicators of consumer sentiment have turned toward a decline (Chart 8).

The pace of the rise in commodity prices has accelerated, due partly to speculative capital inflows and the unrest in the Middle East amid originally robust demand in emerging economies (Chart 9). While commodity prices have recently been soft as risk aversion has heightened globally, triggered by the earthquake in Japan, the trend of price rises and continuous high prices is likely to remain to some extent if the basis of such a trend is the real demand on the back of high growth in emerging economies. I will pay close attention

to future developments in commodities prices and their effects on inflation expectations around the world, including the United States.

Next, looking at East Asian emerging economies, especially China, those economies have exited the deceleration phase starting from the latter half of 2010 and have continued growing at a rapid pace. The structure of growth indicates the ongoing virtuous circle in which the continuing robust expansion of domestic demand in the Chinese economy is increasing exports to China from some peripheral Asian countries, which in turn is spreading to domestic demand in those countries (charts 10 and 11).

In this situation, within Asian emerging economies, concern over inflation has started to heighten partly because of the rise in commodity prices, as well as the robust domestic demand. Moreover, in terms of maintaining the domestic demand expansion, wage increases in tandem with price rises are inevitable. This might in turn increase upward pressure on inflation. Therefore, Asian emerging economies have proceeded with the gradual rise in policy rates to create an environment for sustaining high growth (Chart 12). If the previous accommodative policy conduct -- referred to as "behind the curve" -- prolongs and high inflation takes hold, this will have a negative impact on the economy. Thus, in order to prevent such negative impact, it is important to act ahead of time. As Asian emerging economies are the driving force behind global economic growth, attention is being paid to their potential future actions.

Lastly, European economies are recovering moderately led by exports, driven in particular by Germany and other major economies (Chart 13). The rising inflation trend has become more pronounced and the European Central Bank has suggested a future policy rate rise. In some peripheral European countries that suffered fiscal problems, long-term interest rates have stayed high and uncertainty has remained elevated.

### **C. Japan's Economy**

In light of such recovery in the U.S. economy and high growth in Asian emerging economies, the effects of inventory adjustments in IT-related goods have run their course around the world. Private consumption in Japan is showing signs of picking up after suffering the reverse following the sharp increase seen previously. Although this

represents the judgment made prior to the earthquake, Japan's economy is getting out of the soft patch, driven in particular by the recovery in exports and production (Chart 14).

Looking at market developments prior to the earthquake, stock prices remained on an uptrend while the yen was in the range of 80-85 yen against the U.S. dollar (Chart 15). This is attributed to the fact that overseas stock prices, especially U.S. stock prices, rose in reflection of monetary easing in the United States, and that corporate profits and their cash flows improved substantially. On the other hand, the improvement seen in components related to domestic demand, such as business fixed investment and private consumption, and in the employment and income situation remained moderate (charts 16, 17, and 18). The pace of improvement in the output gap and price developments was generally moderate (Chart 19). Just like in the United States, the channel through which the favorable performance in the corporate sector fed into the household sector seemed to be somewhat weak.

The likely underlying mechanism is as follows. Even if the economy were to achieve an export-led recovery, a rise in import costs due to the increase in commodity prices would cause the terms of trade to worsen and real income to be undermined. As a result, even if the GDP figure increased, gross domestic income (GDI) would not increase that much. For example, during the recovery phase in the 2000s -- that is, during 2002-2007, before the Lehman crisis -- the real GDP growth rate was 1.8 percent on average but the real GDI, excluding trading losses, remained 1.2 percent on average. During the same period, the increase in real GDP brought by net export expansion, accumulated over the six-year period, amounted to 23 trillion yen. The trading losses during the period amounted to 18.7 trillion yen, meaning that the real GDI only grew by 4.3 trillion yen (Chart 20).

These figures suggest that some sectors in the economy have been burdened with these losses. During the recovery phase in the 2000s, firms contained total labor costs by constraining wages. The reduction in costs for wages represents firms' strenuous efforts to achieve structural transformation and streamlining. The reduction in production costs plays a role in stimulating the economy from the supply side, thereby constraining price rises. On the other hand, the reduction in total labor costs and wages leads to a reduction in household income, which in turn undermines a transmission mechanism working on

domestic demand. Thus, it can be said that the trading losses during the recovery phase in the 2000s burdened the household sector through the streamlining in the corporate sector.

If such mechanism underlies the economic recovery led by exports and production, this trend seems to have continued even in the recovery phase after the Lehman crisis. It appears that, on the back of the global and increasingly competitive environment and the yen's appreciation, firms have enhanced their efforts to proceed with structural transformation and to increase growth potential by accelerating their shifting of production sites overseas. It also seems that firms are maintaining their cautious stance in allocating corporate profits brought by the efforts just mentioned to domestic business fixed investment, or to employment and wages. There is a possibility that such mechanism has continued to operate while, until recently, the uptrend in commodity prices has constrained domestic income.

I will closely examine whether such a trend will continue and how it would affect the outlook for Japan's economic activity and prices. Let me repeat that the views I have presented so far were in consideration before the earthquake struck. Therefore, I will examine with vigilance the earthquake-triggered risk aversion around the world and its effects on the global economy, as well as Japan's economy.

#### **D. Monetary Policy**

In October of 2010, the Bank decided to implement comprehensive monetary easing to further pursue powerful monetary easing. Comprehensive monetary easing can be briefly summarized as follows. First, the Bank clarified its adoption of a virtually zero interest rate policy. Second, the Bank confirmed that it would maintain the virtually zero interest rate policy until it judged that price stability was in sight, and that the judgment would be based on the "understanding of medium- to long-term price stability." Third, taking into account that there was little room for a further decline in short-term interest rates, the Bank established the Asset Purchase Program, which aimed at purchasing various financial assets -- namely, government securities, corporate bonds, CP, ETFs, and J-REITs -- with a view to encouraging a decline in longer-term market interest rates and various risk premiums.

This is a quite extraordinary and unconventional monetary policy package that includes the

Bank's commitment to the continuation of the virtually zero interest rate policy, balance-sheet expansion, and purchases of risk assets. When the package was introduced, on the back of the slowdown in overseas economies and the sharp appreciation of the yen, business and household sentiment deteriorated and asset prices including stock prices were sluggish. Correcting the sentiment and risk-taking appetite that have excessively deteriorated in the markets is expected to produce sustained effects on lowering risk premiums. In fact, in the period after the introduction of comprehensive monetary easing until the earthquake, risk premiums generally declined, as seen in the rise in stock prices and REIT prices. It is also expected that the Bank's bold measure to encourage risk taking will boost firms' "animal spirits," thereby leading to an increase in Japan's growth potential and an improvement in productivity.

Also, in the United States, in the period following the Lehman crisis until the introduction of a large-scale asset purchase program -- the so-called "quantitative easing II" -- in November of 2010, unconventional monetary easing measures were implemented four times. In particular, the decision to purchase 600 billion dollars of longer-term Treasury securities in November of 2010 has produced some effects through the decline in long-term interest rates and borrowing costs. It also appears to have had the effect of boosting stock prices through moderating overly pessimistic market views on the U.S. economy seen from the summer of 2010 and correcting the trend of excessive risk aversion, thereby continuing to affect risk premiums requested by market participants.

As the dollar is the world's key currency, monetary easing in the United States may have another global transmission channel. Specifically, as a result of the Federal Reserve's commitment to the virtually zero interest rate policy as a policy action after the Lehman crisis, economies that have a strong linkage with the dollar, such as emerging economies and commodity-exporting economies, have ended up importing U.S. monetary easing, which in turn brings about economic expansion in countries other than the United States (Chart 21). U.S. global firms, both manufacturing and nonmanufacturing, are deeply involved in business operations widely around the world. Thus, economic expansion in areas with a strong linkage with the dollar would enhance the profits and growth expectations of U.S. businesses, which would in turn entail a rise in U.S. stock prices and lead to a recovery in private consumption. Therefore, it can be said that the powerful

monetary easing policy that has continued for more than two years in the United States has been entailing "international spill-over effects" of stimulating its economy at home, due to the rise in U.S. stock prices through the expansion of overseas economies.

It is important to note that the unconventional policy measures being implemented in Japan and the United States are not undisciplined, unlimited monetary easing. In the case of Japan's comprehensive monetary easing, and to clarify that it is after all a temporary and extraordinary policy measure, the Asset Purchase Program has been established and managed on the Bank's balance sheet. Similarly, in the case of the United States, Federal Reserve Chairman Ben S. Bernanke emphasized that the large-scale asset purchase program is a short-term policy measure and the Federal Reserve is committed to achieving medium- to long-term price stability.

So far, I have examined monetary policy and its effects on Japan and the United States. What has been highlighted as a common factor is that, when market sentiment and confidence have swung excessively in the direction of pessimism, central banks' aggressive actions and asset purchases were made to correct that situation and influence risk premiums in a sustained manner.

As mentioned earlier, in response to the earthquake, at the Monetary Policy Meeting held at the beginning of last week, the Bank decided to increase the amount of the Asset Purchase Program, mainly of the purchases of risk assets, with a view to further enhancing monetary easing. This measure is expected to have an effect similar to the one mentioned above, in that, confronted with an unprecedented earthquake disaster, the measure aims at counteracting any deterioration in business sentiment or an excessive increase in risk aversion, thereby preventing economic activity from deteriorating. While uncertainty is likely to remain high, the measure taken by the Bank will exert powerful effects as various efforts toward normalization pay off.

### **Concluding Remarks: the Economy of Oita Prefecture**

In conclusion, I will refer to the developments in this area.

Oita Prefecture was designated as a new industrial city during the high-growth period, and it

has been actively attracting growth-promising companies to the region, through cooperation between the public and private sectors, for a little less than the 50 years that have passed since the Oita coastal industrial zone was formed. Therefore, its industrial structure is quite well balanced and solid, with not only materials industries such as steel and oil having congregated in the area, but also processing industries such as precision machinery, semiconductors, and automobiles. Looking at the ratio of manufacturing to the prefectural gross product as of fiscal 2007, Oita posted a high 23.3 percent compared with the national average of 21.2 percent and the Kyushu average of 17.1 percent. There are many factories with extremely high production efficiency, as suggested by the value of manufactured goods shipments per establishment and per worker both being number one in Kyushu and number three in the nation. Since this region has a high share of manufacturers, it was significantly affected by the decline in exports and production caused by the failure of Lehman Brothers. Subsequently, in view of the many productive and efficient new factories, Oita's exports and production have been recovering relatively steadily in tandem with the recovery in overseas economies.

Moreover, I rediscovered that Oita is blessed with an abundance of resources with high brand recognition, ranging from fruits of the sea such as *Seki aji*, *Seki saba*, and *Shiroshita karei*, as well as dried *shiitake* mushroom and *kabosu*, for which production is the largest in Japan, to internationally popular hot springs resorts such as Yufuin and Beppu. Moreover, Oita has a geographical advantage of being located near rapidly growing East Asian economies, which gives the region a great advantage in terms of production and tourism. In addition, the improvement in traffic infrastructure, including the full opening of the Kyushu *Shinkansen* Line this month and ongoing extension work in the region for the Eastern Kyushu Expressway, is expected to intensify the interaction within the Kyushu region and with other areas including the Kansai region.

Looking toward the future for Oita's economy, I am paying close attention to the following two issues that could lead to future growth in Oita Prefecture. First, wide-ranging cooperation in the medical and welfare areas. Many medical equipment manufacturers have been congregating in Oita Prefecture and the prefecture's total value of medical equipment production ranks fourth in Japan. In October of last year, Oita Prefecture

formulated an "Initiative for Eastern Kyushu Local Medical Industrial Center (or Eastern Kyushu Medical Valley Initiative)" in cooperation with its neighbor Miyazaki Prefecture. The medical and welfare areas have been considered as growth areas in the nation's growth strategy, and, given their characteristics of not being influenced substantially by a business cycle, are expected to contribute to the regional economy. I believe that cooperation among the government, industries, and the academia will be enhanced based on such wide-ranging cooperation, and that industrial congregation will advance in the future.

The second issue is regional revitalization by utilizing natural energy. Oita Prefecture is the top in the nation in terms of the number of hot springs sources and the amount of hot water, and, supported by such geothermal energy, is an advanced prefecture in natural energy utilization, with the supply and self-sufficiency ratio of natural energy being ranked first among the prefectures in Japan. As for natural energy, there have recently been nationwide efforts by both the public and private sectors to enhance its utilization together with the beefed-up efforts toward solving environmental problems. Also in Oita Prefecture, there have been signs of promoting the use of natural energy sources other than geothermal power generation, including small hydroelectric generation and biomass generation. In perceiving the natural energy area as a business opportunity, some local firms appear to be crossing traditional business borders and entering the area through innovations, in which I expect future growth.

With that, I will conclude my speech and move on to exchanging views with you. Thank you.