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Bank of Japan

The Current Situation of and Outlook for Japan's Economy and the Conduct of Monetary Policy

Summary of a Speech at a Meeting with Business Leaders in Nagasaki

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I. The Current Situation of and Outlook for Japan's Economy

A. The Current Situation in Financial Markets

I will first touch upon the current situation in financial markets around the world, which has greatly affected the Japanese economy since last year. Owing to large-scale economic policy measures by governments and aggressive monetary policy steps, including unconventional ones, by central banks, the global financial crisis triggered by the collapse of Lehman Brothers in September 2008 is gradually subsiding. As excessive concerns about financial system stability receded and economic indicators at home and abroad improved, investors regained their appetite for risk and, since spring, have started buying credit assets such as stocks and corporate bonds.

With regard to developments in Japan's financial markets, I will first look back at the measures the Bank of Japan has taken in response to the financial crisis. The measures can be broadly divided into two categories: (1) measures that effectively use existing policy tools; and (2) measures designed to support corporate financing that are exceptional for a central bank.

Regarding the first category, the Bank lowered the target for the uncollateralized overnight call rate twice, in October and December 2008, bringing it down to the current 0.1 percent. In addition, the Bank actively provided liquidity to meet corporate demand for funds over the calendar and fiscal year-ends, increased the amount of outright purchases of Japanese government bonds (JGBs), and expanded the range of eligible collateral by easing the requirements and expanding the range of acceptable collateral.

At the same time, the Bank has taken various measures since October 2008 to support corporate financing in response to the sudden surge of concerns over the liquidity positions of firms. The three main measures are (1) special funds-supplying operations to facilitate corporate financing, in which the Bank provides funds for an unlimited amount against the value of corporate debt accepted as collateral at an interest rate equivalent to the target for the policy rate (December 2008); (2) outright purchases of CP (January 2009); and (3) outright purchases of corporate bonds (March 2009). In terms of money market operation tools used by central banks, these three types of operations are exceptional in that the rate is

not decided through auction but is fixed in advance (in the case of the special funds-supplying operations) or that the degree of credit risk exposure for the central bank is high (in the case of outright purchases of CP and corporate bonds). These exceptional measures were introduced for a specified period, although their duration was extended by three months -- to the end of December 31, 2009 -- at the Monetary Policy Meeting on July 14 and 15, 2009.

The financial environment in Japan has steadily improved due partly to these measures. The ample supply of funds by the Bank has created a strong sense of abundance of liquidity in the money market. Yields on treasury discount bills and the general collateral (GC) repo rates have both been steady at slightly above 0.1 percent in line with the uncollateralized overnight call rate, which has remained stable at around 0.1 percent. Furthermore, interbank rates on term instruments such as TIBOR (Tokyo Interbank Offered Rate) have been edging lower, and at present the premium on term instruments maturing beyond the end of September or December is marginal. In the stock market, the leveling out of economic indicators both at home and abroad and the rise in European and U.S. stock prices have prompted market participants to buy again. The benchmark Nikkei 225 Stock Average has recently been trading above 10,000 yen after dipping to 7,054 yen on March 10, the lowest level in 27 years. In the bond market, the benchmark 10-year JGB yield has hovered around 1.4 percent, reflecting on one hand the rebound in stock prices based on expectations of a bottoming out of the economy as well as concerns over a possible deterioration in the supply-demand balance of government bonds due to an increase in issuance, and on the other hand, buying on dips by institutional investors.

Meanwhile, the environment for corporate financing has also improved. Corporate demand for external funds has decreased reflecting the following: (1) the fall in cash inflow is coming to an end as exports and production begin to rise again; (2) the demand for working capital is declining as progress is being made in inventory adjustments; and (3) the demand for back-up funds is also falling as a result of improvements in business confidence. Funding conditions have also clearly improved. In the corporate bond market, with spreads narrowing, issuance of corporate bonds with high ratings of A and above has increased. Corporate bond issuance reached a record high in June this year. The spread

remains wide for bonds with low ratings such as BBB, but such bonds have also begun to be issued, indicating that issuing conditions for corporate bonds as a whole are improving. In the CP market, issuance rates on some high-rated CP have fallen below yields on treasury discount bills, evidence of extremely favorable issuing conditions. A survey in August by Shoko Chukin Bank shows that the diffusion index (DI) for small and medium firms' perception of their financial position has improved for the seventh consecutive month, recovering to the level before the failure of Lehman Brothers. The result indicates that the financial positions of small and medium firms have improved with the decline in lending rates.

B. The Current Situation of the Economy and Prices

1. Economic activity

Against the financial background I just described, Japan's economic conditions have stopped worsening and are heading steadily toward recovery. The real GDP growth rate for the April-June quarter of 2009, which was recently released, showed an annualized quarter-on-quarter increase of 3.7 percent, marking the first expansion in five quarters. A breakdown shows that while business fixed investment and housing investment continued to fall, net exports, private consumption, and public investment all made a positive contribution. It can therefore be said that the expansion in GDP reflects a recovery in external demand and government economic policies.

Let us take a closer look at developments in the various GDP components. Real exports fell sharply for two consecutive quarters, tumbling by 14.6 percent on a quarter-on-quarter basis in the October-December quarter of 2008 and by 28.9 percent in the January-March quarter of 2009, but then increased substantially by 12.4 percent in the April-June quarter. Growth is continuing, with exports in July increasing by 2.3 percent from the previous month. Exports are clearly on a path of recovery, with the effects of various economic measures implemented around the world taking hold and inventory adjustments in motor vehicles and IT-related goods in East Asia, led by China, and the United States coming to an end. Meanwhile, public investment is increasing as a result of the implementation of economic measures such as the acceleration in the rate of growth in the volume of public works during the April-June quarter. The effects of economic measures can also be seen in

private consumption. Car sales recovered due to tax reductions and subsidies on purchases of environmentally friendly cars, while sales of household electrical appliances increased following the introduction of the eco-point system that favors products that are energy efficient. As a result, the contribution of private consumption to quarter-on-quarter changes in GDP in the April-June quarter was pushed into positive territory. It must be noted, however, that the unemployment rate in July reached 5.7 percent, the worst ever, and that sales at department stores and supermarkets declined sharply under the severe employment and income situation, and also in part due to an unseasonably cold summer. Against this background, the Bank's view that private consumption remained weak was unchanged, an assessment underpinned by the Family Income and Expenditure Survey for July, which showed that the drop in real consumption expenditure had accelerated from the previous month. Business fixed investment continues to fall sharply, with shipments of capital goods (excluding transport equipment) in July decreasing by 1.3 percent from the previous month reflecting the severe situation in corporate profits and the strong sense of excessive capital stock among firms. Housing investment also remains stagnant. Price reductions toward the fiscal year-end in March raised sales of newly built condominiums in the Tokyo metropolitan area to an annualized rate of almost 50,000 units during the January-March quarter. Since then, however, sales have returned to a lower level of around 40,000 units.

Reflecting the above situation in domestic and overseas demand, industrial production is showing signs of recovery. Regarding the shipment-inventory balance, adjustment pressures on inventories remain strong for capital goods and construction goods, while steady progress has been made in inventory adjustments of durable consumer goods and producer goods.

2. Prices

Moving on to developments in prices, the year-on-year decline in the consumer price index (CPI; excluding fresh food) has accelerated mainly due to the prices of petroleum products being lower than the high levels of a year earlier, and the deterioration in the supply-demand balance. The CPI in July 2009 showed a year-on-year decrease of 2.2 percent, marking the steepest fall ever for two consecutive months. This has given rise to

the view among some market participants that Japan is sliding toward deflation. However, price developments have so far been within the Bank's expectations and therefore it is necessary to assess developments calmly, taking into account the following points.

The first point is the general tendency for commodity prices to fluctuate. Since last year, prices have been greatly affected by developments in commodity prices, led by crude oil, and the pace of decline in commodity prices has been faster than that of the increase. Therefore, it is only natural that the drop in the CPI is rather large. Moreover, if we only look at the rate of decline, the drop may seem quite large, but the CPI index stands at 100.1, meaning that the CPI has returned to the level of fall 2007, that is, the level before the surge in prices of petroleum products. Crude oil prices have also roughly returned to levels observed around that time (Chart 1 (1)).

The second point is that the fall in the CPI is partly due to advances in technology and productivity. A look at the CPI excluding food and energy, in order to eliminate the effects of petroleum products, shows that the index has indeed fallen from the previous year. Therefore, it is likely that factors other than the surge in prices of petroleum products, such as the deterioration in the supply-demand balance, may also be a cause for the fall in the CPI. However, the CPI excluding food and energy, over a longer time horizon, displays a medium- to long-term downward trend, suggesting that the fall is also attributable to factors other than the short-term supply-demand balance, including in part advances in technology and productivity (Chart 1 (2)). Although it is not clear how such factors will affect the CPI in the future, this is certainly something that needs to be taken into account when assessing the developments in consumer prices.

The third point is the risk of relying too heavily on developments in specific indicators, such as those related to the supply-demand balance, in forecasting price developments. A major indicator of the supply-demand balance is the output gap. At present, the negative output gap is widening, reflecting the substantial economic downturn. Frankly speaking, our own experience of estimating the supply-demand gap through various methods and using those indicators in analyzing price developments has taught us that relying too heavily on developments in such indicators can result in inaccurate forecasts for prices. A margin

of error has to be assumed whatever the method of assessment, and it is extremely difficult to determine when and to what extent developments in the supply-demand gap affect prices. It is true that the deterioration in the supply-demand balance is putting downward pressure on prices. However, careful consideration is required concerning how this should be factored into the outlook for prices.

C. Outlook for the Economy and Prices

Recent economic indicators suggest that Japan's economy has generally been moving in line with the Bank's baseline scenario, which forecasts that the economy will start recovering moderately from the latter half of the current fiscal year, and that downside tail risks for the near future have diminished to a considerable extent. In the longer term, however, uncertainty about the outlook with regard to the effects of economic policy measures and developments in the financial system remain, and it is therefore necessary to continue to pay close attention to a number of risk factors.

Before moving onto risk factors, however, I would like to address the outlook for the near future item by item, just as when considering the current situation of Japan's economy. Starting with real exports, these are expected to continue recovering, on the back of progress overseas in adjustments of inventories and economic conditions. A closer look at overseas economies shows that in the United States and Europe private consumption and housing investment are likely to remain depressed for the time being, because of persisting pressure on households reflecting the severe employment and income situation. However, consumer and business confidence is on a recovery trend due to the effects of the economic policy measures taken by governments and progress in inventory adjustments. Leading indicators of business fixed investment and housing prices are finally showing signs of leveling off, indicating that the economy is gradually bottoming out. With regard to Asia, the growth of domestic demand in China is increasing reflecting the effects of economic policy measures, while in the NIEs and the ASEAN countries not only exports and production but also some domestic demand components are on a recovery trend. The rebound in economic indicators appears to have prompted market participants to revise upward their growth forecasts for the various countries and regions.

The recovery in Japan's exports is expected to keep production on an upward trend. According to the forecast index for industrial production, the high quarter-on-quarter growth observed in the April-June quarter is expected to continue in the July-September quarter. A key factor in forecasting corporate profits and business fixed investment, capacity expansion in particular, is whether production will return to profitable levels. Chart 2 compares the macroeconomic break-even capacity utilization rate and the actual operating ratio. The chart shows that the current level of production is not yet profitable. Given that many firms are making restructuring efforts to cut fixed costs, it is not necessary for production to return to the high levels recorded in the first half of 2008 for profitability to be restored. However, it will still take some time before this is achieved. Machinery orders are forecasted to continue declining during the July-September quarter, and business fixed investment is expected to remain stagnant for the time being. Housing investment is also likely to continue decreasing for the time being as the number of housing starts, a leading indicator, remains far below levels a year earlier. As for private consumption, the outlook remains unchanged: it is likely to remain generally weak as a whole. This is because although sales of certain products -- such as cars and energy-efficient electrical appliances -- gained some momentum as part of the effects of economic policy measures, the employment and income situation is worsening, while the impact of the H1N1 influenza virus lingers as a further negative factor.

The decline in the CPI (excluding fresh food) is expected to continue accelerating for the time being, mainly because the prices of petroleum products are lower than the high levels of a year earlier.

D. Risk Factors

As I just mentioned, tail risks for the near future seem to have diminished to a considerable extent. In the longer term, however, it is important to achieve a smooth transition from a recovery supported by economic policy measures to a self-sustained recovery. Unfortunately, great uncertainty still remains regarding this point. I would therefore now like to talk about the upside and downside risk factors alluded to earlier that require close examination over the forecast horizon, that is, up to fiscal 2011 for the October 2009 *Outlook for Economic Activity and Prices* (Outlook Report), scheduled to be released on

October 30, 2009.

The first is the risk arising from international financial markets. There is now a growing consensus among market participants that the economy has moved out of its worst phase. However, with regard to the outlook, there is a wide diversion of views among market participants, and each time an economic indicator is released the market fluctuates between optimism and pessimism, trying to find a suitable level for the moment. In this unstable market environment, there is a non-negligible risk of, for example, wild market fluctuations in the event of an unexpected swing in economic indicators or the failure of a financial institution. Potential triggers of such incidents in the United States include an increase in the number of bankruptcies or foreclosures, or problems in the commercial real estate sector, such as difficulties in the rolling over and repayment of loans. Meanwhile, in Europe, against the background of the problems in Central and Eastern European economies, there are concerns over the vulnerability of financial markets. Therefore, the adverse feedback loop between financial and economic activity still warrants close attention. On the other hand, there is also the possibility that the recent adjustment process in financial markets might come to an end faster than expected. It is therefore important to keep an open mind and constantly examine whether the views regarding the outlook for the U.S. and European economies and financial markets are not unduly cautious due to fears of repeating the experience of Japan in the aftermath of the bursting of the bubble.

The second risk is that pressures for protectionism might mount. This has been pointed out in a statement by the European Central Bank Governing Council and by the President of the World Bank. Increased protection of domestic firms or withholding of resources would delay the recovery in exports, put downward pressure on the economy, and have a negative impact on prices.

The third risk is that firms' expectations of medium- to long-term growth may decline. The outlook I mentioned earlier is based on the assumption that firms' expectations of such growth will not change significantly. However, if their expectations have already shifted down, or shift down in the future, the decline in business fixed investment could last longer than expected and private consumption could fall steeply as a result of a significant adjustment in employment.

The fourth risk concerns the macroeconomic stimulus measures. It is necessary to pay attention to the fact that the expansionary macroeconomic policies pursued by governments around the world carry the risk of a subsequent contraction should they stimulate economic activity more than intended. Recently, the term "dollar carry trade" instead of "yen carry trade" is frequently heard in financial markets. The unwinding of unbalanced positions based on excessive expectations could result in large fluctuations in markets and economic activity. Furthermore, attention also needs to be paid to the upside risk to long-term interest rates as a result of growing doubts regarding fiscal discipline.

The last risk factor is developments in prices. For the time being, it is necessary to keep in mind the risk that the inflation rate may fall more than expected due to weak economic activity or a decline in medium- to long-term inflation expectations. From a longer-term perspective, however, we should remain aware of the risk that the inflation rate may rise more than expected because of increases in primary product prices due to funds flowing into commodity markets again as a result of continuing accommodative global financial conditions.

E. Conduct of Monetary Policy in the Near Future: Termination of the Exceptional Policy Measures

As always, in addition to safeguarding stability in financial markets, the Bank, keeping in mind and examining in detail the aforementioned future outlook for economic activity and prices and upside and downside risk factors, will do its utmost to facilitate the return of Japan's economy to a sustainable growth path with price stability. I would now like to briefly touch upon the pressing issue of terminating the exceptional policy measures introduced by the Bank, which include special funds-supplying operations to facilitate corporate financing, outright purchases of CP, and outright purchases of corporate bonds.

As I mentioned earlier, at the Monetary Policy Meeting in July, the duration of the exceptional measures was extended by three months, from the end of September 2009 to the end of December 2009. During this period, the Bank will examine corporate financing

conditions and consider whether it is necessary to continue the exceptional measures. If the financial situation seems to have improved, the Bank will decide to terminate or alter the measures. On the other hand, if the situation does not seem to have sufficiently improved, the Bank will further extend the measures. At present, the Bank holds no predetermined views on the outcome.

In order to convey the Bank's intentions as accurately as possible, I will point out some of the elements that the Bank considers important in deciding whether to terminate or extend the exceptional measures. By doing so, I believe that a common understanding between us, the Bank, and financial markets and firms, of the current situation will be promoted, which is desirable from the viewpoint of accountability.

The first point is that regardless of whether the exceptional measures are terminated or extended, it is necessary to maintain a sufficiently accommodative financial environment for the time being to enable the Japanese economy to return to a sustainable growth path with price stability. In this regard, I would like to point out that it is important to keep in mind that the degree of the expansion of the Bank's balance sheet is not an indication of the extent of monetary easing. In Japan, where the factors that affect the Bank's current account deposits, such as payments and receipts of treasury funds and banknotes, fluctuate greatly, relatively large amounts of short-term funds need to be shifted flexibly in accordance with the supply and demand for funds in order to steer the uncollateralized overnight call rate toward the target level. Furthermore, the Bank actively provides short-term funds in the event of a significant decline in the functioning of markets and a large-scale tightening of supply and demand conditions, as seen in the recent past. Conversely, when the functioning of markets recovers and lenders return to the market, the Bank reduces the supply of short-term funds. In this way, the size of the Bank's balance sheet changes in order to steer the uncollateralized overnight call rate toward the target level. Therefore, even if the size of the Bank's balance sheet should contract, this does not mean that the degree of monetary easing declines as long as the guideline for money market operations remains unchanged.

The second point is that the environment for corporate financing has improved and the need

for exceptional measures is fading. The exceptional measures at least to a certain extent managed to provide reassurance to firms. Therefore, the concern that the termination of these measures may give rise to renewed anxiety among firms is understandable. The following points, however, suggest that the environment for corporate financing appears to be improving to an extent where the traditional funds-supplying operations are sufficient to maintain market confidence: (1) bids have fallen well short of the Bank's offers in outright purchases of CP and corporate bonds, indicating that the need for the Bank to continue these measures has decreased; (2) the amounts involved in the exceptional measures relative to the total amount outstanding of short-term funds-supplying operations are not large (Chart 3 (1)); and (3) the rates in regular operations, so-called funds-supplying operations against pooled collateral, have declined to sufficiently low levels (Chart 3 (2)). Points (2) and (3) indicate that the relative importance of special funds-supplying operations to facilitate corporate financing has declined.

The third point is that the decision should be made based primarily on the overall conditions for corporate financing, although it is, of course, important to consider other factors, such as whether yield spreads on low-rated corporate bonds remain at high levels or the financial conditions of small and medium-sized firms remain tight. If we consider the demerits of the exceptional measures that I will mention next as the fourth point, the overall conditions for corporate financing, including bank lending and CP issuance, should be the primary factor in making decisions regarding the exceptional measures.

The fourth point is that the demerits of the exceptional measures should not be taken lightly. It is true that the exceptional measures brought down issuing rates of CP and corporate bonds as well as interbank rates on term instruments and helped the issuance of corporate bonds with high ratings, thereby contributing greatly to improvements in market sentiment. However, it must also be admitted that undesirable side effects have also surfaced, such as that issuance rates on some high-rated CP have fallen below yields on treasury discount bills. If such an extraordinary situation continues, investor appetite for CP may decline and markets' natural ability to autonomously adjust may be hampered. Furthermore, there is a risk that the fairness and efficiency of markets may be undermined by a central bank's involvement in the microeconomic allocation of resources.

The Bank will closely examine the above points when deciding on the exceptional measures toward the end of December. The merits and demerits of the exceptional measures are like two sides of the same coin -- the more effective the measures, the more intractable their side effects become. Continuing the exceptional measures even when the environment for corporate financing has recovered sufficiently could result in the negative effects overriding the positive ones. Therefore, due attention must be paid to ensure that this does not happen.

II. Monetary Policy under Uncertainty

So far, I have commented on the current situation of and outlook for economic activity and prices in Japan as well as the conduct of monetary policy for the near future. I would now like to talk about dealing with risk factors and conducting monetary policy under great uncertainty.

A. Current Policy Framework and Risk Assessment with Regard to Prices

To start with, I will briefly talk about the Bank's current framework for the conduct of monetary policy. Based on Article 2 of the Bank of Japan Act, which states that "currency and monetary control by the Bank of Japan shall be aimed at achieving price stability, thereby contributing to the sound development of the national economy," members of the Policy Board express the level of inflation -- in terms of the rate of year-on-year change in the CPI -- that they understand as being consistent with price stability over the medium to long term, and the rate currently falls in the range approximately between 0 and 2 percent with the median figures at around 1 percent. Taking account of this "understanding of medium- to long-term price stability," the Bank assesses the economic and price situation from the following two perspectives and makes monetary policy decisions to achieve sustainable growth with price stability:

- (1) The first perspective relates to the outlook for economic activity and prices over the forecast horizon for projections in the Outlook Report (two to two and a half years) that the Bank deems the most likely -- the main scenario -- and assesses whether this is consistent with sustained growth under price stability.
- (2) The second perspective extends the time horizon and assesses the risks considered most

relevant to the conduct of monetary policy.

The above policy framework is the basis of the Bank's communication with the market and the public to provide thorough explanations of the Bank's thinking on monetary policy, its views on economic activity and prices, the main scenario for the outlook, and the accompanying risk factors; and to gradually build a consensus on the appropriate period for policy changes and the range of rate changes while encouraging the autonomous formation of market expectations. Especially when the outlook for economic activity and prices is uncertain, as at present, a central bank does not necessarily have an information advantage. Therefore, in conducting monetary policy, it becomes extremely important to promote the autonomous formation of market expectations and gain an accurate understanding of these. If the Bank strongly commits itself to a particular policy such as during the period of quantitative easing, markets would factor this into their expectations, and the Bank, rather than observing the autonomous formation of expectations by markets, would instead only be looking at a reflection of its own stance.

Therefore, what is necessary is not a direct commitment with little flexibility, but a clear framework that allow markets to anticipate the Bank's future reaction to various events, and sharing with the market the thinking underlying this framework.

Concerning the second of the two perspectives from which the Bank assesses the economic and price situation, the risks considered include not only the upside and downside risks to the main scenario over the forecast horizon for projections in the Outlook Report, that is, two to two and a half years, but also considers risks over a longer time horizon. These are, for example, risks that are not very likely to occur, but may have a serious impact on the economy and prices if they do materialize. From this perspective, what I would like to highlight is the importance of attaining price stability over a medium- to long-term time horizon. Recently, the year-on-year rate of change in the CPI has been negative and some have questioned whether this can really be reconciled with price stability. However, if inflation expectations do not shift down substantially and it is likely that the year-on-year decline in the CPI will gradually decelerate in the longer run, monetary policy should not be swayed by a short-term fall in prices. Of course, as I have already mentioned, the immediate risk with regard to inflation is the downside risk posed by the deterioration in the supply-demand balance. However, what may cause larger swings in the economy and prices is the macroeconomic stimulus measures that may lead to excessive investment and the taking of extreme positions by market participants. For these reasons, assessing the economic and price situation from the second perspective is even more important than in the past. Against the background of the current substantial downturn in the economy and decline in prices, and taking into account the unwinding of various excesses that have built up over the years, overseas central banks are also stressing again the importance of a medium- to long-term perspective on price stability.

B. Two Approaches to the Conduct of Monetary Policy: Gradual Versus Flexible

Next, I would like to discuss the relationship between the degree of economic uncertainty and the conduct of monetary policy. Here, I specifically present two possible approaches to the conduct of monetary policy at a time of great economic uncertainty, namely, whether to implement measures gradually and slowly in response to economic developments; or whether to act flexibly and swiftly before the probability increases that risks will materialize.

To begin with, in contrast to the optimal interest rate policy when uncertainty is not elevated, one approach when uncertainty is high is a gradualist one in which the central bank gradually and carefully implements measures in response to the economic situation as it develops. When uncertainty is high, it takes time to examine developments in various indicators and assess trends in prices and the economy carefully. A gradualist approach to some extent provides the necessary time to do so. Put differently, a gradualist approach offers a wider time frame for a careful assessment, thus reducing the risk of making wrong assessments. Moreover, while abrupt policy changes can result in a loss of credibility of the central bank, a gradualist approach can contribute to minimizing this risk. It also has the advantage that it enhances accountability, since it allows the central bank to ascertain the reaction of the market to, and gain the understanding of the public for, changes in policy, and to respond as necessary. On the other hand, there is the possibility of falling behind the curve as a result of implementing policy changes gradually. It is therefore desirable that the central bank moves in small steps as soon as it is possible to decide that the

conditions for a policy change are there. In addition, depending on the degree of economic uncertainty, it may also be necessary to change the degree of caution and move swiftly if the likelihood of risks materializing increases.

On the other hand, there is the issue of how to deal with tail risks, that is, risks for which it is unclear through what mechanisms they might emerge and the probability of which is small, but which would have major detrimental consequences if they were to materialize. A possible response to such risks is to pursue an approach that seeks to avoid worst-case outcomes, that is, a minimax approach aimed at minimizing the worst-case detrimental consequences. Under this minimax approach, top priority is given to containing risks no matter what the degree of uncertainty.

The Federal Reserve adopted a minimax approach and continued to reduce the federal funds (FF) rate from late 2001 to early 2003 in response to the -- albeit only slightly -- heightened possibility that the continuing negative output gap might give rise to deflation. In this context, then-Chairman Alan Greenspan said that the Federal Reserve policymakers adopted "policies that limit the risk of deflation even though the baseline forecasts from most conventional models would not project such an event." However, it is not easy to explain the rationale of such a preemptive policy stance to the market and the public. In January 2004, two years after the U.S. economy had bottomed out, Ben S. Bernanke, then a member of the Board of Governors, in explaining the reasons for maintaining the FF rate at 1.0 percent -- the lowest level ever at the time -- argued that the downside risks to inflation were greater than the upside risks given (1) the downward trend in core inflation rates, (2) the widening negative output gap and decline in production costs due to increases in labor productivity, and (3) the persistent softness of the labor market. Retrospectively, however, the side effects of such policies have been highlighted. For example, it has been argued that while policymakers continued to talk about strong concerns regarding deflation in order to justify their policies, this in itself may have heightened the public's concerns about deflation, and that the low interest rates during that period were one reason for the subsequent housing bubble.

Based on these considerations, I think it is difficult to preemptively take aggressive

measures to address tail risks. Thus, my tentative conclusion is that even if the probability of risks materializing is still low, it is desirable to implement measures gradually and slowly, when judged over a longer time frame that the likelihood of risks materializing is increasing.

C. Dissemination of Information on Risks: The Case of the Federal Open Market Committee (FOMC)

Let us now examine how information about these risks should be disseminated. For reference, I will use examples from the United States, focusing on the FOMC's statements on the balance of risks.

Let us start with the aforementioned preemptive policy during the period around 2003 to contain deflation through low interest rates. Until the FOMC meeting on January 28 and 29, 2003, the Committee had provided one summary statement regarding its assessment of the risks for the foreseeable future concerning the two policy goals of price stability and sustainable economic growth. Providing one summary statement, however, involves the difficult task of combining two separate risk assessments, one for each of the two goals. At the FOMC meeting on March 18, 2003, the Committee decided to omit its usual summary statement regarding the balance of risks from the press release to be made public due to the heightening of geopolitical uncertainties as a result of the Iraq situation. At the meeting on May 6, the Committee discussed again whether such a statement should be included in the summary style or in a different form, or removed altogether. Overriding the opposition of many participants, the Committee agreed on new language that provided separate assessments of the risks to the two goals of price stability and sustainable growth, followed by a summary statement with regard to the balance of risks to the two goals taken together. The reason for splitting the balance of risks statement into separate assessments was that the usual summary statement did not allow for the circumstances in which the Committee saw some probability, albeit minor, of a further decline in inflation in a situation where the risks to sustainable economic growth were about balanced. The above decision made at the May meeting to include a summary statement led market participants to realize that the FOMC was concerned about substantial downside risks to inflation and resulted in a fall in long-term interest rates in the market. Seeing this market reaction, the Committee continued to release its balance of risks statements using the same language for a while. However, at the meeting on December 9, 2003, most members agreed to delete the summary statement as no longer necessary, as difficulties became apparent when updating and rewording the balance of risks statement as the conduct of monetary policy changed.

Looking at recent statements of the FOMC on the balance of risks including those in the minutes, however, I found that even in a situation of great uncertainty, the FOMC has with precision communicated to the public marginal changes in the economic and prices situation by slightly rewording its statements. Excerpts of risk-balance statements from the minutes of FOMC meetings from April through August 2009 show that the assessment of risks is divided into two time frames: one for the near term, and one for the forecast horizon.

Regarding economic growth, from April through August, members' assessment for the near term was that downside risks had diminished somewhat, while for the longer time frame of the forecast horizon, there was an increase in the number of members who thought that the risks to growth for the period from January through June 2010 were roughly balanced, with a majority of participants holding this view at the meeting held on June 23 and 24, 2009. This indicates that members had revised upward their assessment of the risks to economic growth.

On the other hand, developments in the assessment regarding the risks to inflation are less simple. Concerning the risks for the near term, a few members pointed to a risk of substantial disinflation at the August 2009 meeting, but on the whole attention seems to have shifted from the risk of deflation to that of inflation. Concerning the assessment of risks over the forecast horizon, most participants saw the risks surrounding their inflation outlook as roughly balanced. Other members were split between those stressing upside or downside risks, with the balance remaining largely unchanged. Changes in the assessment of risks to prices were more rapid for the near term than for the forecast horizon, and especially in August mentions of inflation concerns increased.

In the way I just described, the Federal Reserve disseminates fully detailed descriptions of its assessments of risks and the balance of risks so as to facilitate communication with the market. As I said earlier, central banks around the world examine the economic and price situation from a medium- to long-term perspective when conducting monetary policy. In contrast, in markets and among the public, the time frame for making decisions can vary from the short to the long term. Disseminating information about small but important changes in the risk balance can, I believe, help to bridge this discrepancy in time horizons. Even if there are no changes in a central bank's baseline scenario, subtle changes in risk-balance statements make it possible for markets to read signs of changes in the central bank's policy assessment. The Bank believes that a careful analysis of slight changes in the risk balance and the accurate dissemination of such information will enhance its communication with markets and the public.