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Bank of Japan

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

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

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

A. The Current Situation

Japan's economic conditions have deteriorated substantially. According to recently released data, real GDP contracted in the October-December quarter of 2008 by 12.7 percent on an annualized quarter-on-quarter basis, marking the second largest decline since World War II -- smaller only than the decline in the January-March quarter of 1974 -- and the third quarterly decline in a row. World economic growth has decelerated rapidly against the background of the adverse feedback loop between financial and economic activity. This has stalled the growth of the export-oriented Japanese economy, and corporate activity, such as production and capital spending, has been falling at an unprecedented pace. The drop in corporate activity is even more substantial than that in the United States, where the global financial crisis originated. This seems attributable to Japan's industrial structure: the economic expansion since 2002 was largely supported by world economic growth and economic globalization, making Japan more sensitive to a change in global demand. Structural factors include, first, the fact that the weight in industrial production of those industries that had led the economic expansion until recently -- such as transport machinery, electrical machinery, and general machinery -- is high. Second, the ratio of exports in total production has risen, especially in the industries I just mentioned. And third, the rate of domestic procurement of parts and materials is high, and thus domestic production is extremely sensitive to a change in the level of exports.[1] In addition, psychological factors may have played a large role in the sharp decline in production. The appreciation of the yen and the extremely rapid downturn of overseas economies, including emerging and resource-exporting economies, have produced a great sense of uncertainty among Japanese firms regarding the economic outlook, so that they have become increasingly averse to holding excessive inventories and capital stock. Meanwhile, firms' cash inflow has decreased substantially, and as a result their credit demand for working capital has surged.

Let us now examine the current situation of the economy by demand component. I

[1] For details, see the Box in the February 2009 *Monthly Report of Recent Economic and Financial Developments*.

will begin with real exports, which have decreased substantially. Through around last summer, declines in exports to the United States and Europe were offset by buoyant exports to emerging and resource-exporting economies, but since the autumn -- when the negative effects of the turmoil in global financial markets started to spread to emerging and resource-exporting economies -- Japan's exports to almost all destinations have decreased markedly. Real exports, after posting an increase in the July-September quarter of 2008, registered a quarter-on-quarter drop of 15.8 percent -- the largest ever -- in the October-December quarter. Real exports continued to decrease significantly, falling in January this year by 15.7 percent from the previous month. Business fixed investment has also declined substantially. With the environment surrounding corporate profits becoming increasingly severe, business sentiment continued to deteriorate. Real business fixed investment on a GDP basis recorded a 5.3 percent decline on an annualized quarter-on-quarter basis in the October-December quarter, dropping at an accelerating pace for the third quarter in a row since first registering a decline in the January-March quarter of 2008. Meanwhile, the sharp deterioration in the environment surrounding corporate profits has also affected the employment and income situation, which forms the basis for private consumption. First, the labor market has been slackening. The ratio of job offers to applicants fell below 1.0 in December 2007 and continued declining to reach 0.67 in January this year. The unemployment rate bottomed out at 3.6 percent in July 2007 and, although showing some fluctuation, has been on an upward trend when smoothed out. And second, downward pressure on wages has increased. The *Monthly Labour Survey* shows that while regular payments have stayed around the previous year's level, overtime payments have decreased sharply. The nominal wage per employee has fallen below the previous year's level. With this weakening of the employment and income situation, consumer sentiment has deteriorated to a level even below the one observed after the bursting of the IT bubble. Consequently, private consumption, especially of durable consumer goods, has weakened. The weakness has been most notable in automobile sales. The number of new passenger-car registrations, excluding those of small cars with engine sizes of 660 cc or less, decreased sharply in the October-December quarter, by 21.5 percent on a year-on-year basis, and this was followed by year-on-year decreases of around 30 percent in January and February this year. Sales of household electrical appliances appear to be remaining steady on the whole, but there are reports that sales of personal computers have shifted to low-end models and that sales levels of digital appliances are being maintained only through discounting. Thus, the picture is far from good. Sales at department stores and supermarkets have also declined.

Against this background of weak demand at home and abroad, the index of industrial production decreased by 12.0 percent in the October-December quarter on a quarter-on-quarter basis, the first double-digit drop since the linked index currently being used was first published in 1953. The index also posted a double-digit month-on-month decline in January. In addition, the shipment-inventory balance has deteriorated due to the substantial decrease in shipments.

Let me now touch upon developments in prices. The domestic corporate goods price index (CGPI) fell by 0.2 percent in January 2009 on a year-on-year basis, registering the first drop since December 2003. Until around last summer, there had been concerns over second-round effects, with inflation and wages nudging each other up. However, the rate of increase in domestic corporate goods prices peaked in August and has since been falling sharply in line with the drop in international commodity prices. Currently, the index of domestic corporate goods prices has fallen to the level observed at the beginning of 2008. The year-on-year rate of increase in the consumer price index (CPI; excluding fresh food) has declined to 0 percent, mainly reflecting the declines in the prices of petroleum products and the stabilization of food prices.

B. Significant Change in the Economic Situation Due to the Turmoil in Financial Markets

As I have discussed, Japan's economy has fallen hard and is struggling to find its feet. The fall was precipitated by the turmoil in financial markets since last autumn, which was triggered by the failure of Lehman Brothers. Japan's economy had already started to stagnate around last summer as a result of the deceleration in exports due to the slowdown of the world economy and also weaker income generation reflecting the upsurge in energy and materials prices. Nevertheless, the outlook for the economy had remained relatively positive. More specifically, the Bank of Japan, while remaining mindful of both upside risks to inflation and downside risks to the economy, expected that if energy and materials prices regained stability, private consumption and business fixed investment would resume their steady growth and Japan's economic growth rate would pick up gradually, given that there had been no significant deterioration either in firms' expectations regarding the medium- to long-term growth outlook or in the shipment-inventory balance.

However, the failure of Lehman Brothers, which occurred in September last year, drastically changed the situation of the world economy and global financial markets. Market participants became extremely cautious about counterparty risks, precipitating an unwinding of the excessive positions built up during the past several years on a global scale. As a result of such deleveraging, the balance sheets of financial institutions and investors became impaired and their risk-taking capacity diminished significantly, causing a further tightening of financial conditions. Moreover, liquidity decreased in many markets, causing a significant decline in their price-discovery function. In Japan, strains in financial markets mounted sharply from the latter half of October into November, significantly damaging the functioning of CP and corporate bond markets.

The tightening of financial conditions and the decline in the functioning of markets dampened economic activity around the world, and this led to a further deterioration in investors' and financial institutions' assets, causing further financial tightening. In other words, the adverse feedback loop between financial and economic activity intensified rapidly. As this phenomenon took place globally in a short period of time, Japan's exports plunged, bringing about an unprecedented deterioration in the country's economy. Since the changes in financial and economic conditions during the few months since last autumn were significant in terms of their pace and extent, the Bank's Policy Board members were forced to substantially revise their economic projections. For example, looking at the median of Policy Board members' forecast for real GDP growth in fiscal 2009, the projection was revised downward by 2.6 percentage points in less than three months, from 0.6 percent in the October 2008 *Outlook for Economic Activity and Prices* (Outlook Report) to minus 2.0 percent in the interim assessment in January 2009. Even with this revision, however, the downside risks remain high, as is suggested by the Risk Balance Charts released at the same time.[2]

To address this situation, central banks around the world have implemented drastic measures in a flexible manner. Many central banks have significantly lowered their policy interest rates. Moreover, various efforts have been made to provide ample liquidity. Central banks in major economies, while providing ample funds in their own currencies, have also begun to provide U.S. dollar funds through currency swap arrangements. Central banks in Japan, the United States, and the United Kingdom have taken the extraordinary step of directly purchasing CP and other risk assets. I will elaborate in more detail later on measures taken by the Bank since autumn last year. Thanks to the aggressive measures taken by central banks around the world, money and credit markets have gradually been regaining stability. Specifically, the spread between interbank rates on term instruments and yields on government debt has been diminishing. Meanwhile, in the Japanese CP market, whose functioning had decreased, there are signs of a recovery in the amount outstanding of CP issued, and the issuance rate of CP has declined to about the levels seen before the failure of Lehman Brothers.

C. Outlook for the Economic and Price Situation in Japan

As I have just described, financial markets appear to be moving toward an improvement. However, looking at recent economic indicators, it appears likely that the Japanese economy will continue deteriorating for the time being.

Real exports are expected to continue to decrease for the time being due to the deceleration in overseas economic conditions and the appreciation of the yen. In the United States, as the employment situation has become increasingly severe, sales of automobiles have continued to decrease substantially. In the euro area as well, the economic situation continues to deteriorate due largely to the tightening of the financial situation. As I will describe later, although there are some positive signs in emerging and resource-exporting economies, these economies as a whole are likely to remain in

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[2] Risk Balance Charts show aggregated probability distributions compiled from the distributions attributed by individual Policy Board members to the likelihood of divergence upward or downward from their forecasts. For details, see the Box in the April 2008 *Outlook for Economic Activity and Prices*.

an adjustment phase for the time being due to the decrease in exports to the United States and Europe and the deteriorating financial environment as a result of outflows of capital.

Turning to business fixed investment, machinery orders, a leading indicator, decreased sharply by 16.7 percent on a quarter-on-quarter basis in the October-December quarter. Firms' forecast compiled by the Cabinet Office is that machinery orders will increase by around 4 percent in the January-March quarter. However, taking into consideration the possibility that the achievement ratio may fall below the level assumed in the forecast, it is not certain whether machinery orders will actually register an increase. Rather, given the growing uncertainty regarding the outlook for Japan's economy as a result of the sharp deceleration of the world economy and the substantial deterioration in corporate profits, the situation with respect to business fixed investment is expected to become increasingly severe. Housing investment is likely to start to decline again in the January-March quarter.

Given the current deterioration in the shipment-inventory balance, production cuts will continue in a wide range of industries, including materials industries. Production figures for the January-March quarter could therefore be worse than those for the October-December quarter of 2008. Meanwhile, as the terms of trade have continued to improve, there are some positive signs: the Economy Watchers Survey and the Consumer Confidence Index for January showed their first improvements on a month-on-month basis in some time. However, reductions in employee numbers and curbs on wages appear to be moving into full gear, indicating that the employment situation will become even more severe. Against this background, it seems inevitable that private consumption will remain sluggish.

On the price front, the downward trend is likely to intensify for the time being with the deterioration of supply-demand conditions. Specifically, the year-on-year rate of change in the domestic CGPI will remain negative for the time being. The CPI (excluding fresh food) is also likely to fall below the previous year's levels in the near future.

1. Positive movements going forward

There is no doubt that the Japanese economy is in a severe situation. However, taking a longer-term perspective that extends, for example, up through fiscal 2010, which is the period covered by the latest Outlook Report, the Bank envisions the following scenario: from the latter half of fiscal 2009, as global financial markets regain stability and overseas economies move out of their deceleration phase, Japan's economy will start recovering gradually, returning to a sustainable growth path with price stability toward the latter half of fiscal 2010. There is a high degree of uncertainty, but it is also true that positive signs have begun to emerge, although they are still very few.

To begin with, in China, whose economic growth slowed conspicuously, some positive signs are emerging: the Purchasing Managers' Index (PMI) has started to increase again and the Shanghai Stock Price Index has been rising. These developments suggest that, along with the sharp increases in fiscal spending and bank lending since the end of last year, the effects of the aggressive policy measures implemented so far are now gradually beginning to be felt. The current sharp upturn in the Baltic Dry Index is proof that the movement of cargo to China has been recovering. Many causes for concern remain, of course: the real estate market and the employment situation have deteriorated, sales of high-end products have been sluggish, and inward direct investment has declined. These readings need to be interpreted with care, taking account of the effects of the lunar New Year holidays. In any case, as the situation in other Asian countries such as the NIEs and ASEAN economies still remains severe, the positive developments in China merit attention as among the few encouraging signs currently visible.

In the United States, while the large stimulus package enacted on February 17 is expected to gradually produce effects in the months to come, the economic situation remains severe, as indicated by the recently released second revised GDP figures showing that in the October-December quarter real GDP decreased at an annual rate of 6.2 percent from the previous quarter. With the number of employees decreasing substantially and consumer sentiment at historically low levels, uncertainty about the economic outlook is increasing and the market continues to revise downward the outlook for future growth rates. This does not mean, however, that the market's outlook that the economy will shift to positive growth from the latter half of 2009 has been discarded altogether. The ISM manufacturing industry diffusion index for January and February, retail sales for January, and some other recent data, although still weak, have proved to be above the market's forecasts. Even in the housing market, which has seen drastic adjustments so far, signs have emerged of a bottoming out in housing prices in some cities as mortgage lending standards have been eased significantly and mortgage rates have declined. Meanwhile, there are reports that investors who have taken refuge in U.S. government bonds are returning to the corporate bond market. In fact, the issuance of corporate bonds increased sharply in January. If the number of indicators giving rise to expectations of a bottoming out were to increase -- even if only gradually -- this could lead market participants to stop revising downward their growth forecasts and, correspondingly, diminish the uncertainties over the future recovery path.

With respect to the Japanese economy, positive signs are difficult to find. However, it is worth noting that Japanese manufacturing industries are making unprecedented, drastic production cuts. It may sound paradoxical, but the deep cutback in production has prevented inventories from accumulating rapidly despite the sharp drop in shipments. As a result, inventory adjustments may not take very long, and it is expected that once shipments start to increase again, the recovery in production could be relatively strong.

2. Risk factors

Needless to say, the aforementioned outlook involves a high degree of uncertainty. I will now discuss risk factors that I am particularly concerned about when looking at the future.

The first is the ongoing financial crisis in the United States and Europe and its impact on Japan. Measures implemented by governments and central banks have taken effect, and strains in global financial markets have been easing. Nevertheless, as financial institutions' earnings as well as economic indicators continue to deteriorate, nervousness remains regarding counterparty risk. Under these circumstances, if strains in financial markets re-intensify, this could result in tighter financial conditions and a worsening adverse feedback loop between financial and economic activity, causing lower economic growth in the United States and Europe. If this happened, it would have a significant impact on Japanese financial markets and economic activity. Especially if stock prices fell further, strains in the market could mount toward the end of the fiscal year, and if recovery in the economies of the United States and Europe were slow to materialize, this would pose a downside risk to the aforementioned outlook.

The second risk factor is firms' expectations of medium- to long-term growth. Our outlook is based on the assumption that the world economy will return to its growth trend and that firms' expectations of medium- to long-term growth will not change significantly. However, if -- given the significant deterioration in the world economy -- firms' expectations of medium- to long-term growth have already shifted down, or shift down in the future, the decline in business fixed investment could last longer or be greater than expected.

The third risk factor is developments in prices. I think there are both upside and downside risks to the outlook for prices. Up until around last summer, reflecting surges in energy and materials prices, the probability of upside risks to inflation remained high. At present, however, international commodity prices are subdued and supply-demand conditions are slack, and consequently such upside risks have receded. Instead, it is the downside risks that are now likely to be greater should the downturn in the world economy turn out to be more severe than expected and supply and demand fall greatly out of balance. It is also necessary to pay attention to the downside risks to the medium- to long-term inflationary expectations of firms and households. From a longer-term perspective, however, we should note that the increasingly easier financial conditions on a global scale could cause higher inflation. If extremely accommodative financial conditions continue even after global financial markets have returned to normal and the probability has increased of overseas economies returning to a recovery path, surplus funds could again flow into international commodities markets, pushing up inflation rates beyond our expectation.

D. Conduct of Monetary Policy in the Near Future

I would now like to touch upon policy measures the Bank has implemented recently and then talk about points examined when deciding on those policies as well as my own views.

Since last autumn, when the turmoil in global financial markets and the destabilization of the U.S. and European financial systems became increasingly serious, the Bank has decisively taken various measures, including exceptional ones, with a view to ensuring financial market stability.[3] The most prominent decisions were as follows. First, the Bank reduced the target for the uncollateralized overnight call rate twice, in October and December 2008, bringing it down to the current 0.1 percent. As a result of these policy rate reductions, the weighted average of the rate has been stable, moving in the 0.10-0.15 percent range, the lowest level among overnight interbank rates in the world at present (Chart 1). And second, with a view to facilitating corporate financing and ensuring stability in financial markets, the Bank implemented various measures in a short period of time, including (1) the expansion in the range of corporate debt accepted as eligible collateral, (2) the introduction of "Special Funds-Supplying Operations to Facilitate Corporate Financing" and outright purchases of CP, (3) the introduction of U.S. dollar funds-supplying operations, (4) the increase in outright purchases of Japanese government bonds (JGBs), and (5) the expansion in the range of JGBs accepted in outright purchases. At the Monetary Policy Meeting (MPM) in February 2009, the Bank decided to standardize the duration of special funds-supplying operations to three months, the long end of the previous range (one month to three months) and increase the frequency of the operations (previously twice a month) to once a week. The aim of these measures is to effect a decline in longer-term interest rates actually applied when firms raise funds and to relieve firms' funding concerns. As a result of these steps, the Bank can now carry out operations that provide funds with a longer duration of three months at a fixed rate (currently 0.1 percent) for an unlimited amount against the value of corporate debt pledged to the standing pool of eligible collateral. Moreover, the Bank decided to extend by around six months the effective period of its temporary measures, including the outright purchases of CP and the easing

[3] For details, see the March 2009 *Financial Markets Report*.

of the eligibility criteria for corporate debt to be accepted as collateral from a credit rating of "A-rated or higher" to "BBB-rated or higher." The Bank also decided to embark on the outright purchases of corporate bonds with a residual maturity of up to one year. As a result of these aggressive measures, the money and credit markets are gradually regaining stability.

Nevertheless, financial markets in Japan still warrant careful attention in the run-up to the fiscal year-end, given that stock prices remain volatile reflecting the significant deterioration in the business performance of Japanese firms. The Bank will do its utmost to facilitate the return of Japan's economy to a sustainable growth path with price stability, while continuing to carefully assess the future outlook for economic activity and prices, closely considering the likelihood of its projections as well as risk factors accompanying them, and giving due consideration to ensuring stability in financial markets and facilitating corporate financing.

1. The difficulty of making policy decisions under great uncertainty

The most difficult aspect when deciding on the aforementioned policies was the assessment of financial and economic conditions, which were undergoing drastic changes. The pace and extent of changes in financial and economic conditions were greater than expected, making the outlook highly uncertain and the assessment of the current situation very difficult. Particularly at a time of a financial crisis, shifts in market sentiment tend to be extreme, making it difficult to assess market participants' views. A case in point is the period from the latter half of October through November 2008, when the functioning of the CP market declined significantly. Under such circumstances, a balanced assessment of the situation is particularly important. As I have said at every opportunity, the most appropriate conduct of monetary policy in the face of great uncertainty regarding the economic outlook is to take forward-looking policy actions at a gradual pace, while carefully assessing the situation.[4]

The outright purchases of corporate financing instruments, on which I will elaborate

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[4] See "The Current Situation and the Outlook for Japan's Economy and the Conduct of Monetary Policy," a speech by Miyako Suda at a meeting with business leaders in Mie on September 27, 2007.

later, involve a relatively high risk of damage to the financial health of the Bank, since they entail taking on a greater degree of individual firms' credit risk. For this reason, and because of my aforementioned point regarding the most appropriate conduct of monetary policy, before making any decisions on this matter it is necessary to carefully examine market conditions to determine whether the situation really requires the Bank to purchase such instruments and to assess how effective the measure is likely to be, bearing in mind entrance and exit policies. I will now explain this policy measure in more detail.

2. Outright purchases of corporate financing instruments

Following careful deliberation on whether to embark on the outright purchases of corporate financing instruments, the Bank announced the basic principles regarding such purchases after the MPM in January. Since details of these principles are available on the Bank's web site, I would like to briefly discuss only the main points. First, the outright purchases of corporate financing instruments should be regarded as an exceptional measure for a central bank for the following reasons: (1) purchasing corporate financing instruments involves taking on a greater degree of individual firms' credit risk and consequently a relatively high probability of incurring losses that would ultimately be borne by the taxpayer; (2) purchasing such instruments deepens the involvement of the Bank in the microeconomic resource allocation among individual firms; and (3) it involves a higher risk, compared to other policy measures, of damaging the financial health of the Bank through losses and ultimately undermining confidence in the currency and monetary policy. Therefore, second, when taking such a step, it is necessary that the following conditions are met: (1) there has been a significant decline in the functioning of the market for corporate financing instruments -- as evidenced, for example, by a significant overall rise in market interest rates on such instruments regardless of individual circumstances at issuing firms or by the continuation of a lower volume of transactions-- and this has led to tight overall corporate financing conditions; and (2) outright purchases of corporate financing instruments as an exceptional measure are judged necessary to improve the situation in light of the Bank's mission.

Moreover, third, presuming that these conditions are met, when conducting such purchases, it must be ensured that (1) funds are not allocated to particular firms in an arbitrary manner; (2) either a date for the termination or the conditions for the termination of such purchases are set; (3) a purchasing scheme is adopted that ensures purchases are conducted on an appropriate scale and, when the time comes, contributes to the smooth termination of such purchases by, for example, structuring the scheme in such a way that the incentive to sell the instruments to the Bank diminishes as the functioning of the market recovers; (4) purchases are conducted on an appropriate scale in order to avoid a further decline in market functioning due to excessive reliance on purchases by the Bank; and (5) the Bank's financial health is ensured.

These are the basic principles and issues for consideration announced by the Bank regarding the outright purchases of corporate financing instruments. However, the Bank has not set any clearly defined criteria for the actual conduct of such purchases. Probably it would be more correct to say that it cannot set such criteria, and therefore this entails the risk of increasing the volume of outright purchases in response to market demands. Professor John B. Taylor of Stanford University has expressed such concerns by coining the term "mondustrial policy,"[5] which conflates "monetary policy" and "industrial policy" and highlights the possibility that when a central bank intervenes too much in a certain market, this will lead to a distortion in the allocation of economic resources. It is therefore particularly important to consider the entrance and exit policies for such a step.

First, with regard to entrance policies, it is important to carefully examine whether the aforementioned conditions are met, such as whether (1) there is a significant decline in the functioning of a market leading to tight corporate financing conditions overall, and (2) such a step is judged necessary to improve the situation in light of the Bank's mission. Once the Bank starts with outright purchases, it will become difficult to decide where to draw the line regarding which corporate financing instruments are eligible and which are not; consequently, it is necessary to sufficiently take into consideration that, once such purchases have been started, there is likely to be a tendency for the range of financing instruments that end up being purchased to expand.

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[5] John B. Taylor, "The Need to Return to a Monetary Framework," prepared for the National Association of Business Economics Panel, "Long-Run Economic Challenges: A Federal Reserve Perspective," San Francisco, January 3, 2009.

Accordingly, in view of the risks mentioned earlier -- that is, the risk of damage to the financial health of the Bank as a result of losses on such instruments, the danger that confidence in the currency and monetary policy would be undermined, and the effects on the microeconomic allocation of resources -- it is desirable to limit the objective of outright purchases to ensuring the availability of liquidity. The higher the credit risk and price volatility of the financing instruments, the more difficult it would become for the Bank to start purchasing them. On the other hand, regarding exit policies, it is necessary to devise a scheme under which an end date for purchasing operations is set and outright purchases can be smoothly phased out without creating any confusion in the market when a significant decline in its functioning is no longer observed. Furthermore, it is important that all this be announced in advance.

The Bank has successively commenced the outright purchases of CP and corporate bonds. I voted for the introduction of the outright purchases of CP, but voted against the outright purchases of corporate bonds. I would now like to explain the reasons for my decisions.

I voted for the outright purchases of CP for the following reasons: (1) there was excessive concern over counterparty risk, and the functioning of the CP market, whose role is to provide firms with a means to raise working capital, had severely deteriorated; and (2) because the functioning of the corporate bond market had similarly deteriorated, the need had increased for CP issuance as an alternative means to raise funds. My view was that the situation met the necessary conditions for the Bank to conduct outright purchases of CP and that not to act would pose a greater risk.

On the other hand, I voted against the introduction of the outright purchases of corporate bonds for the following reasons: (1) long-term time-series data showed that the amount of corporate bonds issued was only slightly smaller than in the past (Chart 2); (2) the decline in the functioning of the corporate bond market had not led to overall tightness in corporate financing, since the decline in the issuance of corporate bonds had been compensated for by increases in CP issuance and bank lending (Chart 3); (3) the Bank had already commenced sufficient measures, such as special funds-supplying operations to facilitate corporate financing and outright purchases of CP; and (4) the outright purchases of corporate bonds with a residual maturity of up to one year could only be expected to have a limited effect as a means of facilitating corporate financing.

In sum, my view at this point is that the current conditions in the corporate bond market are not so severe as to require the Bank to conduct outright purchases of corporate bonds.

II. Monetary Policy and Seigniorage

A. Monetary Policy Issues

If the aforementioned downside risks to economic activity and prices materialize, the Bank should take flexible and timely policy action. Given the heightened uncertainty surrounding the outlook, it is important, from the standpoint of social welfare costs, for the Bank to clearly state its strong determination in advance that, when necessary, it will deviate from its normal policy rules and take drastic actions, and to ensure that the market has confidence in these actions. "Timely policy action" in this context means that the Bank will always carefully assess whether risks are materializing and, when the assessment calls for a policy action, it will act decisively.[6]

However, given that there is little room for further reductions in the policy interest rate, what options are available? Recently, central banks in the United States and Europe have been actively discussing the following issues: (1) whether or not to establish quantitative targets, such as reserve deposits and money supply, in the conduct of monetary policy; (2) whether to intervene in credit markets and buy credit instruments, when these markets are dysfunctional, in order to aid their recovery, or whether to place more emphasis on the purchase of assets that are neutral for resource allocation in the private sector, such as government bonds; and (3) how to exit from extraordinary policy measures.

With respect to the first issue, that is, quantitative targets, one difficulty is the choice of appropriate targets. In light of Japan's experience, questions have also been raised

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[6] See "Nihonkeizai no Genjo, Sakiyuki to Kin'yuseisaku (The Current Situation and Outlook for Japan's Economy and the Conduct of Monetary Policy)," a speech by Miyako Suda at a meeting with business leaders in Miyazaki on March 27, 2007 (available only in Japanese).

whether policy conduct under a quantitative target is really effective.[7] On the other hand, central banks are also aware that without such targets they may not be able to smoothly communicate their intentions to markets.

With respect to the second issue, in a situation where the purchase of credit instruments is becoming a central pillar of central bank policy, questions have arisen as to how to solve the associated problem of losses arising from price fluctuations and credit risk, and to what extent central banks may intervene in individual markets. In the United Kingdom, the provision of central bank money (banknotes and reserve deposits) through purchases of government bonds is being considered as described in the Minutes of the Monetary Policy Committee (MPC) Meeting of the Bank of England (BOE) held on February 4 and 5, 2009. And in the United States, Jeffrey M. Lacker, President of the Federal Reserve Bank of Richmond, at the Federal Open Market Committee (FOMC) meeting on January 27 and 28 dissented from the current policy on the grounds that increasing money supply through the purchase of government bonds, which does not distort private credit flows and minimizes negative incentive effects, is more appropriate than a credit program.

Pertaining to the third topic, exit strategy, many people, including those at central banks,

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[7] See President and CEO Janet L. Yellen of the Federal Reserve Bank of San Francisco, "The Outlook for 2009: Economic Turmoil and Policy Responses," presentation to the Financial Women's Association on January 15, 2009. The Federal Open Market Committee (FOMC) Minutes for December also show that the Federal Reserve is taking the lessons of the Japanese experience into account. With respect to the impact on credit markets, a study pointed out that while risk premiums for Japanese banks had almost disappeared in short-term markets such as the market for certificates of deposit, this was not necessarily the case in the credit default swap market and the stock market, and that with respect to corporate financing it was impossible, even in the market for short-term funds, to create a financing environment that is close to being completely accommodative. See Naohiko Baba, "Financial Market Functioning and Monetary Policy: Japan's Experience," IMES Discussion Paper Series, 2006-E-16, Institute for Monetary and Economic Studies, Bank of Japan, 2006. Moreover, in a paper entitled "Effects of the Quantitative Easing Policy: A Survey of Empirical Analyses" (Bank of Japan Working Paper No. 2006-E-10, Bank of Japan, 2006), Hiroshi Ugai provided a survey of studies that showed that as a result of an increase in the current account balances held by financial institutions at the Bank, the credit spreads on high-grade corporate bonds had diminished, while those on low-grade ones had increased, and that no impact of an increase in purchases of long-term JGBs on yields on these could be observed.

have highlighted the importance of this.[8] While referring to an exit strategy too soon could prejudice desired policy effects, central banks' creditability rests on their stating their views clearly. The minutes of the MPC meeting of the BOE in February also contain a reference to the government's debt management policy, suggesting that the BOE is mindful of the question of an exit strategy.

In any event, extraordinary measures adopted by central banks such as the purchasing of credit instruments mean that it is highly likely that they shoulder the credit risk of individual issuers in the private sector. Hence, losses that will ultimately be borne by the taxpayer are more likely to occur. In this sense, it could be said that central banks have stepped into the realm of fiscal policy. Meanwhile, amid the substantial deterioration in global economic conditions, the view that it is necessary to rely on fiscal policy is gradually gaining ground, as seen in the statement of the Group of Seven (G-7) meeting in February. Thus, it is important to reexamine the relationship between fiscal policy and monetary policy.

One way to reconsider the relationship between fiscal policy and monetary policy involving extraordinary measures, as well as the issue of central bank credibility and, by extension, the credibility of the currency, is to do so in terms of the traditional discussion of seigniorage, which is what I would like to focus on now.

B. Seigniorage

Let me start by defining "seigniorage." There are two definitions. One is that the amount of currency issued itself is seigniorage. The other is that the profits derived from the issuance of currency are seigniorage. These profits, which stem from central banks' power to issue currency, are profits from financial assets whose acquisition is funded by the issuance of currency -- non-interest-bearing debt.[9] If the costs of issuing

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[8] For example, Chairman Ben S. Bernanke of the Federal Reserve spoke in detail about exit strategy in his speech, "The Crisis and the Policy Response," on January 13, 2009. In addition, President Thomas M. Hoenig of the Federal Reserve Bank of Kansas City said the importance of properly executing an exit strategy could not be emphasized enough in his speech, "The U.S. Economic Outlook: The Aftermath of Leverage," on January 7, 2009.

[9] On seigniorage, see "'Chuoginko to Tsuka-hakko o Meguru Hoseido ni tsuite no Kenkyukai' Hokokusho (Report of The Study Group on Central Bank and the Legal Framework Pertaining to

currency are ignored, seigniorage for a particular period is expressed as the product of the amount of currency issued and the rate of return on the acquired assets. In Japan, the seigniorage for each period, after subtracting all the costs arising from the conduct of monetary policy and the business of the Bank, is transferred to the government in its entirety.[10]

In the following, I would like to define seigniorage as the profits derived from the issuance of currency, and discuss the relationship between fiscal policy and seigniorage. It should be noted, however, that based on a few assumptions, the seigniorage defined as profits from financial assets whose acquisition is funded by the issuance of currency is, on final analysis, equal to the seigniorage defined as the amount of currency issued. The assets acquired in return for the issuance of currency are expected to continue to generate profits in the future. If we discount the values of these future profits at the rate of return and add them up to obtain the present value, we obtain a value of 1. This means that, when we look into the future, we can say that the profits derived from the issuance of currency equal the amount of currency issued. That is to say, when a 10,000 yen note is issued, this amount equals the profits derived from the issuance of this note.

I will now discuss the relationship between seigniorage and government finance. In order to capture the total picture, let us assume that there is an integral government comprising two entities -- the government and the central bank. Each entity conducts its policy independently of the other. Fiscal policy is in the hands of the government, and the fiscal deficit is financed by the issuance of government bonds. The objective of the central bank, on the other hand, is price stability, and to attain this objective it provides central bank money (banknotes and reserve deposits) by purchasing government bonds or providing credit to the private sector. For the sake of simplicity, let us assume that the central bank does not provide credit to the private sector. Then, from the aforementioned two relationships (i.e., the fiscal deficit is financed by the

Issuing of Currency)," *Kin'yu Kenkyu* (Monetary and Economic Studies), 23, Institute for Monetary and Economic Studies, Bank of Japan, August 2004 (available only in Japanese).

[10] It is stipulated that the Bank pay to the general account the surplus in its income statement after deducting the amount of provision for reserves and dividends from it.

issuance of government bonds, and central bank money is provided through purchases of government bonds), one can see that for the integral government, the fiscal deficit is financed either by an increase in the outstanding balance of government bonds held by the private sector or by an increase in the outstanding balance of central bank money.[11]

Since this relationship always holds, the present discounted value of the sequences of current and future figures in real terms can be expressed as follows:

> Present discounted value of the outstanding balance of government bonds held by the private sector (in real terms)
> = present discounted value of the fiscal surplus (in real terms)
> + present discounted value of the increase in the balance of central bank money (in real terms).

This means that the integral government must repay the debt held by the private sector either through (1) a fiscal surplus or (2) an increase in provision of central bank money. The latter corresponds to the present value (in real terms) of the seigniorage defined as profits derived from the issuance of central bank money.

It is said that, in the long term, inflation is a monetary phenomenon. In order to fulfill its policy objective of maintaining price stability, the central bank, the sole provider of central bank money in the economy, needs to control changes in central bank money at all times.[12]

Meanwhile, as the aforementioned equation demonstrates, seigniorage is one of the sources of revenue for repaying government debt, because it is basically transferred to the government's general account. However, it should be noted that an increase in

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[11] The two equations, (1) fiscal deficit = increase in government bonds, and (2) increase in credit vis-à-vis the government (outright purchases of government bonds by the central bank) = increase in central bank money, lead to equation (3) budget surplus + increase in government bonds held by the private sector + increase in central bank money = 0.

[12] Here it is assumed that in the long term there is a stable relationship between central bank money and the money stock, which is closely related to nominal income and prices.

central bank money does not necessarily lead to an increase in seigniorage in real terms. This relationship is shown in Chart 4, drawing on work by Professor Willem Buiter of the London School of Economics.[13] It shows that seigniorage in real terms peaks at a certain inflation rate. This is because when the rate of inflation increases through the increased provision of central bank money, the purchasing power of one unit of money, or seigniorage in real terms, declines.

As seen above, seigniorage has two aspects: one relating to price stability and the other as a source of fiscal revenue. Another aspect with regard to seigniorage that is difficult to understand in the model of an integral government is central bank credibility. Regarding the concept of an integral government, which sees the government's and the central bank's finances in the framework of the consolidated balance sheet, assuming that the government will automatically make up any losses incurred by the central bank, Professor Kazuo Ueda of The University of Tokyo noted, when he was a member of the Bank's Policy Board, that "such arguments seem to be, however, based on a rather naive view of the relationship between the central bank and the government, and the procedures by which the government formulates budgets."[14]

C. The Financial Soundness of Central Banks

In relation to the financial soundness of central banks, the issue of greatest interest is the asset side of their balance sheets. Central banks should not provide central bank money merely by following a trend line. Rather, they must be ready at all times to take timely action. Therefore, central banks, always mindful of the maturity structure of their assets, purchase long- or short-term government bonds and other assets through market operations. When they take the extraordinary measure of purchasing CP or corporate bonds, they also must take into consideration the impact of the acquired assets

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[13] For details, see Willem Buiter, "Can Central Banks Go Broke?" CEPR Policy Insight No. 24, May 2008.

[14] See Kazuo Ueda, "The Role of Capital for Central Banks," based on a speech given at the Fall Meeting of the Japan Society of Monetary Economics on October 25, 2003 (available on the Bank of Japan web site). Under the new Bank of Japan Act, the system under which the government compensates the central bank for any losses was abolished. See Miyako Suda, "Defure to Kin'yu Seisaku -- Oita-ken ni okeru Tokubetsu Kogi (Deflation and Monetary Policy -- A Special Lecture in Oita)," July 2003 (available only in Japanese).

on the maturity structure of their assets. Long-term assets and credit assets involve relatively high price fluctuation risks and credit risks, and when losses from such assets materialize, the earnings from the acquired assets, or seigniorage, decline. The impairment of assets backing central bank money not only reduces payments to the government but also lowers the bank's capital ratio, and this could lead eventually to a crisis of confidence in the currency.[15] I believe that, when central banks continue to take extraordinary policy measures, the importance of their financial soundness cannot be emphasized enough.

Recently, there have been suggestions that seigniorage can provide a source of revenue for fiscal policy. One example is the argument of "government notes." However, the issuance of government notes, depending on how it is implemented, essentially is the same as either the issuance of government bonds through the market or the undertaking of non-interest-bearing government bonds by the Bank.[16] In the case of the latter, if we follow the argument presented so far, fiscal deficits are financed not by the private sector but by the Bank's undertaking of JGBs, which ultimately leads to an increase in the provision of central bank money.[17] Such undertaking of government bonds by the Bank could raise the fiscal premium if the government is perceived to lack fiscal discipline and, by raising doubts regarding the financial soundness of the Bank, undermine the credibility of the currency.

There is also a problem involved in the way seigniorage is used over time. The inflation rate that will maximize seigniorage over the long term is not necessarily compatible with price stability. It is possible for the government, in order to change

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[15] In September 2002, when the Bank announced that it would purchase stocks, the yen was sold due to the fear of a deterioration in the Bank's assets. In the account settlement for fiscal 2003, the Bank posted a deficit in its current income for the first time in 32 years. During the press conference of the Bank's Governor, there were questions whether this was not a side effect of the quantitative easing policy. See "Summary of the Press Conference of the Governor of the Bank of Japan on June 15, 2004" (available only in Japanese).

[16] See "Summary of the Press Conference of the Governor of the Bank of Japan on February 3, 2009" (available only in Japanese), released on February 4, 2009 on the Bank's web site.

[17] The same argument can be made when cash "under the mattress" is exchanged for non-interest-bearing government bonds.

the amount of seigniorage, to cause the actual inflation rate to diverge from the stable inflation rate that the central bank considers to be desirable. However, as Chart 4 shows, in the long term there is a limit to the increase in seigniorage. Financing fiscal deficits with seigniorage means nothing other than borrowing the seigniorage in advance. To the extent that the government obtains seigniorage in advance, seigniorage that is to be acquired by the central bank in return for the provision of central bank money and paid to the government will diminish.

From the viewpoint of transparency and accountability, it is desirable that the balance sheet of the Bank -- the central bank entrusted with the independent conduct of monetary policy -- serves as a basis enabling the public to assess the Bank's policies.[18] However, if seigniorage is taken in advance to finance fiscal policy, this could distort the Bank's financial indicators, making it difficult for the public to assess the Bank's financial soundness and blurring the lines of responsibility.

During the period of the quantitative easing policy, I referred to the increase in the channels for providing funds as "qualitative easing,"[19] and it seems to me that at present particular weight is being placed on such "qualitative easing" in the conduct of monetary policy. Given the high degree of uncertainty attending the economic outlook, for the time being we will be forced to think about the risks of not taking such extraordinary action. Nevertheless, it is important for the Bank, as an independent entity, to properly control central bank money in order to contribute to sustainable

[18] Mineko Furuichi and Takeshi Mori, "Chuoginko no Zaimu Hokoku no Mokuteki, Igi to Kaikei Shori o Meguru Ronten (Points of Discussion Pertaining to the Objectives and Significance of Central Banks' Financial Reporting and Accounting Treatments)," *Kin'yu Kenkyu* (Monetary and Economic Studies), 24 (2), July 2005 (available only in Japanese). This paper states that the objectives and significance of financial reporting of central banks are (1) to provide the public, particularly market participants, with useful information in conducting *ex post* examination of central banks' policies and in predicting the scope in which policies can be implemented in the future, and (2) to provide the public with useful information in assessing whether central banks' asset holdings and profits from issuing currency are properly controlled and managed, since business operations of central banks are backed by their right to issue banknotes.

[19] See, for example, Miyako Suda, "Kigyo Kin'yu o Kangaeru -- Fukushima-ken Kin'yu Keizai Kondankai ni okeru Aisatsu Yoshi (Considering Corporate Finance: Summary of Speech at a Meeting with Business Leaders in Fukushima)," on December 2, 2002 (available only in Japanese).

economic growth under stable prices. I believe we need to discuss more thoroughly how the government and the central bank should make use of the seigniorage derived from the provision of the central bank money in the interest of the public.

III. Closing Remarks

In the course of the Bank's history, a number of Governors have enjoyed particularly strong ties with Kyoto. For example, the 9th and 11th Governor (Junnosuke Inoue), the 15th Governor (Toyotaro Yuki), and the 18th Governor (Hisato Ichimada) had each served previously as a general manager of the Bank's Kyoto branch. In addition, the 13th Governor (Eigo Fukai), who played an important role in the conduct of monetary policy between the two world wars, graduated from a university in Kyoto, namely, Doshisha Academy (the present Doshisha University). Mr. Fukai's role was central in the conduct of monetary policy during key episodes in the history of Japanese finance such as World War I, the 1923 Great Kanto Earthquake, the Showa financial crisis, the lifting of the ban on gold exports, the reimposition of the ban on gold exports, the first-ever underwriting of JGBs, and the 2.26 Incident. He is said to have regretted the underwriting of JGBs by the Bank, calling it the "greatest mistake."[20] And in his farewell speech as Governor, Mr. Fukai stated, "During my tenure at the central bank . . . what I considered to be the basic principle for my duty . . . was that a central bank should do its utmost to prevent inflation caused by a loss of confidence in the currency."[21]

Speaking for myself, as a central banker, Mr. Fukai's words have a deep resonance. The Bank's mission is to encourage sustainable economic growth under price stability, and only by accomplishing that do we as the central bank of Japan deserve the trust of the public, and maintain public confidence in the currency.

[20] "Niijima Jo (Joseph Hardy Neesima) -- Kindai Nippon no Senkakusha (Pioneers of Modern Japan)," edited by The Doshisha, Koyo Shobo, 1993 (available only in Japanese).
[21] "Jimbutsu to Shiso (Famous People and Their Ideas)," Eigo Fukai, Nippon Hyoronsha, 1939 (available only in Japanese).