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Bank of Japan

**Global Financial Crisis and Policy Responses
by the Bank of Japan**

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(Japan Business Federation) in Tokyo*

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Introduction

I am honored to have this opportunity to speak before business leaders in Japan here today.

Time flies, and it is only about a week before the turn of the year. Looking back, this year has been a particularly severe one both for overseas economies and Japan's economy. The slowdown in the world economy gradually became pronounced, reflecting the turmoil in global financial markets since the summer of 2007, and the situation changed significantly especially since the bankruptcy filing of Lehman Brothers in mid-September. Many in corporate management have expressed the view that the sharp downturn in overseas economies and Japan's economy over the past several months is one they have never experienced before, and the severity of the situation is clearly shown in the recent economic data. Today, I would like to take this opportunity to review this year's developments in global financial markets, the world economy, and Japan's economy, talk about the background to the current global financial crisis, and lastly explain the Bank of Japan's thinking on the conduct of monetary policy.

I. Global Financial Markets and the World Economy

I would like to start with developments in global financial markets and the world economy.

As you know, the turmoil in global financial markets since the summer of 2007 was caused by declines in the prices of securitized products backed by subprime mortgages. It is not appropriate to limit our understanding of this trouble as "the subprime mortgage problem" or interpret it as "the financial sector's fault." In essence, it was caused by the bursting of a global credit bubble -- a phenomenon generated by a combination of the rise in asset prices and the increase in credit and leverage. During the period of the credit bubble, firms in general enjoyed the fruits of high growth in the world economy. The rise and bursting of the credit bubble was observed to the greatest degree in the U.S. economy, but other economies also experienced similar phenomena, albeit with some differences in degree. The turmoil in financial markets surfaced as "liquidity constraints" when conduits and aggregators of securitized products and financial institutions faced difficulties in raising funds. Losses incurred by financial institutions eventually expanded due to declines in the prices of various securitized products, and this in turn led to a tightening of credit standards.

As a result, there was downward pressure on economic activity, impairing financial institutions' assets. As was the case in Japan after the bursting of the bubble, financial conditions in the United States deteriorated with market participants' pessimism rising and falling in a repetitive pattern. Needless to say, the situation deteriorated sharply since the bankruptcy filing of Lehman Brothers in mid-September. Since then, market participants and investors have been extremely sensitive to counterparty risk and have significantly increased their risk aversion. Consequently, the volume of transactions in financial markets dropped sharply and market liquidity declined not only in uncollateralized funds transactions, but also in collateralized ones such as repo transactions, which are fund transactions with collateralized bonds, and foreign exchange swaps. The situation deteriorated further, with a widening of credit spreads on corporate bonds and a further decline in the prices of securitized products. This is evidenced by the fact that the price level of securitized products such as collateralized loan obligations (CLOs), which are products backed by corporate loans, has dropped to around 20 percent of the level observed before the summer of 2007 in the case of single A-rated products. In the United States, delinquency rates have risen not only for mortgage loans but for commercial real estate loans and consumer loans as well, reflecting the weaker U.S. economy. Reflecting this, the capital bases of financial institutions have been further impaired, and their lending attitudes have become even tighter -- the emergence of a negative feedback loop between financial and economic activities.

To address the situation, which can be described as a "financial crisis," governments and central banks have already taken decisive measures. Central banks have strived to stabilize financial markets by aggressively providing liquidity in their own currencies. In addition, since September major central banks including the Bank of Japan have been providing a massive amount of liquidity in U.S. dollars in their respective markets under a coordinated framework. Since the bankruptcy filing of Lehman Brothers, governments have undertaken such measures as placing troubled financial institutions under government control and injecting public funds, substantially expanding deposit insurance coverage, and providing guarantees for financial institutions' debts.

Despite the numerous measures taken in each country, global financial markets as a whole

remain under great strains. In money markets, interest rates on comparatively short-term instruments have recovered to the level before the bankruptcy filing of Lehman Brothers, due partly to the decisive measures taken by governments and central banks to date. However, interest rates on longer-term instruments remain elevated. Stock prices have fluctuated widely against the backdrop of concerns over the outlook for the world economy. Credit spreads on corporate bonds have been at a high level due to concerns about corporate performance. The tightness of liquidity conditions among financial institutions has begun to improve somewhat, but the crux of the problem has now shifted to the magnitude and duration of adjustments in the world economy.

The slowdown in the world economy has gradually become marked in 2008. In particular, the negative feedback loop operating between financial and economic activities is no longer confined to the U.S. and European economies but has recently begun to be observed in other economies, indicating that the conditions of the world economy have become more severe.

At the beginning of December, the National Bureau of Economic Research (NBER), which determines the business cycle of the U.S. economy, announced that the U.S. economy, which had been expanding from November 2001, already entered a recession phase in December 2007. The Federal Reserve has significantly reduced its target for the federal funds rate since last fall. Nevertheless, due to the widening of credit spreads, the interest rates applied to loans extended to financial institutions, firms, and households have been rising so far. With regard to the housing market, which holds the key to the outlook for the U.S. economy, adjustments are likely to continue. Given the tightening lending attitudes of financial institutions, it is likely that fund-raising conditions will remain severe for firms and households. The prevalent view regarding the timing of the recovery in the U.S. economy seems to be the latter half of 2009, but I think that this view is backed by the expectation that the current severe situation is likely to continue for some time, and not by some reasoning indicating that the economy is likely to recover from that time. In any event, it is likely that the current recession may become the longest in the postwar era, longer than the 16 months recorded in the periods 1973 to 1975 and 1981 to 1982. Economic conditions in Europe have also deteriorated. As in the U.S. economy, the

lending attitudes of financial institutions have tightened, and pressures acting to depress economic activity from the financial side have intensified. In addition, the slowdown in emerging economies -- for example, in Asia, Central and Eastern Europe, and Latin America-- where economic conditions have been favorable until relatively recently, has become increasingly pronounced due not only to the decrease in their exports reflecting the deterioration in economic conditions in the United States and Europe but also to the adverse effects on domestic demand in emerging economies from the turmoil in global financial markets.

Economic growth rates around the globe have been declining simultaneously and rapidly, albeit with some differences in level, as the effects of the financial crises in the United States and Europe have spread to other economies. Without a doubt, the distinctive features of the current recession are "simultaneity" and "rapidity." At present, not only advanced economies such as the United States, Europe, and Japan but also emerging economies are undergoing either an economic slowdown or a recession simultaneously for the first time since the formerly planned economies joined the world of the market economies. As for the rapidity, it is obvious from the degree of downward revisions made to GDP growth rate forecasts since the beginning of this year. According to the *World Economic Outlook* released by the International Monetary Funds (IMF), the growth of world output for 2009 was projected to be 4.4 percent in January, but was revised downward to 2.2 percent in November. The output of advanced economies was also revised downward from 2.1 percent to minus 0.3 percent.

Why has the world economy simultaneously faced rapid economic deceleration? There are a few likely hypotheses. First, the nature of economic downturn may have changed due to the globalization of financial markets. It is no exaggeration to say that a negative feedback loop, which I have just discussed with regard to the U.S. and European economies, is now operating on a global basis. A typical example of this can be seen in the reduction of credit extension to emerging economies by U.S. and European financial institutions. Second, technical innovations in the field of information and communications, as represented by supply chain management, may have had an impact. While supply chain management has enabled efficient management of production and inventories, at the same

time it may have also facilitated rapid recognition of the decline in final demand, inducing sharp reductions in production. Additionally, with today's easy access to diverse information via the Internet, changes in the psychology of corporate management and consumers may have become increasingly synchronized around the globe. Third, with the global economic deceleration and turmoil in financial markets never experienced before, feelings of anxiety and defensive behavior may have spread globally, further accelerating the downturn.

I am not sure which of these hypotheses on the simultaneity and rapidity of the economic deceleration actually applies. Regardless, the background to the deceleration in world growth boils down to the single fact that various "excesses" accumulated during the prolonged period of high growth that continued until recently. Looking back, the world economy, until recently, had been enjoying unprecedentedly favorable conditions. High growth rates of around 5 percent continued from 2004 to 2007. On the other hand, prices, notwithstanding high growth, remained stable on the whole until the recent past, due to an expansion of production capacity resulting from the participation of emerging economies in the global market economy. Although memory fades, there were hot discussions in 2004 on the risk of deflation. "China exporting deflation" and "threat of deflation" were issues often addressed at international conferences. Low interest rates continued for a prolonged period in an environment of high growth and low inflation. In this continued benign environment of high growth, stable prices, and low interest rates, various excessive activities, both economic and financial, were undertaken and "excesses" accumulated. Investors and financial institutions eased their credit standards, and a global credit bubble emerged. The substantial rise in asset prices, the surge in commodity and energy prices, and the significant increase in leverage by market participants were all indications of excessive financial and economic activities. Looking calmly at the current deterioration in economic conditions around the globe, it can be viewed basically as part of the process of correcting the "excesses" that accumulated during the period of the credit bubble.

As you know, Japan experienced this adjustment process from the 1990s to the beginning of the 2000s, following the bursting of the economic bubble. Japan's economy finally started to return to a full-fledged recovery path with the resolution of the "three excesses" of

production capacity, employment, and debt. In the case of the U.S. economy, key factors for the economy to recover will be how adjustments in the household sector progress and to what extent financial institutions can write off their losses and enhance their capital bases. Future developments in the world economy will be critical as well. Looking back, Japan's economic recovery materialized with the support of high growth in overseas economies. However, the current situation is difficult in that this time the outlook for the world economy is highly uncertain.

II. Current Situation and Outlook for Japan's Economy

Next, I would like to discuss the current situation of Japan's economy and the outlook for its future, taking into account the developments in global financial markets and the world economy that I have just described.

Japan's economy continued to enjoy a moderate but prolonged economic expansion from the beginning of 2002, but since the middle of 2007 the economy has been hit by a series of negative shocks, and become increasingly sluggish. Economic growth began to slow from around the end of 2007, due mainly to a sharp decline in housing investment as the revised Building Standard Law came into force. Growth in corporate profits and wages has been subdued due to the deterioration in the terms of trade since this spring reflecting increases in energy and materials prices, and as a result growth in business fixed investment and private consumption has been slowing at a moderate pace. The slowdown in overseas economies has become pronounced as strains in global financial markets and in the U.S. and European financial systems have intensified since this summer, and reflecting this, growth in Japan's exports turned negative. And since September, tightening in corporate financing, which I will discuss later, has started to negatively influence economic activity. With these negative effects accumulating, economic conditions have recently been deteriorating. The results of the December *Tankan* (Short-Term Economic Survey of Enterprises in Japan) released last week also indicated the severe situation of Japan's economy. Looking ahead, we judge that economic conditions are likely to increase in severity for the immediate future. This is because domestic private demand is likely to weaken further as corporate profits decline, firms' funding conditions deteriorate, and the employment and income conditions in the household sector worsen, and also because exports are expected to decrease sharply due

to the further slowdown in overseas economies and the appreciation of the yen.

As for prices, the year-on-year rate of change in the consumer price index (CPI) for all items excluding fresh food had been around 0 percent from around 2003, but from around the end of 2007 it rose at a rapid pace, especially in petroleum products and food, due to the surge in commodity prices, and reached 2.4 percent this summer. Thereafter, it began to decline reflecting the drop in commodity prices. Looking ahead, given that aggregate supply and demand conditions will likely ease as growth in real GDP is expected to fall short of the potential growth rate for the next several quarters, and that commodity prices have been falling, the rate of change is expected to moderate further.

In sum, economic conditions have been deteriorating and are likely to become still more severe in the immediate future. With regard to risk factors, much depends on the future developments in the financial crises in the United States and Europe and their impact, and on developments in overseas economies and financial conditions in Japan. Attention must be paid to the further downside risks posed to economic activity. As for prices, there is a possibility that the inflation rate will decline further if the downside risks to economic activity materialize or commodity prices fall further.

Among the risk factors affecting the outlook for Japan's economy, I have already discussed the situation of the world economy. Financial conditions in Japan have deteriorated sharply on the whole. This can be seen in tighter funding conditions in the CP and corporate bond markets as well as in an increasing number of small and even large firms which report that their financial positions are weak and the lending attitudes of financial institutions are severe. Should the severity in financial conditions such as the lending attitudes of financial institutions and in the issuance of CP and corporate bonds increase, pressures acting to depress economic activity from the financial side may intensify. With regard to bank loans, which had been covering the decline in the issuance of CP and corporate bonds, the December *Tankan* shows an increasing number of firms reporting that the lending attitudes of financial institutions have tightened. The increase in the number of corporate bankruptcies and the fall in stock prices observed recently may, through a rise in credit costs and an increase in the risk associated with stockholdings, change financial

institutions' risk-taking behavior, thereby leading to a tightening of their lending attitudes. In this regard, the current situation in Japan requires careful examination of a possible negative feedback loop operating between financial and economic activities.

III. Conduct of Monetary Policy

Having discussed the current situation and the outlook for Japan's economy, I will now turn to the Bank's conduct of monetary policy. Since September, when the turmoil in global financial markets and in the U.S. and European financial systems increased in severity, the Bank has promptly undertaken various measures. These can be categorized in three areas: reductions in policy interest rates, measures to stabilize the market, and measures to support corporate financing. I would now like to explain the thinking behind these policy measures, including those decided last week.

First are the measures taken as interest rate policy. Since February last year, the Bank had maintained the target of its policy interest rate, the uncollateralized overnight call rate, at 0.5 percent. At the end of this October, the Bank reduced the target to 0.3 percent, and it was further reduced to 0.1 percent last week. The Federal Reserve, last week, also reduced its target for the federal funds rate, and set the interest rates on required and excess reserve balances at 0.25 percent. At the same time, the Federal Reserve announced that the exceptionally low level of the federal funds rate will continue for some time. When interbank overnight interest rates are lowered this far, meaningful policy in terms of stimulating demand through interest rates shifts toward easing firms' accessibility of funds. This holds true in both Japan and the United States.

In this sense, measures that will ensure stability in financial markets and maintain an environment to extract maximal monetary easing effects are extremely important. In this area, the Bank implemented U.S. dollar funds-supplying operations soon after the bankruptcy filing of Lehman Brothers as a coordinated measure among the central banks in major economies, and has been supplying sufficient dollar funds ever since. These operations are currently being conducted without limitation on the amount, as long as it is within the value of collateral. As a result, dollar funding rates have declined, mainly for shorter terms, and these operations are supporting economic activity by relieving the

funding concerns of Japanese firms through reducing the dollar funding pressures among financial institutions. With regard to yen funds, the complementary deposit facility has been introduced to enable smooth and sufficient provision of funds, and funds for over the year-end have been provided in larger amounts than a year before. Although the influence of intensified tensions in the global financial markets is being felt in Japanese markets in the form of large fluctuations in stock prices and a widening of credit spreads in the corporate bond market, Japanese financial markets have still been relatively stable compared to U.S. and European markets, in part because of the swift money market actions taken by the Bank. In addition, at the Monetary Policy Meeting held last week, the amount of outright purchases of JGBs was increased from 14.4 trillion yen per year to 16.8 trillion yen per year. This is to supply longer-term funds and resolve the problem of having to conduct frequent short-term funds supplying operations, thereby facilitating smooth money market operations.

Along with money market stabilizing measures, the Bank has introduced various measures to support corporate financing with a view to extracting maximal monetary easing effects. In advanced economies, the parties that extend credit directly to firms are private financial institutions and investors, and the role of central banks is to indirectly support this credit extension. Specifically, the role of central banks is to provide liquidity through money market operations and to take corporate debt as eligible collateral for its credit extension to private financial institutions. If central banks implement measures that take on the credit risks of individual firms, this will inevitably take away the businesses of private financial institutions. In addition, considering the increasing possibility of incurring losses, undertaking such credit risks must be examined from various aspects such as role sharing with the government in a broad sense, the financial health of the central bank, and confidence in the currency. In this connection, when the Federal Reserve introduced its outright purchases of CP, it attached various safety measures such as accepting only the most highly rated CP.

As I mentioned earlier, financial conditions in Japan are deteriorating sharply on the whole, and the risk that low interest rates may not exert their intended impact on economic activity has increased. Based on this recognition, since this September the Bank has introduced

various measures to reduce such risk through providing liquidity to financial institutions and expanding the range of eligible corporate debt accepted as collateral. The Bank has already been conducting purchases of CP under repurchase agreements, and these have been significantly increased in terms of frequency and size to support the better functioning of the CP market. In addition, with a view to facilitating corporate financing during the run-up to the calendar and fiscal year-ends, the range of corporate bonds and loans on deeds accepted as eligible collateral has been expanded and, as a temporary measure, BBB-rated corporate bonds and loans on deeds have been included in eligible collateral. Furthermore, a decision was made to introduce a special operation to facilitate corporate financing, which will be implemented in early January. This special operation will enable financial institutions to obtain funds over the fiscal year-end with no explicit ceiling on the total funds available, although the maximum loans available to individual financial institutions will not exceed the value of the corporate debt pledged as collateral. Also, the interest rate on these funds will be set lower than corresponding market interest rates. With these measures, the Bank is aiming to support, in terms of funds availability and costs, the lending activities of financial institutions and transactions on the CP and corporate bond markets.

In addition, given that the tightness in corporate financing may increase further during the run-up to the end of the fiscal year, the Bank decided, last week, to introduce outright purchases of CP as a temporary measure, and to investigate how other corporate financing instruments may be employed as a central bank. Since outright purchases of CP essentially undertake the credit risks of individual firms, they constitute an exceptional step taken by the central bank in light of the Bank's fundamental position that the main purpose of central bank operations is to provide liquidity. Looking back on the history of central banks in leading countries, the only cases where central banks have purchased corporate financing instruments outright are the Bank of Japan's purchasing of ABCP, ABSs, and corporate stocks in the first half of this decade and the Federal Reserve's purchasing of CP mentioned earlier. Nevertheless, it becomes difficult to draw a clear line between measures to provide liquidity and those that take on credit risk in crisis situations. Central banks are expected, based on the current economic and financial situation, to fully recognize the importance of their responsibilities in ensuring the stability of prices and of

the financial system, and to make judgments on specific and practical matters in view of appropriately assuming these responsibilities. The Bank, in providing support to corporate financing, will examine the scope of undertakings that are necessary and appropriate for a central bank, as well as appropriate ways, including the involvement of the government, to ensure the Bank's financial health and confidence in the currency.

Closing Remarks

Today, I have discussed the conditions of global financial markets and the world economy, the economic situation in Japan, and the conduct of monetary policy, and also presented some outlook for the coming year. Currently, the world economy is in a severe situation never experienced for many years that I may venture to call a crisis situation. The immediate task is "fire-fighting" against this crisis, and we are doing our utmost. At the same time, however, looking back on the developments in the world economy for the past two decades or so, the phenomenon of the rise and bursting of bubbles seems to have increased in frequency and become visible across a wider range of economies. Considering the background to these experiences, it seems necessary to remember that responding to crises with excessive policy actions may lead to larger crises later on. In the current crisis, many issues have surfaced in central banking circles in areas such as the basic ideas behind the conduct of monetary policy and the regulation and supervision of financial institutions. I am sure that various issues are also being reconsidered in the field of corporate management, given the progress of globalization in economic and financial activities. The Bank, through exchanging views with you, will do its utmost as a central bank to facilitate the return of Japan's economy to a sustainable growth path with price stability.

Thank you very much for your kind attention.