

Miyako Suda: The current situation of and outlook for Japan's economy and the conduct of monetary policy

Summary of a speech by Ms Miyako Suda, Member of the Policy Board of the Bank of Japan, at a meeting with Business Leaders, Wakayama, 3 June 2010.

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I. Japan's economy and prices and the conduct of monetary policy

A. *Developments in financial markets*

1. Developments in global financial markets and the situation in Greece

The topic I would like to discuss today is the current situation of, and outlook for, Japan's economy and the Bank of Japan's conduct of monetary policy. Let me begin by looking at developments in global financial markets.

Following the unprecedented turmoil triggered by the failure of Lehman Brothers in September 2008, global financial markets regained stability from around the spring of 2009 due to various measures taken by governments and central banks around the world. The LIBOR–OIS spread, an indicator of counterparty credit risk, has narrowed to levels significantly below those seen before the Lehman shock. Recently, however, signs of instability have reemerged due to concerns over fiscal problems in some European countries, particularly Greece, and uncertainty regarding financial regulation in the United States and Europe. The crisis in Greece has caused large fluctuations in stock prices and foreign exchange rates around the world, increasing investors' risk aversion and deepening the fiscal woes of other European countries. In what follows, I would like to review recent developments in global financial markets, focusing in particular on the situation surrounding Greece.

The Greek debt crisis was triggered by a loss of confidence in Greece's official statistics and its ability to repay its debt. In October 2009, the new administration in Greece announced that the country's budget deficit in 2009 would be far greater than previously estimated. The significant revision gave rise to concerns about the reliability of Greece's official statistics and fiscal discipline, prompting a large rise in Greece's sovereign risk premium. In January this year, the Greek government submitted to the European Commission a three-year plan to cut its budget deficit, and in April, the 16 euro area member states agreed on a 30-billion euro financial support package. At that stage, Greece was still able to procure funds relatively smoothly through the issuance of government securities. However, Greece's sovereign risk premium increased rapidly from the end of April to early May, following a further revision to its budget deficit estimate, a sharp downgrading of Greek government bonds by a major credit rating agency, and successive news reports about the escalation of street protests in Greece. In response, worldwide stock prices tumbled and foreign exchange rates fluctuated sharply. For example, the Dow Jones Industrial Average experienced its largest recorded intraday points fall on May 6, 2010.

To address this situation, the European Union agreed on a 500 billion euro emergency loan package, the European Stabilization Mechanism, with the International Monetary Fund (IMF) pledging additional funds. The European Central Bank (ECB), for its part, decided to intervene in euro area public and private debt securities markets through the Securities Markets Programme, while adopting a fixed-rate tender procedure with full allotment in the regular three-month longer-term refinancing operations (LTROs), a six-month LTRO with full allotment, and U.S. dollar liquidity-providing operations. Furthermore, the Greek government announced additional fiscal consolidation measures, which gradually are helping to ease the severe strains in financial markets. However, fiscal deficits are not a problem for Greece

alone. Rather, this problem is shared by all countries that responded to the rapid economic deterioration with large-scale expansionary fiscal measures in the aftermath of the Lehman shock. However, the problem has become particularly acute in the euro area, with its strict fiscal rules enshrined in the Stability and Growth Pact and its single common currency, which means that countries cannot use exchange rate adjustments to modify trade between member states. This basic constraint is identical for countries other than Greece, such as Portugal, Italy, Ireland, and Spain, on which attention has recently focused. These countries face structural problems in terms of managing fiscal policy and maintaining competitiveness under a single currency. Consequently, fiscal reconstruction is likely to be a painful and time consuming process and financial markets are likely to remain wary of the sovereign risks of these five countries and the credit risks of financial institutions with large exposure to them. Against this background, stock prices have remained weak in the United States and Europe, while the LIBOR–OIS spreads for the U.S. dollar and euro are expected to continue to widen. In the foreign exchange market, the euro is tending to be weak. In sum, global financial markets remain unpredictable, requiring continued close monitoring.

2. *Developments in Japanese financial markets*

Turning to Japanese financial markets, interest rates, particularly those on term instruments, have been declining since the beginning of 2009 in tandem with the improvement in the functioning of various markets as a result of the stabilization in global financial markets. In December 2009, the Bank introduced a new market operation, which provides funds at a fixed rate against pooled collateral, to counter instability in global financial markets following the financial crisis triggered by the surfacing of payment rescheduling problem of government-affiliated firms in Dubai, and to quell any concerns that market confidence might deteriorate in the face of increased news reports about deflation. In addition, in order to further lower interest rates on term instruments, the Bank, in March 2010, sharply increased the volume of funds provided through the new funds-supplying operation, and interest rates on term instruments have been declining since. On the other hand, while stock prices were on an upward trend from the spring of 2009 due to improved economic sentiment, they have been falling sharply since the beginning of May in tandem with the decline in U.S. and European stock prices reflecting the emergence of the problems surrounding Greece. Along with the fall in stock prices, risk avoidance among investors has grown, leading to increased purchases of government bonds and a moderate downward trend in long-term interest rates. In the foreign exchange market, the dollar has been trading at around 90 yen, while the euro has weakened significantly against the yen.

As for the environment for corporate financing, firms' cash inflow has improved, reducing demand for external funds and narrowing the issuing spreads even on debt securities issued by firms with low credit ratings. In view of the improvement in the corporate financing environment, the Bank terminated the special measures introduced after the Lehman shock: outright purchases of CP and corporate bonds were wound up at the end of December 2009, while special funds-supplying operations to facilitate corporate financing were terminated at the end of March 2010. The termination of these measures has had no major impact on markets, but given the current marked instability in stock prices and foreign exchange rates, the Bank is paying close attention to the effects of developments in risk aversion.

B. *The current situation of the economy and prices*

As I explained earlier, uncertainty remains regarding developments in global financial markets, but an increasing number of recently released economic indicators show that signs of an economic recovery in Japan are becoming more broad-based. Following the assessment at the Monetary Policy Meeting on April 6 and 7, 2010, that Japan's economy "has been picking up," the Bank raised its assessment at the meeting on May 20 and 21, stating that the economy shows further signs of a moderate recovery. However, as I have repeatedly mentioned, developments in global financial markets have recently been

unstable, and attention should be paid to how they affect economic activity in Japan. I would now like to discuss in detail the current situation for each demand component and then consider the outlook as well as risk factors for the economy.

First, real exports, the main engine of Japan's economic growth, have been increasing, especially to emerging and commodity-exporting economies, and here particularly those in Asia. Let us look at the global economic and price situation forming the background to the increase in Japan's exports. The U.S. economy, for example, is recovering at a moderate pace. Private nonfarm payroll employment has started to clearly increase, and retail sales data provide signs of a recovery in a broad range of business areas. However, with the unemployment rate still high and the average duration of unemployment at a new peak, credit card lending remains tight and the pressure on households to adjust their balance sheets continues to weigh on the recovery of private consumption. Similarly, in the housing market, home price indices have been slow to recover, and mortgage delinquency rates and the number of foreclosures have been rising. Against this background, the pace at which the recovery in the corporate sector has been spreading to the household sector has remained moderate.

Economic activity in the euro area has been picking up as a whole, with some differences in growth by country. The pace of recovery, however, remains moderate compared to that in the United States. In the euro area, exports and production continue to increase, but private consumption has been weak, reflecting persisting adjustment pressure on households' balance sheets against the background of the severe employment situation and the fact that consumer sentiment has deteriorated somewhat due, for example, to the growing severity of the situation in Greece.

On the other hand, emerging and commodity-exporting economies continue to show robust growth underpinned by strong domestic demand. In China, due mainly to the effects of the expansionary macroeconomic policies, bank lending has expanded by more than 20 percent from a year earlier and retail sales and fixed asset investment are at much higher levels than in 2009. The strong domestic demand in China has stimulated economic activity in other countries in the region such as the NIEs and the ASEAN countries through increased exports to China. As a result, these economies continue to show high growth supported by a virtuous circle of growth in production, income, and spending.

As for the price situation in overseas economies, a disinflationary trend in the United States and Europe continues. Specifically, in the United States, the year-on-year rate of increase in the consumer price index (CPI) for all items less energy and food, or the core CPI, has continued to slow, registering 0.9 percent in April, the smallest increase since January 1966. In the euro area, the year-on-year rate of increase in the core CPI declined to 0.8 percent in April, the lowest since the introduction of the index. These developments in the United States and Europe imply that the deterioration in the aggregate demand and supply balance in these economies has been exerting downward pressure on prices. On the other hand, inflationary concerns are intensifying in emerging economies. In China, in particular, real estate prices in 70 major cities in April marked the largest year-on-year increase on record and the year-on-year increase in the CPI in April was the highest in a year and a half.

Turning to domestic demand in Japan, public investment has been decreasing since the second half of fiscal 2009. On the other hand, corporate profits have been following a recovery trend due mainly to increased production and labor cost restraint. Reflecting these developments, business fixed investment has leveled out and started to show signs of picking up, as evidenced by the continued increase in shipments of capital goods, a coincident indicator of business fixed investment. The employment and income situation remains severe, but gradually signs of a recovery are emerging: the unemployment rate has peaked out, and nominal wages per employee increased by 1.5 percent in April year on year, registering a positive figure for the second consecutive month. Against this background, private consumption, notably of durable goods, has picked up due to the effects of policy

measures such as tax reductions on purchases of environmentally friendly cars and the introduction of the eco-point system, which favors energy-efficient products. It should be noted, however, that the substantial increase in sales of electrical appliances through March was due to a rush of demand prior to tighter application of the eco-point system for flat panel televisions, and that sales at department stores, which marked a quarter-on-quarter increase in the first quarter of 2010 for the first time since the fourth quarter of 2007, have been sluggish since the beginning of April, largely due to weak sales of apparel reflecting unfavorable weather conditions. Although some market participants regard the improved sales of luxury goods as a sign of a self-sustaining recovery, I believe that the situation in private consumption still requires careful monitoring. Meanwhile, the decline in housing investment has almost leveled out, as evidenced by, for example, improved sales of newly built condominiums in the Tokyo metropolitan area.

Reflecting the situation in domestic and overseas demand I just described, production has been rising. The decline in inventories has almost leveled out, and the shipment-inventory balance, on the whole, has improved to a level where there are no inventory adjustment pressures.

Looking at developments in prices in Japan, the pace of the year-on-year decline in the CPI (excluding fresh food) – which posted the largest fall on record, minus 2.4 percent, in August 2009 – has started to decelerate with the effects of the drop in the prices of petroleum products following their surge in 2008 waning. The moderating trend in the pace of decline in the CPI has continued against the background of the gradual improvement in the aggregate demand and supply balance. Recently, the rate of change in the CPI has been hovering around minus 1 percent once the effects of subsidies for high school tuition fees are taken out.

C. Outlook for the economy and prices

Japan's economy is starting to recover moderately, induced by the improvement in overseas economic conditions. The Bank's projections for economic activity in Japan are as follows: while the effects of various policy measures are likely to wane, emerging and commodity-exporting economies are likely to maintain high growth, and the momentum for a self-sustaining recovery in Japan's domestic private demand is expected to gradually gather pace; Japan's economy therefore is likely to be on a recovery trend.¹ For these projections to materialize, it is important that improvements in the corporate sector feed through to the household sector supported by a virtuous cycle of increased production, income, and spending. However, considering Japan's experience during the economic recovery phase since 2002, the pace with which improvements in the corporate sector feed through is likely to remain moderate. Moreover, uncertainties regarding the economic outlook have been heightening due to instability in global financial markets reflecting concerns over fiscal problems in some European countries. I will discuss these risk factors later on, and would now like to address the outlook for each demand component.

To begin with, Japan's real exports are likely to continue increasing, especially those to emerging and commodity-exporting economies. Examining developments in the world economy, on which developments in Japan's exports depend, emerging and commodity-exporting economies are likely to continue achieving strong growth led by domestic demand, which in turn should contribute to a continued moderate recovery in the U.S. and European economies. Specifically, the momentum for a self-sustaining recovery is expected to gradually become more pronounced in the U.S. economy with a continued improvement in the employment and income situation. Nevertheless, the pace of economic recovery will likely remain moderate, given that it will take considerable time for the housing market to

¹ For details, see the April 2010 *Outlook for Economic Activity and Prices* released on May 1, 2010.

recover, and that adjustment pressure on households' balance sheets will continue to be a constraint on a recovery in consumption. The economy of the euro area is also expected to continue recovering moderately, with exports, partly due to the weak euro, expected to grow, which in turn will boost production. However, the pace of economic recovery in the euro area is expected to be more moderate than that in the United States, not only because adjustment pressure on households' balance sheets and sluggish consumer confidence stemming from unstable financial market conditions are likely to persist for some while at a time when the employment and income situation remains severe, but also because stringent fiscal consolidation measures required of countries facing serious fiscal problems will exert downward pressure on economic activity in the euro area.

Turning to domestic demand in Japan, the momentum of recovery in private consumption might temporarily weaken in the latter half of fiscal 2010 as the effects of policy measures gradually wane. Nevertheless, the underlying trend of a recovery is not likely to be interrupted given the continued improvement in the employment and income situation. Business fixed investment, which has stopped declining, is expected to gradually start picking up, given that machinery orders (private demand, excluding orders of shipbuilding and orders from electric power companies), which are a leading indicator of machinery investment, are expected to have risen in the April–June quarter for the third consecutive quarterly increase. Housing investment will likely continue recovering moderately: the number of housing starts – a leading indicator of housing investment – is starting to recover as a result of support measures and adjustments in condominium prices. Reflecting such developments in demand both at home and abroad, production is likely to continue rising as a trend. The industrial production index may temporarily become weak in the October–December quarter, that is, the quarter immediately after the purchase support for eco-friendly cars expires, but the uptrend in production is expected to remain intact with the continued increase in demand both at home and abroad.²

As for prices, under the assumption that medium- to long-term inflation expectations remain stable, there are prospects that the year-on-year rate of change in the CPI (excluding fresh food) could turn positive in fiscal 2011 as the aggregate demand and supply balance moderately improves.

D. Risk factors

Next, I will discuss the risk factors relevant to the outlook I have just talked about. The three risk factors that I am particularly concerned about at present are: (1) developments in global financial markets; (2) the sustainability of growth in emerging and commodity-exporting economies; and (3) a decline in the expected growth rate of the economy. The outlook is becoming increasingly uncertain due to these risk factors which at present I see as tilted to the downside.

Regarding the first factor, global financial markets have become volatile due to a number of reasons including: (1) the fiscal deficit problem in some European countries; (2) balance-sheet problems at European financial institutions; (3) the effect on the United States and Europe of the adoption of more stringent financial regulations, including the restrictions on short selling in Germany; and (4) expectations that monetary policy will be tightened in China. While all of these factors require close attention, I am particularly concerned about developments with regard to the fiscal deficit problem in some European countries, such as Portugal, Ireland, Italy, Greece, and Spain. As I pointed out at the beginning of this speech,

² When assessing developments in the industrial production index, it should be noted that the index is greatly influenced by the distortion caused by seasonal adjustments. For details, see footnote 8 of the May issue of the *Monthly Report of Recent Economic and Financial Developments*, released by the Bank of Japan on May 25, 2010.

the fiscal deficit problem in some European countries arises from the difficulties of an economic system based on a common currency, the euro. Therefore, the road to recovery may be long and painful due to the need for severe fiscal consolidation. Such worries are at the root of the significant volatility in stock prices and foreign exchange rates around the world, which in turn may have a negative impact on private consumption and business fixed investment not only in Europe but also in Japan through a deterioration in household and corporate sentiment. Furthermore, a possible downturn of the economy of the euro area as a result of rigorous fiscal consolidation measures may affect Japan's exports to some extent. There is also a risk that weakness in European financial markets could spread to other countries through losses incurred by European financial institutions. Other risks that require attention include that expansionary macroeconomic policies in countries such as China are adjusted too quickly or too slowly.

The second risk factor concerns the sustainability of growth in emerging and commodity-exporting economies. At present, these countries are enjoying high economic growth and are expected to maintain high levels of growth. However, a further increase in the inflow of funds to these countries as a result of global monetary easing could lead to excessive investment activity and position-taking, possibly triggering an overheating of these economies or a surge in primary commodity prices. A price surge in primary commodities could affect the Japanese economy by leading to a downturn in corporate profits through a deterioration in the terms of trade or by pushing down private consumption. Furthermore, if economies overheat, the subsequent unwinding of excesses could cause a sharp downturn of the global economy and destabilize financial markets. In fact, in China, expectations of a tightening of monetary policy have recently induced volatility in stock prices, while international commodity prices, such as those of crude oil, have started to fall as investors are becoming more cautious about taking on risks. If these trends gain further momentum, prices in industrialized countries, including Japan, may be affected somewhat through funds flowing out of emerging and commodity-exporting economies and international commodity markets, causing a further decline in international commodity prices.

The third risk factor is a decline in the expected growth rate resulting from domestic structural trends such as: (1) corporate efforts to restrain wages to survive global competition; (2) the growing economic divergence between large and small firms as well as between large cities and regional areas; and (3) the aging and shrinking of the population. A decline in the expected growth rate could hamper the virtuous circle of production, income, and spending. Furthermore, it could lead more firms to increase business fixed investment overseas rather than in Japan. In fact, the results of the *Annual Survey of Corporate Behavior (Fiscal 2009)* conducted by the Cabinet Office show that 55.7 percent of responding manufacturers were planning to increase and strengthen overseas production. Also, if expansionary macroeconomic policies are maintained for longer than is necessary, this could lower the expected medium- to long-term growth rate of domestic demand by slowing down the response to structural changes, keeping resources in inefficient areas, and delaying improvements in productivity in the economy as a whole.

E. Monetary policy for the immediate future

So far, I have talked about developments in financial markets at home and abroad, the economy, and prices, as well as the risk factors relevant to the outlook with regard to these. I will now move on to the issue of the Bank's monetary policy.

The Bank recognizes that Japan's economy faces the critical challenge of overcoming deflation and returning to a sustainable growth path with price stability. To this end, the Bank will continue to consistently make contributions as the central bank. In the conduct of monetary policy, the Bank will aim to maintain the extremely accommodative financial environment. Furthermore, in view of the current state of the Japanese economy, and recognizing the need to strengthening the foundations for economic growth, the Bank has decided to introduce a new initiative to contribute to the strengthening of the foundations for

economic growth. Specifically, the Bank decided, through the provision of funds, to support efforts by private financial institutions that would help to strengthen the foundations for economic growth, and on May 21, 2010 announced a preliminary framework for this initiative. At present, the Bank is exchanging views with a wide range of financial institutions and firms in order to formulate concrete plans for the initiative.

The provision of funds by a central bank specifically to strengthen the foundations for economic growth is an unprecedented measure. Such a move could increase the risk of: (1) distorting resource allocation in the private sector; (2) reducing the flexibility of monetary adjustments by lengthening the duration of assets held by the Bank; and (3) negatively affecting the soundness of the Bank's balance sheet. The decision to resort to such a measure reflects the acute concern of the Bank over the prolonged weakness of the Japanese economy. In the *Outlook for Economic Activity and Prices* (hereafter the Outlook Report) released on April 30, the Bank stated at the opening that: (1) the presence of emerging and commodity exporting economies in the global economy is growing; (2) in advanced economies, the outstanding amount of public debt has risen to unprecedented levels; (3) discussions have proceeded regarding a review of financial regulation and supervision; and (4) Japan – where domestic demand is expected to decline against the backdrop of an aging and shrinking population – faces the critical challenge of raising real economic growth and productivity. The report also states that the Bank takes into account “these medium-to long-term changes in, and challenges facing, the global economy and Japan's economy” when examining the outlook for economic activity and prices. This statement is based on the belief that firms' expectations for economic growth, and hence the outlook for growth, will change if each and every one of us moves forward and takes action to tackle these structural changes.³

These problems ailing the Japanese economy are already well known. Various prescriptions have been provided on how to deal with these structural changes and problems. However, the absence of any effective measures and concrete results has given rise to a growing sense of despair among the public. Estimates of future population trends in Japan underline the pressing need for per capita productivity to rise if growth expectations are to be maintained.

II. The potential growth rate and deflation

I will now talk about the vital necessity to raise the potential growth rate in order to get out of the deflationary impasse. A comparison of the growth rate of consumer prices in the United States, Europe, and Japan shows that, after the collapse of Lehman Brothers, the CPI (excluding food and energy prices, which tend to be volatile) declined in Japan alone, even though Japan was outside the epicenter of the financial crisis. In terms of the downward trend in inflation, this has been quite similar in the United States, Europe, and Japan, so that the reason why prices in Japan have been falling is that the inflation rate was low to start with. In any case, in order to find out why Japan alone is experiencing deflation, it is necessary to look into why the inflation rate has been low in Japan compared with the United States and Europe from the latter half of the 1990s. I will now look into this issue from a medium- to long-term perspective.

³ On this point, I agree with the view of Yutaka Yamaguchi, a former Deputy Governor of the Bank of Japan, outlined in a speech delivered to the Colloque Monétaire International at the Banque de France on October 8 and 9, 1999: “Nevertheless, looking back on the experiences of the Bank of Japan during the 1990s, I believe that central banks are counted on to determine quickly any major structural changes in economies, analyze accurately their implications, and explain them persuasively to the public at large.” For details, see “Monetary Policy and Structural Policy: A Japanese Perspective,” available on the Bank's web site at <http://www.boj.or.jp/en/index.htm>.

A. Negative productivity shocks

A major factor behind the prolonged deflation in Japan since the 1990s is the negative output gap, which has prevailed for a long time. One of the reasons often cited recently for this negative output gap is the slowdown in productivity growth – that is, negative productivity shocks.⁴ I will now discuss these negative productivity shocks and their relation with the output gap, which is the cause of deflation.

The reasons for Japan's slower growth trend from the 1990s, compared with those of the United States and Europe, can be attributed to successive negative productivity shocks. The first shock is the rapid advance in population aging and decline. The second is the continuing IT revolution and the intensification of global competition based on the increased supply capacity of emerging markets. It has been argued that against the background of these major structural changes, corporate governance in Japan, being bound by past success, has shown insufficient adaptability and flexibility.⁵ The third factor is that these negative productivity shocks coincided with the disposal of nonperforming loans following the burst of the real estate bubble.⁶ To be more specific, following the burst of the real estate bubble of the late 1980s, manufacturers were busy dealing with excesses in production capacity, employment, and debt, while financial institutions were unable to perform their credit intermediation function properly because they were preoccupied with the disposal of nonperforming loans. It is thought that these factors combined put downward pressure on labor input, capital input, and total factor productivity.⁷ Indeed, the pace of labor productivity growth in Japan moderated from the 1990s onward. Also, during this period, there was limited room for reducing interest rates and it therefore was impossible to ease monetary policy to the extent required for countering the decline in the potential growth rate.

At the same time, growth expectations for the economy have also been weighed down by anxiety about the future stemming from the large fiscal deficit and problems regarding the pension system. The decline in growth expectations has pushed down people's permanent income expectations, leading to general restraint in consumption and investment. Since supply can be adjusted only relatively slowly, the demand and supply balance deteriorated, exerting downward pressure on prices. Thus, the significant and prolonged downward pressure on prices in Japan has been caused by the intermittent negative production shocks that occurred during the 1990s. Given this environment, firms placed greater emphasis on profitability by further restraining wages against the background of the slow rise in labor productivity, causing unit labor costs (labor costs per unit of output) to trend downward in contrast with the situation in the United States and Europe. The downward pressure on wages has been strong because of (1) the tendency in Japan to restrain personnel costs through wage adjustments rather than job cuts, (2) the increased tendency of firms to shift production overseas in the search for low-cost labor, and (3) the weakening of labor unions. In addition, fierce competition particularly among nonmanufacturers also contributed to lower inflation rates. It has been argued that the productivity gap of the nonmanufacturing sector vis-à-vis manufacturing was partly responsible for pushing up services prices (according to

⁴ For details, see Fumio Hayashi and Edward Prescott, "The 1990s in Japan: A Lost Decade," *Review of Economic Dynamics*, 5, pp. 206–235, 2002.

⁵ See Yoshikazu Morimoto, Wataru Hirata, and Ryo Kato, "Global Disinflation," research paper released by the Bank of Japan in June 2003 (available on the Bank's website).

⁶ See Masaaki Shirakawa, "Japan's Economy and Innovation," speech given at the Japan National Press Club in Tokyo on May 31, 2010 (available on the Bank's website).

⁷ See Masayuki Nakayuki, Akira Otani, and Shigenori Shiratsuka, "Distortions in Factor Markets and Structural Adjustments in the Economy," IMES Discussion Paper Series, No. 2004-E-4 (available on the Bank's website).

the structural inflation theory), but this tendency has lessened as a result of increased competition since the 1990s.⁸

Furthermore, medium- to long-term inflation expectations – another large factor affecting prices – appear to be lower in Japan than in other countries. This is probably due to the decline in growth expectations mentioned earlier, coupled with the fact that inflation rates in Japan have been comparatively low in the past. Survey results suggest that long-term price expectations have been relatively stable in a range between 0 and 2 percent since the latter half of the 1990s and that fluctuations in expectations seem to correlate with the potential growth rate. Based on these findings, it may be said that the decline in the potential growth rate in Japan since the 1990s exerted downward pressure on prices by triggering a decline in demand exceeding that in the potential growth rate, which in turn lowered the expected growth rate at the time, which then negatively affected medium- to long-term inflation expectations. In other words, the main cause of deflation appears to be the decline in the potential growth rate brought about by various external shocks, which in turn gave rise to a more guarded view with respect to growth prospects.

As for the outlook, the potential growth rate is likely to remain low. The aging of the population will not only reduce the ratio of the working population, but will lead to a fall in investment and the capital stock as the saving rate declines, and increase the downward pressure on economic growth per capita. In addition, the decline in the population must also be taken into account. This, over time, will add further downward pressure on economic growth overall. If these developments lower the expected growth rate even more, prices will come under further downward pressure.

B. Importance of maintaining the public's confidence in policymakers

It follows from the foregoing that in order to achieve sustainable economic growth with price stability, it is essential to raise the potential growth rate. In view of the limited room for lowering interest rates, the opinion has been voiced that fiscal spending, which has an immediate effect, should be increased without hesitation. However, given the huge outstanding amount of public debt in Japan, thoughtlessly increasing fiscal spending could damage public confidence in the conduct of fiscal policy. Especially amid the growing concern about fiscal sustainability following the escalation of fiscal strains in Greece, a policy of fiscal expansion could rouse anxiety about possible tax increases and the health of the pension scheme, and, in turn, restrain consumer spending. If this happens, the demand and supply balance of the overall economy will deteriorate, increasing deflationary pressure. Loss of confidence in the conduct of fiscal policy will not only lead to a rise in interest rates and the cost of repayments, but also damage the balance sheets of financial institutions holding government securities and exert downward pressure on the economy from the financial side.

Credibility is also vital for central banks. If a central bank provides funds or is perceived to be doing so for fiscal spending when the room for increases in fiscal spending is limited, its credibility as an independent policymaker will be tarnished. Its ability to achieve price stability through the conduct of monetary policy will be in doubt and interest rates will rise as a result.⁹ Let us consider this by focusing on the government's budget constraint. Since fiscal deficits require the issuance of government securities, the government's intertemporal

⁸ On the low labor productivity in the nonmanufacturing sector, see "Stagnation and Structural Adjustments of Nonmanufacturing Industries during the 1990s," research paper released by the Research and Statistics Department of the Bank of Japan, February 1999. This is a summary of the Japanese-language original released in February 1999.

⁹ For details, see "Central Bank Independence, Transparency, and Accountability," remarks by Ben S. Bernanke, Chairman of the Board of Governors of the Federal Reserve System, at the Institute for Monetary and Economic Studies International Conference, Bank of Japan, on 25 May 2010.

budget constraint, in real terms, and taking the present discounted value of the fiscal surplus, is given by the following equation:

Outstanding balance of government securities issued/price level = present discounted value of the fiscal surplus (in real terms).

Fiscal expansion lowers the present discounted value of the fiscal surplus. Thus, if we take the interest rate level as given, for the outstanding balance of government securities in real terms to decline, the price level needs to rise. However, although such a rise in the price level would spell the end of deflation in Japan, it would give rise to concerns that the government was planning to accumulate debt and then inflate it away. Therefore, no matter how strongly the central bank is committed to ensuring price stability, it will find it difficult to maintain credibility. Ultimately, such a path will destabilize the economy and prices. Lessons learned from the past are that credibility, once lost, is hard to be restored.

For the present, the economy and prices are moving largely in line with the main scenario presented in the April 2010 Outlook Report, and the year-on-year rate of change in the CPI is likely to return to positive territory in fiscal 2011. In this situation, efforts should be made to raise the productivity of the overall economy and increase the potential growth rate in order to end deflation and reduce the fiscal deficit.