

April 30, 2008

Bank of Japan

## **Outlook for Economic Activity and Prices**

**(April 2008)**

**[The Bank's View]<sup>1</sup>**

### **Outlook for Economic Activity and Prices**

Japan's economic growth is slowing, mainly due to the effects of high energy and materials prices. Compared with the projection in the October 2007 *Outlook for Economic Activity and Prices* (Outlook Report), housing investment and business fixed investment have been weaker than expected while exports have been stronger. As a result, the rate of real GDP growth in fiscal 2007 seems likely to be around the potential growth rate,<sup>2</sup> as projected in the October Outlook Report.

From fiscal 2008 through fiscal 2009, the economy is likely to continue its moderate growth at a pace around the potential growth rate. In the first half of fiscal 2008, while housing investment is expected to recover gradually, deceleration in the economy seems likely to continue due mainly to the slowdown in overseas economies, especially the United States, and the effects of high energy and materials prices. Thereafter, the growth rate is likely to pick up gradually, as overseas economies are expected to move out of their deceleration phase and the effects of high energy and materials prices are likely to abate. As a result, the rate of real GDP growth for fiscal 2008 is likely to register around 1.5 percent, lower than the previous projection. The growth rate for fiscal 2009 is expected to be in the range around 1.5-2.0 percent. There are, however, downside risks to the economy stemming from uncertainties regarding future developments in overseas economies and global financial markets as well as the effects of high energy and materials prices.

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<sup>1</sup> The text of "The Bank's View" was decided by the Policy Board at the Monetary Policy Meeting held on April 30, 2008.

<sup>2</sup> The Bank's estimate of the current potential growth rate is around 1.5 percent or somewhat higher, having risen moderately from a level of approximately 1 percent in fiscal 2003 through fiscal 2004.

The outlook rests on the following underlying assumptions and mechanisms.

First, exports are expected to continue rising, as overseas economies, especially emerging economies, are likely to grow although at a slower pace. Second, in the corporate sector where firms currently face no pressures to adjust production capacity, inventory, and employment, they are likely to carry on investment to meet medium- to long-term demand, and so business fixed investment, particularly at large firms, is expected to keep increasing. The pace of growth in business fixed investment is, however, likely to be moderate not only because pressure on corporate profits is expected to remain intense due mainly to elevated materials prices, but also because strong growth in capital investment over the last several years has resulted in a higher level of capital stock. Third, in the household sector, private consumption is likely to remain firm against the background of moderate growth in employee income. The number of employees is likely to continue rising, as many firms are feeling a shortage of labor. In this situation, upward pressure on wages is likely to increase gradually, as tight labor market conditions are expected to become prolonged. However, the pace of wage increases is likely to remain moderate because persistent labor cost restraint by firms, especially small and medium-sized firms, is likely to continue in the face of sluggish growth in corporate profits. And fourth, the accommodative financial conditions are likely to continue to support private demand. The level of short-term interest rates has been very low relative to the potential growth rate and inflation. Despite the continued disruptions in global financial markets, the increase in credit spreads in Japan has been relatively small and the adverse effects on financial institutions in Japan have been limited compared to the United States and Europe. Under these circumstances, the lending attitude of financial institutions has been generally accommodative. However, financing conditions at small firms and some nonmanufacturers are becoming somewhat less accommodative, and this seems likely to continue for a while.

Given this economic outlook, the environment surrounding prices can be summarized as follows. First, the level of resource utilization, in terms of labor and production capacity, is close to its historical average, and this suggests that aggregate supply and demand in the economy are more or less balanced. Going forward, resource utilization is likely to stay more or less at the same level, as the economy is expected to grow at around the potential

growth rate. Estimates of the output gap are also likely to remain around the current level. Second, it is likely that unit labor costs (labor costs per unit of output) will decline at a slower pace as wages gradually rise. And third, the private sector expects future price increases. The results of various surveys indicate an upward shift in private-sector expectations of inflation due to rises in the prices of frequently purchased items and an increase in the number of items undergoing price hikes.

Looking at price indices, the domestic corporate goods price index (CGPI) in fiscal 2007 turned out to be higher than the previous projection in October, recording its highest rate of increase since fiscal 1989, due to rises in international commodity prices. As for the outlook, the CGPI is likely to continue increasing,<sup>3</sup> although this will be subject to future developments in the prices of crude oil and other commodities as well as foreign exchange rates. The rate of increase in fiscal 2008 is projected to be higher than the October projection.

The consumer price index (CPI, excluding fresh food) for fiscal 2007 was somewhat higher than previously projected due to increased prices of petroleum products and food products. It seems likely that, with the output gap remaining more or less at the same level, the year-on-year rate of change in the CPI (excluding fresh food) will be in the 1.0-1.5 percent range until the middle of fiscal 2008, reflecting the sharp rises in the prices of petroleum products and food products, and decline slightly thereafter. On a fiscal-year basis, the rate of increase is projected to be around 1.0 percent in fiscal 2008, higher than the October projection, and to continue to register around 1.0 percent in fiscal 2009.

### **Upside and Downside Risks**

The outlook described above is the most likely projection based on the underlying assumptions and mechanisms mentioned earlier. It should be noted that the outlook is subject to the following upside and downside risks, and that these require close attention especially when the outlook for economic activity and prices is highly uncertain.

The first risk concerns developments in overseas economies and global financial markets.

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<sup>3</sup> This outlook is based on the 2005-base CGPI.

Global financial markets have been unstable due to continued disruptions stemming from the U.S. subprime mortgage problem. In this situation, deceleration in the U.S. economy is becoming more pronounced and the economy has recently lost momentum, as adjustments in the housing market have intensified and the financial environment has deteriorated sharply. Looking forward, if the housing correction and the financial market disruptions intensify and become prolonged, the U.S. economy may weaken further. In this case, there is a risk of slower global economic growth, as the adverse effects of sluggish growth in the U.S. economy may spill over to economies in other parts of the world via channels such as international trade and global financial markets. The European economy is continuing to grow, although the pace of growth is slowing. However, possible adverse effects of global financial market disruptions on European financial conditions may pose a downside risk. In China, the economy continues to expand strongly, and, depending on developments in domestic demand such as fixed asset investment, the economic growth rate may exceed expectations during the projection period (fiscal 2008 through fiscal 2009). At the same time, there is also a risk of the growth rate falling below expectations if the effects of the strengthened measures to curtail increased inflationary pressures and the deceleration in the U.S. economy turn out to be greater than expected. In countries that export natural resources, high prices for such resources have supported increased expenditure on, for example, infrastructure investment, and this may further push up world economic growth.

If downside risks to overseas economies and global financial markets should materialize, Japan's economy may be adversely influenced through, for example, changes in external trade, corporate profits, and financial market conditions.

The second risk concerns developments in energy and materials prices. In this Outlook Report, it is assumed that the prices of crude oil and other international commodities will remain elevated, supported by growing demand especially in emerging economies. If, however, international commodity prices increase more than expected, this could increase inflationary pressures across the world, posing the risk of a subsequent economic slowdown. Moreover, higher prices of international commodities mean that the outflow of income from Japan to abroad will increase, and this may have negative consequences for the expenditure of Japanese firms and households.

The third risk concerns firms' expectations of future growth. In this Outlook Report, it is assumed that firms' growth expectations concerning medium- to long-term demand growth will remain unaffected by the current slowdown in the economy, and thus that a moderate increase in business fixed investment will continue. However, if the firms' growth expectations weaken, the projections in this Outlook Report, especially those concerning business fixed investment, may deviate downward. On the other hand, if the various downside risks mentioned above, which may already have been incorporated into firms' decision-making, do not materialize, firms' expectations of future growth may strengthen, leading to higher economic growth than projected.

The fourth risk concerns possible larger swings in financial and economic activity under continuing accommodative financial conditions. The recent economic slowdown seems to have reduced the risk that firms, households, and financial institutions will overextend themselves based on overly optimistic assumptions of future financial conditions. However, given that accommodative financial conditions have been in place for a long time and are expected to continue, there remains a risk that a change in economic agents' expectations of future growth may lead them to overextend themselves, resulting in a long-run misallocation of resources.

Turning to the outlook for inflation, it should be noted that there are also uncertainties that could cause inflation to deviate either upward or downward from the rate projected. If any of the above-mentioned upside and downside risk factors affecting the level of economic activity should materialize, prices may be expected to respond accordingly. There are also the following risk factors that are unique to prices. The first of these concerns changes in the inflation expectations of households and the price-setting behavior of firms. Against the backdrop of recent developments such as rises in the prices of frequently purchased consumer goods and services, consumers' inflation expectations may increase further. At the same time, firms' pass-through of increased materials prices may become more pronounced. If these changes were to materialize, prices would be likely to deviate above the projection. However, given the severity of competition in the goods and services markets, it is possible that firms will redouble their cost reduction efforts and the extent of pass-through may not be as large as expected. The second risk concerns fluctuations in the

prices of primary commodities such as crude oil. Considerable uncertainty surrounds developments in these prices, leaving the potential for movement in either direction.

It needs to be kept in mind that the upside and downside risk factors outlined above are mutually interrelated. If downside risks to overseas economies and global financial markets should decrease, firms' expectations of future growth are likely to become stronger and financial conditions to be correspondingly more accommodative. Consequently, economic growth and inflation may deviate upward from their projected paths. As for energy and materials prices, decreased downside risks to overseas economies and global financial markets could induce either further price rises due to stronger than expected global demand, or price declines due to diminished speculative activity and hence an outflow of such funds from these markets.

### **Conduct of Monetary Policy**

To realize sustainable growth with price stability, the Bank assesses the economic and price situation from two perspectives and then outlines its thinking on the future conduct of monetary policy, taking account of the "understanding of medium- to long-term price stability" -- that is, the level of inflation that each member of the Policy Board understands, when conducting monetary policy, as being consistent with price stability over the medium to long term (hereafter the "understanding").

The "understanding" expressed in terms of the year-on-year rate of change in the CPI currently falls in the range approximately between 0 and 2 percent, with most Policy Board members' median figures at around 1 percent.<sup>4</sup>

The first perspective involves assessing the most likely outlook for economic activity and prices through fiscal 2009 with reference to the view of market participants regarding the future course of the policy interest rate -- a view that is incorporated in market interest rates. It is expected that the growth rate of Japan's economy will decelerate for the time being, but that over the projection period as a whole it will likely grow at a pace around its potential

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<sup>4</sup> The "understanding" has recently been reviewed -- a process which, in principle, occurs annually -- since about a year has now passed since the last such review.

growth rate. The year-on-year rate of change in the CPI (excluding fresh food) is likely to remain at around 1.0 percent on average. Such developments can be regarded as broadly in line with the "understanding." In sum, Japan's economy is likely to realize sustainable growth with price stability.

The second perspective assesses the risks considered most relevant to the conduct of monetary policy, including risks that have a longer time horizon than the first perspective. As noted earlier, those that demand most attention are the downside risks to the economy stemming from uncertainties regarding future developments in overseas economies and global financial markets as well as the effects of high energy and materials prices. However, the risk of the economy falling into a vicious circle of declining prices and deteriorating economic activity seems to be small, since the corporate sector and the financial system have become more resilient. The outlook for prices is subject to upside risks stemming from further increases in energy and materials prices as well as changes in consumers' inflation expectations and the price-setting behavior of firms; nevertheless, the possibility of the inflation rate deviating significantly from the "understanding" is small. In the long run, however, there remains the risk of possible swings in economic activity and prices if the period of accommodative financial conditions is further prolonged and, for instance, the expectation takes hold that interest rates will remain low for a long time regardless of developments in economic activity and prices. The significance of this risk will increase if the downside risks mentioned above should turn out to decrease.

Regarding the conduct of monetary policy, the Bank's basic thinking had been that (1) given the extremely low level of short-term interest rates relative to the economy's potential growth rate and inflation, these were to be raised if Japan's economy was to follow a path of sustainable growth with price stability, and (2) the pace of increase in interest rates should be determined in accordance with improvements in the economic and price situation without any predetermined view. In terms of its actual policy implementation, the Bank raised the level of the policy interest rate to 0.5 percent in February 2007, but has thereafter kept it unchanged. This is because, although the outlook for the economy deemed most likely by the Bank has remained for sustainable growth with price stability, the following factors have also had to be taken into consideration: firstly, that the pace of economic growth has decelerated mainly due to the drop in housing investment and the effects of high

energy and materials prices; and secondly, that there have been increased downside risks to the economy stemming from uncertainties regarding future developments in overseas economies and global financial markets as well as the effects of high energy and materials prices. Against the background of decelerating economic growth and increased downside risks, market expectations of a future increase in the policy interest rate have lessened and there have been corresponding declines in the interest rates on term instruments.

Given the current situation where the outlook for economic activity and prices is highly uncertain, it is not appropriate to predetermine the direction of future monetary policy. Rather, close attention needs to be paid to future developments in economic activity and prices: whether downside risks will decrease, thereby increasing the likelihood of the economy realizing sustainable growth with price stability; or whether the probability of such risks materializing will rise. The Bank will carefully assess the future outlook for economic activity and prices, closely considering the likelihood of its projections as well as factors posing upside or downside risks, and will implement its policies in an accordingly flexible manner.

For monetary policy to be effective, it is necessary for financial markets to be kept stable. To ensure such stability, the Bank has at its disposal various tools for providing sufficient liquidity and has been exerting itself to keep the money market functioning. It has, since last summer, been appropriately providing liquidity through money market operations while market disruptions continue in the United States and Europe. As a result, Japan's money market has been stable. The Bank will continue to carefully monitor market developments and to ensure, via appropriate money market operations, the proper functioning of the money market.

### **(Box) Risk Balance Charts**

Given the high degree of uncertainty regarding the outlook for economic activity and prices, the Bank has decided to release, in addition to the Forecasts of the Majority of Policy Board Members (Appendix 1), the aggregated probability distributions compiled from the distributions attributed by individual Policy Board members to the likelihood of divergence upward or downward from their forecasts (Risk Balance Charts, shown in Appendix 2).

The process of compilation is as follows:

- (1) Each Policy Board member submits his or her forecasts in the form of point estimates, the values to which he or she attaches the highest probability of realization, for the year-on-year rates of change in real GDP, the domestic corporate goods price index (CGPI) and the consumer price index (CPI, excluding fresh food). These forecasts are summarized in Appendix 1, as in the past.
- (2) For the year-on-year rates of change in real GDP and the CPI (excluding fresh food), each Policy Board member also indicates, in the form of a probability distribution, the likelihood that upside or downside risks will materialize and cause divergence from the forecast value.
- (3) Probability distributions are then aggregated and divided by the number of Policy Board members, that is, they are averaged.<sup>(Note)</sup>

The Risk Balance Charts given in this Outlook Report display the following properties.

#### Real GDP

The probability distribution for the rate of real GDP growth in fiscal 2008 is skewed to the left. This suggests that Policy Board members consider the downside risks to be greater than the upside risks. On the other hand, the probability distribution for fiscal 2009 is more or less evenly balanced, implying that Policy Board members attach similar probabilities to both upside and downside risks. Comparison of the probability distributions for fiscal 2008 and 2009 points to greater uncertainty ahead since the distribution is flatter for fiscal 2009 than for 2008.

#### The CPI (excluding fresh food)

The probability distributions for the year-on-year rate of change in the CPI (excluding fresh food) for fiscal 2008 and 2009 are both somewhat skewed to the left. As in the case of the rate of growth in real GDP, the distribution is flatter for fiscal 2009 than for fiscal 2008.

(Note)

Some central banks, such as the Bank of England, publish probability distributions of economic indicators expressing the distribution of risks as "fan charts." At these central banks, board members agree on a single forecast and its distribution, which are then published. In contrast, the Risk Balance Charts of the Bank of Japan represent an average of the probability distributions assumed by individual Policy Board members.

(Appendix 1)

**Forecasts of the Majority of Policy Board Members<sup>5</sup> and Actuals for Fiscal 2007**

y/y % chg.

	Real GDP	Domestic CGPI	CPI (excluding fresh food)
Forecasts made in October 2007	+1.7 to +1.8 [+1.8]	+1.9 to +2.1 [+2.0]	0.0 to +0.1 [0.0]
Actual	+1.6	+2.2	+0.3

**Forecasts of the Majority of Policy Board Members<sup>5,6</sup> for Fiscal 2008 and Fiscal 2009**

y/y % chg.

	Real GDP	Domestic CGPI	CPI (excluding fresh food)
Fiscal 2008	+1.4 to +1.6 [+1.5]	+2.4 to +2.8 [+2.5]	+0.9 to +1.1 [+1.1]
Forecasts made in October 2007	+1.9 to +2.3 [+2.1]	+0.9 to +1.2 [+1.0]	+0.2 to +0.4 [+0.4]
Fiscal 2009	+1.6 to +1.8 [+1.7]	+1.3 to +1.8 [+1.5]	+0.8 to +1.0 [+1.0]

Notes: 1. Figures in brackets indicate forecast medians.

2. "Actual" real GDP for fiscal 2007 is calculated on the assumption that real GDP in the first quarter of 2008 equals that in the fourth quarter of 2007.
3. Domestic CGPI forecasts made in October 2007 were based on the 2000-base CGPI, while the actual figure for fiscal 2007 and forecasts for fiscal 2008 and 2009 are based on the 2005-base CGPI.
4. Individual Policy Board members make the above forecasts with reference to the view of market participants regarding the future course of the policy interest rate -- a view that is incorporated in market interest rates.

<sup>5</sup> The forecasts of the majority of Policy Board members are constructed as follows: each Policy Board member's forecast takes the form of a point estimate, namely the figure to which he or she attaches the highest probability. These forecasts are then shown as a range, with the highest and lowest figures excluded. It should be noted that the range does not indicate the forecast errors.

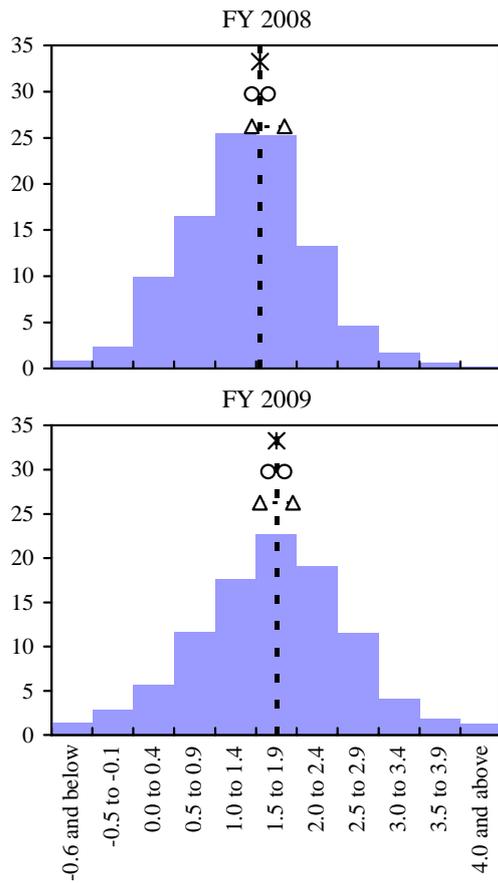
<sup>6</sup> The forecasts of all Policy Board members may be summarized as follows.

y/y % chg.

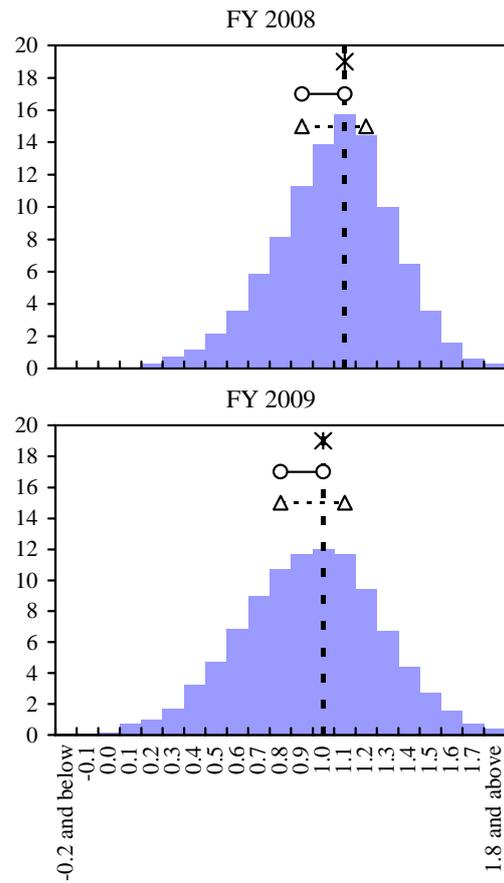
	Real GDP	Domestic CGPI	CPI (excluding fresh food)
Fiscal 2008	+1.4 to +1.8	+2.3 to +2.9	+0.9 to +1.2
Forecasts made in October 2007	+1.9 to +2.4	+0.8 to +1.5	+0.2 to +0.5
Fiscal 2009	+1.5 to +1.9	+1.3 to +1.9	+0.8 to +1.1

### Risk Balance Charts

(1) Real GDP



(2) CPI (Excluding Fresh Food)



- Notes: 1. Vertical axes in the charts represent probability (%), while horizontal axes represent the year-on-year percentage changes in the respective indicators.
2. x on the dashed line indicates the median of the Policy Board members' forecasts (point estimates).
3. ○—○ indicates the range of the forecasts of the majority of Policy Board members.
4. △····△ indicates the range of the forecasts of all Policy Board members.