April 26, 2013
Bank of Japan

Outlook for Economic Activity and Prices
(April 2013)

The Bank's View

I. Baseline Scenario of the Outlook for Economic Activity and Prices in Japan

A. Outlook for Economic Activity

Japan's economy has stopped weakening and has shown some signs of picking up. Looking ahead, it is expected to return to a moderate recovery path around mid-2013, mainly against the background that domestic demand remains resilient due to the effects of monetary easing as well as various economic measures, and that growth rates of overseas economies gradually pick up. Thereafter, while the economy will be affected by the front-loaded increase and subsequent decline in demand prior to and after the two scheduled consumption tax hikes, it is likely to continue growing at a pace above its potential, as a trend, as a virtuous cycle among production, income, and spending is maintained.

The above projection assumes the following underlying developments.

First, assuming that global financial markets remain generally stable, the growth rates of overseas economies, including the United States and China, are expected to gradually pick up, albeit moderately. Such developments overseas, as well as the yen's depreciation in the foreign exchange market, are likely to support an increase in Japan's exports.

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1 The text of "The Bank's View" was decided by the Policy Board at the Monetary Policy Meeting held on April 26, 2013.
2 The projection period in this Outlook for Economic Activity and Prices (Outlook Report) has been extended by one year, through fiscal 2015.
3 Japan's potential growth rate -- under a certain methodology -- is estimated to be "around 0.5 percent" on average during the projection period, and is expected to rise gradually toward the end of the projection period. However, it should be noted that estimates of the potential growth rate are subject to a considerable margin of error as they rely on the specific methodology employed and could change as more data for the relevant period become available.
Second, financial conditions are expected to ease further as the Bank of Japan steadily implements "quantitative and qualitative monetary easing." Specifically, quantitative and qualitative monetary easing is expected not only to work through such transmission channels as longer-term interest rates and asset prices, but also to lower real interest rates through a pick-up in expected inflation rates that is caused by fundamental changes in expectations. Such stimulative effects on private demand are likely to strengthen with improvement in economic conditions.

Third, public investment is expected to continue increasing at a high level for the time being, mainly reflecting various economic measures and increases in the budget associated with reconstruction after the earthquake disaster.

Fourth, firms' and households' medium- to long-term growth expectations are expected to rise moderately as the government's regulatory and institutional reforms make progress, and as firms' efforts to tap potential demand at home and abroad proceed.

Given these assumptions, in fiscal 2013 a virtuous cycle among production, income, and spending is expected to start working, triggered by increases in public investment and exports. More specifically, business fixed investment is likely to follow a moderate increasing trend against the background of improvements in corporate profits and monetary easing effects, including investment related to disaster prevention and energy, and replacement demand for aging equipment. Private consumption is expected to see increased resilience, owing to improvements in household sentiment and the elderly's large appetite for spending, and as it is gradually supported by improvement in employee income. Under these circumstances, Japan's economy is expected to return to a moderate recovery path around mid-2013. Thereafter, a considerable front-loaded increase in demand prior to the consumption tax hike is anticipated in the second half of the fiscal year. Consequently, the overall growth rate for fiscal 2013 is projected to be significantly elevated. From fiscal 2014 toward fiscal 2015, while affected by fluctuations in demand stemming from the scheduled consumption tax hikes, the economy is expected to continue growing at a pace above its potential, as a trend, as positive developments in domestic private demand are
likely to continue, supported by increasing exports and monetary easing effects. Comparing the current projection for the period through fiscal 2014 with that in the January 2013 interim assessment, the growth rates are expected to be higher than the ones presented in January, mainly due to the introduction of quantitative and qualitative monetary easing, an improvement in financial market conditions, and an increase in public investment.

B. Outlook for Prices

The year-on-year rate of change in the consumer price index (CPI, for all items less fresh food, and the same hereafter) has recently been around 0 percent or slightly negative.

Examining factors that determine future inflation rates, first, the **aggregate supply and demand balance** is expected to follow a moderate improving trend, causing excess demand over supply to expand toward the latter half of the projection period. Meanwhile, a tightening of labor supply and demand conditions is expected to become evident, and nominal wages are likely to see gradual upward pressure. Second, some recent indicators suggest a rise in **medium- to long-term inflation expectations**. These expectations are likely to continue on a rising trend under quantitative and qualitative monetary easing, gradually converging to around 2 percent -- the price stability target. Third, **import prices** are expected to continue rising during the projection period, reflecting upward pressure for the time being from developments in the foreign exchange market and assuming that international commodity prices will follow a moderate rising trend in line with global economic growth.

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4 The consumption tax hikes will affect the economy mainly by generating a front-loaded increase and subsequent decline in demand prior to and after the tax hikes (an intertemporal substitution effect). The effect of the tax hikes on the economic growth rate for each fiscal year is estimated as follows: an increase of around 0.3 percentage point for fiscal 2013, a decrease of around 0.7 percentage point for fiscal 2014, and an increase of around 0.2 percentage point for fiscal 2015. However, it should be noted that these estimates are subject to considerable uncertainty given that they depend partly on income conditions and price developments at each point in time, and therefore are subject to a considerable margin of error.
Based on these factors, the outlook for prices -- excluding the direct effects of the consumption tax hikes -- is as follows.\(^5\) The year-on-year rate of change in the CPI is expected to follow a rising trend, reflecting factors such as the improvement in the aggregate supply and demand balance as well as the rise in medium- to long-term inflation expectations, and it is likely to reach around 2 percent -- the price stability target -- toward the latter half of the projection period. Comparing the current projection for the period through fiscal 2014 with that in the January 2013 interim assessment, the projected rates of change in the CPI are higher.

II.  Upside and Downside Risks

A.  Risks to Economic Activity

The following are upside and downside risks to the Bank's aforementioned baseline scenario regarding the economy. The first concerns developments in global financial markets. While the tail risk that the European debt problem might lead to global financial market turmoil and a significant global economic downturn has decreased, there is still considerable uncertainty surrounding developments in Europe. Continued vigilance is warranted over future developments, including those in global financial markets.

Second, there is uncertainty regarding developments in overseas economies. The U.S. economy may post higher growth, mainly against the background of progress in balance-sheet repair, strengthening of monetary easing effects, especially in the housing market, and the positive impact of new energy sources. On the other hand, the economy may also register lower growth, mainly due to fiscal problems. Meanwhile, the pick-up in the growth rates for Europe and China may be delayed for longer than expected, as the effects of fiscal austerity measures continue in Europe, and China appears to be burdened with excess capital stock relative to its sustainable growth path. Even if the growth rates of overseas economies rise as expected, Japan's exports and industrial production might not be able to fully enjoy the benefits of higher growth in the case of a relative delay in the

\(^5\) The effects of the two scheduled consumption tax hikes on prices can be mechanically estimated by assuming that the rise in the consumption taxes will be fully passed on for all currently taxable items. On this basis, the CPI will be pushed up by 2.0 percentage points in fiscal 2014 and 1.3 percentage points in the second half of fiscal 2015 (0.7 percentage point for fiscal 2015 as a whole).
recovery of business fixed investment worldwide, considering that the share of capital
goods and parts is high in Japan's economy.

Third, firms' and households' medium- to long-term growth expectations may be either
raised or lowered depending on future developments in regulatory and institutional reforms.

Fourth, the extent of the front-loaded increase and subsequent decline in demand prior to
and after the consumption tax hikes may differ significantly depending on developments in
real income and prices at each point in time.

Fifth, in the event that confidence in fiscal sustainability in the medium to long term
debutes, the economy may deviate downward from the baseline scenario through increases
in people's concerns regarding the future, and rises in long-term interest rates that are
unwarranted by economic fundamental conditions. On the other hand, there is also a
possibility that the economy will deviate upward from the baseline scenario if the path
toward fiscal consolidation becomes evident and people's concerns regarding the future are
alleviated.

B. Risks to Prices

As for upside and downside risks specific to prices, the first concerns the high uncertainty
regarding developments in firms' and households' medium- to long-term inflation
expectations. While there is a possibility that inflation expectations may not readily rise
due to their possible formation reflecting moderate price declines in the past, there is also a
possibility that they will rise relatively quickly in response to fundamental changes in
expectations.

The second risk concerns uncertainty associated with the responsiveness of prices to the
aggregate supply and demand balance. Attention needs to be paid to whether firms will
raise prices and wages in accordance with the extent to which the supply and demand
balance tightens under a highly competitive environment sustained over time.

The third risk concerns the high uncertainty regarding developments in import prices
reflecting fluctuations in international commodity prices and foreign exchange rates, and
the extent to which such developments are passed on to domestic prices.
III. Conduct of Monetary Policy

The Bank assesses the aforementioned economic and price situation from two perspectives and then outlines its thinking on the future conduct of monetary policy with the price stability target in mind.

The first perspective concerns an examination of the baseline scenario for the outlook. Japan's economy is judged likely to achieve around 2 percent inflation and return to a sustainable growth path toward the latter half of the projection period.

The second perspective involves an examination of the risks considered most relevant to the conduct of monetary policy. With regard to economic activity, upside and downside risks can be assessed as being balanced, although uncertainty remains high, including that regarding developments in overseas economies. Risks on the price front also can be assessed as being largely balanced, although considerable uncertainty surrounds developments in medium- to long-term inflation expectations. Examining financial imbalances from a longer-term perspective, there is no sign at this point of excessively bullish expectations in asset markets or in the activities of financial institutions. Nevertheless, due attention needs to be paid to the fact that financial institutions' holdings of government bonds remain at an elevated level while the amount outstanding of government debt has shown a cumulative increase.  

As for the future conduct of monetary policy, the Bank will continue with quantitative and qualitative monetary easing, aiming to achieve the price stability target of 2 percent, as long as it is necessary for maintaining that target in a stable manner. It will examine both upside and downside risks to economic activity and prices, and make adjustments as appropriate.

Such conduct of monetary policy will support the positive movements that have started to

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6 For more details, see the April 2013 issue of the Bank's *Financial System Report.*
7 In implementing quantitative and qualitative monetary easing, the Bank will purchase a considerable amount of Japanese government bonds (JGBs) from the market. Such JGB purchases are executed for the purpose of conducting monetary policy and not for the purpose of financing fiscal deficits. The Bank strongly expects that the government -- in line with the joint statement released with the Bank in January -- will steadily promote measures aimed at establishing a sustainable fiscal structure.
appear in economic activity and financial markets, contribute to a further pick-up in inflation expectations that appear to have risen, and lead Japan’s economy to overcome deflation that has lasted for nearly 15 years.
## Forecasts of the Majority of Policy Board Members

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Real GDP</th>
<th>CPI (all items less fresh food)</th>
<th>Excluding the effects of the consumption tax hikes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fiscal 2012</strong></td>
<td>+1.0 to +1.1 [+1.0]</td>
<td>-0.2</td>
<td></td>
</tr>
<tr>
<td>Forecasts made in January 2013</td>
<td>+1.0 to +1.1 [+1.0]</td>
<td>-0.2 to -0.1 [-0.2]</td>
<td></td>
</tr>
<tr>
<td><strong>Fiscal 2013</strong></td>
<td>+2.4 to +3.0 [+2.9]</td>
<td>+0.4 to +0.8 [+0.7]</td>
<td></td>
</tr>
<tr>
<td>Forecasts made in January 2013</td>
<td>+1.9 to +2.5 [+2.3]</td>
<td>+0.3 to +0.6 [+0.4]</td>
<td></td>
</tr>
<tr>
<td><strong>Fiscal 2014</strong></td>
<td>+1.0 to +1.5 [+1.4]</td>
<td>+2.7 to +3.6 [+3.4]</td>
<td>+0.7 to +1.6 [+1.4]</td>
</tr>
<tr>
<td>Forecasts made in January 2013</td>
<td>+0.6 to +1.0 [+0.8]</td>
<td>+2.5 to +3.0 [+2.9]</td>
<td>+0.5 to +1.0 [+0.9]</td>
</tr>
<tr>
<td><strong>Fiscal 2015</strong></td>
<td>+1.4 to +1.9 [+1.6]</td>
<td>+1.6 to +2.9 [+2.6]</td>
<td>+0.9 to +2.2 [+1.9]</td>
</tr>
</tbody>
</table>

**Notes:**
1. Figures in brackets indicate the median of the Policy Board members' forecasts (point estimates).
2. The forecasts of the majority of the 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 of realization. These forecasts are then shown as a range, with the highest figure and the lowest figure excluded. The range does not indicate the forecast errors.
3. Individual Policy Board members make their forecasts assuming the effects of past policy decisions and with reference to views incorporated in financial markets regarding future policy.
4. The scheduled consumption tax hikes for April 2014 and October 2015 -- to 8 percent and 10 percent, respectively -- are incorporated in the forecasts. In terms of the outlook for the CPI, individual Policy Board members make their forecasts based on figures excluding the direct effects of the consumption tax hikes.
5. The forecasts for the CPI for fiscal 2014 and fiscal 2015 that incorporate the direct effects of the consumption tax hikes are constructed as follows. First, the contribution to prices from each tax hike is mechanically computed on the assumption that the tax increase will be fully passed on for all taxable items. The CPI for fiscal 2014 and fiscal 2015 will be pushed up by 2.0 percentage points and 0.7 percentage point, respectively. Second, these figures are added to the forecasts made by the Policy Board members.
6. The ranges shown below include the forecasts of all Policy Board members.
Forecast Distribution Charts of Policy Board Members

(1) Real GDP

(2) CPI (All Items Less Fresh Food)

Notes:
1. Based on the aggregated probability distributions (i.e., the Risk Balance Charts) compiled from the distributions of individual Policy Board members, the Forecast Distribution Charts are compiled as follows. First, upper and lower 10 percentiles of the aggregated distributions are trimmed and second, colors indicated below are used to show the respective percentiles of those distributions.

2. For the process of compilation of the Risk Balance Charts, see the box on page 9 of the April 2008 Outlook for Economic Activity and Prices.

3. The circles in the bar charts indicate the median of the Policy Board members' forecasts (point estimates). The vertical lines in the bar charts indicate the range of the forecasts of the majority of Policy Board members.

4. The forecast for the CPI excludes the direct effects of the scheduled consumption tax hikes.