April 30, 2015
Bank of Japan

Outlook for Economic Activity and Prices
(April 2015)

The Bank's View[1]

Summary

- Japan's economy is likely to continue growing at a pace above its potential from fiscal 2015 through fiscal 2016. Thereafter, through fiscal 2017, the economy is projected to maintain its positive growth, although with a slowing in its pace to around a level somewhat below the potential growth rate. The slowdown is due mainly to (1) the effects of a front-loaded increase and subsequent decline in demand prior to and after the consumption tax hike planned in April 2017 and (2) cyclical deceleration.[2]
- The year-on-year rate of increase in the consumer price index (CPI, for all items less fresh food and excluding the direct effects of the consumption tax hikes) is likely to be about 0 percent for the time being and, as the underlying trend in inflation steadily rises and the effects of the decline in crude oil prices dissipate, accelerate toward 2 percent -- the price stability target.[3] Although the timing of reaching around 2 percent depends on developments in crude oil prices, it is projected to be around the first half of fiscal 2016, assuming that crude oil prices will rise moderately from the recent level. Thereafter, Japan's economy is expected to gradually shift to a growth path that sustains such inflation in a stable manner.
- Comparing the current projections up through fiscal 2016 with the previous ones, the projected growth rate is more or less unchanged. The projected rate of increase in prices is somewhat lower.
- In the context of the price stability target, the Bank of Japan examined the aforementioned baseline scenario (the first perspective) and upside and downside risks to the baseline scenario (the second perspective).[4] As for the conduct of monetary policy, quantitative and qualitative monetary easing (QQE) has been exerting its intended effects. The Bank will continue with QQE, 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.

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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 30, 2015.
[2] The April 2015 *Outlook for Economic Activity and Prices* (Outlook Report) assumes, as with the January 2015 interim assessment, that the consumption tax will rise to 10 percent in April 2017.
[3] Individual Policy Board members make their forecasts based on the following assumption about crude oil prices. Dubai crude oil prices are expected to rise moderately from the recent 55 U.S. dollars per barrel to 70-75 dollars per barrel toward the end of the projection period. In such a case, the contribution of energy items to the year-on-year rate of change in the CPI (all items less fresh food) is estimated to be mostly in the range of minus 0.7 to minus 0.8 percentage point for fiscal 2015, and mostly in the range of plus 0.1 to plus 0.2 percentage point for fiscal 2016. More specifically, this contribution is expected to fall further into negative territory for the time being, followed by a narrowing in the negative contribution in the second half of fiscal 2015; in the first half of fiscal 2016, the contribution is estimated to be around 0 percentage point.
[4] As for the examination from two perspectives in the context of the price stability target, see the Bank's statement released on January 22, 2013, entitled "The 'Price Stability Target' under the Framework for the Conduct of Monetary Policy."

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

A. Outlook for Economic Activity

Japan's economy has continued its moderate recovery trend. In the corporate sector, exports and production have picked up and profits have increased to their highest level historically. Firms have maintained their positive investment stance. In the household sector, private consumption as a whole has remained resilient amid continued steady improvement in the employment and income situation.

Looking ahead, as domestic demand is likely to be firm and exports are expected to increase moderately, a virtuous cycle from income to spending is likely to be maintained in both the household and corporate sectors. In these circumstances, Japan's economy is likely to continue growing at a pace above its potential from fiscal 2015 through fiscal 2016.[5] Thereafter, through fiscal 2017, the economy is projected to maintain its positive growth, although with a slowing in its pace to around a level somewhat below the potential growth rate. The slowdown is due mainly to (1) the effects of a front-loaded increase and subsequent decline in demand prior to and after the consumption tax hike planned in April 2017 and (2) cyclical deceleration.

The above projection assumes the following underlying developments.

First, as the Bank of Japan continues with QQE, aiming to achieve the price stability target of 2 percent as long as it is necessary for maintaining that target in a stable manner, financial conditions are likely to remain accommodative and continue stimulating the economy.[6]

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[5] Japan's potential growth rate is estimated to be "around 0.5 percent or lower" recently under a specific methodology, 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 methodology employed and could change as more data for the relevant period become available.

[6] 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. Specifically, markets have factored in that short-term interest rates will continue to be effectively 0 percent throughout the projection period. While markets have been forecasting that long-term interest rates will hover at low levels throughout the projection period, this reflects market participants' forecasts for prices, which are lower than those presented in the Outlook Report. Each Policy Board member assumes the future path of long-term interest rates based on such market views, taking into account the difference in the forecasts for prices.

Second, overseas economies are expected to moderately increase their growth rates as advanced economies continue to see firm recovery and its positive effects gradually spread to emerging economies. Among major countries and regions, the U.S. economy is expected to continue to see growth driven mainly by private demand. The European economy is projected to recover moderately, due to supportive forces including a recovery in private consumption and an increase in exports, although it remains under adjustment pressure associated with the debt problem and low inflation rates will likely continue for some time. The Chinese economy is likely to follow a generally stable growth path, albeit at a somewhat reduced pace, as authorities carry out policy measures to support economic activity while progressing with structural reforms.

Third, public investment is expected to follow a moderate downtrend from the current relatively high level, and thereafter level off toward the end of the projection period.

Fourth, firms' and households' medium- to long-term growth expectations are expected to rise moderately against the backdrop of progress in implementation of the government's growth strategy, including regulatory and institutional reforms, an increase in labor participation by women and the elderly under such strategy, firms' continued efforts toward improving productivity and discovering potential domestic and external demand, and steady progress in overcoming of deflation.

Given these assumptions, economic activity during the projection period can be elaborated on as follows. <u>For fiscal 2015 through fiscal 2016</u>, exports are expected to increase moderately owing to the recovery in overseas economies and support from past foreign exchange rate developments. With an improvement in corporate profits and monetary accommodation continuing to provide a boost, business fixed investment is projected to increase steadily, additionally supported by recently emerging developments toward the enhancement of domestic production capacity. Private consumption is projected to accelerate its pace of increase due to the effects of a steady improvement in the employment and income situation and a wage rise, combined with those of an increase in real income due to the decline in energy prices and of a recovery from the decline after the consumption tax hike in April 2014, both of which are expected in fiscal 2015.[7] Reflecting these developments in demand both at home and abroad, industrial production is expected to increase moderately.

Through fiscal 2017, the economy is likely to be affected by the front-loaded increase and subsequent decline in demand prior to and after the scheduled second round of consumption tax hikes, and the pace of increase in business fixed investment is likely to decline, reflecting a cycle in the accumulation of capital stock. However, exports are projected to continue increasing moderately owing to overseas economic growth, and domestic private demand is likely to be resilient supported by accommodative financial conditions and heightened growth expectations. Meanwhile, Japan's potential growth rate is expected to follow a moderate increasing trend through the projection period, pushing up the economy's growth in the medium to long term. Therefore, the economy is projected to maintain its positive growth, although with a slowing in its pace to around a level somewhat below the potential growth rate.

Comparing the current projections up through fiscal 2016 with those in the January 2015 interim assessment, the projected growth rate is more or less unchanged.

B. Outlook for Prices

The year-on-year rate of increase in the CPI (for all items less fresh food, and the same hereafter) has been about 0 percent recently.

Major factors that determine inflation rates into the future are evaluated as follows. First, the aggregate supply and demand balance (the output gap), which shows the utilization of

[7] The effects of the two rounds of consumption tax hikes on the economic growth rate for each fiscal year are quantitatively estimated as follows: an increase of around 0.5 percentage point for fiscal 2013, a decrease of around 1.2 percentage points for fiscal 2014, an increase of around 0.3 percentage point for fiscal 2015, an increase of around 0.3 percentage point for fiscal 2016, and a decrease of around 0.8 percentage point for fiscal 2017. 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.

labor and capital, has steadily followed an improving trend.[8] Specifically, the tightening trend in labor market conditions has continued, with the unemployment rate declining moderately to around 3.5 percent.[9] In this situation, wage improvements have continued, as seen in the fact that scheduled cash earnings (regular wages) have increased. Moreover, since the effects of the decline in demand following the consumption tax hike have been dissipating, capacity utilization rates have become higher. Therefore, the output gap is likely to turn positive (in excess demand) in the first half of fiscal 2015, and thereafter, through fiscal 2016, move further into excess demand territory; thus, upward pressure on wages and prices due to the tightening of supply and demand conditions is likely to steadily increase. Subsequently, in fiscal 2017, the output gap is projected to be more or less unchanged in positive territory.

Second, <u>medium- to long-term inflation expectations</u> appear to be rising on the whole from a somewhat longer-term perspective. Such developments in inflation expectations are likely to have been influencing actual wage and price settings. For example, in the annual labor-management wage negotiations, there has been a spread of movements toward reflecting price developments as well as corporate performance on wages, and the increase in wages including that in base pay this year will be larger than last year. Looking ahead, as the Bank pursues QQE and the observed inflation rate rises, medium- to long-term inflation expectations are also likely to follow an increasing trend and gradually converge to around 2 percent -- the price stability target.

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[8] There are two approaches to estimating the output gap: (1) estimate potential GDP and then measure its difference with actual GDP; and (2) directly measure the utilization of production factors (labor and capital). As the output gap in the Outlook Report has been estimated based on the latter approach, changes in the GDP growth rate do not have a one-to-one relationship with the expansion/narrowing of the output gap. It should be noted that estimates of the output gap could differ depending on the specific methodology employed and data used, and therefore they are subject to a considerable margin of error.

[9] One measure used in determining the degree of tightness in labor market conditions is the *structural unemployment rate*. In the labor market, there is always a mismatch to some extent between job openings and job applicants, and thus there is a certain number of unemployed even when the economy is booming. Given that there is such unemployment due to the mismatch, the unemployment rate that corresponds to a state in which excess labor force has disappeared is called the structural unemployment rate. This rate is calculated to be around 3.5 percent or lower recently under a specific methodology. However, it should be noted that the estimated structural unemployment rate tends to change over time.

Third, through import prices, while past developments in foreign exchange rates will exert upward pressure on consumer prices, a decline in international commodity prices, including crude oil prices, will exert downward pressure on consumer prices for the time being.

Based on the above, the outlook for the year-on-year rate of increase in the CPI (excluding the direct effects of the consumption tax hikes) is as follows. It is likely to be about 0 percent for the time being and, as the underlying trend in inflation steadily rises and the effects of the decline in crude oil prices dissipate, accelerate toward 2 percent -- the price stability target. Although the timing of reaching around 2 percent depends on developments in crude oil prices, it is projected to be around the first half of fiscal 2016, assuming that crude oil prices will rise moderately from the recent level. Thereafter, the year-on-year rate of increase in the CPI is likely to be around 2 percent on average.[10] Comparing the current projections up through fiscal 2016 with those in the January 2015 interim assessment, the projected rate of increase in the CPI is somewhat lower.

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. First, there is uncertainty regarding developments in overseas economies. Risks to future developments in overseas economies include the pace of growth in the U.S. economy and its effects on the global financial markets, the prospects regarding the debt problem and the momentum of economic activity and prices in Europe, the progress in structural adjustments toward achieving sustainable growth in emerging economies, the effects of the decline in commodity prices, and geopolitical risks.

The second risk is the effects of the consumption tax hike scheduled to take place in April 2017. The effects on the economy of the front-loaded increase and subsequent decline in demand prior to and after the consumption tax hike, as well as of the decline in real income,

[10] The effects of the scheduled consumption tax hike in April 2017 on prices can be mechanically estimated by assuming that the rise in the consumption tax will be fully passed on for all currently taxable items. On this basis, the year-on-year rate of increase in the CPI will be pushed up by 1.3 percentage points in fiscal 2017.

may differ depending on consumer sentiment, the employment and income situation, and developments in prices.

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, innovation in the corporate sector, and the employment and income situation surrounding the household sector.

Fourth, in the event that confidence in fiscal sustainability in the medium to long term declines, 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 confidence in the path toward fiscal consolidation strengthens and people's concerns regarding the future are alleviated.

B. Risks to Prices

In case the aforementioned upside and downside risks to the economy materialize, it is likely that prices will also be affected to a certain degree. Other factors that could exert upside and downside risks to prices are as follows. The first concerns developments in firms' and households' medium- to long-term inflation expectations. The baseline scenario assumes that, amid rises in observed inflation accompanied by wage increases, people's inflation expectations will rise further and gradually converge to around 2 percent -- the price stability target. However, the pace at which they will rise is subject to uncertainty over developments in observed prices and to the extent to which they will affect inflation expectations. On this point, there is a risk that the year-on-year rate of increase in the CPI being about 0 percent for the time being, which owes to the effects of the decline in energy prices, might affect the pace of increase in inflation expectations.

The second concerns developments in the output gap, particularly in labor market conditions. The baseline scenario assumes that, on the labor supply side, the recent increase in labor participation by the elderly and women and recent movements in firms to convert part-time employees into regular ones will continue to some extent, but uncertainty is associated with this assumption.

The third regards the responsiveness of inflation to the output gap. Attention needs to be paid to what extent firms will raise sales prices and wages as supply and demand balances in goods and services as well as labor market conditions tighten. On this point, there is a possibility that the pace of improvement in wages could deviate upward on the back of the tightening in labor market conditions, which in turn could affect prices of goods and services. Meanwhile, there also is a possibility that a rise in prices and wages will not progress smoothly should consumers mount strong resistance to an increase in sales prices or should firms be cautious with regard to raising wages.

Fourth, developments in import prices, reflecting fluctuations in international commodity prices such as crude oil prices and foreign exchange rates, as well as the extent to which such developments will spread to domestic prices, may lead prices to deviate either upward or downward from the baseline scenario.

III. Conduct of Monetary Policy

In the context of the price stability target, the Bank assesses the aforementioned economic and price situation from two perspectives and then outlines its thinking on the future conduct of monetary policy.

The first perspective concerns an examination of the baseline scenario for the outlook. Japan's economy is judged as likely to achieve around 2 percent inflation around the first half of fiscal 2016 and thereafter gradually shift to a growth path that sustains such inflation in a stable manner.

The second perspective involves an examination of the risks considered most relevant to the conduct of monetary policy. With regard to the baseline scenario for economic activity, upside and downside risks can be assessed as being balanced, although uncertainty remains high, including that regarding developments in overseas economies. With regard to the baseline scenario for prices, there is considerable uncertainty, mainly in developments in medium- to long-term inflation expectations, and risks are skewed to the downside. 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.[11] Nevertheless, in a situation where the amount outstanding of government debt has shown a cumulative increase, due attention needs to be paid to the fact that financial institutions' holdings of government bonds have remained at an elevated level, although they have been on a gradual declining trend.

As for the conduct of monetary policy, QQE has been exerting its intended effects. The Bank will continue with QQE, 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.

[11] For more details, see the April 2015 issue of the Bank's *Financial System Report*.

(Appendix)

Forecasts of the Majority of Policy Board Members

y/y % chg.

	Real GDP	CPI (all items less fresh food)	Excluding the effects of the consumption tax hikes
Fiscal 2014	-1.0 to -0.8 [-0.9]	+2.8	+0.8
Forecasts made in January 2015	-0.6 to -0.4 [-0.5]	+2.9 to +3.2 [+2.9]	+0.9 to +1.2 [+0.9]
Fiscal 2015	+1.5 to +2.1 [+2.0]	+0.2 to +1.2 [+0.8]	
Forecasts made in January 2015	+1.8 to +2.3 [+2.1]	+0.4 to +1.3 [+1.0]	
Fiscal 2016	+1.4 to +1.8 [+1.5]	+1.2 to +2.2 [+2.0]	
Forecasts made in January 2015	+1.5 to +1.7 [+1.6]	+1.5 to +2.3 [+2.2]	
Fiscal 2017	+0.1 to +0.5 [+0.2]	+2.7 to +3.4 [+3.2]	+1.4 to +2.1 [+1.9]

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. Dubai crude oil prices are expected to rise moderately from the recent 55 U.S. dollars per barrel to 70-75 dollars per barrel toward the end of the projection period. In such a case, the contribution of energy items to the year-on-year rate of change in the CPI (all items less fresh food) is estimated to be mostly in the range of minus 0.7 to minus 0.8 percentage point for fiscal 2015, and mostly in the range of plus 0.1 to plus 0.2 percentage point for fiscal 2016. More specifically, this contribution is expected to fall further into negative territory for the time being, followed by a narrowing in the negative contribution in the second half of fiscal 2015; in the first half of fiscal 2016, the contribution is estimated to be around 0 percentage point.

5. The consumption tax hike scheduled to take place in April 2017 -- to 10 percent -- is incorporated in the forecasts, but individual Policy Board members make their forecasts of the CPI based on figures excluding the direct effects of the consumption tax hike. The forecasts for the CPI for fiscal 2017 that incorporate the direct effects of the consumption tax hike 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 will be pushed up by 1.3 percentage points. Second, this figure is added to the forecasts made by the Policy Board members.

6. The CPI (all items less fresh food) for fiscal 2014 is computed based on the assumption that the year-on-year rate of increase for March is the same as that for February, and the contribution of the tax hike to prices is mechanically computed in the same way as described in Note 5: the CPI for fiscal 2014 is pushed up by 2.0 percentage points.

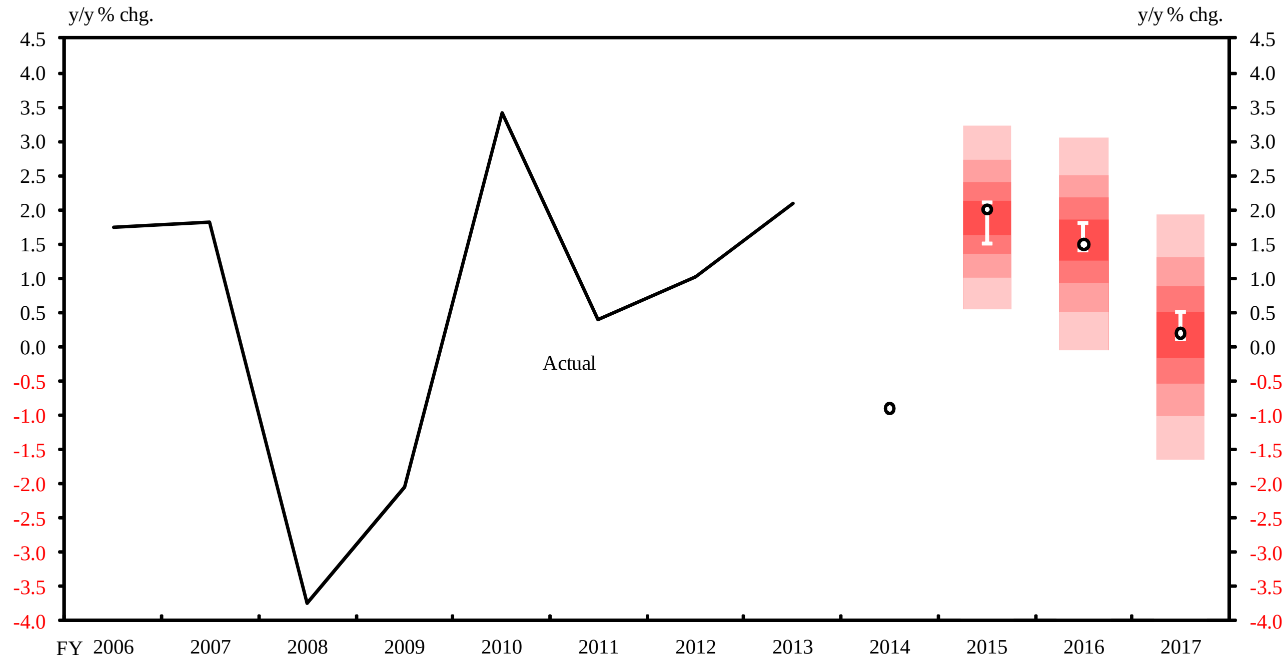
7. The ranges shown below include the forecasts of all Policy Board members.

y/y % chg.

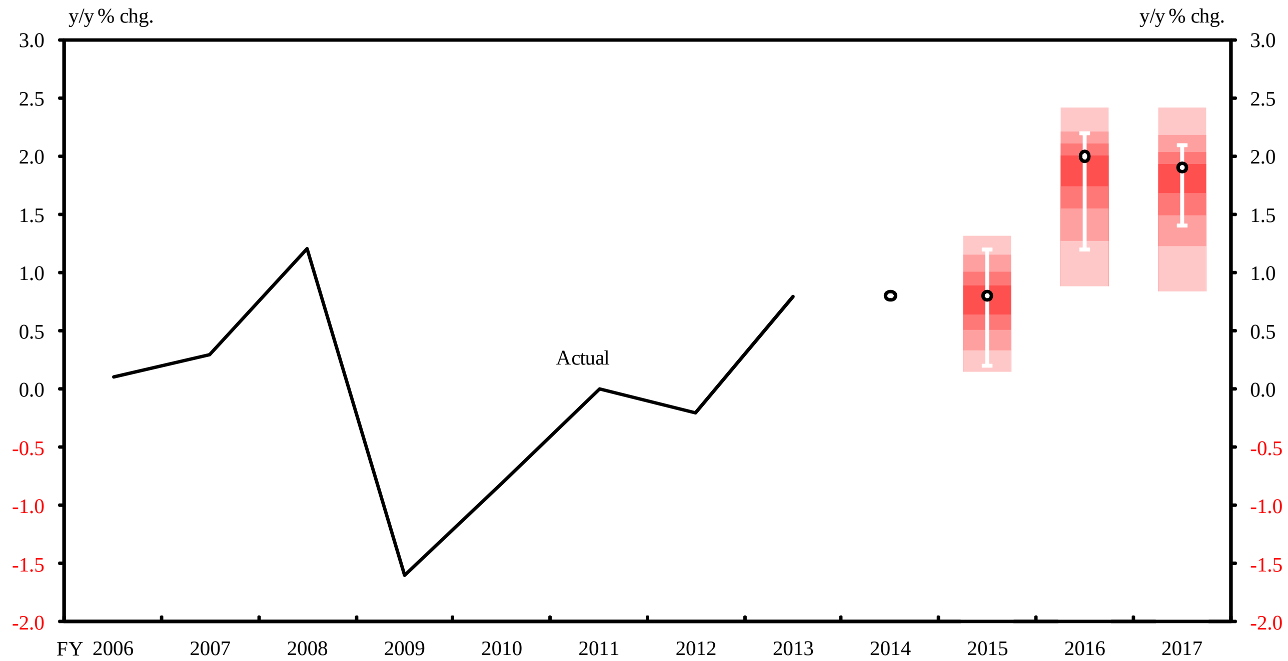
	Real GDP	CPI (all items less fresh food)	Excluding the effects of the consumption tax hikes
Fiscal 2014	-1.0 to -0.3	+2.8	+0.8
Forecasts made in January 2015	-0.7 to -0.3	+2.9 to +3.3	+0.9 to +1.3
Fiscal 2015	+0.8 to +2.2	+0.2 to +1.3	
Forecasts made in January 2015	+1.3 to +2.3	+0.3 to +1.4	
Fiscal 2016	+0.8 to +1.8	+0.8 to +2.3	
Forecasts made in January 2015	+0.7 to +2.0	+0.9 to +2.3	
Fiscal 2017	-0.1 to +0.6	+2.0 to +3.5	+0.7 to +2.2

Forecast Distribution Charts of Policy Board Members

(1) Real GDP



(2) CPI (All Items Less Fresh Food)



Notes: 1. The Forecast Distribution Charts are based on the aggregated probability distributions (i.e., the Risk Balance Charts) compiled from the distributions of individual policy board members, and constructed as follows. First, the upper and lower 10 percentiles of the aggregated distributions are trimmed. Second, the various percentiles of the aggregated distributions are color-coded as below.

Upper 40% to lower 40%	Upper 30% to 40% and lower 30% to 40%	Upper 20% to 30% and lower 20% to 30%	Upper 10% to 20% and lower 10% to 20%

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 charts indicate the median of the Policy Board members' forecasts (point estimates). However, the CPI (all items less fresh food) for fiscal 2014 is computed based on the assumption that the year-on-year rate of increase for March is the same as that for February.
4. The vertical lines in the bar charts indicate the range of the forecasts of the majority of Policy Board members.
5. The forecast for the CPI excludes the direct effects of the scheduled consumption tax hikes.