# Sayuri Shirai: Japan's economic and price developments and monetary policy – underlying inflation trend and inflation expectations

Speech by Ms Sayuri Shirai, Member of the Policy Board of the Bank of Japan, at a meeting with business leaders, Shimane, 25 November 2015.

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Accompanying charts can be found at the end of the speech.

### I. Introduction

Good morning. I feel honored to have an opportunity to meet with the local government officials and business representatives here today. Let me also express my sincere gratitude for your kind cooperation with the activities of the Bank of Japan's Matsue Branch. Today, I would like to talk about the Bank's baseline scenario of the outlook for economic activity and prices through fiscal 2017 as well as risks to the scenario, as described in the October 2015 *Outlook for Economic Activity and Prices* (hereafter the Outlook Report). Accordingly, I also will present and explain my views.

## II. Japan's medium-term outlook for economic activity and risk assessment

Let me begin with Japan's economic activity.

#### A. Outlook for economic activity

In the Bank's baseline scenario of the outlook for economic activity, the projected growth rate for fiscal 2015 was revised considerably downward while the projections for fiscal 2016 and 2017 were more or less unchanged, compared with those in the July 2015 interim assessment. Nevertheless, domestic demand is likely to increase and exports are expected to continue increasing moderately on the back of the recovery in overseas economies. A virtuous cycle among production, income, and spending is likely to be maintained in the corporate and household sectors. Firms' and households' growth expectations and potential economic growth are also likely to rise moderately in line with continued accommodative financial conditions. In fiscal 2017, the rate of economic growth is likely to decelerate significantly – mainly due to the effects of the planned consumption tax hike and cyclical deceleration in business fixed investment – but is still likely to remain positive (Chart 1).

My outlook for economic activity is somewhat lower than the median of the Policy Board members' forecasts: around 1 percent for fiscal 2015; a little less than around 1.5 percent for fiscal 2016; and slightly above 0 percent for fiscal 2017, owing to a significant decline in the growth rate, due, for example, to the planned consumption tax hike. Let me explain in some detail.

For fiscal 2015, my projection is lower than that in the July 2015 interim assessment, reflecting the negative economic growth recorded in the April-June quarter (relative to the previous quarter), mediocre performance thereafter, and the prospect that such performance is likely to continue for the time being.

Several factors comprise the background to this outlook. *First*, I adopted a more conservative projection of real exports, not only because external demand was temporarily weak, but also because more consideration was being given to the possibility that structural changes had been hampering rapid export recovery. The latter point is consistent with the fact that industrial production and exports by Japanese firms have remained sluggish while those by their

overseas subsidiaries have expanded rapidly since 2009.<sup>1</sup> In particular, a shift to overseas production, mainly in the transportation machinery and electrical machinery sectors, left the Japanese economy with the general-purpose, production & business oriented machinery, and information & communication equipment sectors, etc. as the main engine for generating domestic production and export growth. The export performance of these leading sectors has been stagnant, mainly due to a deceleration in economic growth in Asia. Although real exports improved very recently, partly due to the release of new smartphones, they are likely to be more or less constant for the time being in light of the economic slowdown in emerging economies.

**Second**, I revised downward my projection of real private consumption for fiscal 2015. Quarteron-quarter growth rates for real consumption and real retail sales have turned positive in the July-September quarter. However, this downward revision was attributable to (1) very moderate real wage growth after turning positive in July this year and (2) stagnant developments in the consumer confidence index and its components over the next six months – including *consumer perception indices on income growth* and *willingness to buy durable goods*. Nevertheless, looking ahead, a moderate recovery trend in consumption is likely to be maintained as nominal wages will continue on a moderate rising trend, amid the tightening labor market conditions.

**Third**, I revised downward my projection of business fixed investment for fiscal 2015 as well, owing to negative growth recorded in the April-June quarter (relative to the previous quarter). In contrast to positive business fixed investment plans for fiscal 2015 reported by the Bank's *Tankan* (Short-Term Economic Survey of Enterprises in Japan), actual machinery orders and capital goods shipment have remained disappointing; some firms may postpone their fixed investment plans because of higher unexpected costs caused by labor shortages and rising prices of construction materials. One positive development, meanwhile, is a sustained recovery in residential investment. The recent problems related to the apartment construction wrongdoings in Yokohama and other related problems may dampen such investment under the low interest rate environment, since a front-loaded increase in demand prior to the planned consumption tax hike will gradually materialize.

**For fiscal 2016**, I am projecting relatively high economic growth owing to a front-loaded increase in private consumption and residential investment prior to the planned consumption tax hike, amid the favorable employment situation. However, I made a moderate downward revision compared with the July 2015 interim assessment, mainly due to lower-than-expected real export growth. My outlook is more cautious than the median of the Policy Board members' forecasts, probably because I allocate a greater weight to a potential loss of economic growth. In Japan, firms with good business conditions tend to feel labor shortages and to be increasingly constrained from expanding business activities, while firms with bad business conditions tend to operate their businesses by managing existing employment. This may be one reason why the pace of replacing nonviable less active firms with viable active firms is slow, thereby hampering economic growth.

# B. Upside and downside risk assessment with regard to economic activity

In the October 2015 Outlook Report, the Bank pointed out the following as risks to its baseline **scenario for economic activity**: (1) developments in overseas economies; (2) the effects of the planned consumption tax hike in April 2017; (3) firms' and households' medium- to long-term growth expectations; and (4) fiscal sustainability in the medium to long term. On the whole, it assessed that risks are skewed to the downside.

<sup>&</sup>lt;sup>1</sup> See Ministry of Economy, Trade and Industry, "Global Shipment Index."

In my *risk assessment related to economic activity*, the upside and downside risks are likely to remain balanced through fiscal 2015 and 2016. By contrast, risks for fiscal 2017 are tilted to the downside. Particularly, I find the following risks related to overseas economies important:

- In the Chinese economy, while the labor force population ratio declines, private consumption and Internet sales are firm, due in part to a continuing rise in wages. But the year-on-year rate of increase in retail sales for the first ten months of 2015 remains moderately below the annual target of 13 percent. The tertiary sector, i.e., services industries, is growing and already accounts for over 50 percent of the total value added of the economy. Whether the services industries could become an engine for domestic and global economic growth in the foreseeable future is yet to be seen and may incur downside risk, given that an increasing number of private-sector firms face uncertainty with respect to financing conditions amid the more cautious lending behavior of the banking sector.
- Other Asian economies are expected to see stronger growth, led mainly by domestic demand, since the pace of trade growth through the global value chain has decelerated. However, the downside risk is that such developments in domestic demand could be contained by large-scale portfolio capital outflows and the amplified volatility in the foreign exchange and capital markets, perhaps as a result of the normalization of the U.S. monetary policy.
- The U.S. economy may achieve greater-than-expected growth if business fixed investment and residential investment expand firmly in tandem with greater growth in labor productivity and wages. This is plausible given that the deleveraging process has made progress in the corporate and household sectors.
- In the euro area, the fragmentation in interbank markets has improved and some cross-border capital flows have increased, partly owing to the accommodative monetary easing performed by the European Central Bank, thereby leading to an increase in lending to firms and households. In addition, the intra-regional competitiveness gap has shrunk as the wage growth rate per worker in Germany has been maintained at a high level, at around 3 percent, while wages in peripheral countries have been contained and adjusted. The upside risk is that these favorable developments may enable the euro area to generate stronger-than-expected economic recovery.

In addition, *for fiscal 2017*, the downside risk is greater because there is considerable uncertainty at present related to subsequent declines in demand and in real income after the planned consumption tax hike. It is not clear how much these negative impacts could be offset by a "quantitative" expansion of public- and private-sector fixed investment associated with the Tokyo 2020 Olympic Games, amid the tightened labor market conditions.

# III. Japan's medium-term outlook for prices and risk assessment

Next, I will turn to the price outlook and risk assessment.

# A. Outlook for prices

In *the Bank's baseline scenario of the outlook for prices*, the year-on-year rate of change in the core consumer price index (CPI, all items less fresh food and excluding the direct effects of the consumption tax hikes) is likely to be at around 0 percent for the time being, lower than that in the July 2015 interim assessment. After that, the rate of increase in the core CPI is projected to accelerate toward 2 percent as the underlying trend in inflation steadily rises and the effects of the decline in crude oil prices dissipate. Although the timing of reaching around 2 percent depends on developments in crude oil prices, this is projected to happen around the second 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 (Chart 1).

Regarding *my outlook for prices*, let me first present an overall picture. Although the mechanism of the price rises I assume is the same as that in the Bank's baseline scenario, my projections remain more cautious than the median of the Policy Board members' forecasts. The outlook throughout fiscal 2017 was revised somewhat downward. Currently, my projection is that the rate of increase in the core CPI is likely to rise closer to around 2 percent "from the end of fiscal 2016 to early fiscal 2017" – a delay of about a quarter from my previous projection of "toward the end of fiscal 2016." Let me explain my outlook in some detail.

My projection for prices for fiscal 2015 is that the core CPI will be at around 0 percent. The slight downward revision from the July 2015 interim assessment is attributable to the decline in crude oil prices. Also, the delay in the pace of the output gap improvement was taken into account as the actual output gap deteriorated in the April-June guarter. My projection for fiscal 2016 that the core CPI inflation will rise to a little over 1 percent is rather cautious compared to that presented previously. This reflects (1) the remaining effects of the drop in energy prices, (2) a delay of about a quarter in terms of the timing for the output gap to turn positive, and (3) a delay in the timing for inflation expectations to begin rising owing to a slower pace of increase in prices. Thereafter, the rate of increase in the core CPI will accelerate and reach around 1.7-1.8 percent, or rise closer to around 2 percent from the January-March quarter of 2017 (the peak of the front-loaded increase in domestic demand) to the April-June quarter (the period most likely to see an opportunistic price increase with the planned consumption tax hike). My outlook for fiscal 2017 as a whole is that the average rate of core CPI inflation will decline somewhat and reach around a little over 1.5 percent – slightly below my July assessment - mainly due to the effects of the decline in demand following the frontloaded increase and a decline in real income.

On *the timing with respect to achieving sustained inflation of around 2 percent in a stable manner*, it might be necessary to assess this over a little longer time span. This is because there is high uncertainty regarding the effects of the planned consumption tax hike and the "quantitative" expansion of public- and private-sector fixed investment associated with the Tokyo 2020 Olympic Games. Moreover, it is likely to take some time for inflation expectations to rise.

# B. Upside and downside risk assessment with regard to prices

With regard to *risks to the Bank's baseline scenario for prices*, the Bank highlighted the following four factors: (1) developments in firms' and households' medium- to long-term inflation expectations; (2) developments in the output gap; (3) responsiveness of inflation to the output gap; and (4) developments in import prices. It assessed that risks are skewed to the downside.

*My risk assessment related to prices*, on the other hand, is that risks for fiscal 2015 are balanced but those for fiscal 2016 and 2017 are tilted to the downside. In particular, there is a great deal of uncertainty related to crude oil prices and foreign exchange rate developments, which could generate both upside and downside risks to the price outlook. On the other hand, there is a downside risk that a steady increase in inflation expectations, a key factor in raising inflation in a stable manner, may not take place as fast as projected. On the whole, therefore, the risks are judged to be tilted to the downside.

# C. Expression on the timing with respect to achieving around 2 percent inflation

In the baseline scenario described in the October 2015 Outlook Report, the Bank postponed *the timing of reaching around 2 percent inflation* by two quarters, from "around the first half of fiscal 2016" as described in the April Outlook Report to "around the second half of fiscal 2016." On this front, I opposed the expression "around the first half of fiscal 2016" and proposed to change it to "in or around fiscal 2016" at the Monetary Policy Meeting (MPM) held

on April 30. Meanwhile, at the MPM held on October 30, I supported the Bank's revised expression. Let me explain why.

Due to the fact that the median of the Policy Board members' forecasts was revised downward sharply this time, it is apparently unfeasible to achieve around 2 percent inflation around the first half of fiscal 2016. Therefore, it is reasonable for the Bank to change the expression. However, given that it assessed that risks to prices are skewed to the downside, it may be appropriate for the Bank to use an expression that allows for a wider time span to reach around 2 percent, such as "from around the second half of fiscal 2016 to around the first half of fiscal 2017" – instead of "around the second half of fiscal 2016."

On the other hand, the timing expressed as "around the second half of fiscal 2016" practically corresponds to the latter half of the intended period in my proposal in April. Also, more importantly, the expression is very similar to my present projection and could be regarded as more or less in line with it by interpreting "around 2 percent" flexibly. Based on these two reasons, I supported the Bank's revised expression.

## IV. Conduct of monetary policy

Despite the downward revision of the Bank's outlook for economic activity and prices from the July 2015 interim assessment, I view that it is important for the Bank to maintain the accommodative monetary environment by continuing the current guideline for money market operations. Before I elaborate on my line of thinking, by making referrals in contrast to trends observed last October when the expansion of quantitative and qualitative monetary easing (QQE) was implemented, let me emphasize that the price stability target of 2 percent does not just pursue a price hike; the target should be achieved with sustained wage growth and expansion of private consumption. On this front, it is important to assess whether Japan's economy continues to face a virtuous cycle among production, income, and spending operating in both the corporate and household sectors. Let me highlight five viewpoints that are essential to making such an assessment.

*First*, firms' business conditions and current profits are more favorable than those in the previous year. For example, the Bank' s September 2015 *Tankan* indicates that the diffusion index (DI) for *actual business conditions* for all industries – calculated by subtracting the percentage share of firms responding that business conditions are "unfavorable" from the share of those indicating that business conditions are "favorable" – improved moderately from 7 percent in June to 8 percent in September, in contrast to a decline from 7 percent to 4 percent over the same period last year. In particular, the business conditions DI of *large nonmanufacturing enterprises* improved further from 23 percent in June to 25 percent in September – exceeding the levels of the previous year (dropping from 19 percent to 13 percent over the same period). *Projected current profits* are favorable as well. The September *Tankan* shows that the year-on-year rate of change in projected current profits of all industries for fiscal 2015 recorded 3.3 percent (4.0 percent in manufacturing and 2.7 percent in nonmanufacturing). The profitability outlook shows a complete change from that for fiscal 2014 reported in September last year, when the rate of change in projected profits was minus 4.0 percent (minus 2.6 percent in manufacturing and minus 5.1 percent in nonmanufacturing).

Furthermore, let me plot the relationship between the year-on-year rate of growth in *projected current profits and sales* for all industries for fiscal 2015 as of September 2015 (Chart 2). This shows that a relatively large number of sectors are positioned in the first quadrant (positive territory for both growth in current profits and sales). Generally, growth in current profits is much greater than that in sales – reflecting an improvement in the terms of trade (caused by a plunge in commodity prices such as for crude oil) as well as profits from revaluation of dividends from overseas and higher yen-based export prices, both driven by the yen's depreciation. Noticeable developments are that the rates of growth in current profits and sales in (1) food; (2) accommodations, eating & drinking services; and (3) services for individuals are greater than those for fiscal 2014 reported in September 2014. The food sector, which is

included in manufacturing, projects export sales growth of 5 percent and domestic sales growth of 3 percent – suggesting that domestic private consumption is quite solid as well. The aforementioned data indicate that domestic demand is recovering from the adverse effects of the consumption tax hike in April 2014.

**Second**, a risk of returning to deflation is considered low given that prices of a wide range of consumption items, excluding energy, have been rising. While the Bank assesses the underlying trend in inflation based on various indicators, typical indicators are *mainly the core CPI and trimmed mean*. Both exclude temporarily volatile items in order to grasp the trend behavior of prices. They often are utilized to project future prices owing to their relatively high predictive power. The difference is that the core CPI always excludes the same items that tend to show high volatility from the consumption basket weight. In contrast, the trimmed mean looks at the price changes every month for each item of the CPI and eliminates a certain fraction (e.g., 10 percent) of the most extreme observations at both ends of the largest and smallest changes. Thus, items eliminated each month could vary month to month.

The Bank uses *the CPI for all items less fresh food*, or the "core CPI," in determining its medium-term outlook for prices in the Outlook Report. Energy prices are included in the core CPI because they did not have a statistically significant impact on CPI movements in the long term. However, as a sharp fall in energy prices since the latter half of the previous year has amplified the volatility in the core CPI, it has become more important to assess the underlying trend in inflation in a comprehensive manner, not only with the core CPI but also with multiple indicators. As one such indicator, the Bank has begun to release the "CPI for all items less fresh food and energy" on a monthly basis. While the rate of change in the core CPI has been at around 0 percent recently, that in the CPI for all items less fresh food and energy has risen to 1.2 percent lately (Chart 3). Moreover, *the trimmed mean* is increasingly becoming important since the indicator automatically removes highly volatile items every month – given that fluctuations in commodity prices and foreign exchange rates have amplified. The "10 percent trimmed mean" has been rising moderately and is currently at 0.6 percent, and this contrasts sharply with the declining trend observed about the same period last year.

*Third*, firms' pricing behavior with respect to sales prices has shown positive developments. To see this, let me plot the relationship between *the actual sales price DI and the rate of growth in projected domestic sales for fiscal 2015*, according to the September *Tankan* (Chart 4). The sales price DI is calculated by subtracting the percentage share of firms responding that their sales prices are "falling" from the share of those indicating that the prices are "rising." Chart 4 indicates that a few sectors are positioned in the first quadrant (positive territory for both the actual sales price DI and projected domestic sales). Developments in sectors such as (1) food and (2) accommodations, eating & drinking services are worthy of note. The sales price DI in these sectors used to be negative to a relatively large degree or showed greater responses with "fall" than those with "rise" before QQE was launched. This indicates a significant turnaround in firms' pricing behavior toward an environment where they find it easier to raise their sales prices than before.

The current rise in a wide range of CPI items reflects three factors: (a) an import price rise driven by the yen's depreciation; (b) an increase in domestic demand; and (c) a pass-through of a wage rise. While it is difficult to disentangle these factors, the impact of (a) above, the import price rise, seems large and it eventually will fade away unless a further depreciation of the yen takes place. Meanwhile, firms have provided high value-added goods and services, and higher sales prices have accompanied a sales increase in some items, as seen in the food and accommodations, eating & drinking services sectors. Looking ahead, nominal wages are likely to rise and the output gap is likely to improve in positive territory, which will help enhance the sustainability of a price rise.

*Fourth*, developments in inflation expectations should be monitored closely, although some indicators have declined recently. Inflation expectations are a collective term referring to those of households, firms, and economists, as well as market-based indicators. Attention should be

paid to a recent decline in inflation expectations of firms and economists, as well as in marketbased indicators. At the same time, however, a decline in inflation expectations has been a global phenomenon since summer 2015. Therefore, it is important to understand whether such a decline reflects a downward revision of commodity price projections and a temporary deceleration in global economic growth, or alternatively a deterioration of the outlook for the domestic supply-demand balance. On this front, domestic private consumption has been resilient. The corporate sector has maintained its positive business fixed investment plans according to various recent surveys, and thus fixed investment is likely to expand in the near future. These domestic demand conditions support the view that domestic supply-demand balance is not bad at all. Inflation expectations, therefore, are likely to show a sustainable rise once the rate of change in the CPI begins to rise following an improvement in the output gap.

Fifth, as a related issue, households' inflation expectations tend to be higher than those of firms. Households tend to perceive that prices are always rising and they always keep positive inflation expectations even under a mild deflationary phase or a very slight inflationary phase (Chart 5). This suggests the presence of **an upward bias** in inflation expectations. On this point, I have delivered several speeches abroad in the past and have suggested that the scale of upward bias appears to be generally greater in Japan than in Europe and the United States.<sup>2</sup> Given the past long-standing stagnant wages, households appear to have formed an expectation over time that future wages will always decline. This has led households to anticipate tighter budgets, and such strong defensive action has resulted in a larger upward bias in their inflation expectations. In this environment, it is important for households to form a perception that wages will increase steadily and that such an increase will continue; indeed, wages are currently improving moderately. In addition, at present, a further monetary policy action is unnecessary given that current sluggish movements of the core CPI caused by a decline in energy prices are temporary, and that a decline in production costs and the resultant improvement in corporate profits might enhance the opportunity for firms to raise wages more readily.

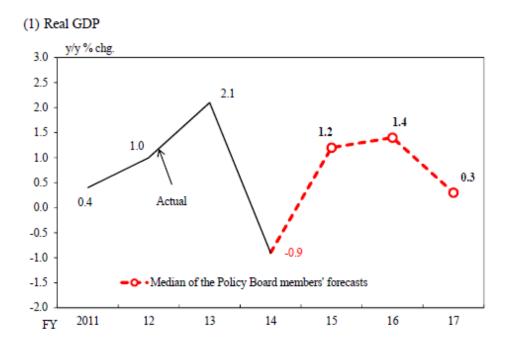
Based on these five viewpoints, it is time to closely monitor whether prices will exhibit a rising trend under the current accommodative monetary easing environment. If such a path toward price rises does not materialize at all, the Bank – depending on the causes – may consider some adjustments with regard to the monetary policy.

This brings me to the end of my speech.

Thank you very much indeed for your kind attention.

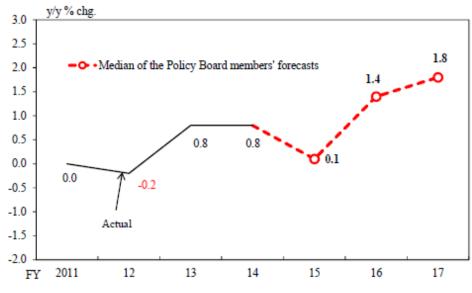
<sup>&</sup>lt;sup>2</sup> For recent speeches, see Sayuri Shirai, "Monetary Policies in a Diversifying Global Economy: Japan, the United States, and the Asia-Pacific Region," Remarks at the Panel Discussion Organized by the Federal Reserve Bank of San Francisco, Bank of Japan, 2015, and Sayuri Shirai, "Unconventional Monetary Policies of the Bank of Japan and European Central Bank," Remarks at the Panel Discussion at the Bruegel Annual Meeting, Bank of Japan, 2015.

#### Chart 1



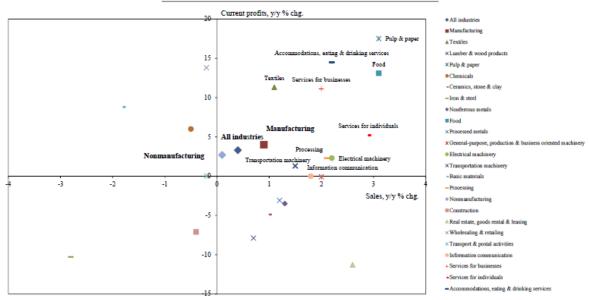
## The Bank's Outlook for Economic Activity and Prices





Note: Figures exclude the direct effects of the consumption tax hikes. Source: Bank of Japan.

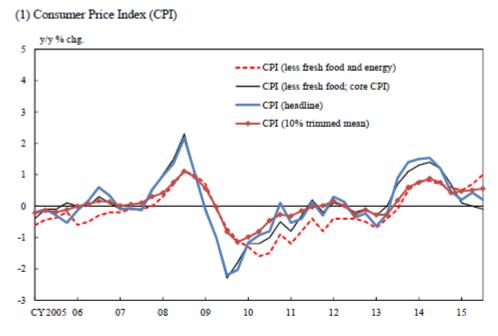
#### Firms' Outlook on Current Profits and Sales for FY 2015



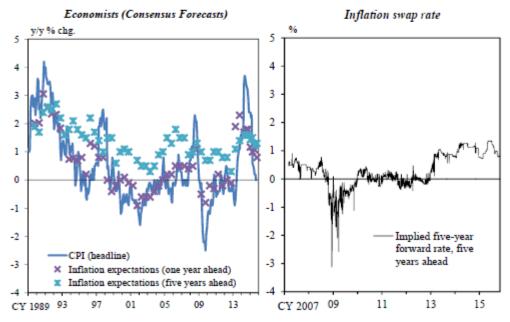
Note: Data for "Petroleum & coal products (-14.6, n.a.)," "Electric & gas utilities (-4.1, 52.3)," and "Mining & quarrying of stone and gravel (-10.3, -37.8)" are not shown in the chart. Source: Bank of Japan.

#### Chart 2

Actual Inflation and Inflation Expectations

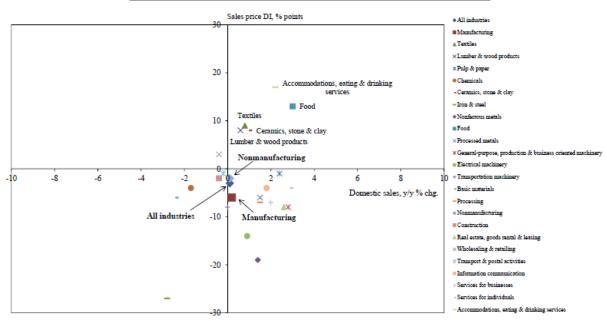


(2) Inflation Expectations



Sources: Consensus Economics Inc., "Consensus Forecasts"; Ministry of Internal Affairs and Communications; Bloomberg.

Chart 3



Firms' Actual Sales Price DI and Outlook of Domestic Sales for FY 2015

Note: Data for "Petroleum & coal products (-14.8, -20)." "Electric & gas utilities (-4.1, -36)." and "Mining & quarrying of stone and gravel (-10.3, 0)" are not shown in the chart. Source: Bank of Japan.

Chart 4

#### (1) One Year Ahead (a) Households (b) Firms y/y % chg. y/y % chg. 10 10 One year ahead (median) -One year ahead (average) One year ahead (average) 8 8 6 6 4 4 2 2 0 0 -2 -2 2014/3 14/6 14/9 14/12 15/3 15/6 15/9 2006/6 08/6 10/6 12/6 14/6 (2) Five Years Ahead (b) Firms (a) Households y/y % chg y/y % chg. 10 10 Five years ahead (median) Five years ahead (average) Five years ahead (average) 8 8 6 6 4 4 2 2 0 0 -2 -2 10/6 14/6 15/6 15/9 2006/6 08/6 12/6 14/9 14/12 15/3 2014/3 14/6

#### Households' and Firms' Inflation Expectations

Note: The responses exclude the effects of the consumption tax hikes. Source: Bank of Japan.