

Monetary Policy of the ECB and the Bank of Japan

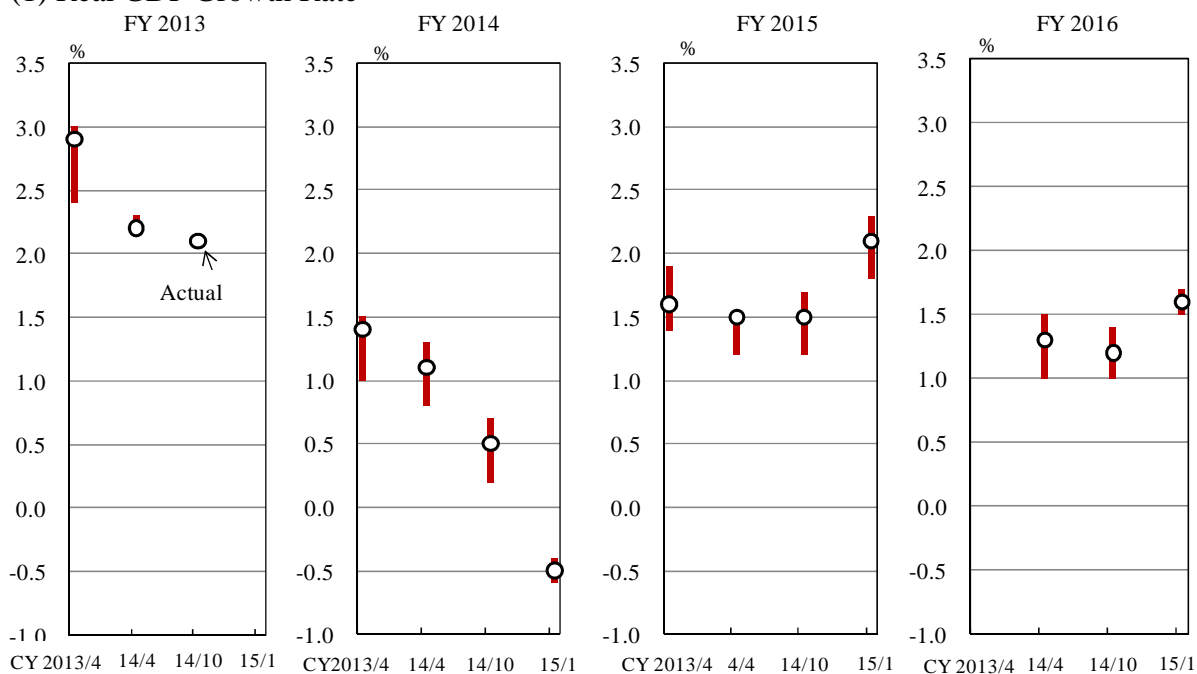
		European Central Bank (ECB)	Bank of Japan
Asset purchases	Types of assets	<p>(1) Euro-denominated securities issued by euro area governments and agencies and European institutions</p> <p>—Maturity between 2-30 years</p> <p>—Basically, investment-grade securities (above BBB-)</p> <p>(2) Asset-backed securities (ABSs)</p> <p>(3) Covered bonds</p>	<p>(1) Japanese government bonds (JGBs)</p> <p>—All maturities including 40-year bonds are eligible for purchase.</p> <p>—Average remaining maturity of about 7-10 years</p> <p>(2) Exchange-traded funds (ETFs)</p> <p>(3) Japan real estate investment trusts (J-REITs)</p> <p>(4) CP and corporate bonds (with the amount outstanding maintained at about 2.2 trillion yen and about 3.2 trillion yen, respectively)</p>
	Purchase amounts	—Combined monthly purchases of public- and private-sector securities of 60 billion euros	<p>—<u>JGBs</u>: An annual pace of increase of about 80 trillion yen</p> <p>—<u>ETFs</u>: An annual pace of increase of about 3 trillion yen</p> <p>—<u>J-REITs</u>: An annual pace of increase of about 90 billion yen</p>
	Effective period	<p>—From March 2015, until at least September 2016 (covered bond purchases from October 2014, and ABS purchases from November 2014)</p> <p>—It will be conducted until the ECB sees a sustained adjustment in the path of inflation which is consistent with its aim of achieving inflation rates below, but close to, 2 percent over the medium term.</p>	<p>—From April 2013, expanded in October 2014</p> <p>—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.</p>
Other policy measures	Measures to support bank lending	—Targeted longer-term refinancing operations (the interest rate on the main refinancing operations will be applied from March 2015)	<p>—Fund-Provisioning Measure to Stimulate Bank Lending (0.1 %)</p> <p>—Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth (0.1 %)</p>
	Major policy rates	<p>—Main refinancing operations (0.05 %)</p> <p>—Marginal lending facility (0.3 %)</p> <p>—Deposit facility (minus 0.2 %)</p>	<p><u>Guideline for money market operations:</u></p> <p>Increase the monetary base at an annual pace of about 80 trillion yen.</p> <p>—Fund-Supplying Operations against Pooled Collateral (0.1 %)</p> <p>—Complementary Deposit Facility (0.1 %)</p>

Note: Figures in parentheses are the applicable interest rates.

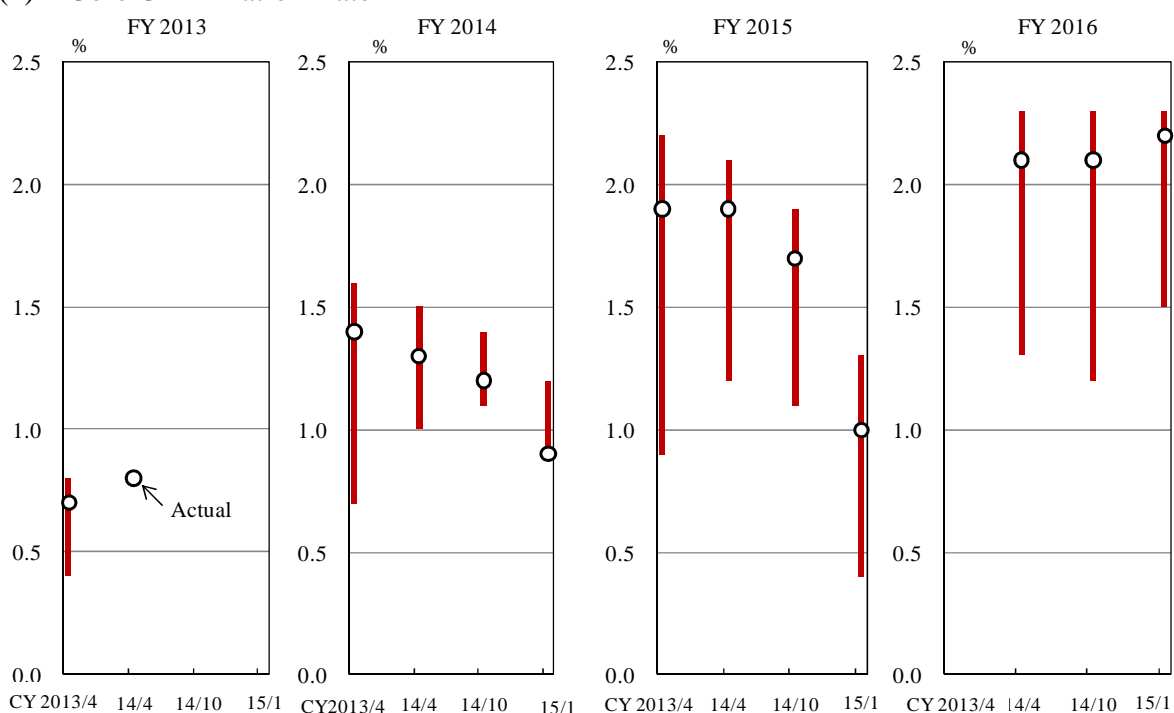
Sources: European Central Bank; Bank of Japan.

The Bank's Outlook for Economic Activity and Prices

(1) Real GDP Growth Rate



(2) Core CPI Inflation Rate

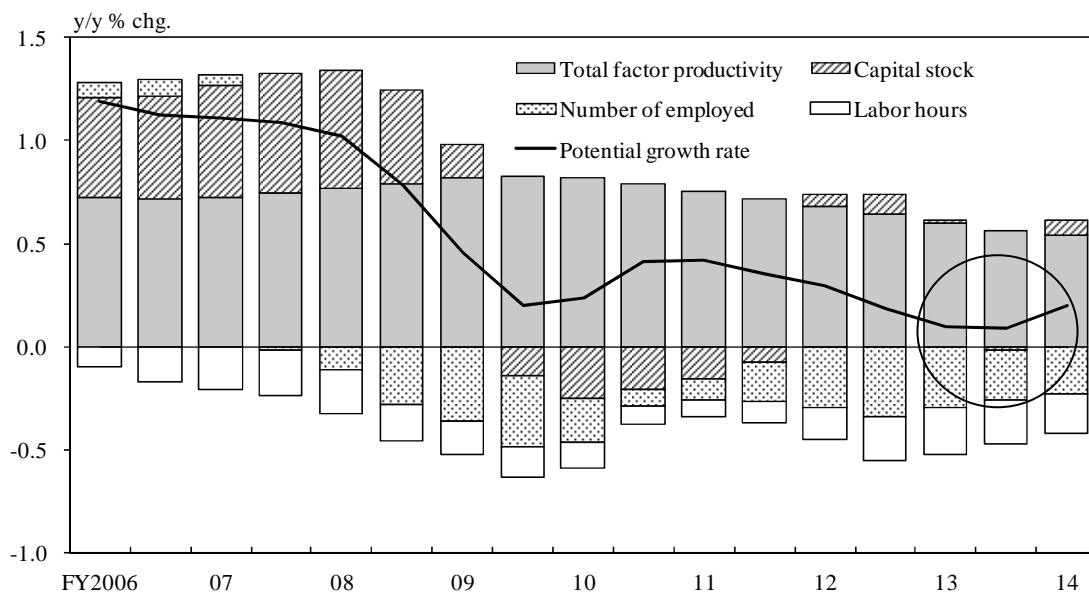


Note: The range and the median of majority forecasts of Policy Board members. Figures for FY 2014 exclude the direct effects of the consumption tax hike.

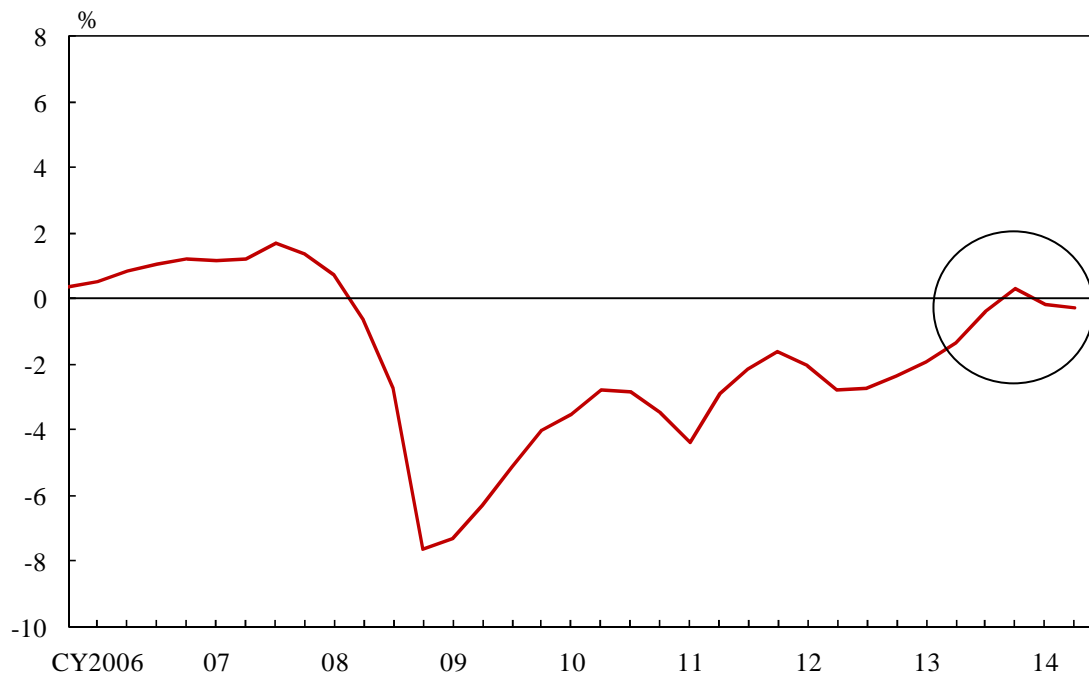
Source: Bank of Japan.

Potential Growth Rate and Output Gap

(1) Potential Growth Rate



(2) Output Gap

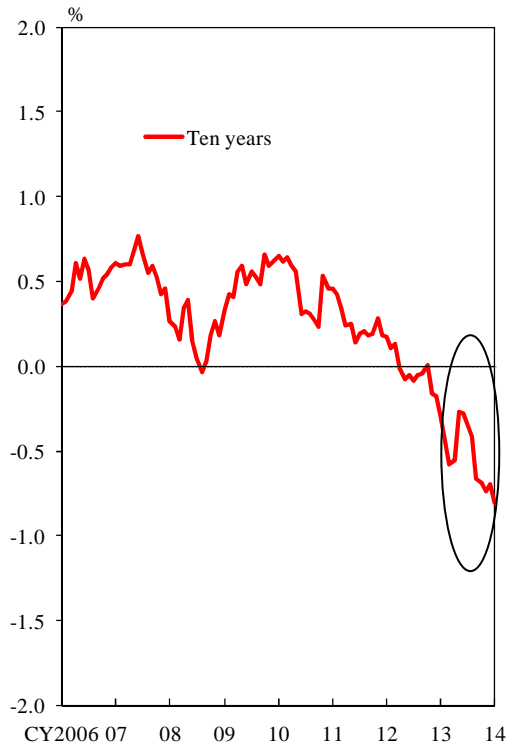


Note: The latest estimates are for April-June 2014 for the potential growth rate and for July-September 2014 for the output gap.

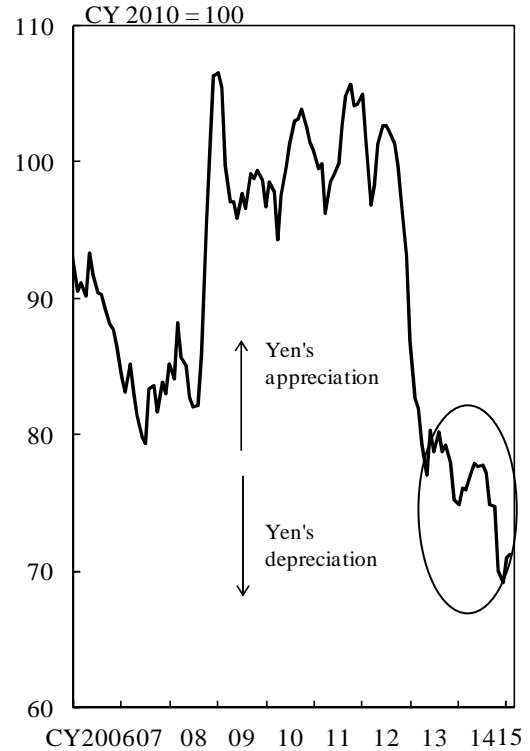
Source: Bank of Japan.

Financial Market Conditions

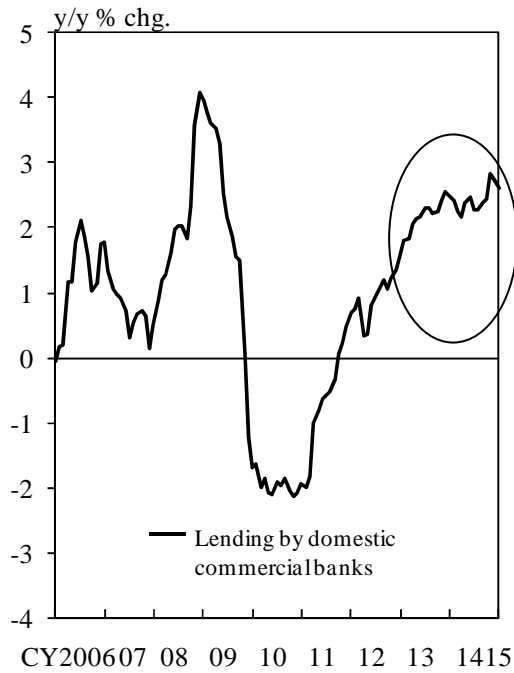
(1) Real Long-Term Interest Rate



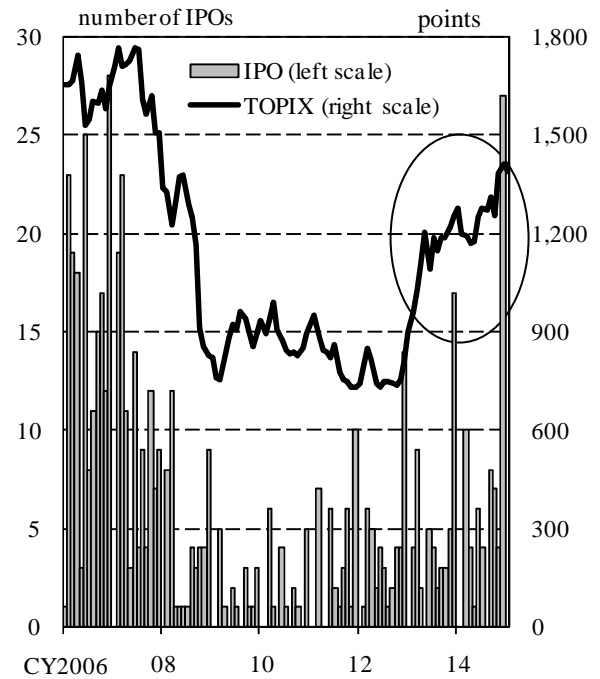
(2) Real Effective Exchange Rate



(3) Private Bank Lending



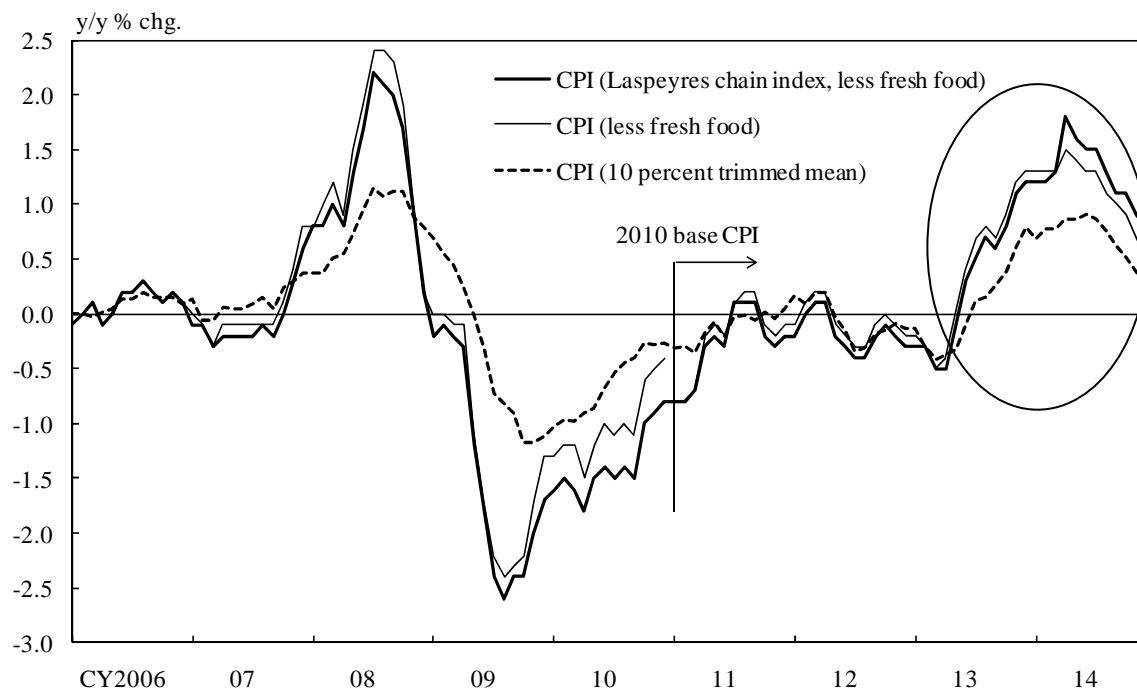
(4) Stock Prices and IPO



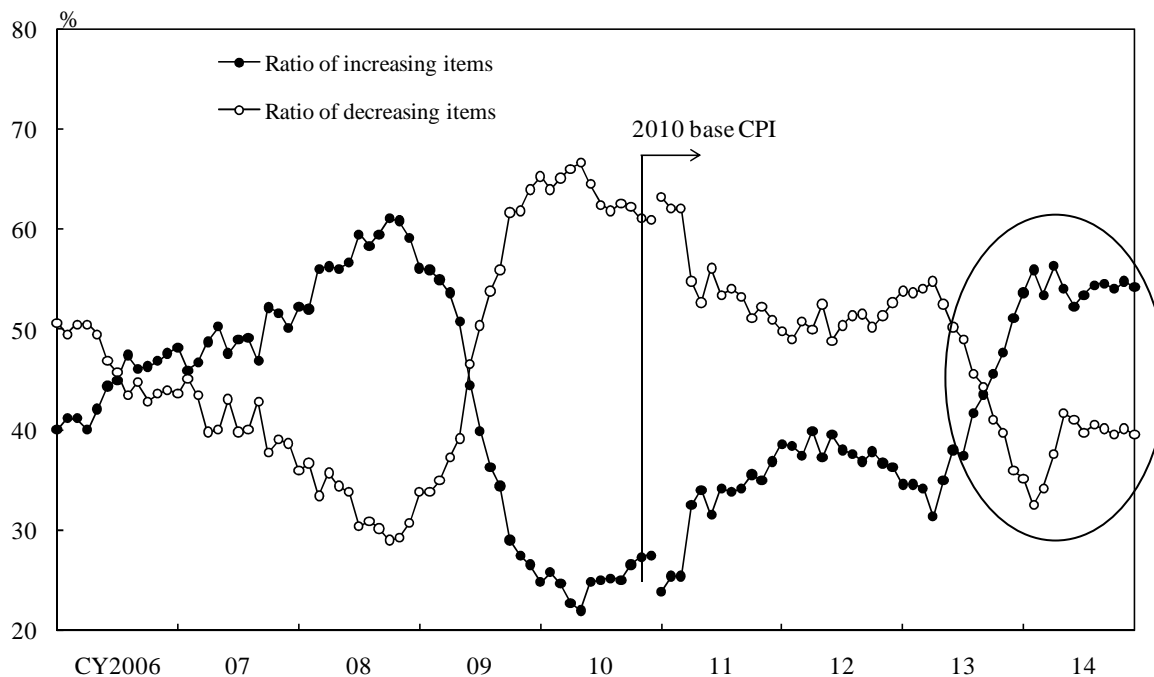
Note: Figures for the real long-term interest rate are estimated using bond yields and market participants' inflation expectations.
Sources: I-N Information Systems; Bloomberg; QUICK; Bank of Japan.

Underlying Price Developments

(1) Trend Changes in Consumer Price Indexes



(2) Ratio of Increasing and Decreasing Items (Core CPI)

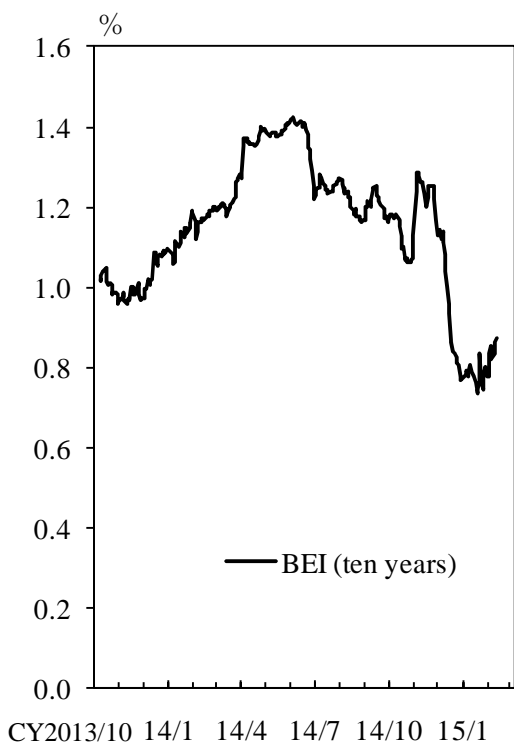


Note: Figures after April 2014 exclude the direct effects of the consumption tax hike.

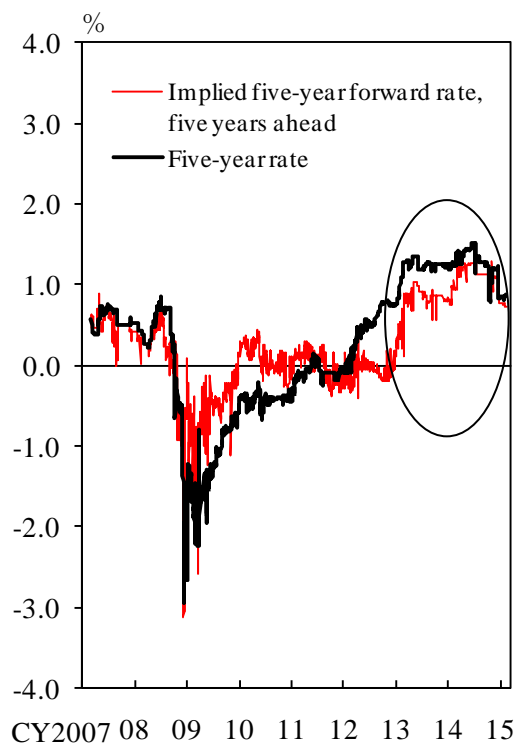
Sources: Ministry of Internal Affairs and Communications; Bank of Japan.

Medium- to Long-Term Inflation Expectations <1>
(Market-based Indicators and Market Participants' Survey)

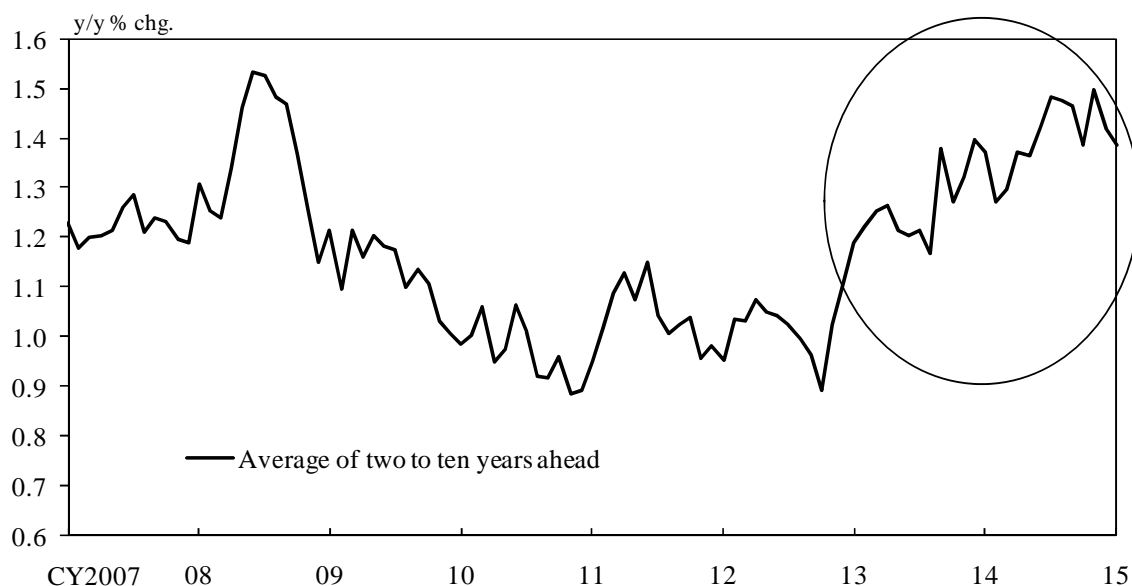
(1) Break-Even Inflation (BEI) Rate



(2) Inflation Swap Rate



(3) Bond Market Participants (QUICK Bond Monthly Survey)

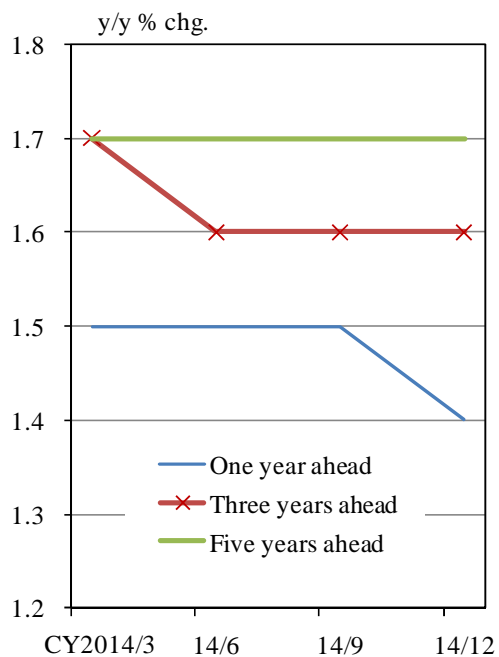


Note: Inflation swap rate is the fixed interest rate of the zero coupon inflation swap. The QUICK Bond Monthly Survey began including the effects of the consumption tax hike from the September 2013 survey.
Sources: Bloomberg; QUICK.

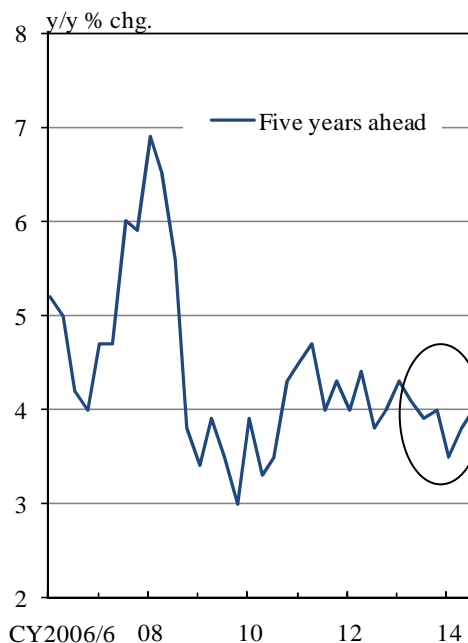
Medium- to Long-Term Inflation Expectations <2>

(Firms, Households, and Economists)

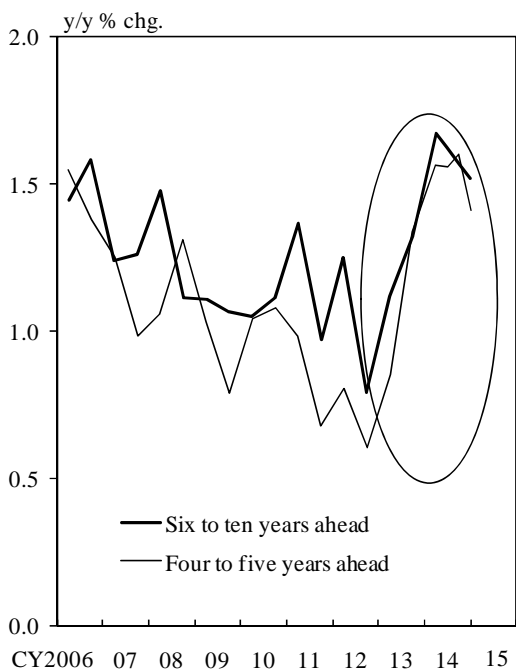
(1) Firms (*Tankan*, All Firms, All Industries)



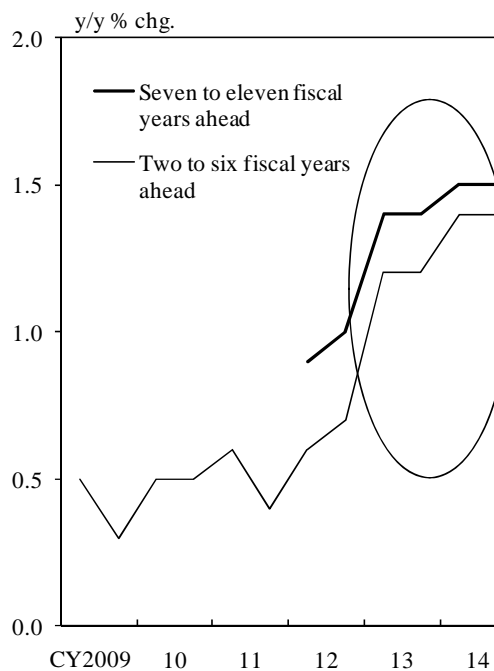
(2) Households (Opinion Survey on the General Public's Views and Behavior)



(3) Economists (Consensus Forecast)



(4) Economists (ESP Forecast)



Note: Survey respondents are asked to exclude the effects of the consumption tax hike for the whole period for the *Tankan*, from the June 2013 survey for the household survey, and from the October 2013 survey for the ESP forecast. The effects are irrelevant for the Consensus Forecasts.

Sources: Bloomberg; Consensus Economics Inc., "Consensus Forecasts"; Japan Center for Economic Research (JCER); QUICK; Bank of Japan.

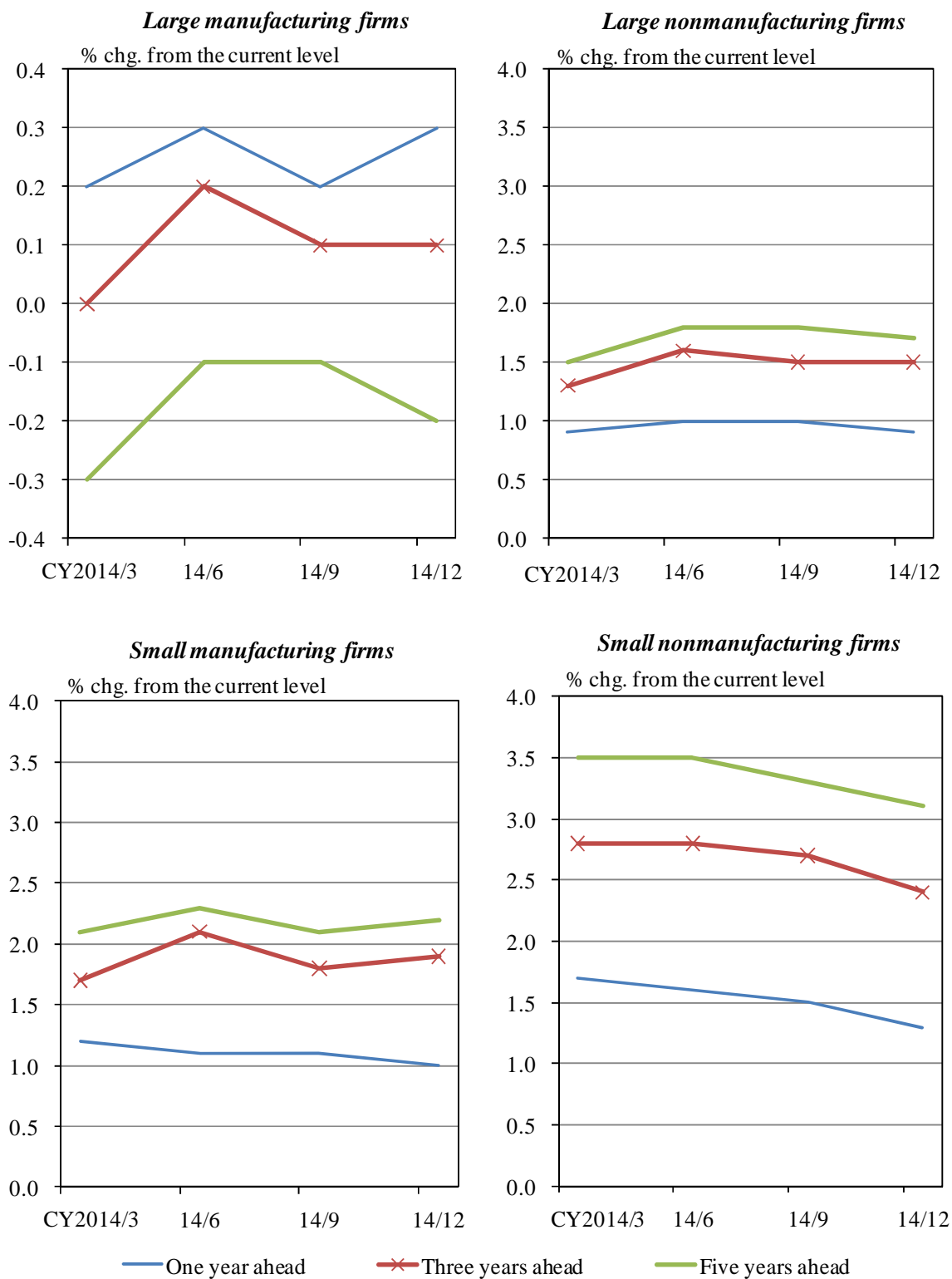
Surveys of Inflation Expectations

Agent	Name of Survey	Time Frame		Sample numbers	Starting period and frequency
		Short-term	Medium- to long-term		
Households	Opinion Survey on the General Public's Views and Behavior	One year	Five years	4,000 people	June 2006, ¹ quarterly
	Consumer Confidence Survey	One year	n.a.	8,400 households	April 2004, monthly
Market participants and economists	QSS Bond Monthly Survey	One and two years	Ten years	About 220 market participants	July 2004, monthly
	ESP Forecast	One and two years	Two to six and seven to eleven years	About 40 economists	May 2004, monthly
	Consensus Forecast (long-term projection)	Each year to five years ahead	Six to ten years	n.a.	From October 1989 to April 2014: April and October From July 2014 to the present: January, April, July, and October
Firms	<i>Tankan</i> (Bank of Japan)	One year	Three and five years	About 10,000 firms	March 2014, quarterly
	QUICK <i>Tankan</i>	One year	Two or more years ahead	About 400 firms	January 2014, monthly

Note:1. Data for the Opinion Survey on the General Public's Views and Behavior are available on a consistent basis from June 2006.

Source: Each survey.

Firms' Outlook for Sales Prices (1): Medium to Long Term (Average)

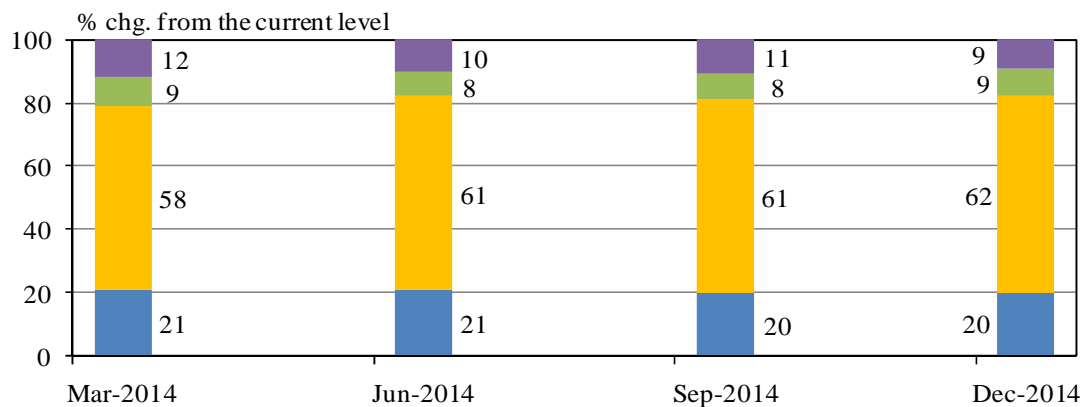


Note: The *Tankan* explicitly asks respondents to disregard the effects of the consumption tax hike.
 Source: Bank of Japan.

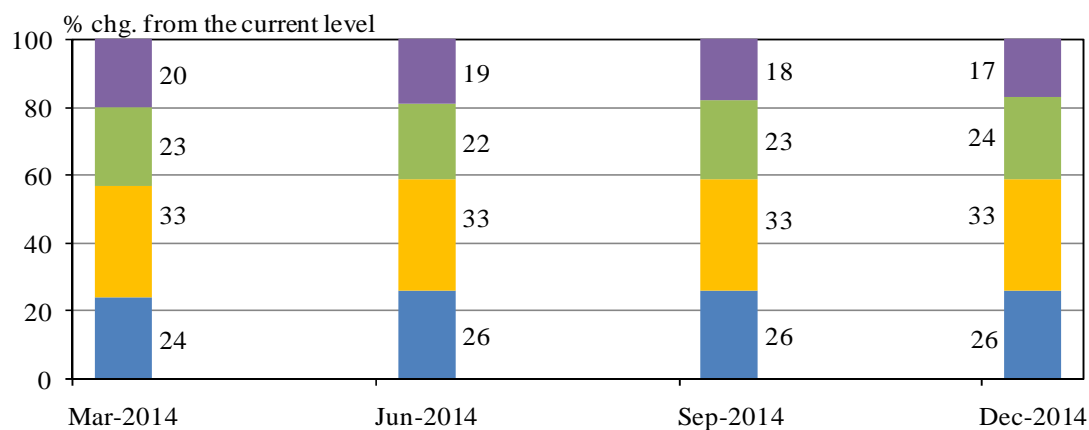
Firms' Outlook for Sales Prices (2): Medium to Long Term

-- Distribution of the Three Largest Responses --

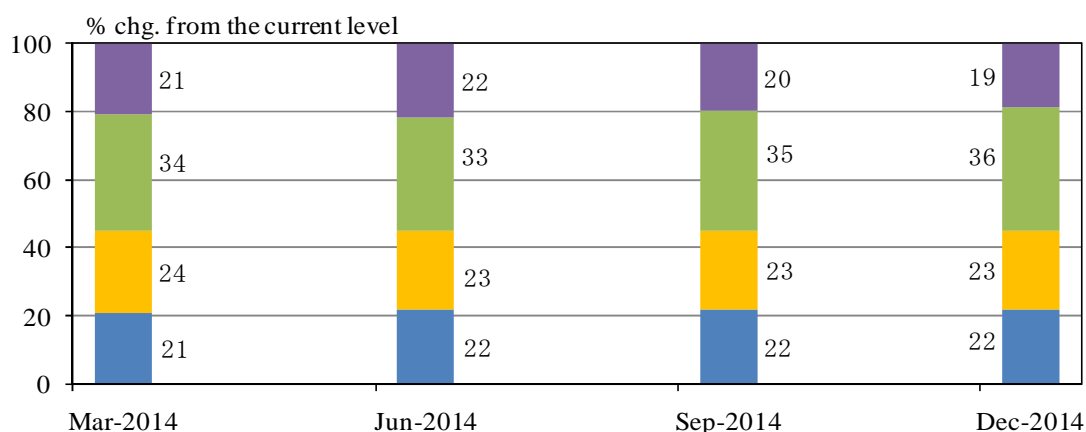
All firms, all industries: one year ahead



All firms, all industries: three years ahead



All firms, all industries: five years ahead



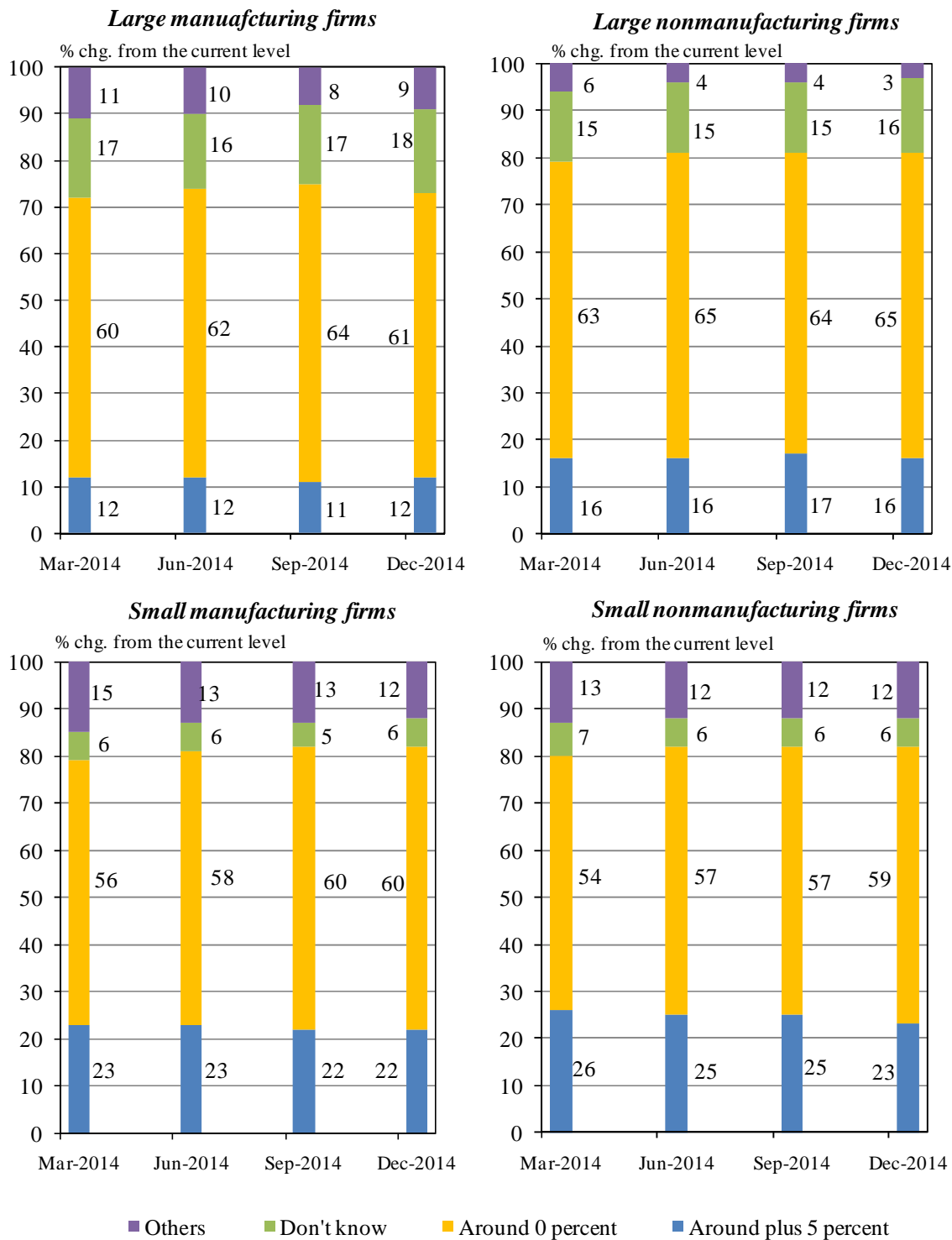
■ Others
 ■ Don't know
 ■ Around 0 percent
 ■ Around plus 5 percent

Note: The *Tankan* explicitly asks respondents to disregard the effects of the consumption tax hike.

Source: Bank of Japan.

Firms' Outlook for Sales Prices (3): One Year Ahead

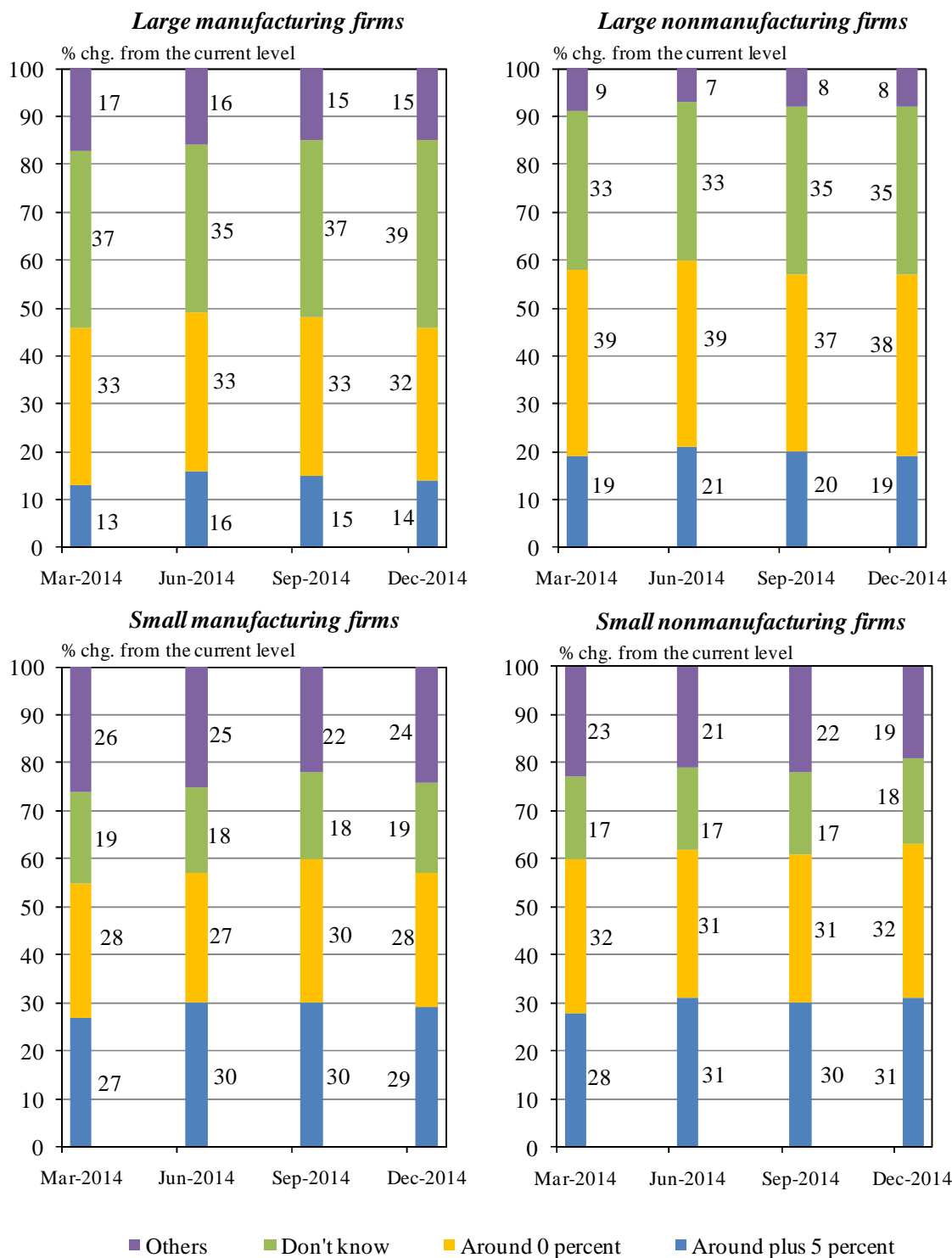
-- Distribution of the Three Largest Responses --



Note: The *Tankan* explicitly asks respondents to disregard the effects of the consumption tax hike.
 Source: Bank of Japan.

Firms' Outlook for Sales Prices (4): Three Years Ahead

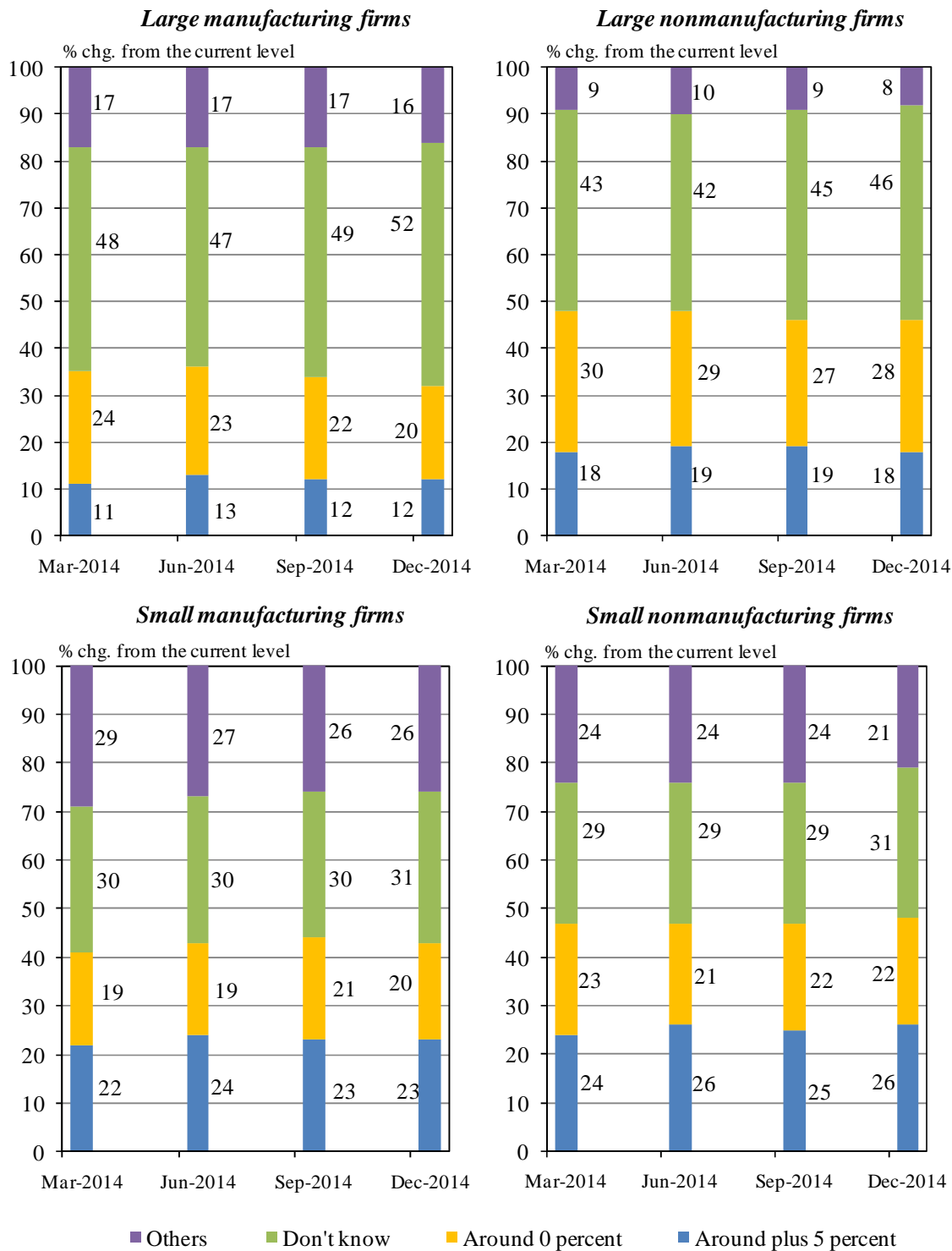
-- Distribution of the Three Largest Responses --



Note: The *Tankan* explicitly asks respondents to disregard the effects of the consumption tax hike.
 Source: Bank of Japan.

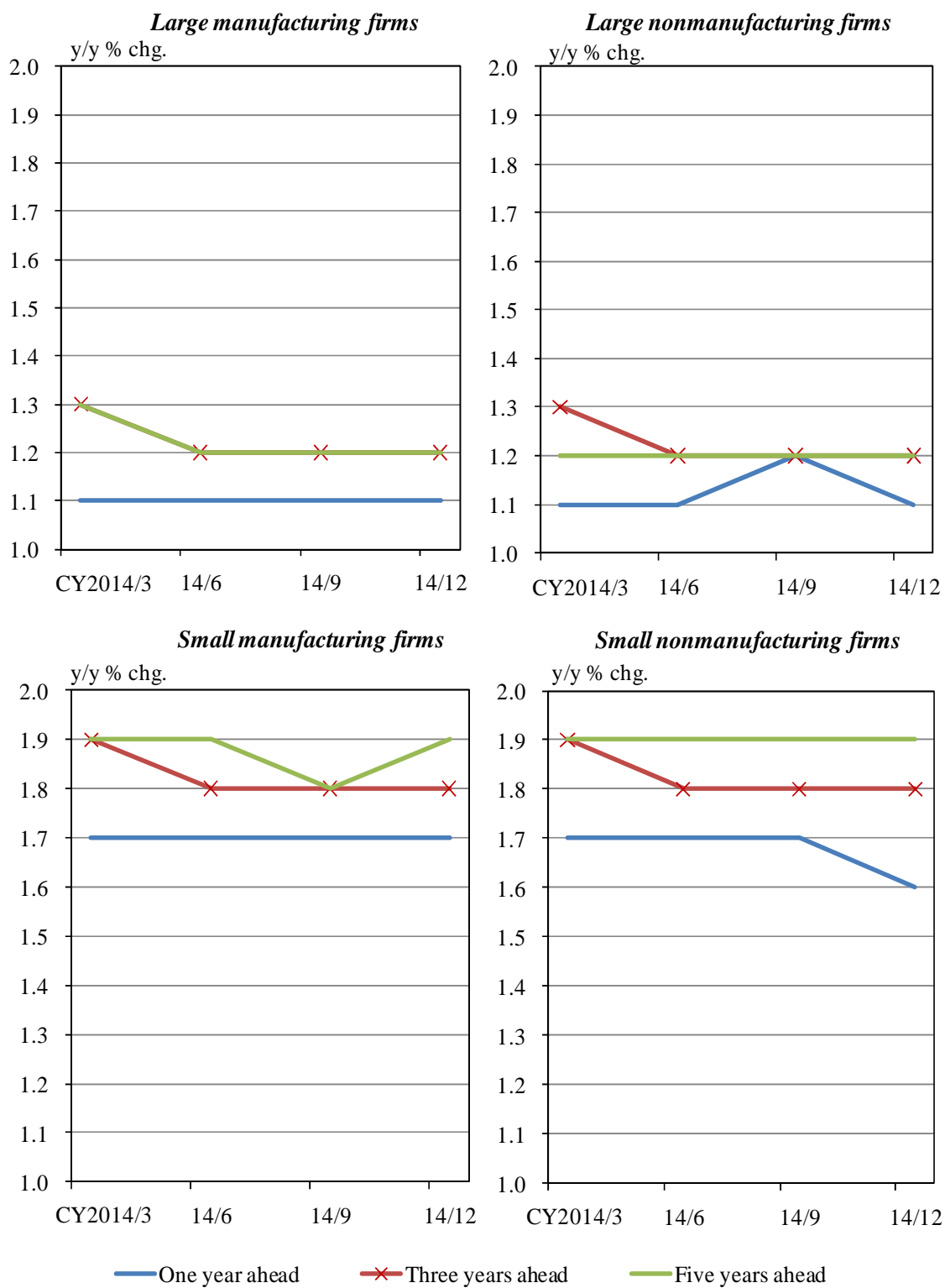
Firms' Outlook for Sales Prices (5): Five Years Ahead

-- Distribution of the Three Largest Responses --



Note: The *Tankan* explicitly asks respondents to disregard the effects of the consumption tax hike.
 Source: Bank of Japan.

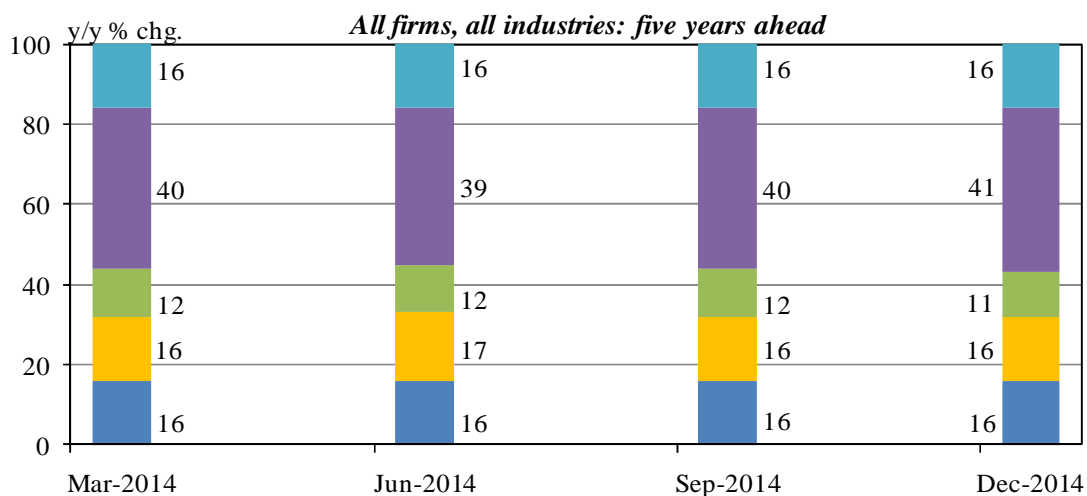
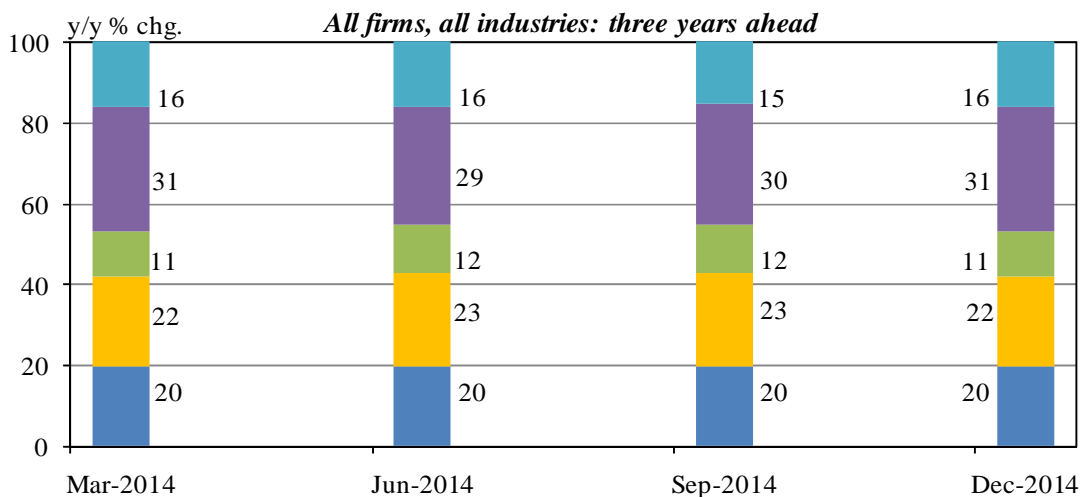
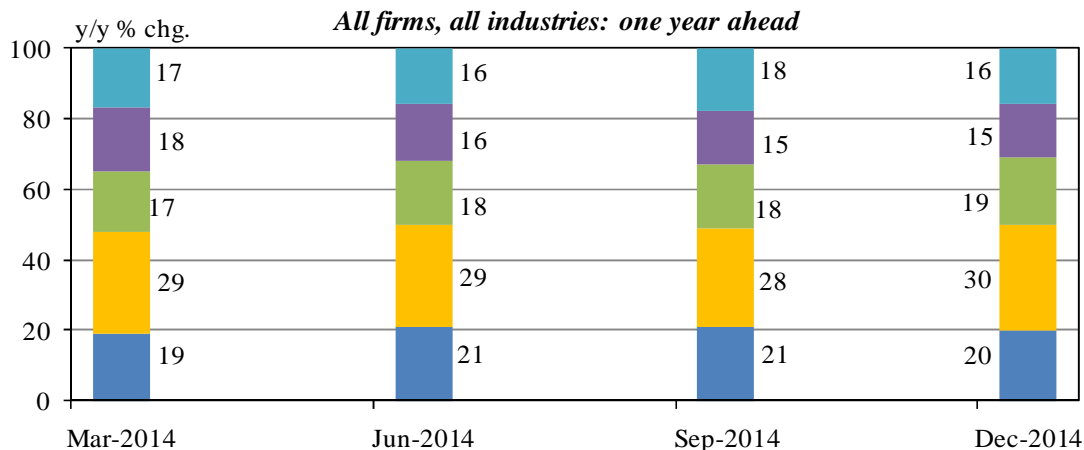
Firms' Outlook for General Prices (1): Medium to Long Term (Average)



Note: The *Tankan* explicitly asks respondents to disregard the effects of the consumption tax hike.
 Source: Bank of Japan.

Firms' Outlook for General Prices (2): Medium to Long Term

-- Distribution of the Four Largest Responses --



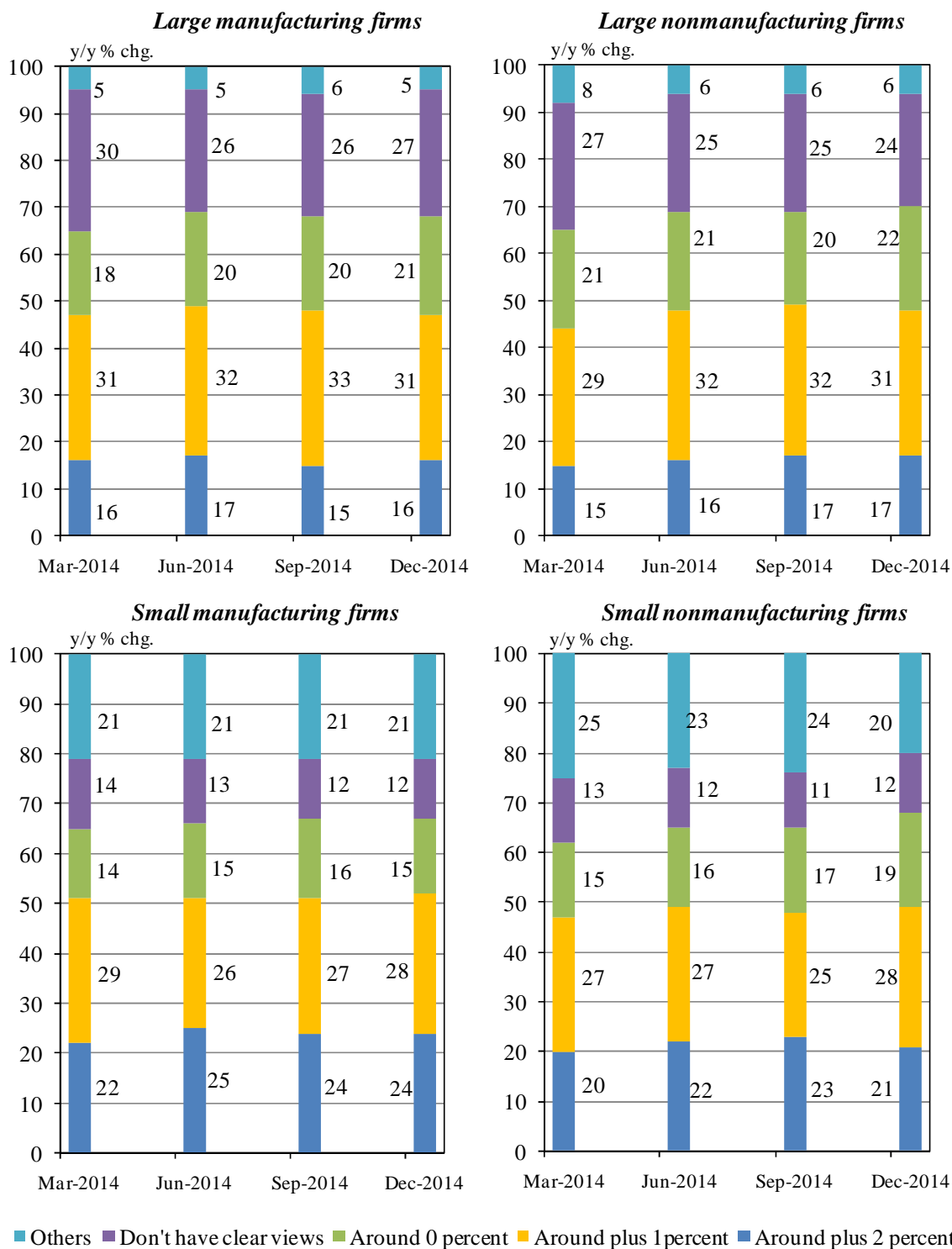
■ Others ■ Don't have clear views ■ Around 0 percent ■ Around plus 1 percent ■ Around plus 2 percent

Note: The *Tankan* explicitly asks respondents to disregard the effects of the consumption tax hike.

Source: Bank of Japan.

Firms' Outlook for General Prices (3): One Year Ahead

-- Distribution of the Four Largest Responses --

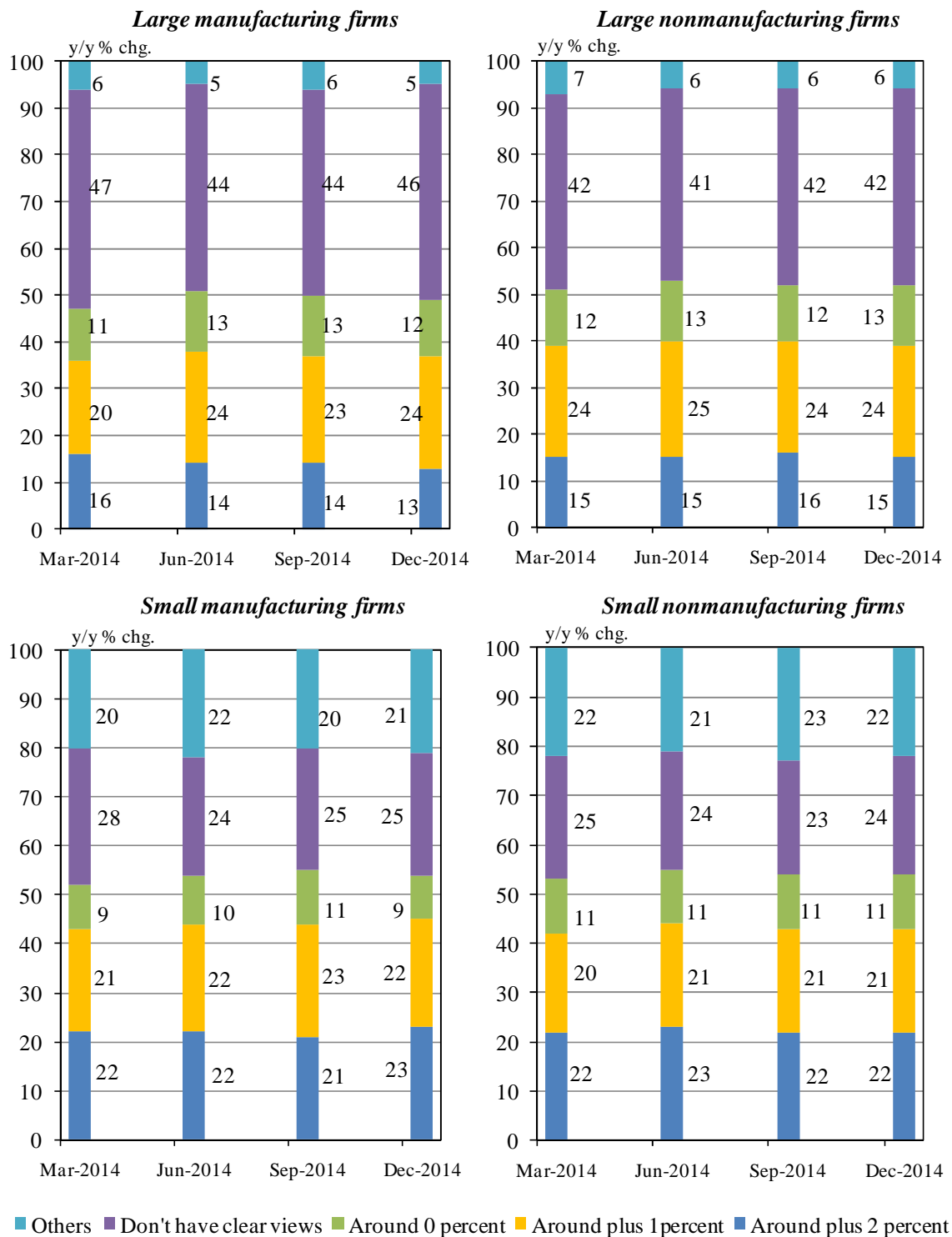


Note: The *Tankan* explicitly asks respondents to disregard the effects of the consumption tax hike.

Source: Bank of Japan.

Firms' Outlook for General Prices (4): Three Years Ahead

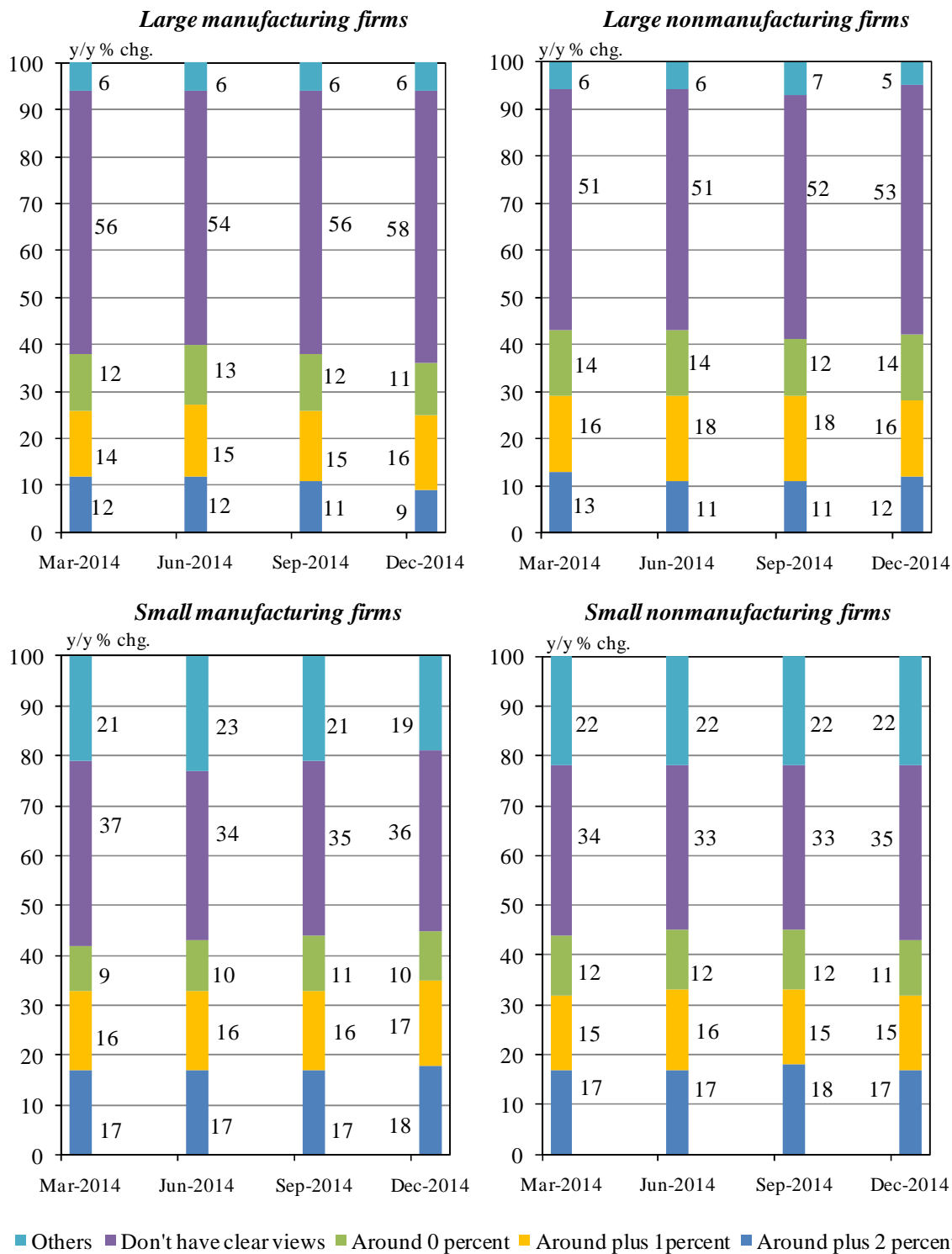
-- Distribution of the Four Largest Responses --



Note: The *Tankan* explicitly asks respondents to disregard the effects of the consumption tax hike.
 Source: Bank of Japan.

Firms' Outlook for General Prices (5): Five Years Ahead

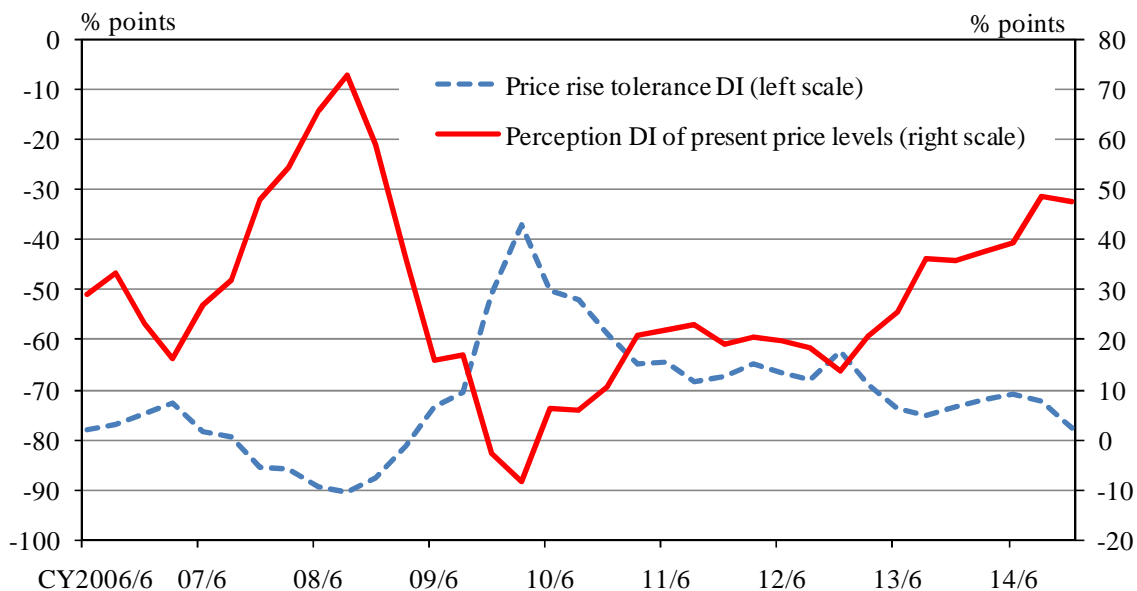
-- Distribution of the Four Largest Responses --



Note: The *Tankan* explicitly asks respondents to disregard the effects of the consumption tax hike.
 Source: Bank of Japan.

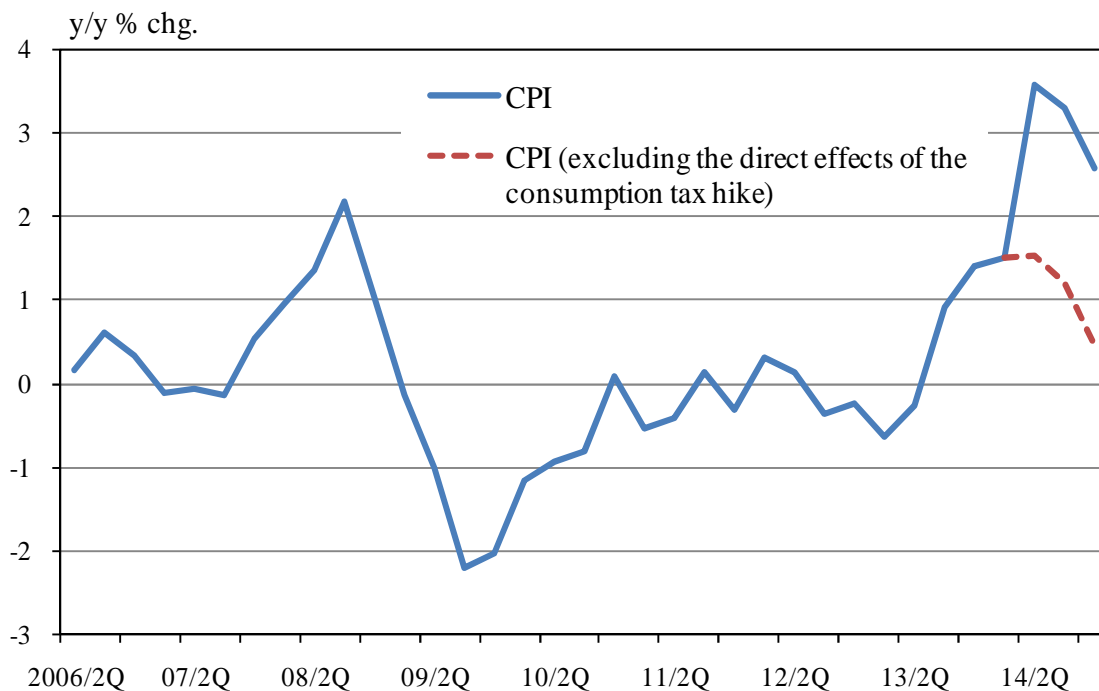
Households' Attitude to the Price Rise

(1) "Price Rise Tolerance DI" and "Perception DI of Present Price Levels"



Notes: 1. Price rise tolerance DI = ("price rise is rather favorable" and "price decline is rather unfavorable" respondent ratio - "price rise is rather unfavorable" and "price decline is rather favorable" respondent ratio) / (valid respondent ratio - "have remained almost unchanged" respondent ratio).
 2. Perception DI of present price levels = ("have gone up significantly" * 1 + "have gone up slightly" * 0.5) - ("have gone down slightly" * 0.5 + "have gone down significantly" * 1).

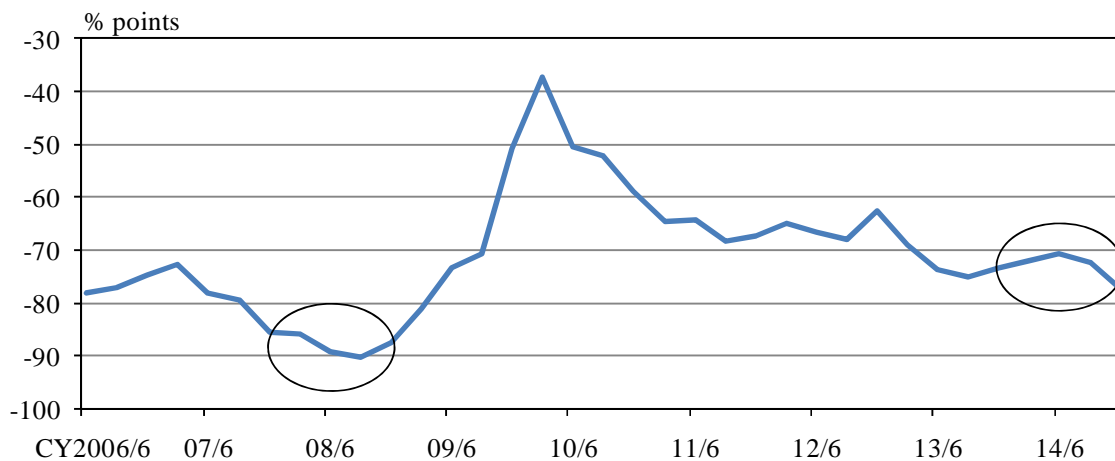
(2) Actual Inflation



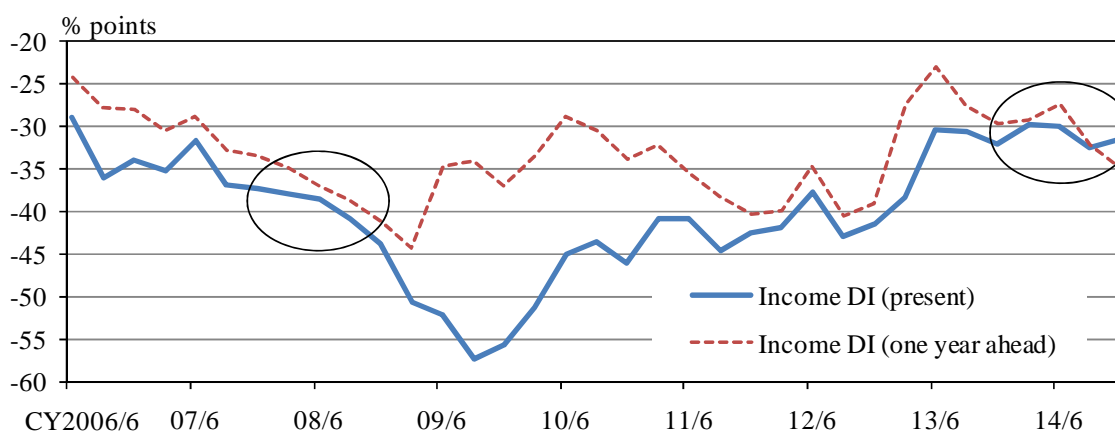
Sources: Ministry of Internal Affairs and Communications; Bank of Japan.

Households' Price Rise Tolerance, Income, and Employment DIs

(1) Price Rise Tolerance DI

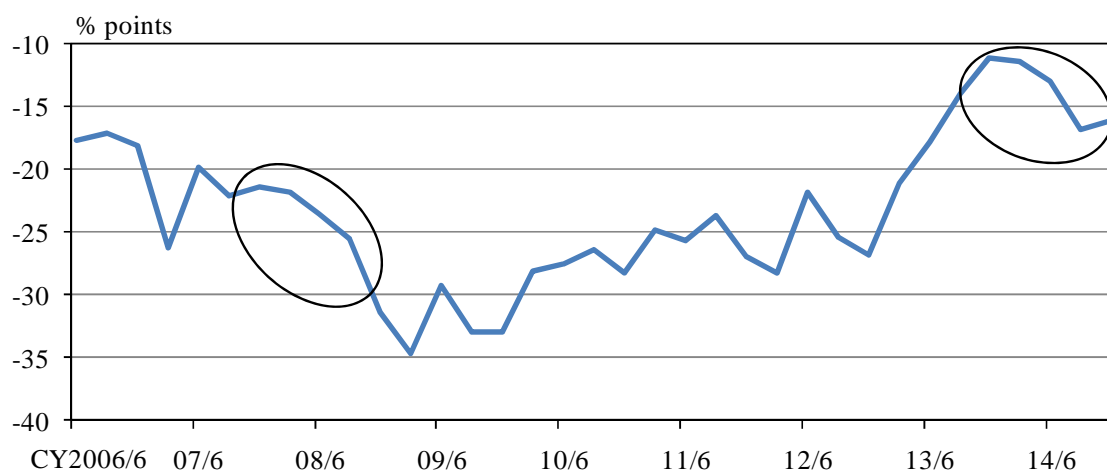


(2) Income DI



Note: Income DI="will increase (has increased)" - "will decrease (has decreased)"

(3) Employment Conditions DI

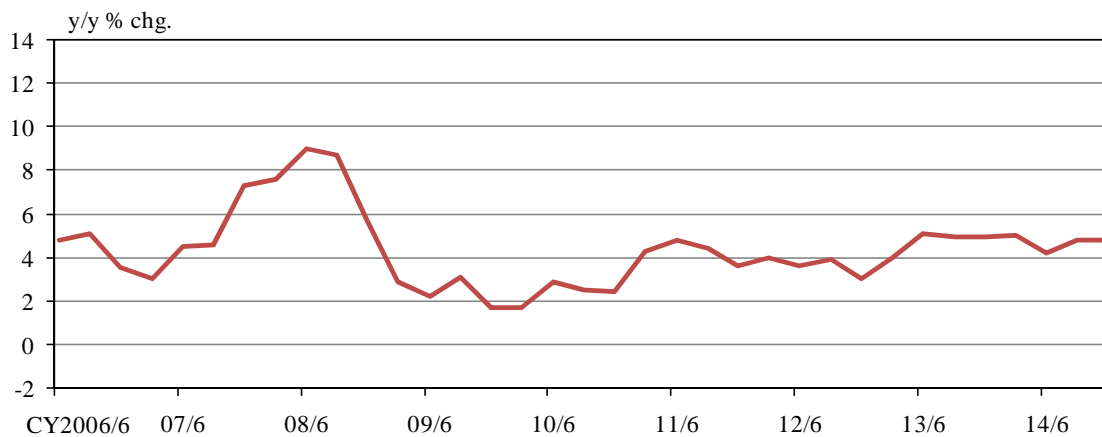


Note: Employment conditions DI="not particularly worried" - "quite worried"

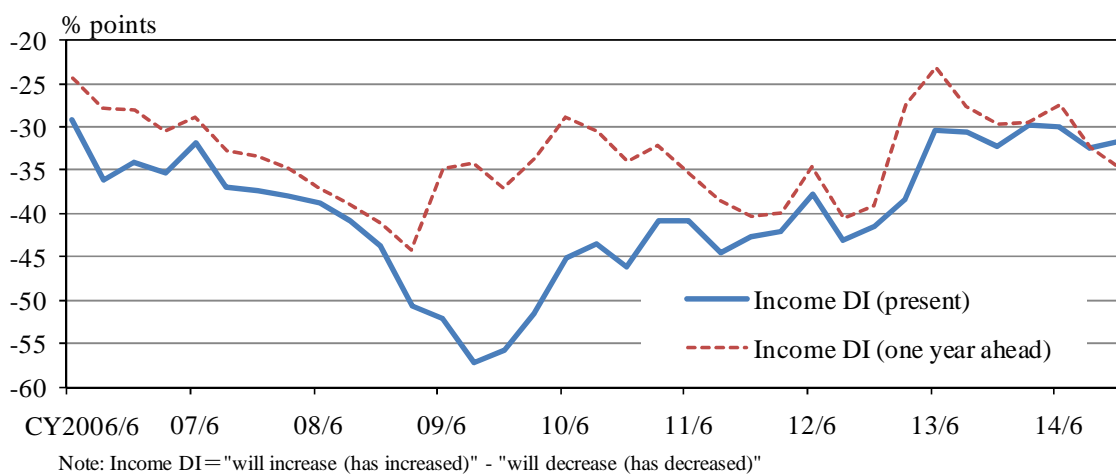
Source: Bank of Japan.

Households' Inflation Expectations and Income and Spending DIs

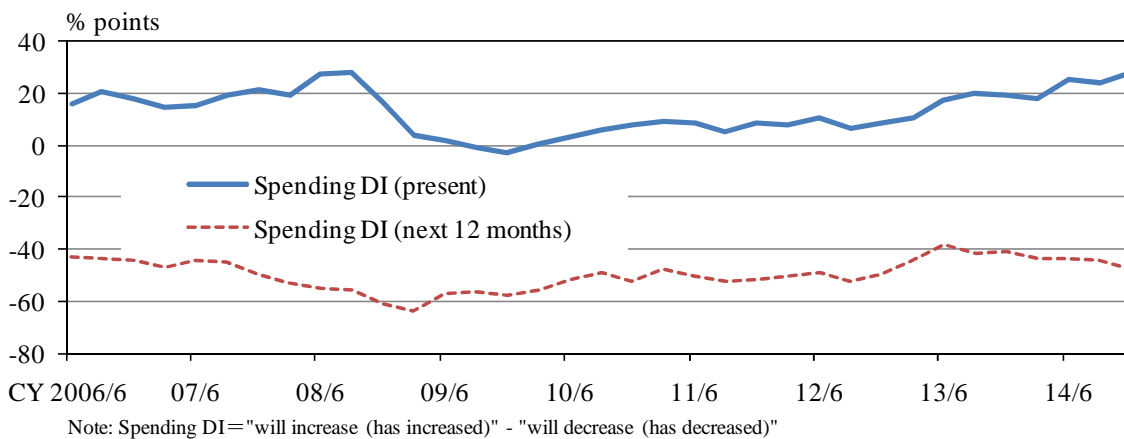
(1) One-Year Inflation Expectations



(2) Income DI



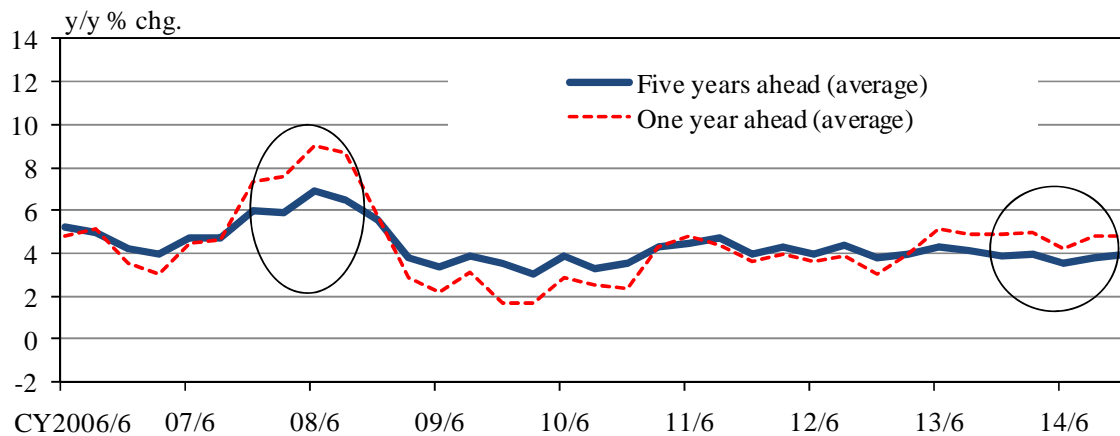
(3) Spending DI



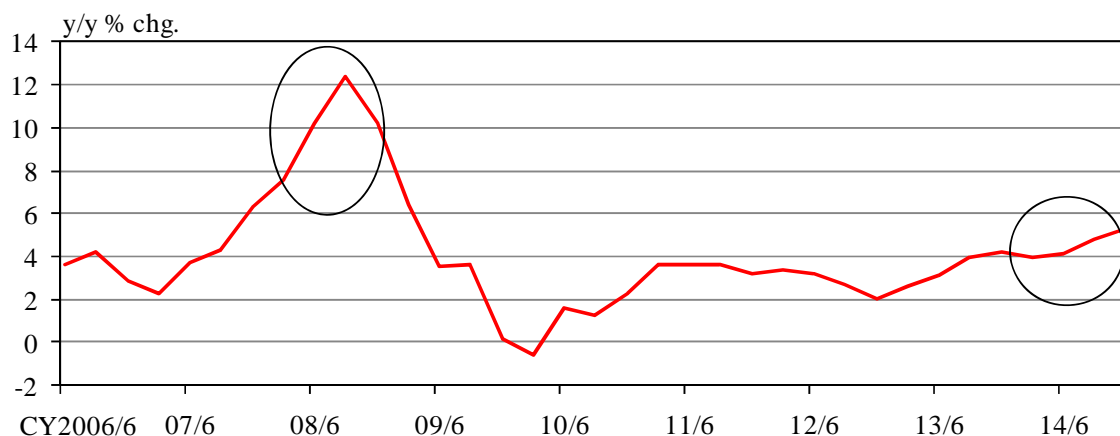
Source: Bank of Japan.

Households' Inflation Expectations and Present Inflation Perceptions

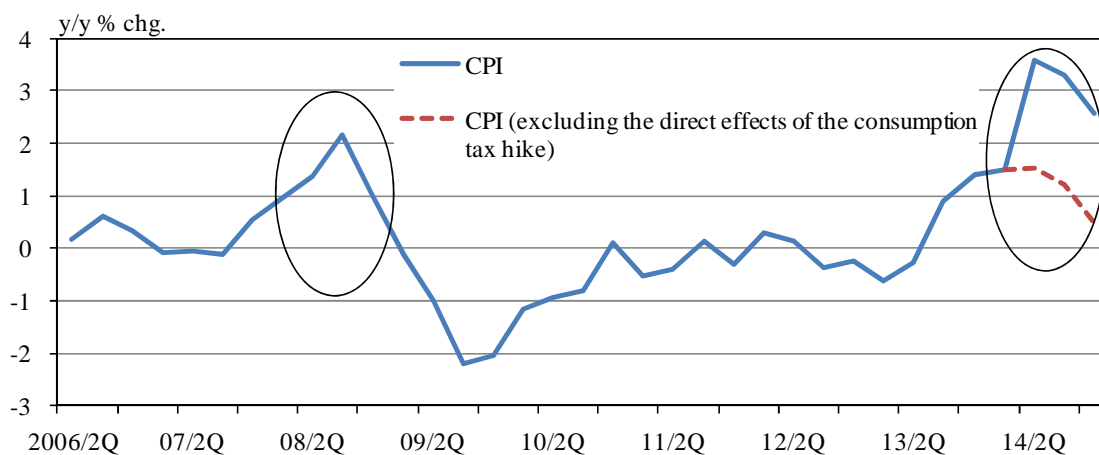
(1) Households' Inflation Expectations



(2) Households' Present Inflation Perceptions



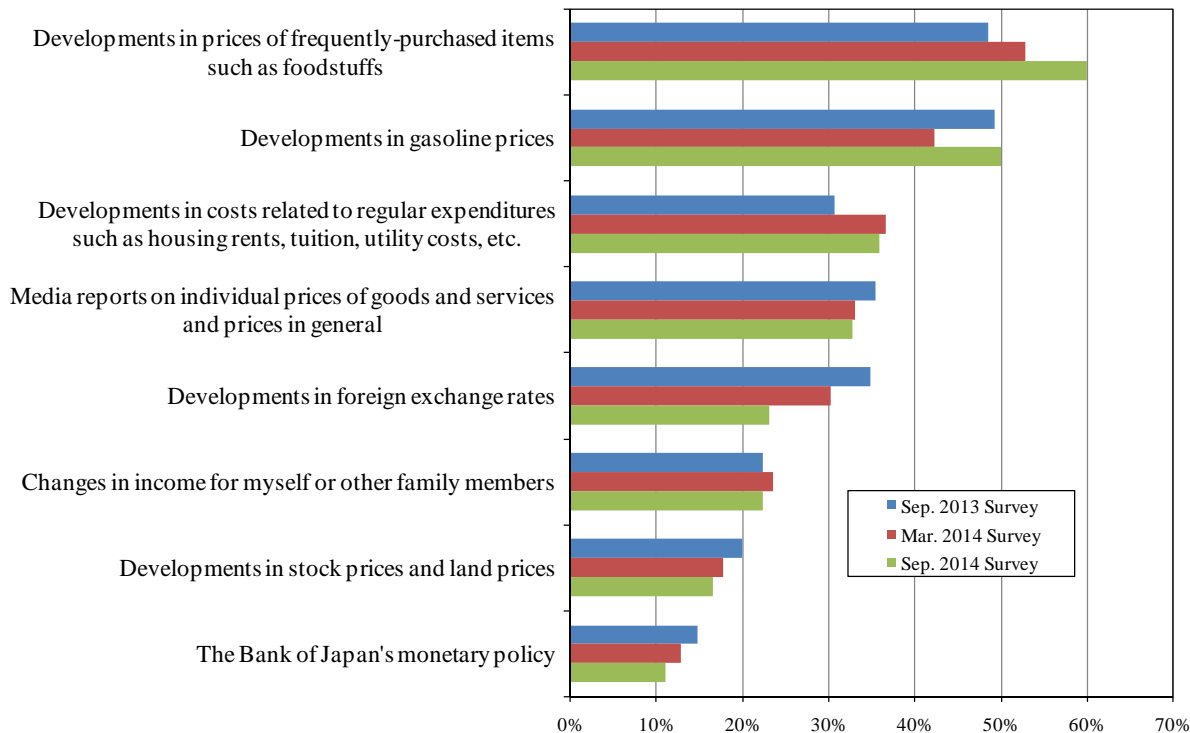
(3) Actual Inflation



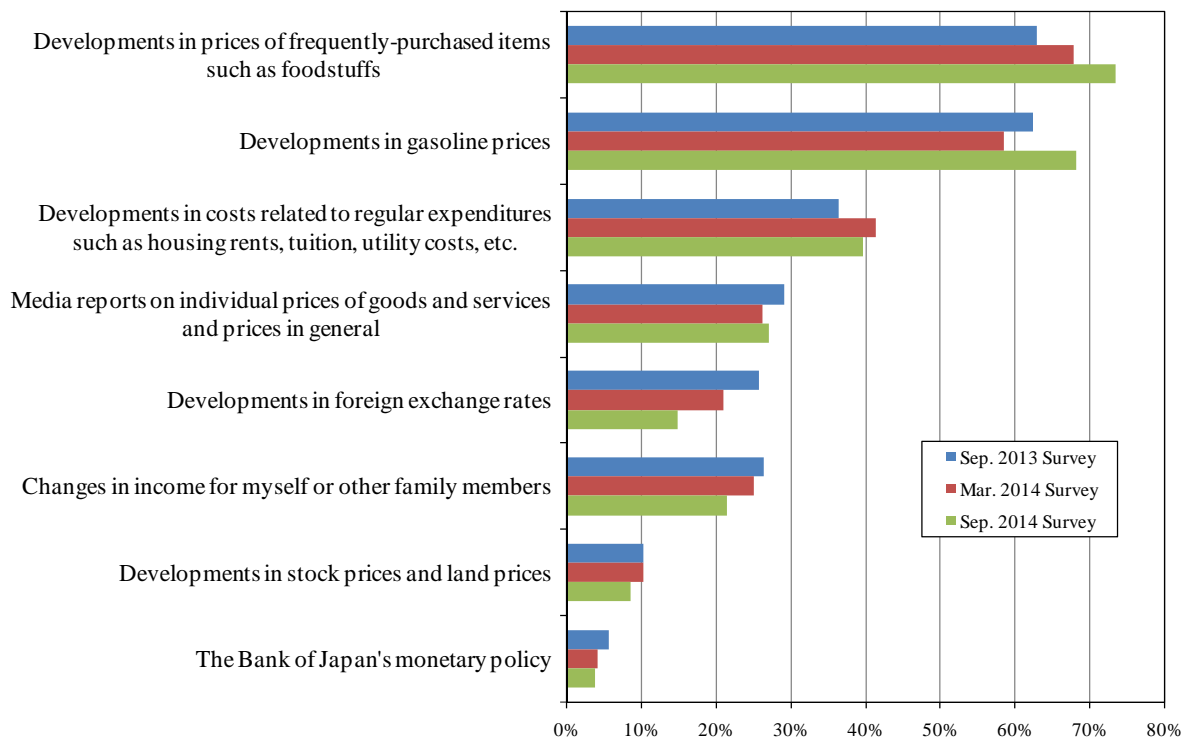
Sources: Ministry of Internal Affairs and Communications; Bank of Japan.

Information Sources for Households' Price Views

(1) Five Years Ahead



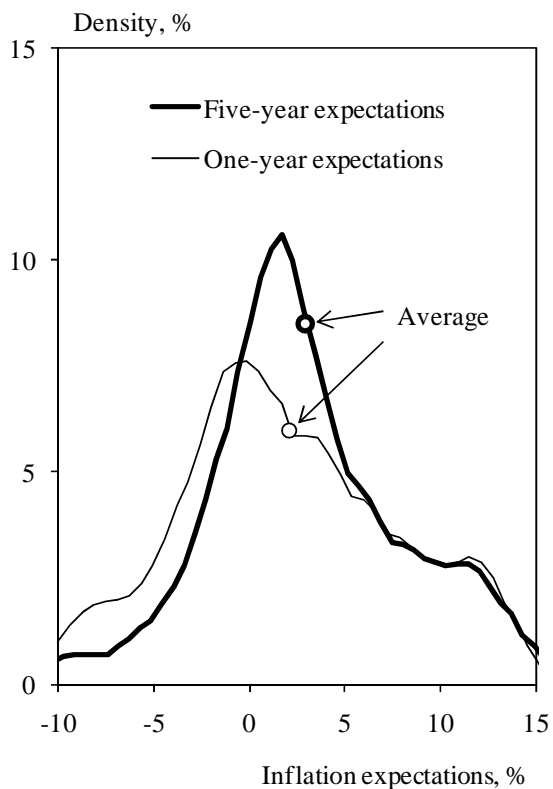
(2) Present



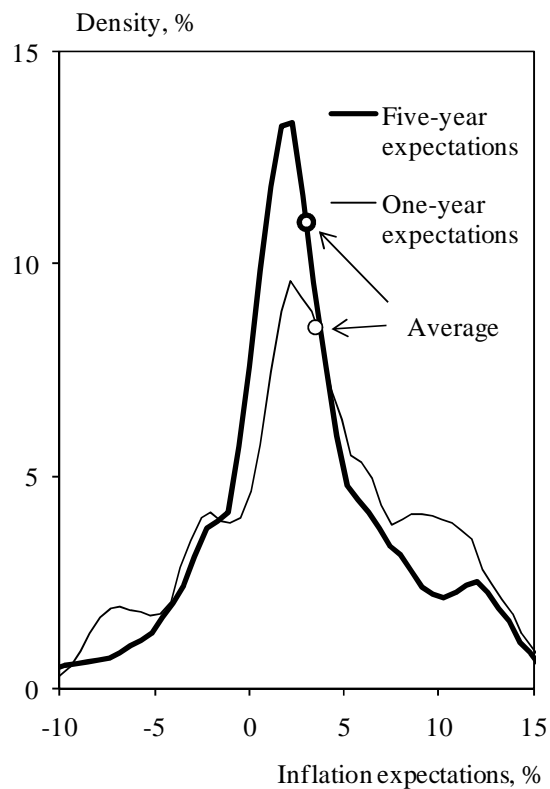
Source: Bank of Japan.

Distribution of Households' Inflation Expectations
(After Adjusting for Reporting Biases)

(1) Distribution of Expectations in 2012



(2) Distribution of Expectations in 2013



Source: Bank of Japan.