



# Recent Economic and Financial Developments and Monetary Policy

*Speech at a Meeting with Business Leaders in Yamanashi Prefecture (Held in Kofu)*

June 10, 2015

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Bank of Japan

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Note: Charts are based on available data as of June 8, 2015 (2 p.m., Japan Standard Time).

# Global Economic Outlook

(1) IMF Projections (as of April 2015)

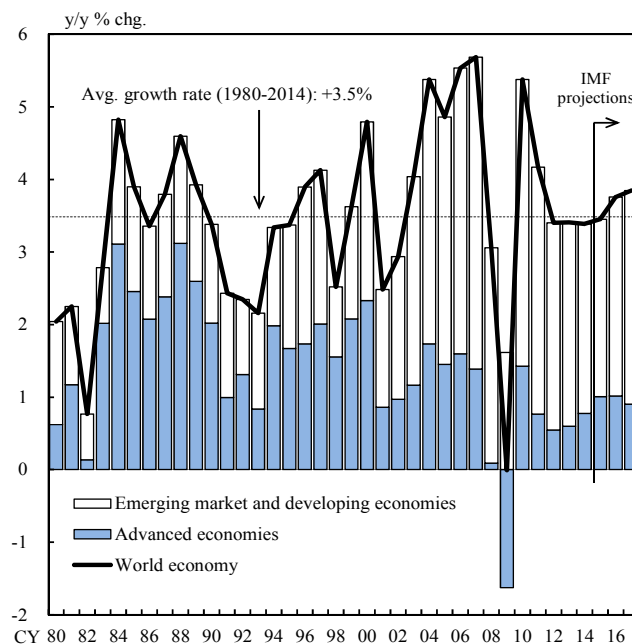
CY	real GDP growth rate, y/y % chg.			
	2014	2015 projection	2016 projection	2017 projection
World	3.4	3.5 (0.0)	3.8 (0.1)	3.8
Advanced economies	1.8	2.4 (0.0)	2.4 (0.0)	2.2
United States	2.4	3.1 (-0.5)	3.1 (-0.2)	2.7
Euro area	0.9	1.5 (0.3)	1.6 (0.2)	1.6
Japan	-0.1	1.0 (0.4)	1.2 (0.4)	0.4
Emerging market and developing economies	4.6	4.3 (0.0)	4.7 (0.0)	5.0
Emerging and developing Asia	6.8	6.6 (0.2)	6.4 (0.2)	6.3
China	7.4	6.8 (0.0)	6.3 (0.0)	6.0
ASEAN	4.6	5.2 (0.0)	5.3 (0.0)	5.4
Russia	0.6	-3.8 (-0.8)	-1.1 (-0.1)	1.0
Latin America and the Caribbean	1.3	0.9 (-0.4)	2.0 (-0.3)	2.7

Notes: 1. Figures are calculated using GDP based on purchasing power parity (PPP) shares of the world total from the International Monetary Fund.

2. Figures in parentheses are the difference from the January 2015 *World Economic Outlook* projections.

Source: International Monetary Fund.

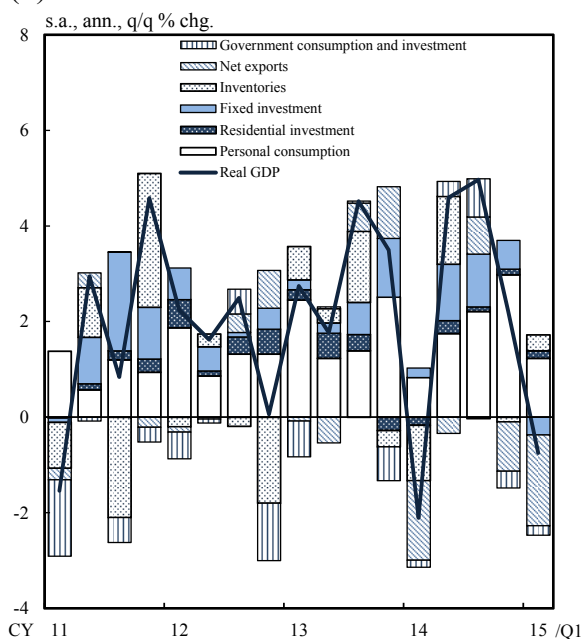
(2) Real GDP Growth Rate of the World Economy



Source: International Monetary Fund.

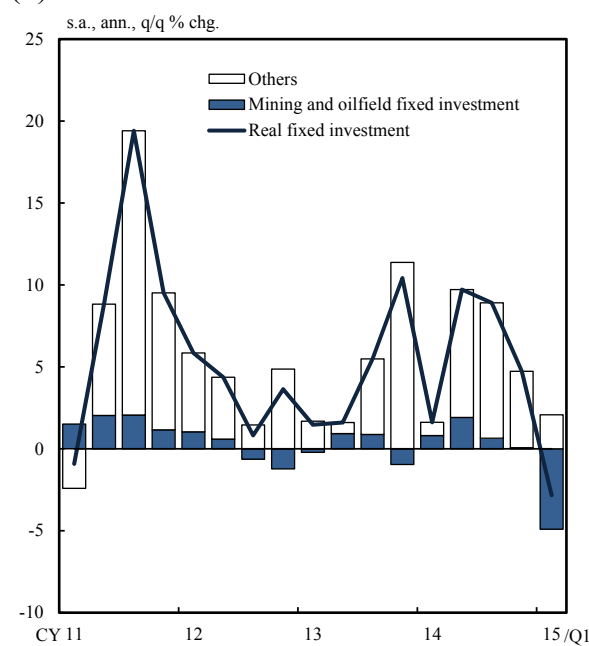
# U.S. Economy

(1) Real GDP



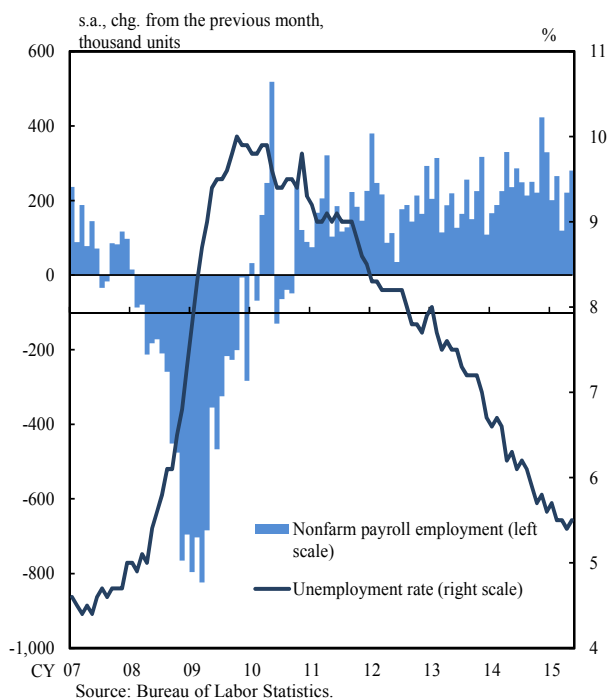
Source: Bureau of Economic Analysis.

(2) Fixed Investment

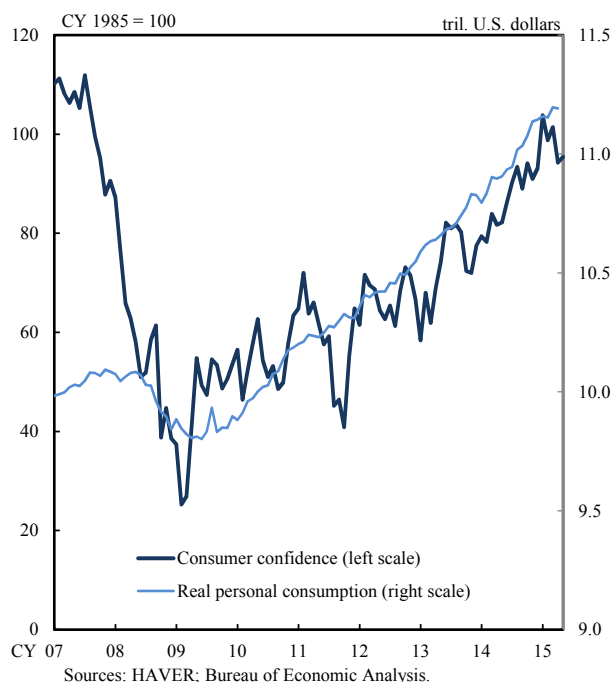


# U.S. Economy (Continued)

(3) Employment

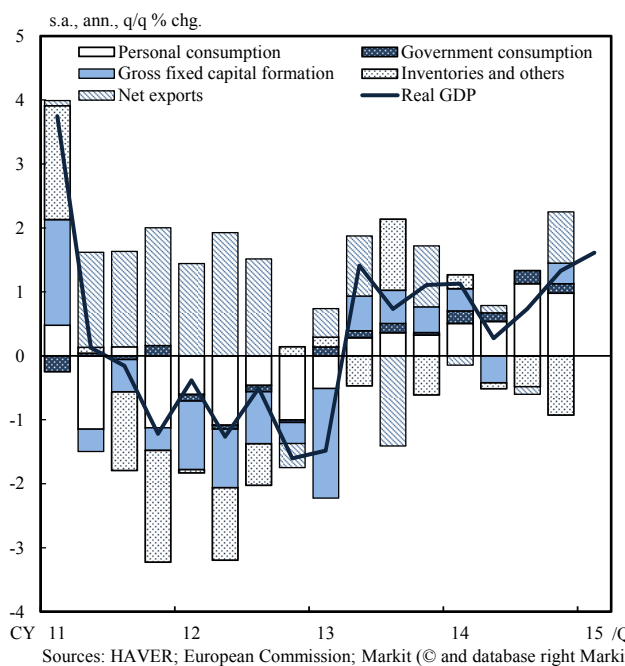


(4) Personal Consumption

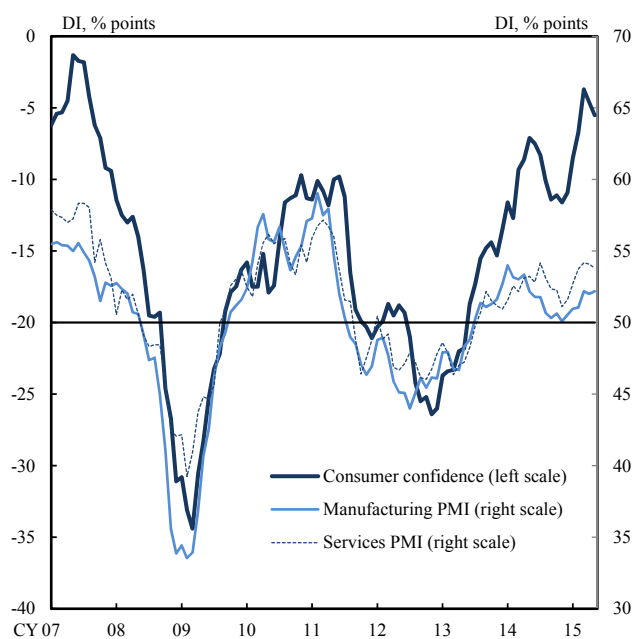


# European Economy

(1) Real GDP

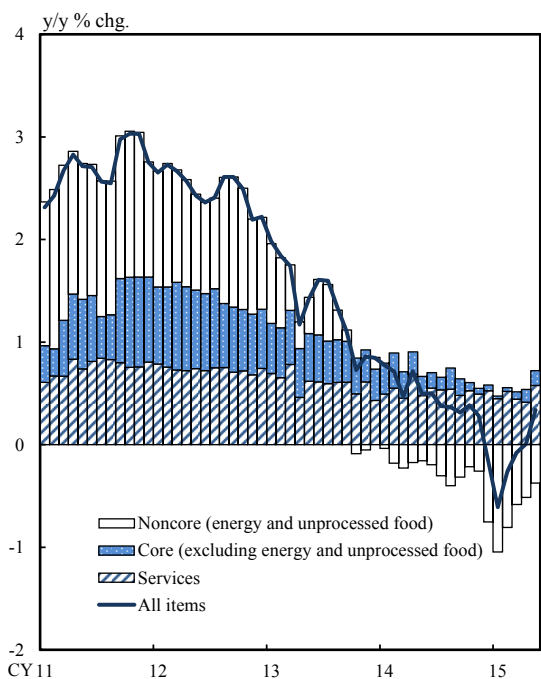


(2) Consumer Confidence and Business Sentiment

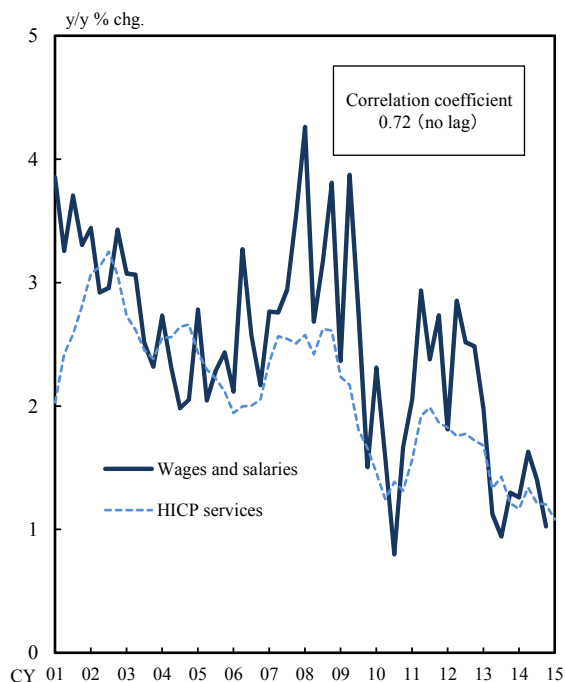


# European Economy (Continued)

(3) HICP

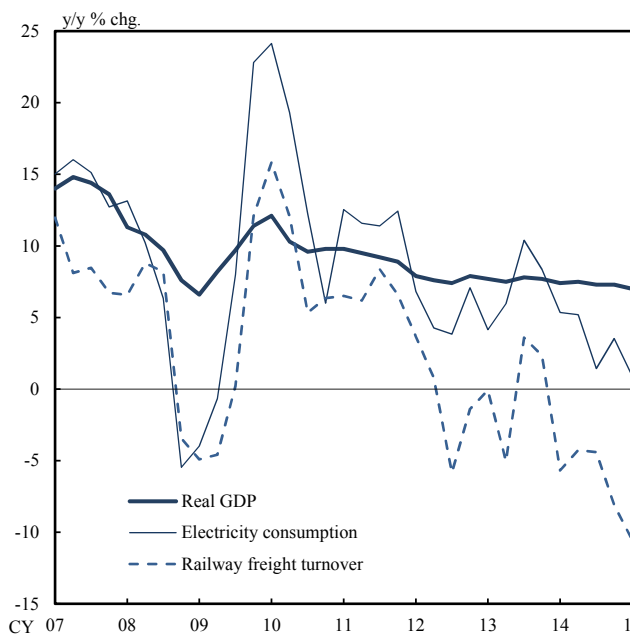


(4) Wages and Service Prices

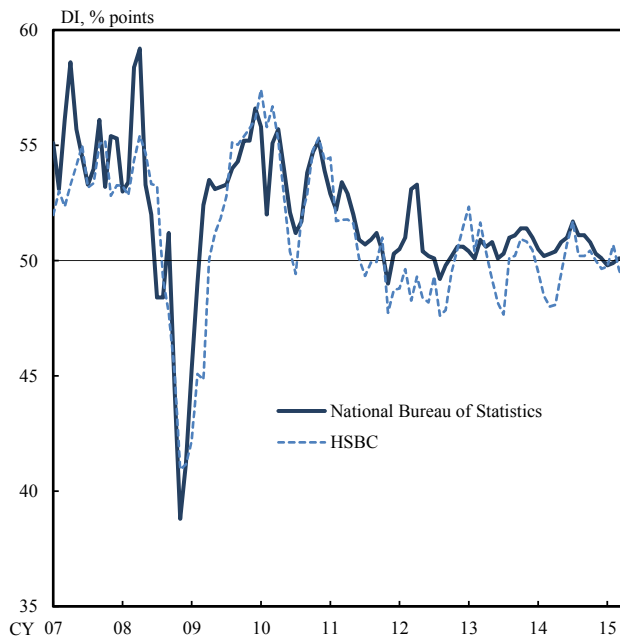


# Chinese Economy

(1) Real GDP, Electricity Consumption, and Railway Freight Turnover



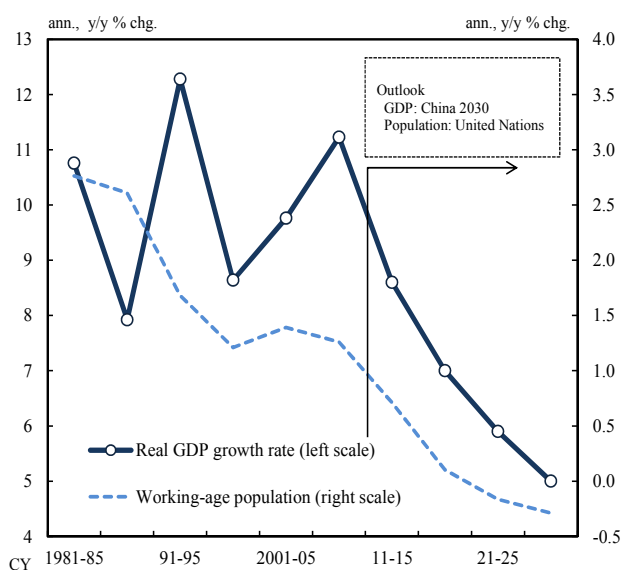
(2) Manufacturing PMI



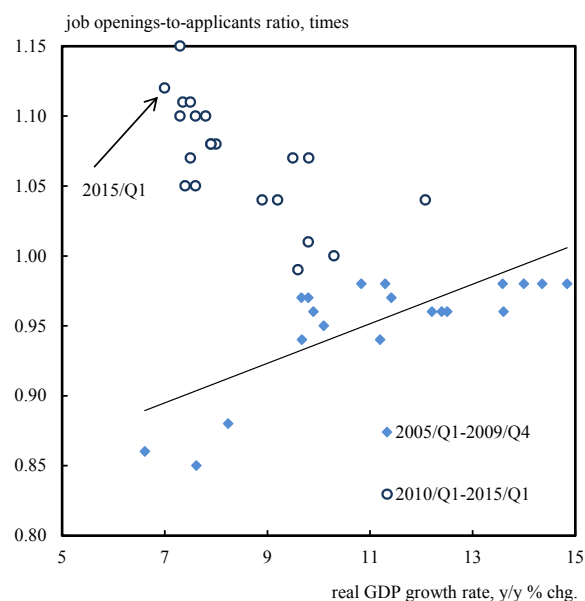
Sources: CEIC Data; Markit (© and database right Markit Economics Ltd 2015. All rights reserved).

# Chinese Economy (Continued)

(3) Long-Term Economic Outlook ("China 2030")



(4) GDP and Employment



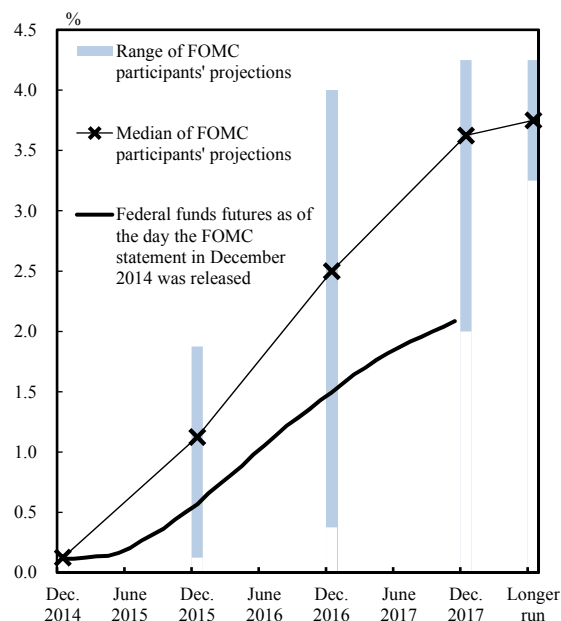
Notes: 1. "China 2030" refers to "China 2030: Building a Modern, Harmonious, and Creative High-Income Society," released by the World Bank and the Development Research Center of the State Council of the People's Republic of China in 2012.

2. Solid line is the regression line of 2005/Q1-2009/Q4 data.

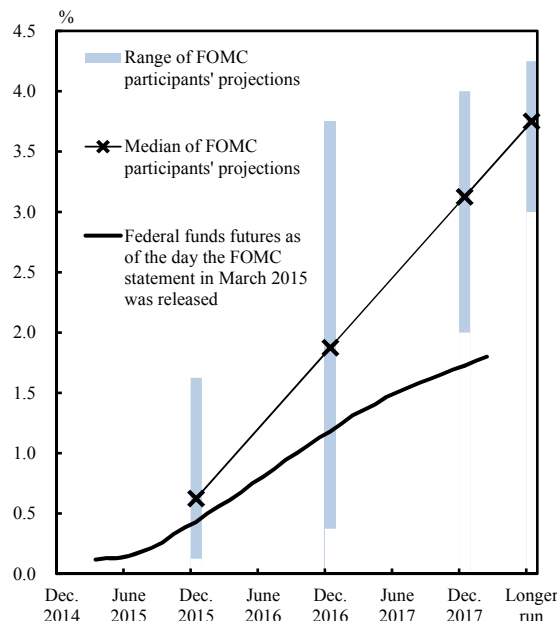
Sources: World Bank; Development Research Center of the State Council, People's Republic of China; United Nations; CEIC Data.

# FOMC Participants' Projections of the Target Federal Funds Rate and Federal Funds Futures

(December 2014)



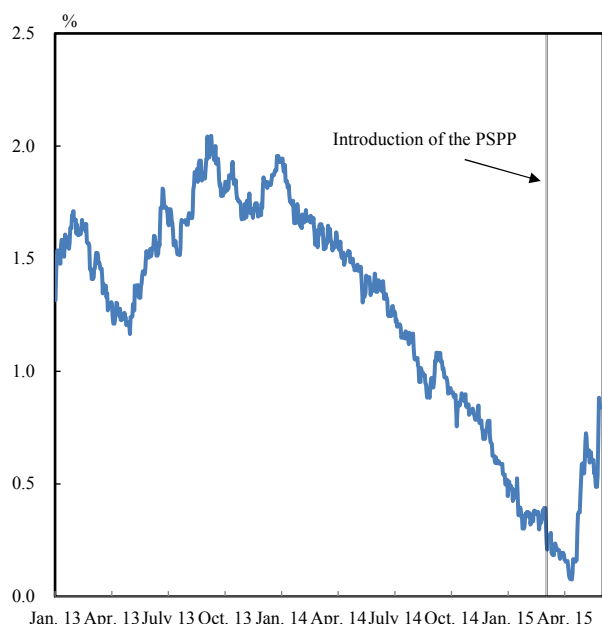
(March 2015)



Sources: Federal Reserve Board; Bloomberg.

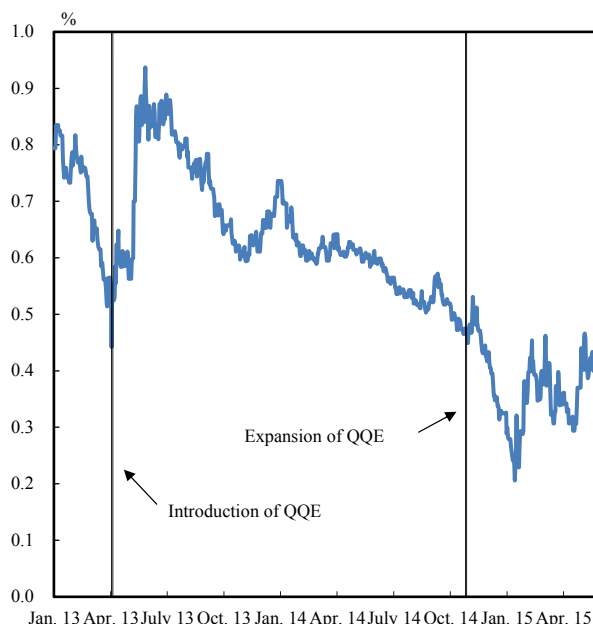
# Long-Term Interest Rates of Germany and Japan

(1) 10-Year German Bund Yields

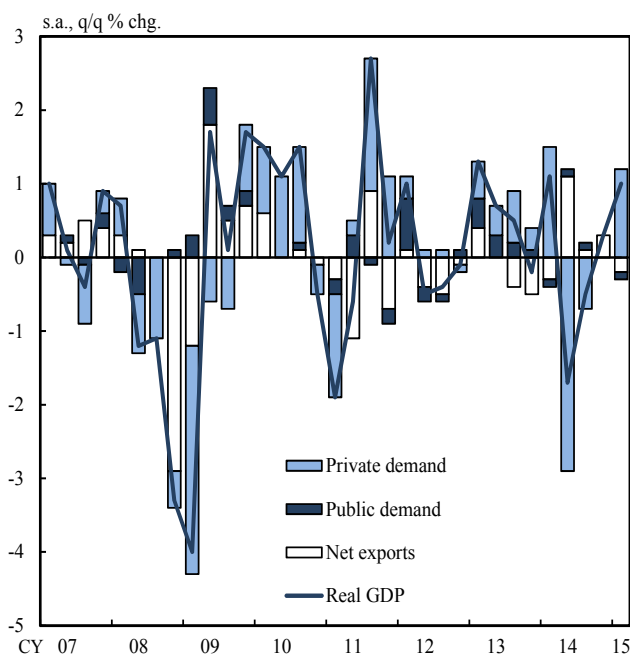


Source: Bloomberg.

(2) 10-Year JGB Yields



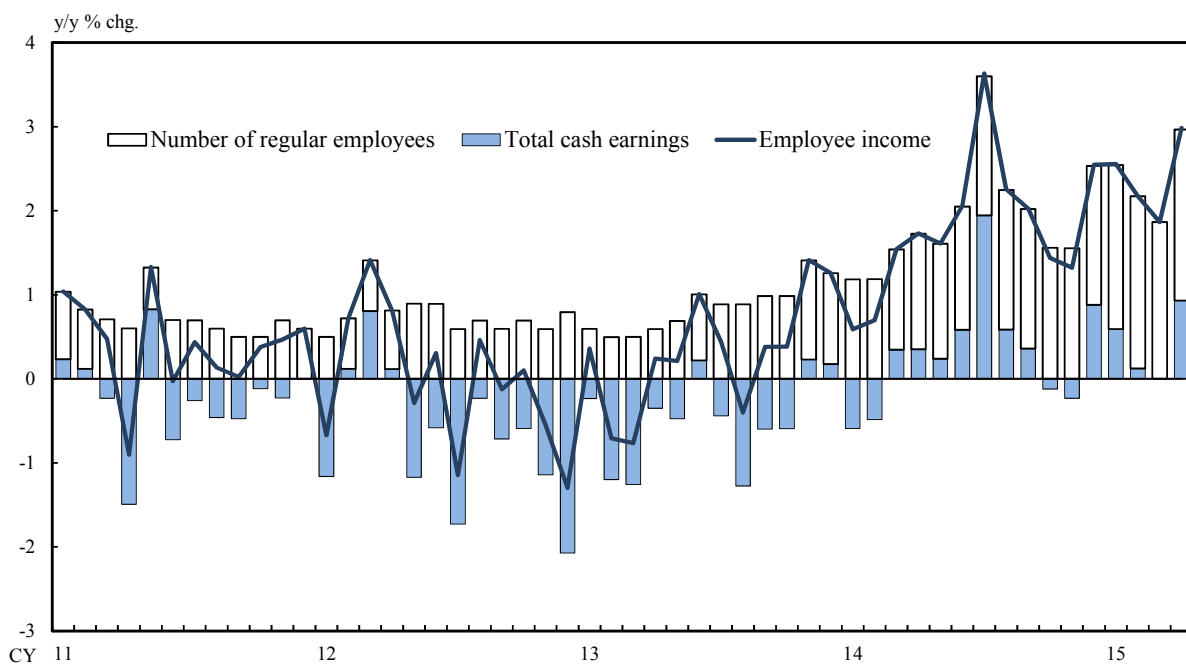
# Japan's Economy: Real GDP



Source: Cabinet Office.

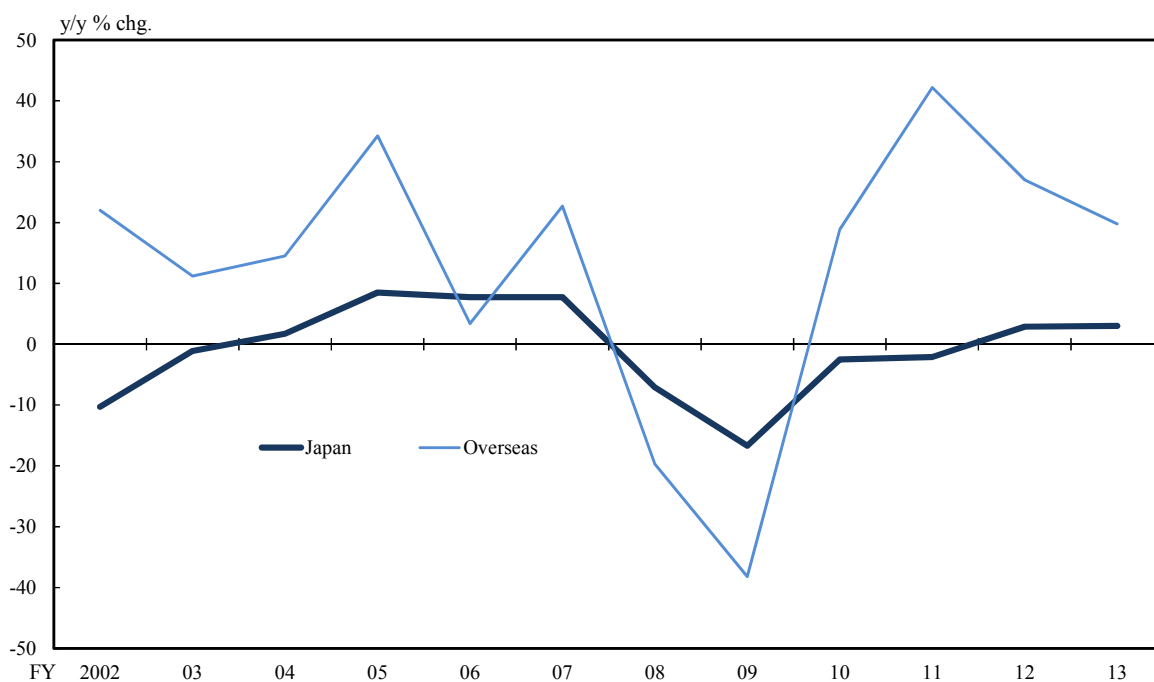
		s.a., q/q % chg.			
		2014			2015
		Q2	Q3	Q4	Q1
Real GDP	a	-1.7	-0.5	0.3	1.0
Inventories	b	1.3	-0.7	-0.2	0.6
Imports	c	1.1	-0.2	-0.3	-0.6
Final demand	d = a - b - c	-4.1	0.4	0.8	1.0
Real GDP	f	-1.7	-0.5	0.3	1.0
Income from /to the rest of the world	g	0.2	0.4	1.1	-0.8
Trading gains/losses	h	0.3	-0.2	0.1	1.1
Real GNI	i = f + g + h	-1.3	-0.3	1.5	1.3

# Employee Income



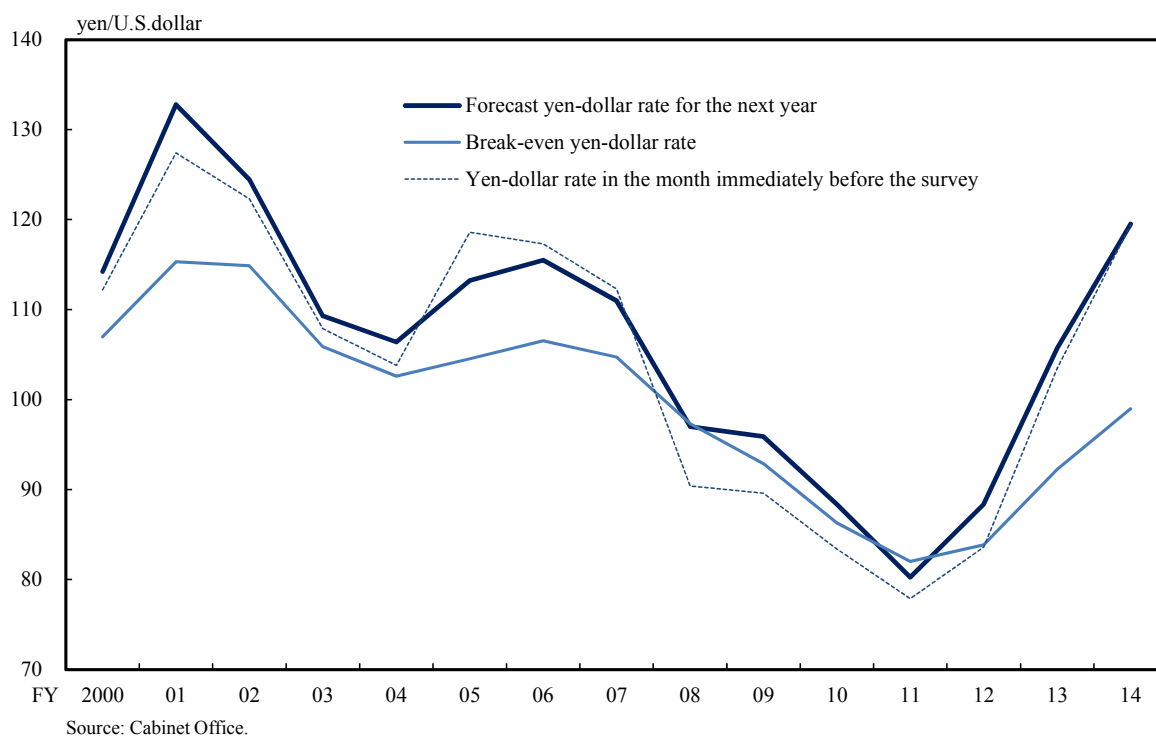
Note: Employee income is calculated as the "number of regular employees" times "total cash earnings." Figures are those for establishments with at least five employees.  
 Source: Ministry of Health, Labour and Welfare.

# Fixed Investment in Japan and Overseas



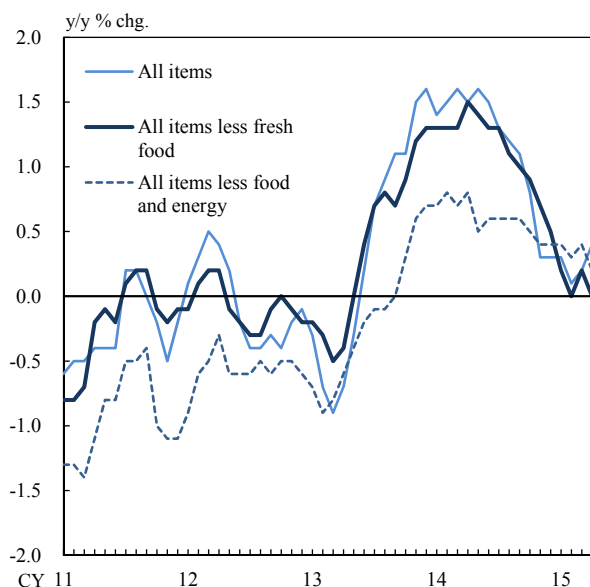
Source: Development Bank of Japan.

## Trend of the Forecast Yen-U.S. Dollar Rate and the Break-Even Yen-U.S. Dollar Rate

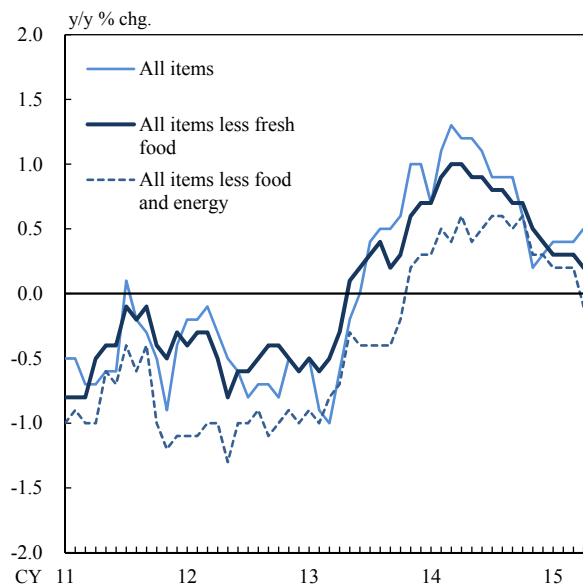


## Consumer Prices

(1) Japan



(2) Tokyo (23 Wards)

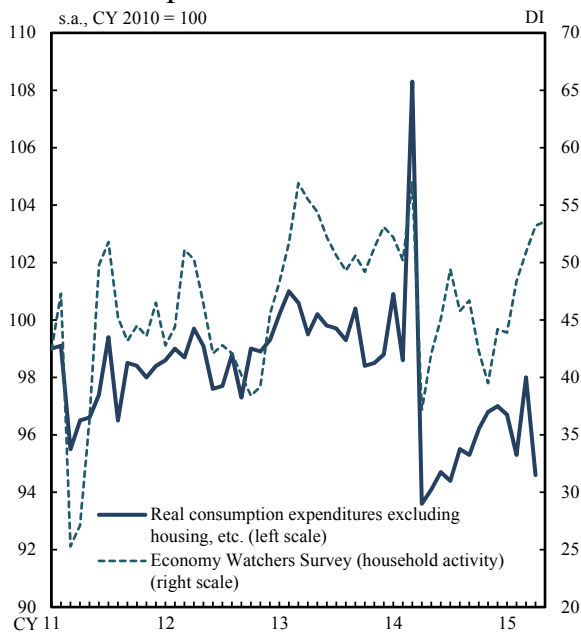


Note: Figures for April 2014 and onward are estimated after adjusting for the direct effects of the consumption tax hike.  
 Source: Ministry of Internal Affairs and Communications.



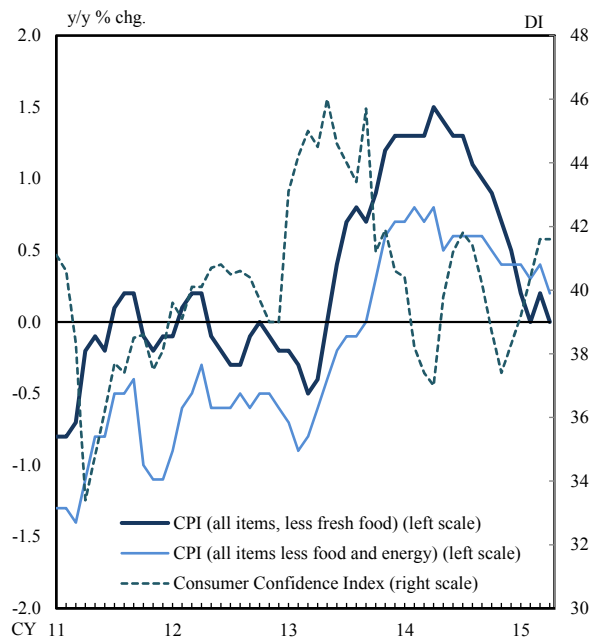
# Consumer Confidence in Relation to Private Consumption and Prices

(1) Consumer Confidence and Private Consumption



Sources: Ministry of Internal Affairs and Communications; Cabinet Office.

(2) Consumer Confidence and Prices

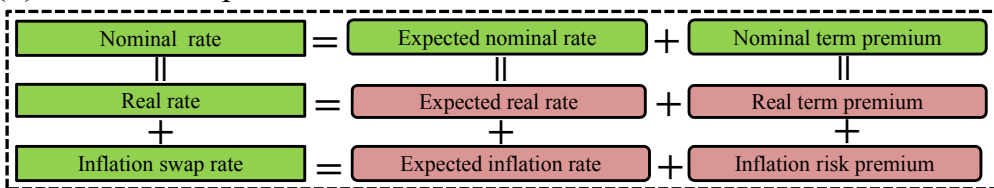


Note: Figures for April 2014 and onward are estimated after adjusting for the direct effects of the consumption tax hike.

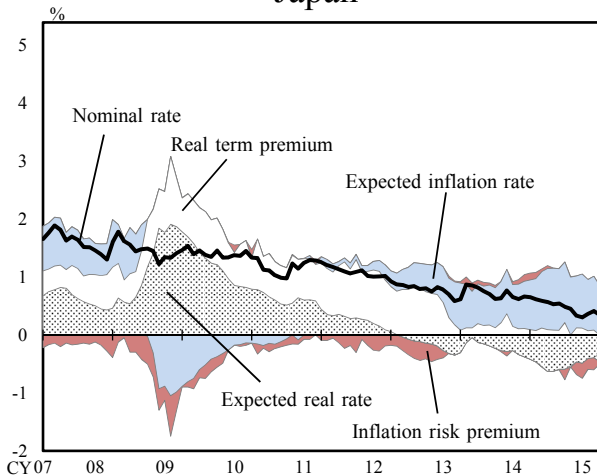
Sources: Ministry of Internal Affairs and Communications; Cabinet Office.

# Estimates for Inflation Expectations

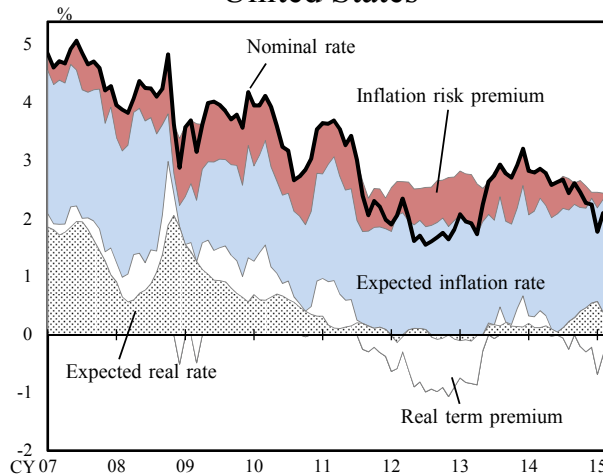
(1) Inflation Expectations Derived from the Nominal Rate



Japan



United States

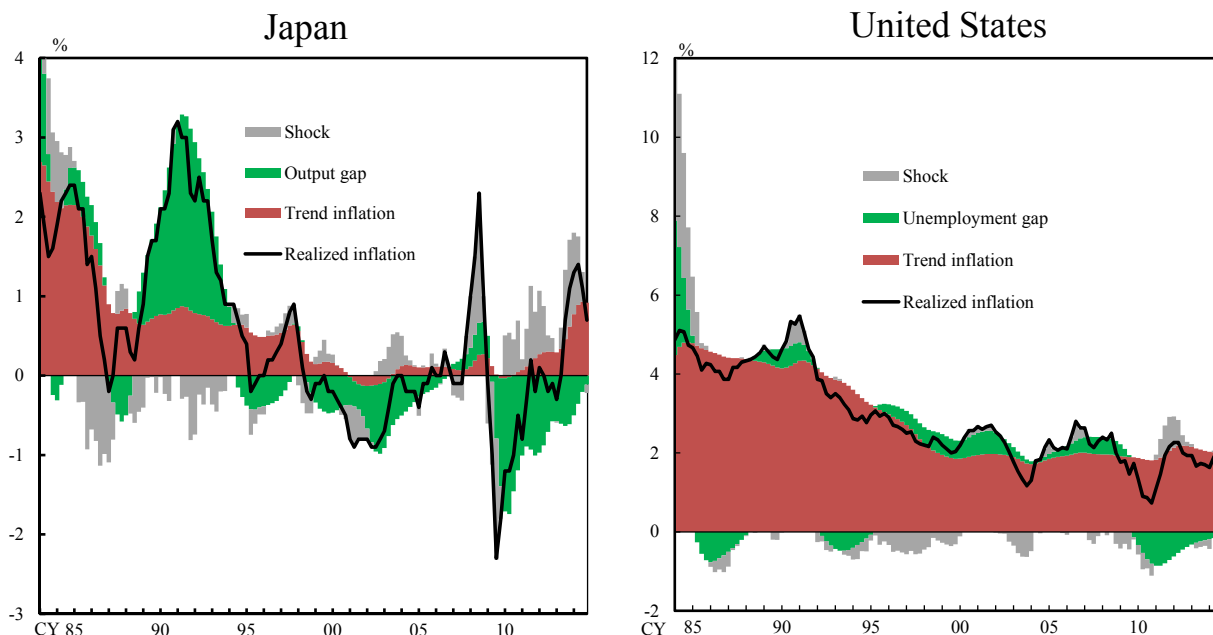


Note: For details, see Kei Imakubo and Jouchi Nakajima, "Estimating Inflation Risk Premia from Nominal and Real Yield Curves Using a Shadow-Rate Model," *Bank of Japan Working Paper Series No. 15-E-1*, April 2015.

Source: Bank of Japan.

# Estimates for Inflation Expectations (Continued)

## (2) Trend Inflation Estimated Using a Regime-Switching Model

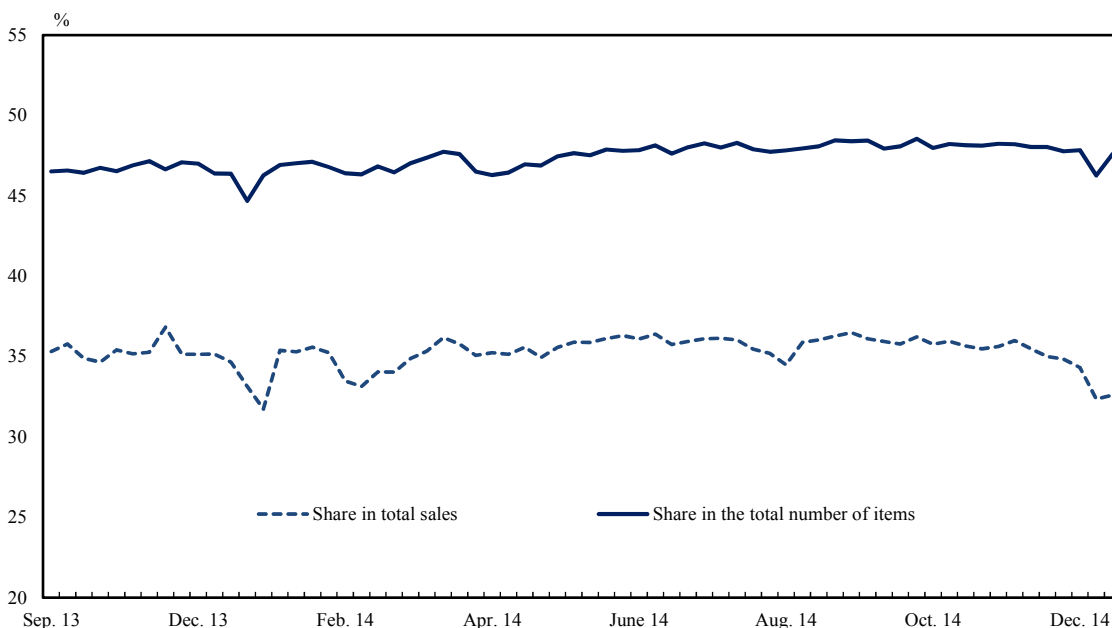


Note: For details, see Sohei Kaihatsu and Jouchi Nakajima, "Has Trend Inflation Shifted? An Empirical Analysis with a Regime-Switching Model," *Bank of Japan Working Paper Series No. 15-E-3*, May 2015.

Source: Bank of Japan.

# SRI-Hitotsubashi Unit Value Price Index

## (1) Share of New Goods in Total Sales and in the Total Number of Items

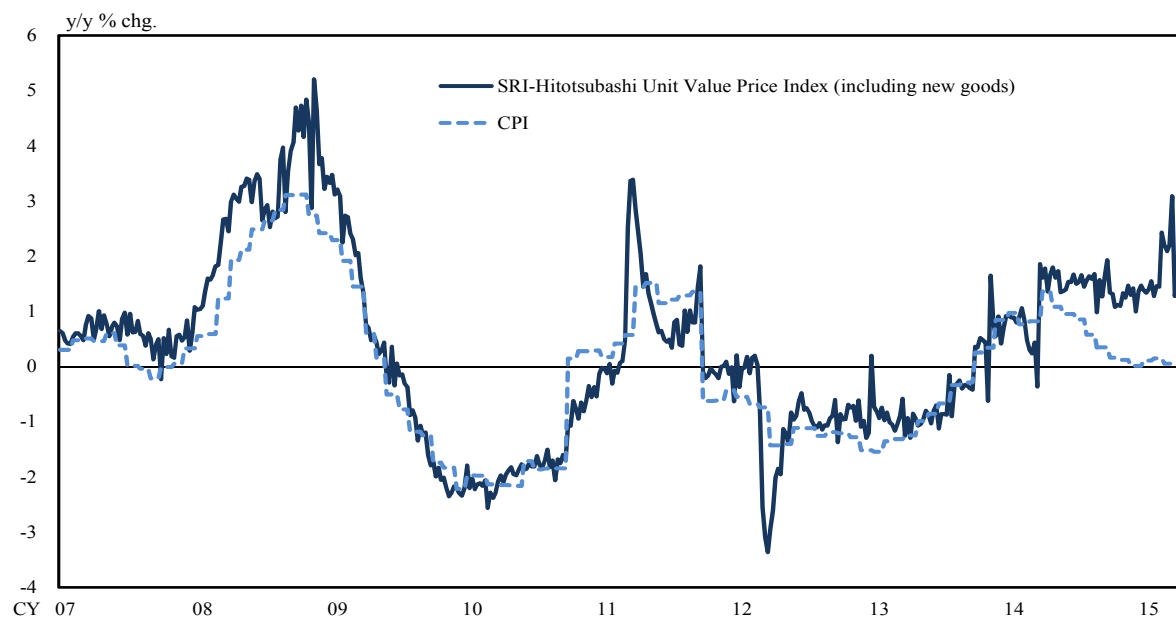


Note: For details, see Naohito Abe, "Saikin no Kakaku Shisuu no Doukou to Shin Shohin no Eikyo ni tsuite (Recent Developments in Price Indexes and Effects of New Goods)," Newsletter No. 3, the Research Center for Economic and Social Risks (RCESR), Institute of Economic Research, Hitotsubashi University, March 2015 (available in Japanese), and Naohito Abe et al., "Effects of New Goods and Product Turnover on Price Indexes," *RCESR Discussion Paper Series No. DP15-2*, March 2015.

Sources: Hitotsubashi University; New Supermarket Association of Japan; Intage Inc.

## SRI-Hitotsubashi Unit Value Price Index (Continued)

### (2) Comparison of the Unit Value Price Index Including New Goods and the CPI



Note: Figures are those for supermarkets. The CPI is calculated based on the same items covered by the SRI-Hitotsubashi Unit Value Price Index. For details, see Naohito Abe, "Saikin no Kakaku Shisuu no Doukou to Shin Shohin no Eikyo ni tsuite (Recent Developments in Price Indexes and Effects of New Goods)," Newsletter No. 3, the Research Center for Economic and Social Risks (RCESR), Institute of Economic Research, Hitotsubashi University, March 2015 (available in Japanese), and Naohito Abe et al., "Effects of New Goods and Product Turnover on Price Indexes," *RCESR Discussion Paper Series* No. DP15-2, March 2015.

Sources: Hitotsubashi University; New Supermarket Association of Japan; Intage Inc.

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## "Outlook for Economic Activity and Prices" (April 2015)

### Forecasts of the Majority of Policy Board Members

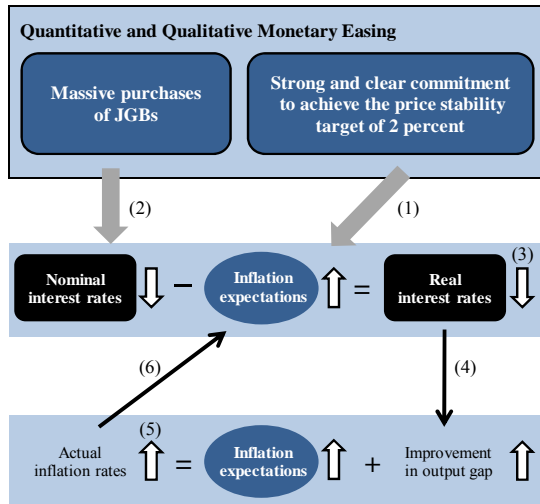
	y/y % chg.		
	Real GDP	CPI (all items less fresh food)	Excluding the effects of the consumption tax hikes
Fiscal 2014	-1.0 to -0.8 [-0.9]	+2.8	+0.8
Forecasts made in January 2015	-0.6 to -0.4 [-0.5]	+2.9 to +3.2 [+2.9]	+0.9 to +1.2 [+0.9]
Fiscal 2015	+1.5 to +2.1 [+2.0]	+0.2 to +1.2 [+0.8]	
Forecasts 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]

Note: Figures in brackets indicate the median of the Policy Board members' forecasts (point estimates).  
Source: Bank of Japan.

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# Effects of QQE

## (1) Mechanism of QQE



## (3) Downward Pressure on Long-Term Yields

Changes from the end of Mar. 2013 to the end of Dec. 2014

Increase in the amount outstanding of the Bank's JGB holdings	Increase in the share of the Bank's JGB holdings	Downward pressure on long-term yields
+110 tril. yen	+19.3 % points	-0.8 % points

Source: Bank of Japan.

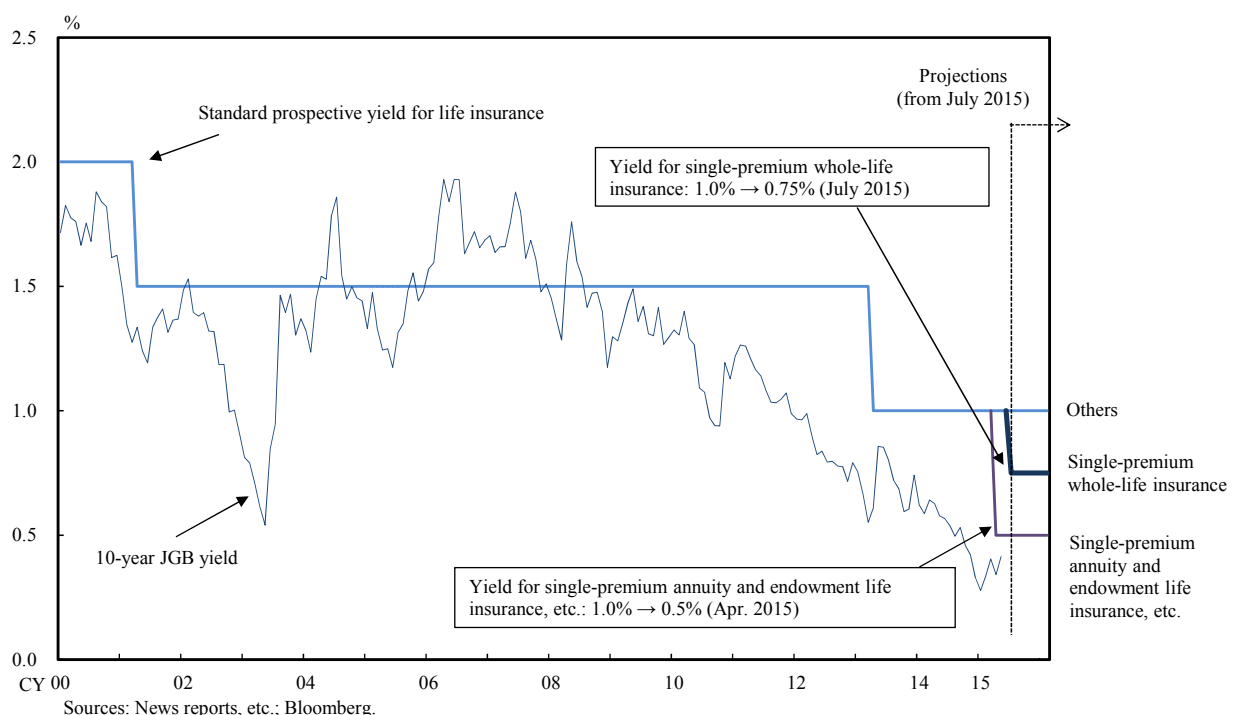
## (2) Nominal Interest Rates and Inflation Expectations

I. 2013/Q1	II. 2014/Q4	Difference: II - I
0.7	0.4	- 0.3

	2013/Q1 I.	2014/Q4 II.	Difference II - I
ESP Forecast			
1 year ahead	0.2	1.1	+ 1.0
2 to 6 years ahead	0.7	1.4	+ 0.7
7 to 11 years ahead	1.0	1.5	+ 0.5
QUICK Survey			
Over the next year	0.1	1.9	+ 1.7
Over the next 2 years	0.6	1.7	+ 1.1
Over the next 10 years	1.1	1.5	+ 0.4
BEI for inflation-indexed JGBs (10 years)	-	1.1	-
Inflation swap rate (10 years)	0.8	1.1	+ 0.2
"Tankan" (outlook for general prices)			
1 year ahead	-	1.4	-
3 years ahead	-	1.6	-
5 years ahead	-	1.7	-
Consumer Confidence Survey (1 year from now)			
	1.9	3.0	+ 1.2
Opinion Survey on the General Public's Views and Behavior			
From the previous year	0.2	5.0	+ 4.8
Over the next year	3.0	3.0	+ 0.0
Over the next 5 years	2.0	2.0	+ 0.0

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# Standard Prospective Yield for Life Insurance

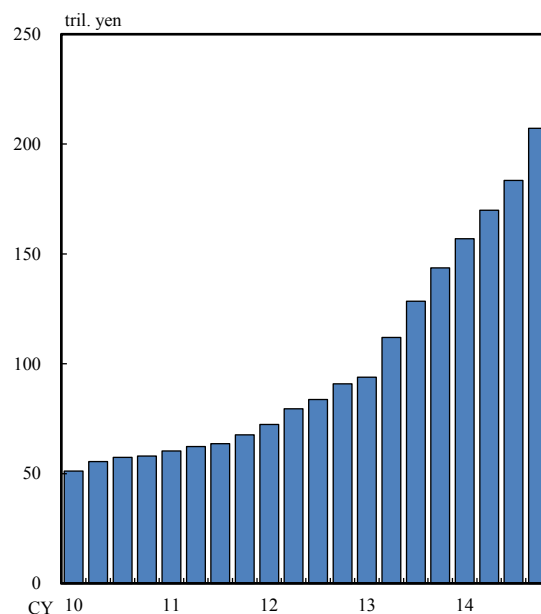
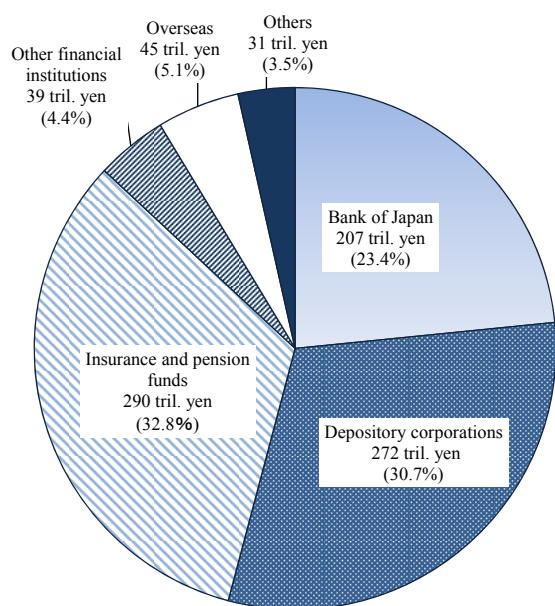


Sources: News reports, etc.; Bloomberg.

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# Amount Outstanding of JGBs by Type of Holder

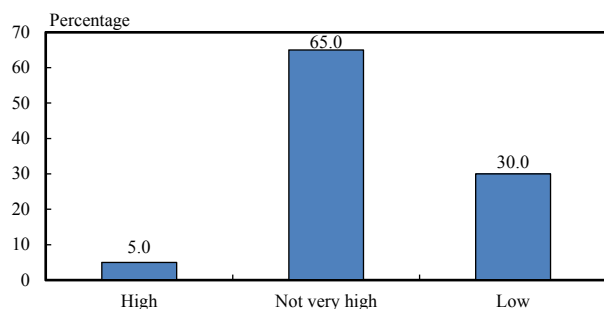
(1) Breakdown by Type of JGB Holder (end of December 2014)      (2) JGBs Held by the Bank of Japan



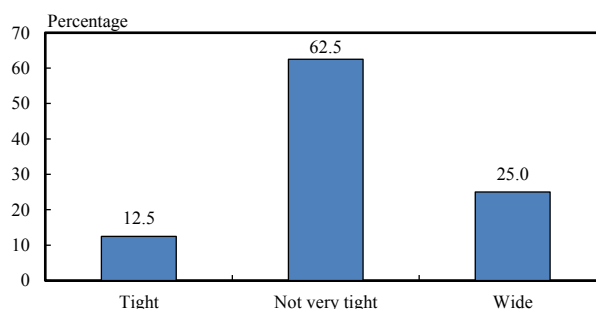
Note: Figures are compiled based on the flow of funds (excluding T-bills, evaluated at market prices).  
Source: Bank of Japan.

# Results of the Bond Market Survey (February 2015)

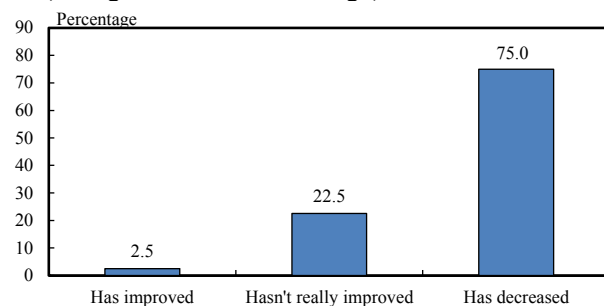
(1) Degree of Bond Market Functioning  
(Current situation)



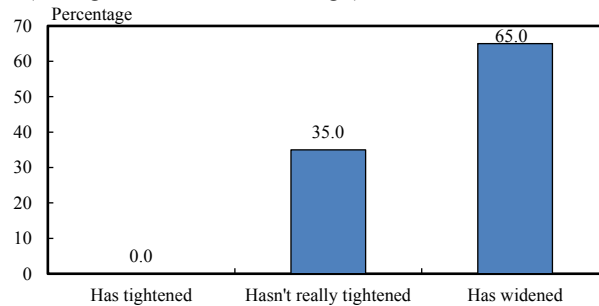
(2) Bid-Ask Spread  
(Current situation)



(Change from three months ago)



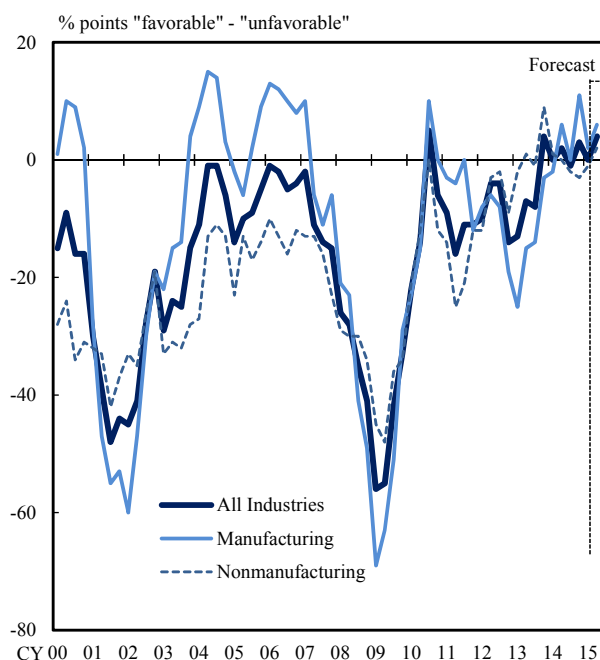
(Change from three months ago)



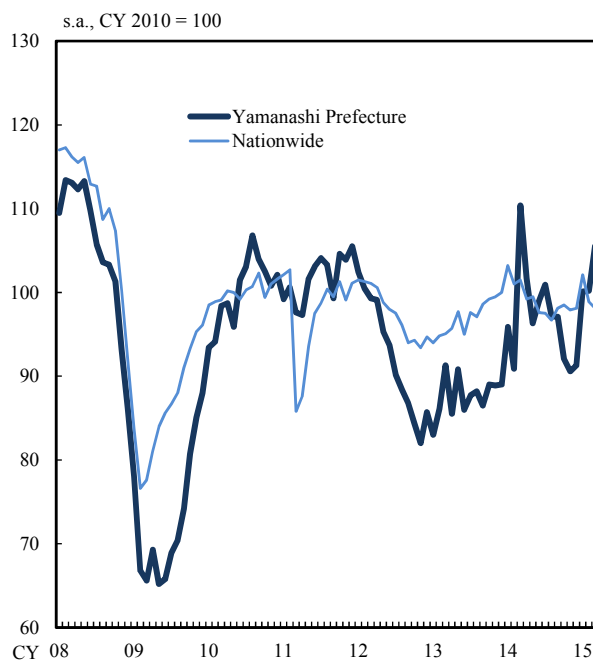
Source: Bank of Japan.

## Economic Activity in Yamanashi Prefecture

(1) Business Conditions DI (*Tankan*)



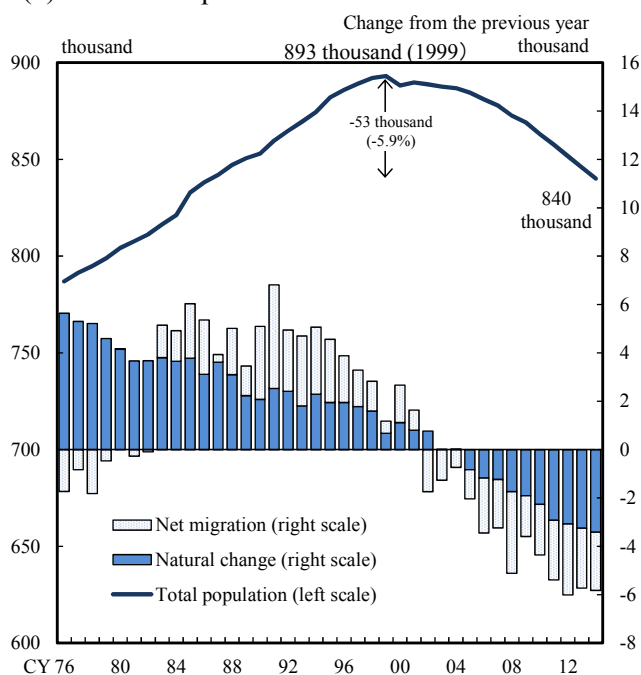
(2) Production



Sources: Bank of Japan; Ministry of Economy, Trade and Industry; Yamanashi Prefecture.

## Economic Activity in Yamanashi Prefecture (Continued)

(3) Trend in Population



Sources: Ministry of Internal Affairs and Communications; Yamanashi Prefecture; Japan Tourism Agency.

(4) Number of Foreign Guests Accommodated  
(Preliminary Estimate for 2014)

Ranking	Prefecture	Number of Foreign Guests Accommodated (thousand)	YoY (%)	Ranking
1	Tokyo	13,453	36.8	13
2	Osaka	5,838	35.3	14
3	Hokkaido	4,035	31.4	16
4	Kyoto	3,409	29.8	17
5	Chiba	2,750	34.2	15
6	Okinawa	2,313	55.5	5
7	Aichi	1,487	29.6	18
8	Fukuoka	1,327	47.5	9
9	Kanagawa	1,321	23.8	24
10	Yamanashi	942	91.3	1