#### <u>Charts</u>

#### Speech at a Meeting with Business Leaders in Hakodate

- Chart 1: Outlook for the Global Economy
- Chart 2: Economic Developments in the United States and the Euro Area
- Chart 3: Economic Developments in China
- Chart 4: Exchange Rates and Stock Prices in Emerging Economies
- Chart 5: Inflation Rates in Major Economies
- Chart 6: Medium- to Long-Term Inflation Expectations in Major Economies
- Chart 7: "Outlook for Economic Activity and Prices" (as of October 2013)
- Chart 8: Phillips Curve
- Chart 9: Short-Term and Medium- to Long-Term Inflation Expectations
- Chart 10: Inflation Expectations by Economic Entity
- Chart 11: Wages
- Chart 12: Personnel Expenses by Industry and Firm Size
- Chart 13: Wage Phillips Curves for Japan and the United States
- Chart 14: Labor Share and Share of Operating Surplus
- Chart 15: Quantitative and Qualitative Monetary Easing (QQE)
- Chart 16: Forward Guidance Practices among Major Economies
- Chart 17: Expansion in the Monetary Base and JGB Purchases

Notes: Charts are based on data released on or prior to November 29, 2013.

## Outlook for the Global Economy

#### (1) IMF Projections (as of October 2013)

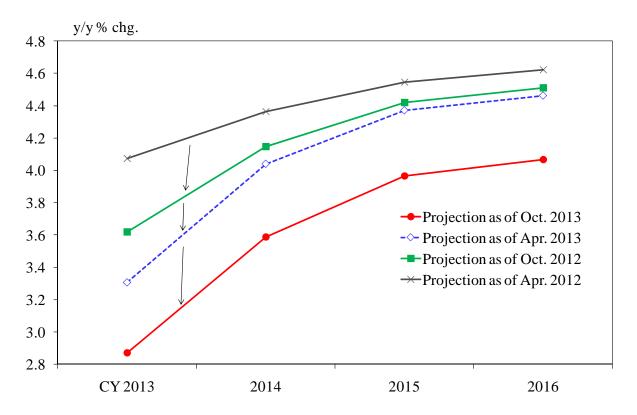
real GDP growh rate, y/y % chg.

	Total ODI grown rate, y/y /o on					
CY		2011	2012	2013	2014	
				projection	projection	
World		3.9	3.2	2.9	3.6	
****	Id	3.9	3.4	(-0.3)	(-0.2)	
	dvanced economies	1.7	1.5	1.2	2.0	
	Advanced economies			(0.0)	(0.0)	
	United States	1.8	2.8	1.6	2.6	
				(-0.1)	(-0.2)	
	Euro area	1.5	-0.6	-0.4	1.0	
				(0.1)	(0.0)	
	Japan	-0.6	2.0	2.0	1.2	
				(-0.1)	(0.1)	
	Emerging market and developing	6.2	4.9	4.5	5.1	
e	conomies			(-0.5)	(-0.4)	
	Developing Asia	7.8	6.4	6.3	6.5	
				(-0.6)	(-0.5)	
	China	9.3	7.7	7.6	7.3	
	Cinnu	7.3		(-0.2)	(-0.4)	
	Brazil	2.7	0.9	2.5	2.5	
	DIULII			(0.0)	(-0.7)	

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 July 2013 World Economic Outlook projections.

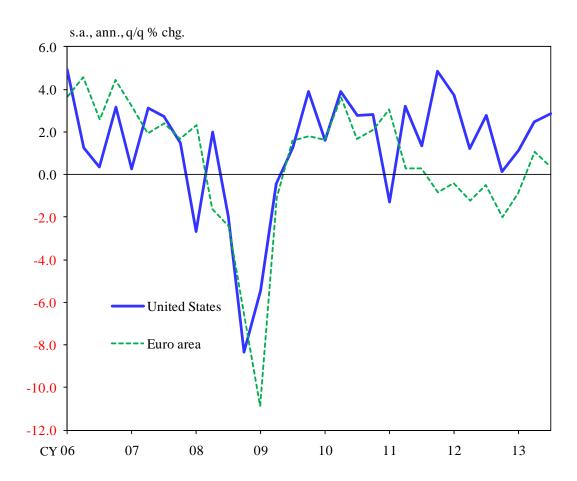
#### (2) Transition in IMF Projections



Source: International Monetary Fund.

# Economic Developments in the United States and the Euro Area

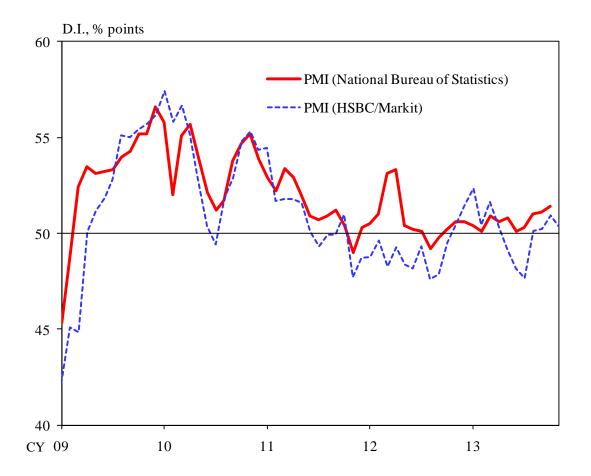
Real GDP Growth Rates in the United States and the Euro Area



Sources: U.S. Bureau of Economic Analysis; Thomson Reuters.

## Economic Developments in China

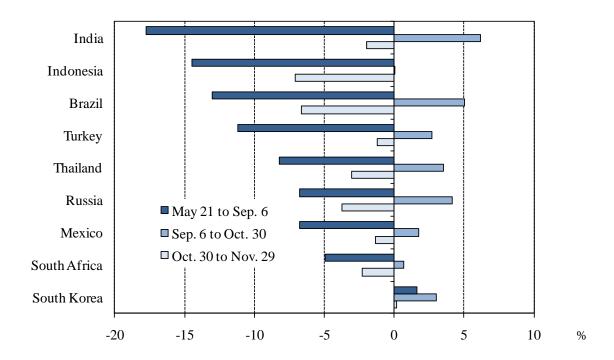
## Manufacturing PMI in China



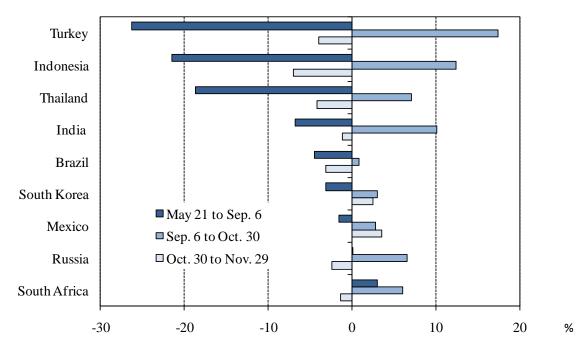
Sources: CEIC Data; Markit (© and database right Markit Economics Ltd 2013. All rights reserved).

## Exchange Rates and Stock Prices in Emerging Economies

### (1) Rate of Change in Selected Currencies against the U.S. Dollar



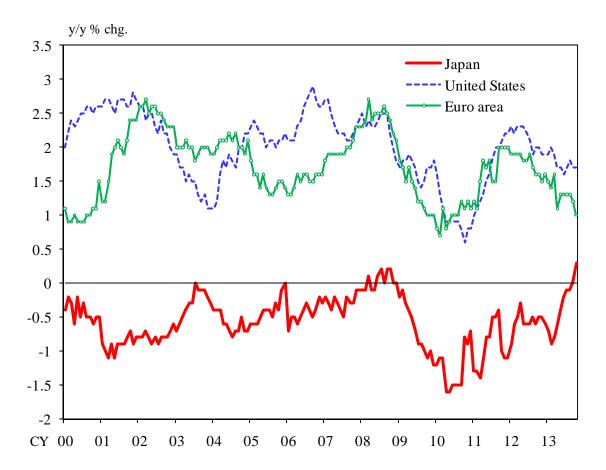
## (2) Rate of Change in Selected Stock Prices



Source: Bloomberg.

## Inflation Rates in Major Economies

#### Core CPI Inflation Rates in Japan, the United States, and the Euro Area

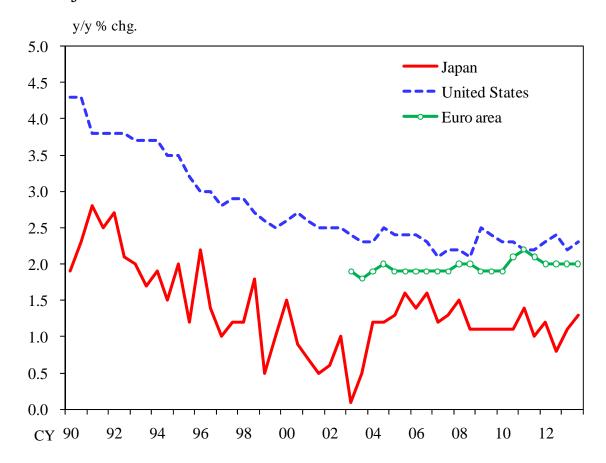


Note: The core CPI in the United States includes all items excluding food and energy. The core CPI in the euro area includes all items excluding energy and unprocessed food. The core CPI in Japan includes all items less food (less alcoholic beverages) and energy.

Sources: Ministry of Internal Affairs and Communications; Eurostat; Bloomberg.

# Medium- to Long-Term Inflation Expectations in Major Economies

CPI Projections for 6-10 Years Ahead < Consensus Forecasts >



Note: Survey is conducted every April and October.

Source: Consensus Economics Inc.

## "Outlook for Economic Activity and Prices" (as of October 2013)

### Forecasts of the Majority of Policy Board Members

y/y % chg.

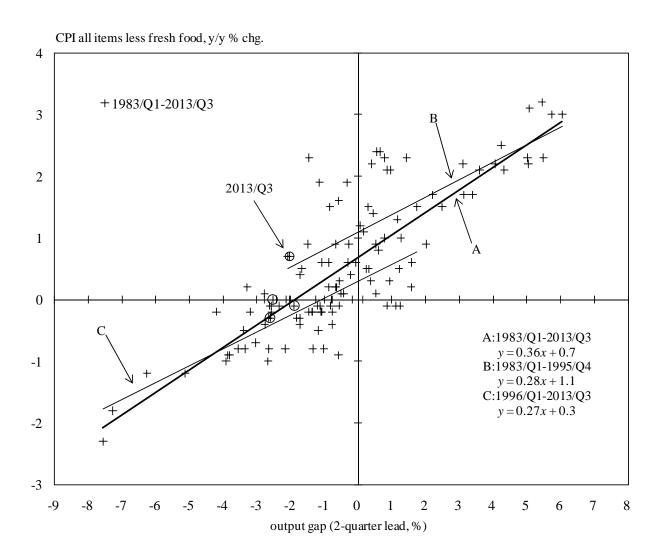
		Real GDP	CPI (all items less fresh food)	Excluding the effects of the consumption tax hikes
	Fiscal 2013	+2.6 to +3.0	+0.6 to +1.0	
		[+2.7]	[+0.7]	
	Forecasts made in July 2013	+2.5 to +3.0	+0.5 to +0.8	
		[+2.8]	[+0.6]	
	Fiscal 2014	+0.9 to +1.5	+2.8 to +3.6	+0.8 to +1.6
		[+1.5]	[+3.3]	[+1.3]
	Forecasts made in July 2013	+0.8 to +1.5	+2.7 to +3.6	+0.7 to +1.6
		[+1.3]	[+3.3]	[+1.3]
	Figure 2015	+1.3 to +1.8	+1.6 to +2.9	+0.9 to +2.2
	Fiscal 2015	[+1.5]	[+2.6]	[+1.9]
	Forecasts made in July 2013	+1.3 to +1.9	+1.6 to +2.9	+0.9 to +2.2
		[+1.5]	[+2.6]	[+1.9]

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

Source: Bank of Japan.

## Phillips Curve

### Phillips Curve (CPI All Items Less Fresh Food)

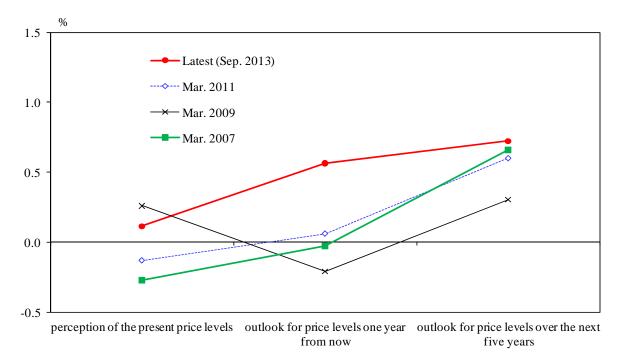


Notes: 1. The circled marks are the latest four positions.

2. Figures for the CPI are adjusted to exclude the effect of changes in the consumption tax rate. Sources: Ministry of Internal Affairs and Communications; Cabinet Office, etc.

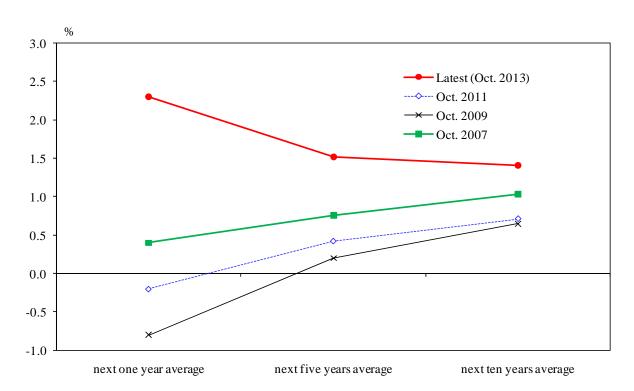
# Short-Term and Medium- to Long-Term Inflation Expectations

## (1) Households <Opinion Survey on the General Public's Views and Behavior>



Note: Figures from the June 2013 survey exclude the effects of the scheduled consumption tax hikes.

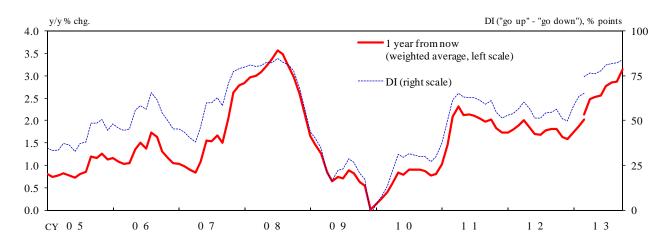
#### (2) Economists < Consensus Forecasts>



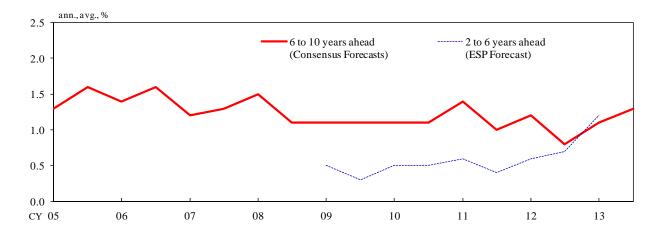
Sources: Bank of Japan; Consensus Economics Inc.

## Inflation Expectations by Economic Entity

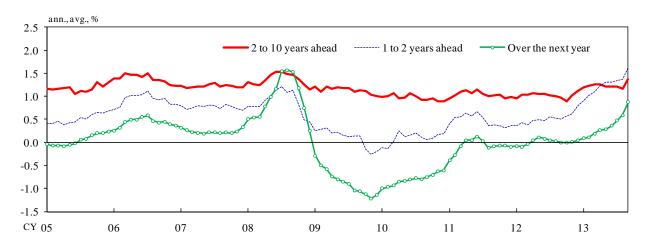
#### (1) Households < Consumer Confidence Survey>



## (2) Economists<sup>1</sup>



## (3) Market Participants < Quick Bond Monthly Survey><sup>2</sup>



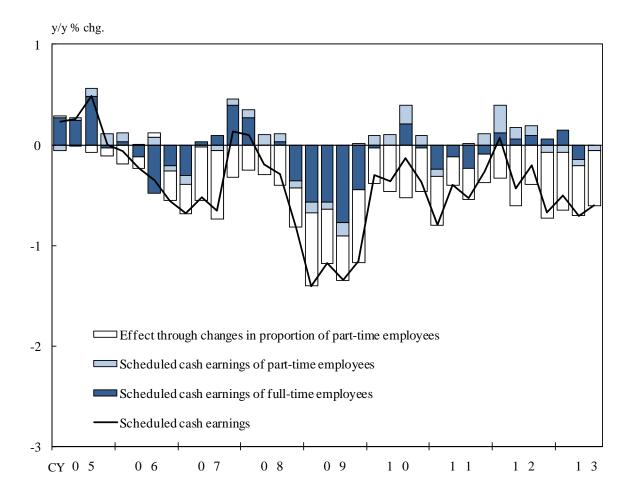
Notes: 1. Figures for the ESP Forecast exclude the effects of the scheduled consumption tax hikes.

2. From the September 2013 survey, the Quick Bond Monthly Survey has asked respondents to include the effects of the scheduled consumption tax hikes.

Sources: Cabinet Office; Consensus Economics Inc.; Japan Center for Economic Research; QUICK.

### Wages

#### Breakdown of Scheduled Cash Earnings



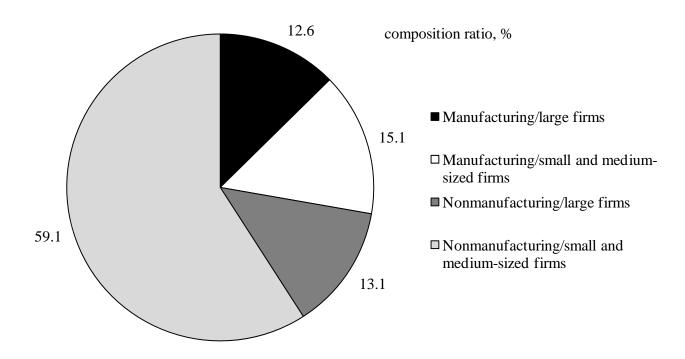
Notes: 1. Data are for establishments with at least five employees.

- 2. Figures for 2013/Q3 are those of September. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.
- 3. Contributions from scheduled cash earnings of full-time employees and those of part-time employees are calculated as "scheduled cash earnings of each type of employee (y/y chg.)" times "proportion of the corresponding type's scheduled cash earnings to the previous year's total." Contributions from the effect created through changes in the proportion of part-time employees are the residuals.

Sources: Ministry of Health, Labour and Welfare.

## Personnel Expenses by Industry and Firm Size

#### Composition Ratio of Personnel Expenses by Industry and Firm Size



Notes: 1. "Large firms" consists of firms with capital of 1 billion yen or over. "Small and medium-sized firms" consists of firms with capital of less than 1 billion yen.

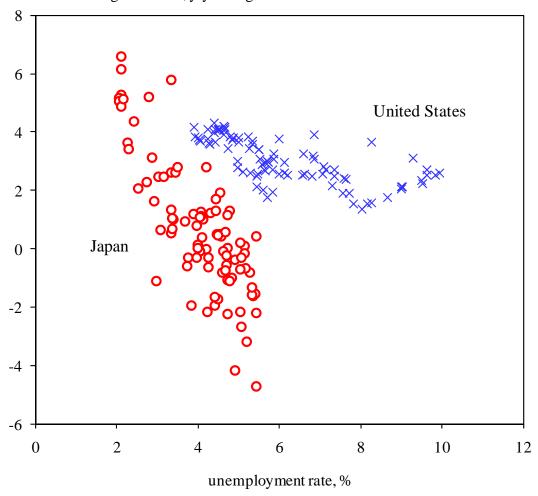
2. "Personnel expenses" includes directors' remuneration, bonus for directors, salaries and wages, bonuses for employees, and welfare expense.

Source: Ministry of Finance.

## Wage Phillips Curves for Japan and the United States

Rates of Wage Inflation and Unemployment for Japan and the United States

rate of wage inflation, y/y % chg.



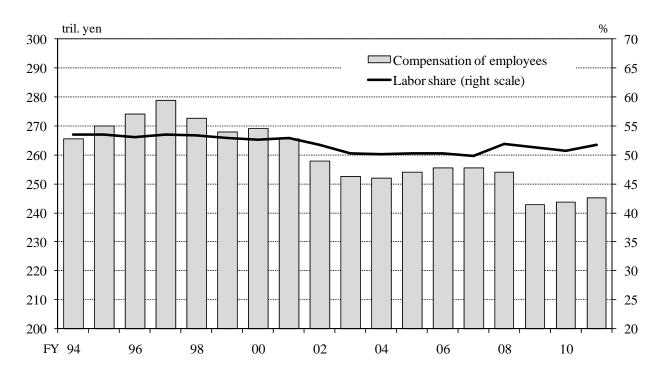
Notes: 1. The period covers 1985/Q1 through 2013/Q3.

2. The wage is the hourly wage for establishments with 30 or more employees.

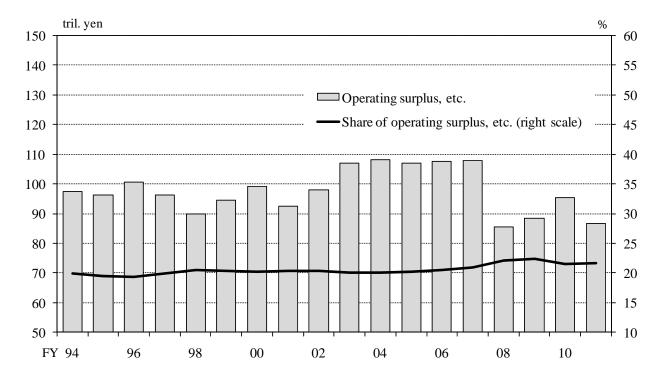
Sources: Ministry of Health, Labour and Welfare; U.S. Bureau of Labor Statistics; Haver Analytics.

## Labor Share and Share of Operating Surplus

#### (1) Compensation of Employees and Labor Share



#### (2) Operating Surplus and Share of Operating Surplus, etc.



Note: "Operating surplus, etc." includes operating surplus and mixed income.

Source: Cabinet Office.

## Quantitative and Qualitative Monetary Easing (QQE)

#### 1. Adoption of the monetary base control

• The monetary base will increase at an annual pace of about 60-70 tril. yen.

#### 2. Increase in JGB purchases and their maturity extension

- With a view to encouraging a further decline interest rates across the yield curve, the Bank will purchase JGBs so that their amount outstanding will increase at an annual pace of <u>about 50 tril. yen</u>.
- JGBs with all maturities will be made eligible for purchase, and <u>the average</u> remaining maturity of the Bank's JGB purchases will be extended from slightly less than three years to <u>about seven years</u> -- equivalent to the average maturity of the amount outstanding of JGBs issued.

#### 3. Increase in ETF and J-REIT purchases

• With a view to lowering risk premia of asset prices, the Bank will purchase ETFs and J-REITs so that their amounts outstanding will increase at an annual pace of 1 tril. yen and 30 bil. yen, respectively.

#### 4. Continuation of the QQE

- The Bank will continue with the QQE, aiming to achieve the price stability target of 2%, as long as it is necessary for maintaining that target in a stable manner.
- The Bank will examine both upside and downside risks to economic activity and prices, and make adjustments as appropriate.

## Forward Guidance Practices among Major Economies

#### (1) Forward Guidance in the United States

The Federal Open Market Committee (FOMC) . . . currently anticipates that this exceptionally low range for the federal funds rate [0 to 0.25 percent] will be appropriate at least as long as

- the unemployment rate remains above 6.5 percent,
- inflation between one and two years ahead is projected to be no more than a half percentage point above the FOMC's 2 percent longer-run goal,
- and longer-term inflation expectations continue to be well anchored.

#### (2) Forward Guidance in the United Kingdom

- The Monetary Policy Committee (MPC) intends not to raise Bank Rate from its current level of 0.5 percent at least until . . . <u>the unemployment rate has fallen to a threshold of 7 percent</u>, subject to the conditions below.
  - ✓ in the MPC's view, it is more likely than not, that CPI inflation 18 to 24 months ahead will be 0.5 percentage points or more above the 2 percent target,
  - ✓ medium-term inflation expectations no longer remain sufficiently well anchored, and
  - ✓ the Financial Policy Committee (FPC) judges that the stance of monetary policy poses a significant threat to financial stability that cannot be contained by the substantial range of mitigating policy actions available to the FPC.

If any of these knockouts were breached, the above-mentioned guidance would cease to hold.

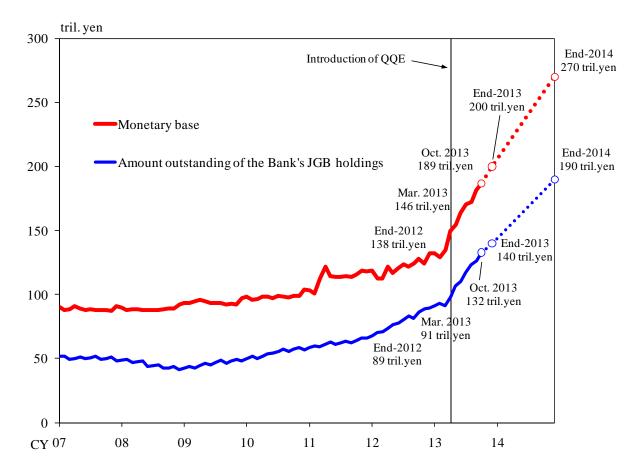
#### (3) Forward Guidance in the Euro Area

The Governing Council expects the key ECB interest rates to remain at present or lower levels for an extended period of time. This expectation is based on the overall subdued outlook for inflation extending into the medium term, given the broad-based weakness in the real economy and subdued monetary dynamics.

Sources: Federal Reserve; Bank of England; European Central Bank.

## Expansion in the Monetary Base and JGB Purchases

### Monetary Base Target and Increase in JGB Purchases



Source: Bank of Japan.