

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

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

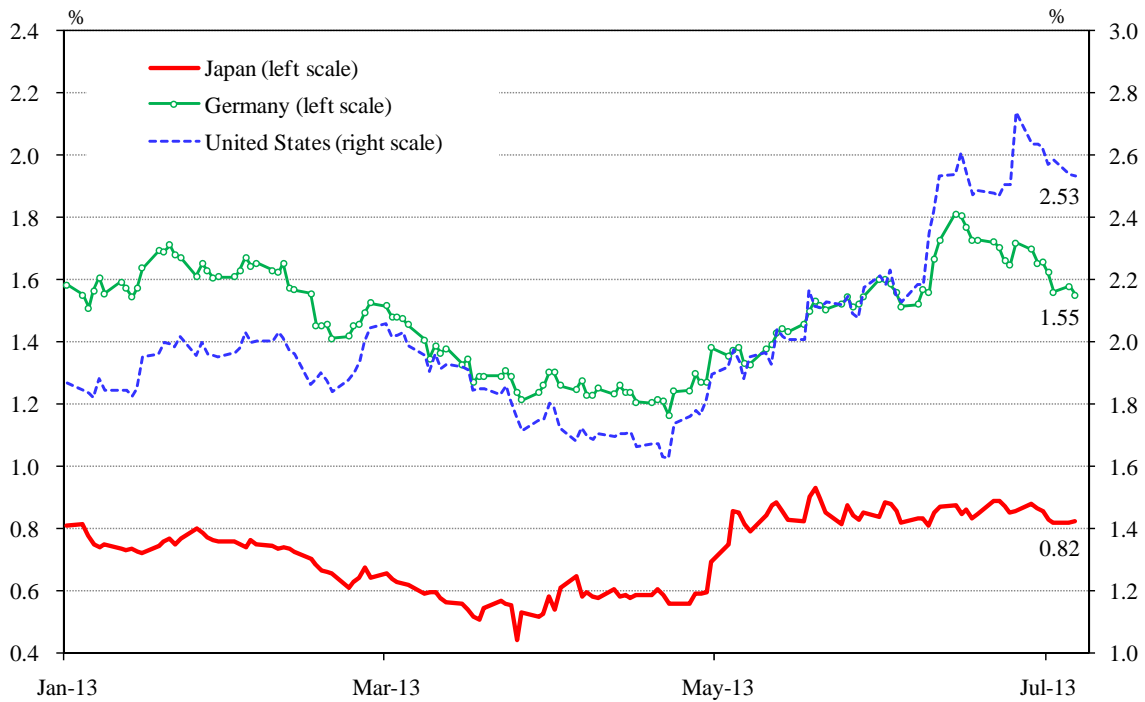
- With a view to lowering risk premia of asset prices, the Bank will purchase ETFs and J-REITs so that their amounts outstanding will increase at an annual pace of 1 tril. yen and 30 bil. yen, respectively.

### 4. Continuation of the QQE

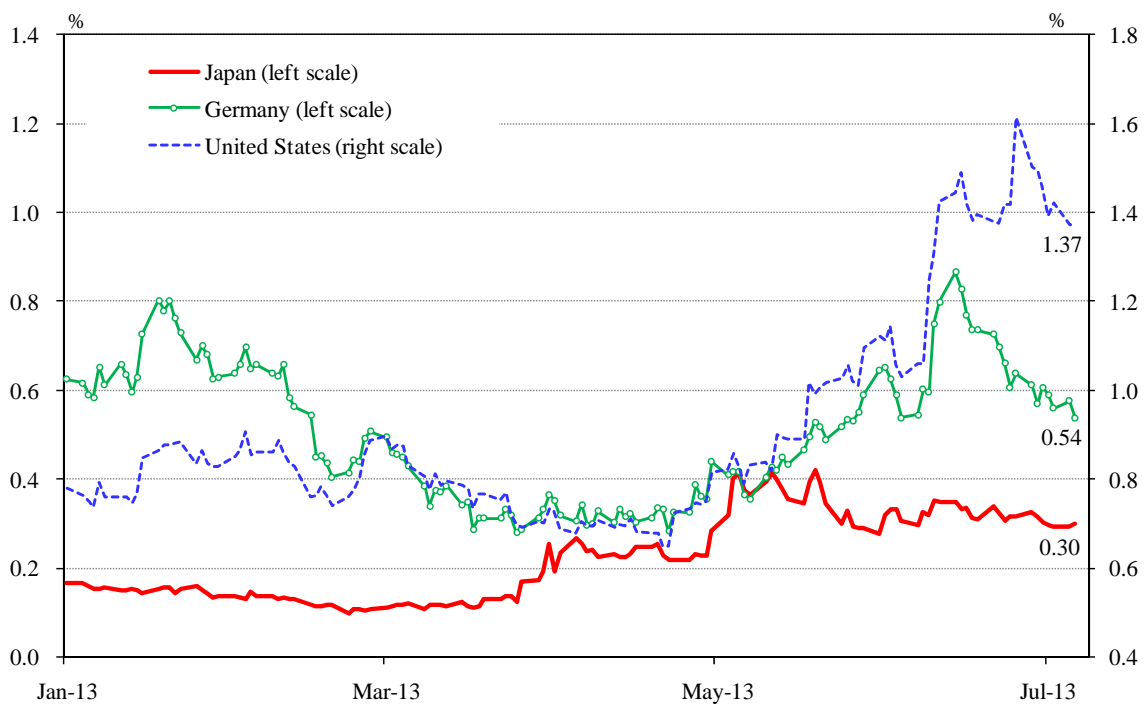
- The Bank will continue with the QQE, aiming to achieve the price stability target of 2%, as long as it is necessary for maintaining that target in a stable manner.
- The Bank will examine both upside and downside risks to economic activity and prices, and make adjustments as appropriate.

# Government Bond Yields in Japan, Germany, and the United States

## (1) 10-Year Bonds



## (2) 5-Year Bonds

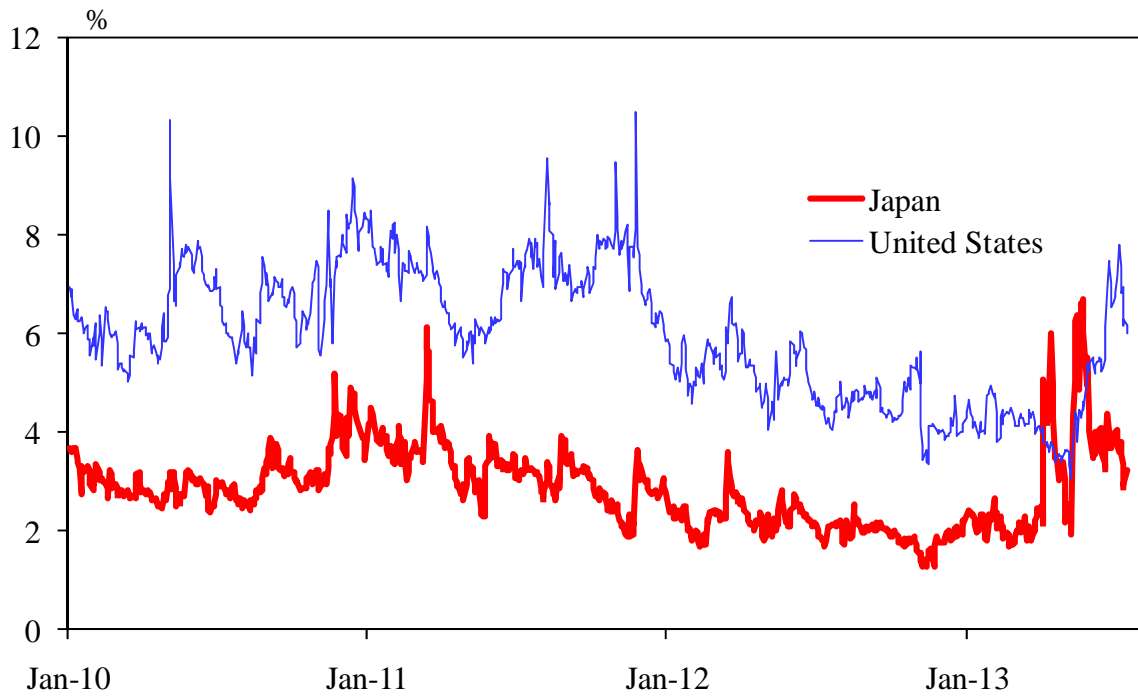


Note: As of July 16, 2013.

Source: Bloomberg.

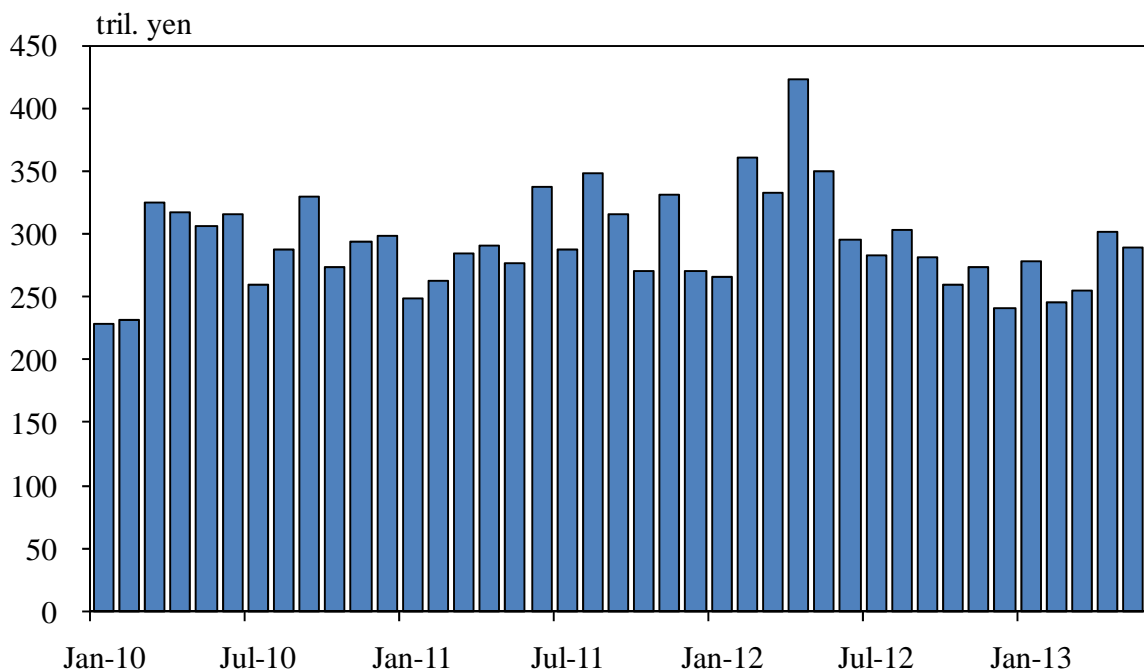
# Liquidity in Bond Markets

## (1) Implied Volatility of Long-Term Bond Futures Options



Note: As of July 16, 2013.

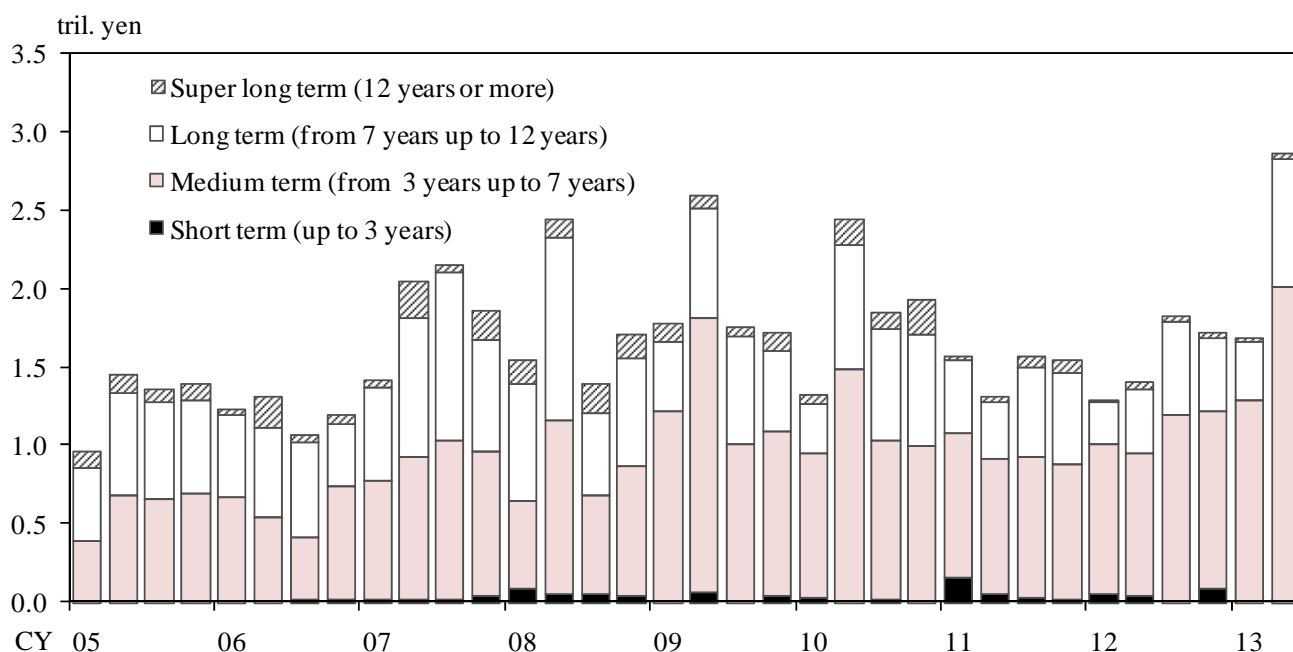
## (2) Trading Volume of Over-the-Counter Bonds (Gross Basis)



Sources: Bloomberg; Japan Securities Dealers Association.

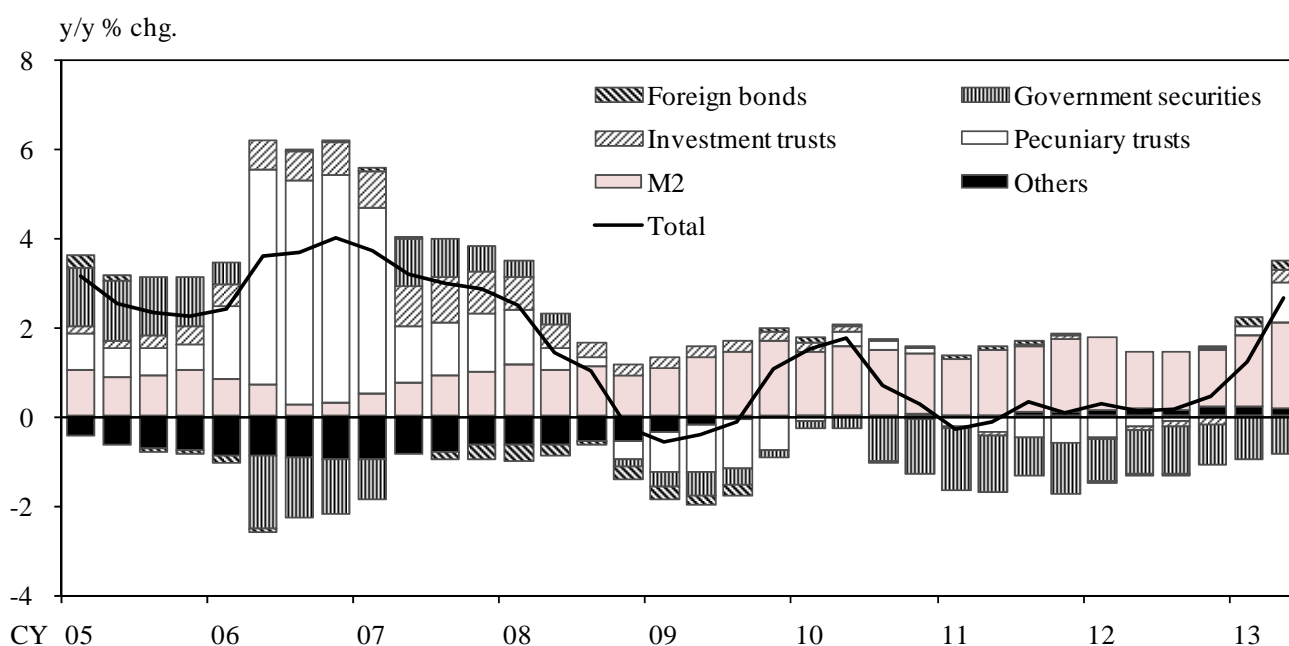
# Amount Outstanding of Corporate Bonds and Money Stock

## (1) Amount Outstanding of Corporate Bonds



Note: Figures are for publicly-offered domestic corporate bonds (bonds issued by banks are excluded). Figures are calculated at the date of decision of issuance conditions.

## (2) Money Stock (Broadly-Defined Liquidity)



Sources: Bank of Japan; I-N Information Systems.

## Outright Purchases of JGBs

### Breakdown of Outright Purchases of JGBs (May 30, 2013, Financial Markets Department)

per month, tril. yen

Residual maturity	Up to 1 year	More than 1 year and up to 5 years	More than 5 years and up to 10 years	More than 10 years
Released on April 4	0.22	3.0	3.4	0.8
Released on April 18 (monthly schedule for May 2013)	0.22 (0.11)  <2 times>	3.0-3.5 (0.6-0.7)  <5 times>	3.0-3.5 (0.6-0.7)  <5 times>	0.8-1.2 (0.2-0.3)  <4 times>
Released on May 30 (monthly schedule after June 2013)	About 0.22 (About 0.11)  <About 2 times>	About 3.0-4.2 (About 0.5-0.7)  <About 6 times>	About 2.7-3.6 (About 0.45-0.6)  <About 6 times>	About 1.0-1.5 (About 0.2-0.3)  <About 5 times>

Note: Figures in parentheses indicate size per auction. Figures in angular brackets indicate the number of auctions per month.

Source: Bank of Japan.

Introduction of the "Price Stability Target" and  
Joint Statement of the Government and the Bank of Japan  
(January 22, 2013)

Introduction of the "Price Stability Target"

The Bank recognizes that the inflation rate consistent with price stability on a sustainable basis will rise as efforts by a wide range of entities toward strengthening competitiveness and growth potential of Japan's economy make progress. Based on this recognition, the Bank sets the price stability target at 2 percent in terms of the year-on-year rate of change in the consumer price index (CPI).

Under the price stability target specified above, the Bank will pursue monetary easing and aim to achieve this target at the earliest possible time. Taking into consideration that it will take considerable time before the effects of monetary policy permeate the economy, the Bank will ascertain whether there is any significant risk to the sustainability of economic growth, including from the accumulation of financial imbalances.

(Joint Statement of the Government and the Bank of Japan)

The Bank and the Government released a statement titled "Joint Statement of the Government and the Bank of Japan on Overcoming Deflation and Achieving Sustainable Economic Growth."

## Minutes of the Monetary Policy Meetings (MPMs)

### (1) Minutes of the MPM on February 13 and 14 (excerpts; emphasis added)

- Some members referred to the following as options for the Bank if there was a need for additional monetary easing in the future: (1) lowering the interest rate applied under the complementary deposit facility; (2) purchasing JGBs with longer remaining maturities under the [Asset Purchase] Program; and (3) increasing the size of purchases of risk assets.
- A few of these members said that, if JGBs with longer remaining maturities became eligible for purchases, in considering issues as providing clarity, one approach might be to consolidate purchases of JGBs under the Program with those conducted in terms of money market operations, although careful examination of the benefits and costs accompanying the consolidation was necessary.

### (2) Minutes of the MPM on March 6 and 7 (excerpts; emphasis added)

- [S]ome members said that accumulation of the amount outstanding of the Program through the fixed-rate funds-supplying operation against pooled collateral would likely become more difficult as the amount of funds the Bank provided increased further. They continued that it was therefore highly likely that the Bank would need to take drastic measures to address this issue at some point. One of these members added that such measures should be considered not in terms of mere technical revisions to the operational method, but as part of future additional monetary easing measures.
- With regard to the various points discussed at this meeting -- including the stance on the operation of the Program -- one member added that these should not be discussed simply as technical matters, and that the time might be approaching for the Bank to reconsider the scheme of monetary policy -- that is, the comprehensive monetary easing framework and its concept.

## Monetary Base Target and the Bank's Balance Sheet

### (1) Monetary Base Target and the Bank's Balance Sheet Projection

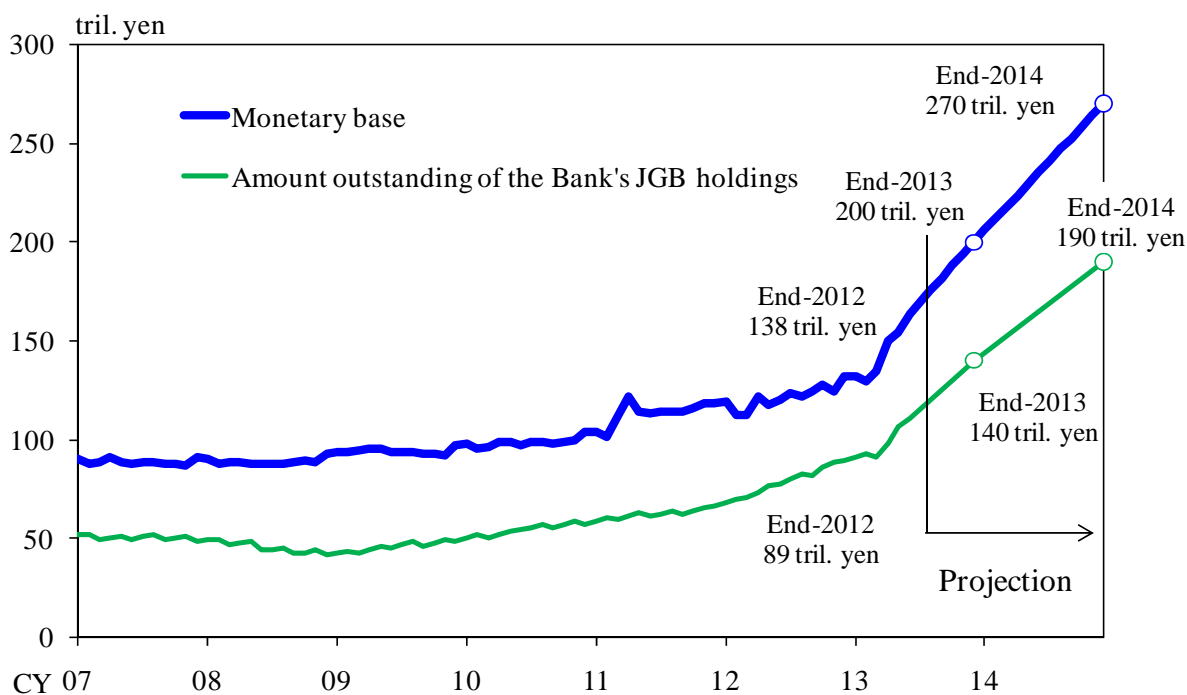
	End-2012 (actual)	End-2013 (projected)	End-2014 (projected)
Monetary base	138	200	270

tril. yen

Breakdown of the Bank's Balance Sheet

	End-2012 (actual)	End-2013 (projected)	End-2014 (projected)
JGBs	89	140	190
CP	2.1	2.2	2.2
Corporate bonds	2.9	3.2	3.2
Exchange-traded funds (ETFs)	1.5	2.5	3.5
Japan real estate investment trusts (J-REITs)	0.11	0.14	0.17
Loan Support Program	3.3	13	18
Total assets (including others)	158	220	290
Banknotes	87	88	90
Current deposits	47	107	175
Total liabilities and net assets (including others)	158	220	290

### (2) Monetary Base Target and Increase in JGB Purchases



Source: Bank of Japan.



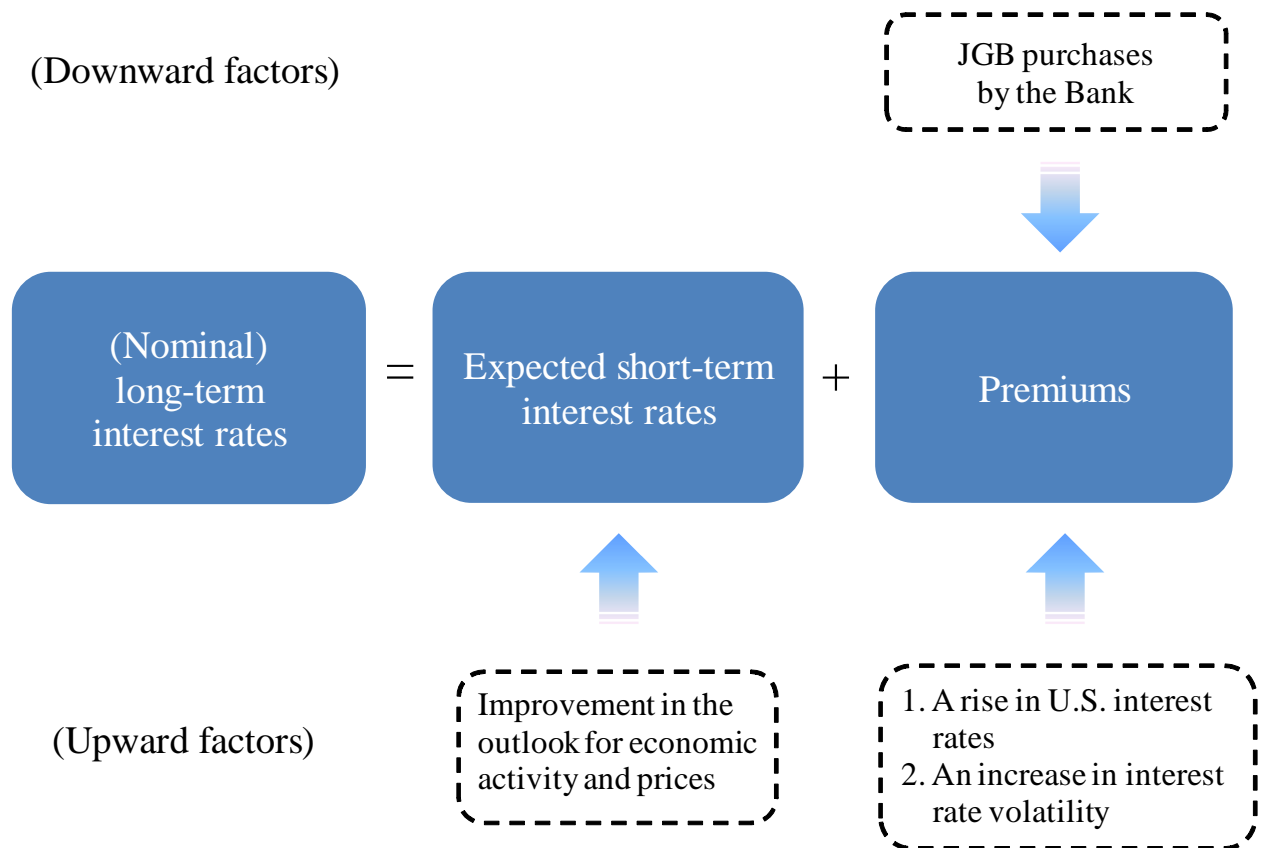
## Monetary Policy Framework (1)

	Country/area	Name/price indicator	Numerical value	Set by	Period
Countries adopting inflation targeting	United Kingdom	Target Consumer Prices Index (CPI) (all items)	2 percent	Government	Reasonable time period (medium term)
	Canada	Target Consumer Price Index (CPI) (total)	2 percent (midpoint of the target range of 1-3 percent)	Government and central bank	Usually between six and eight quarters
	Australia	Target Consumer Price Index (CPI) (all groups)	2-3 percent	Government and central bank	Medium term
	New Zealand	Target Consumers Price Index (CPI) (all groups)	Near 2 percent (midpoint of the target of between 1 percent and 3 percent)	Government and central bank	Medium term
	Sweden	Target Consumer Price Index (CPI)	2 percent	Central bank	Normally two years
Countries not adopting inflation targeting	United States	Longer-run goal Personal Consumption Expenditures Price Index (PCEPI)	2 percent	Central bank	Longer run
	Euro area	Quantitative definition of price stability Harmonized Index of Consumer Prices (HICP)	Below, but close to, 2 percent	Central bank	Medium term
	Switzerland	Definition of price stability Consumer Price Index (CPI)	Less than 2 percent per annum	Central bank	Medium and long term

## Monetary Policy Framework (2)

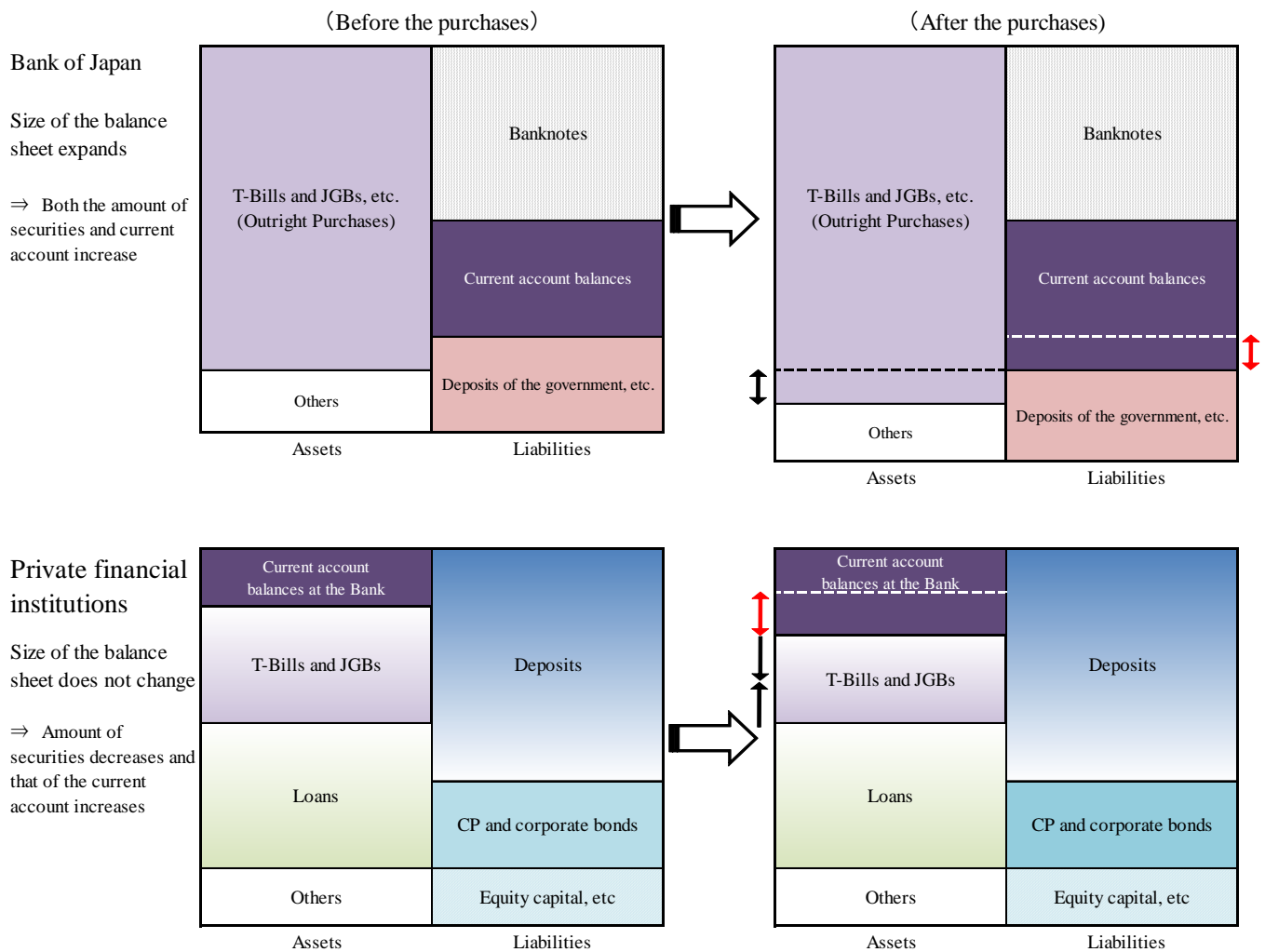
	Country/area	Revision frequency	Accountability mechanism when inflation deviates from the target, goal, etc	Notes (flexibility)
Countries adopting inflation targeting	United Kingdom	At least once every twelve months	If the target is missed by more than 1 percentage point on either side, the Governor of the Bank must write an open letter to the Chancellor explaining why inflation has increased or fallen to such an extent.	A target of 2 percent does not mean that inflation will be held at this rate constantly.
	Canada	Currently every five years	N/A	The Bank can adjust somewhat the target horizon, depending on the nature and duration of the shocks hitting the economy.
	Australia	Around the time when the Governor is appointed or reappointed and when the prime minister changes.	N/A	The objective is to keep inflation within the target range, on average, over the cycle. This formulation allows for natural short-run variation.
	New Zealand	When the Governor is appointed or reappointed, the Governor and the Minister of Finance conclude a "Policy Targets Agreement" for setting the target.	When inflation is outside or is projected to be outside the target range, the Bank must explain the reasons and procedures for recovery. On the advice of the Minister, the Governor may be removed if his/her performance for achieving the policy targets has been inadequate.	For a variety of reasons, the actual inflation will vary from the target, due to, for example, exceptional movements in international commodity prices, and changes in indirect taxes.
	Sweden	N/A	N/A	Temporary deviation from the target is acceptable. The Riksbank has set a tolerance band around the target of plus/minus 1 percentage point.
Countries not adopting inflation targeting	United States	The Federal Open Market Committee aims to reaffirm it each January.	N/A	The Federal Open Market Committee takes a balanced approach to inflation and employment.
	Euro area	N/A	N/A	A wide range of indicators needs to be monitored in order to assess the outlook for price stability.
	Switzerland	N/A	N/A	Temporary deviation from the definition as a result of one-off factors, such as a sudden surge in oil prices or strong exchange rate fluctuations, is acceptable.

# Factors Affecting Long-Term Interest Rates



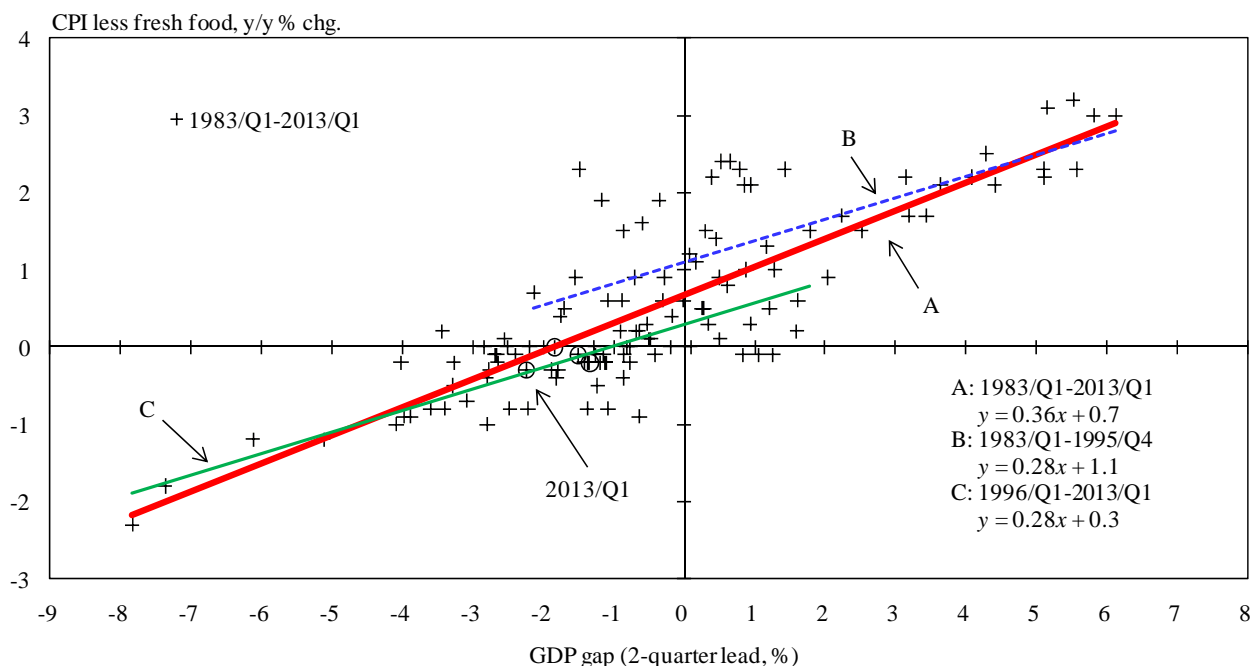
## Change in the Balance Sheets of the Bank and Private Financial Institutions

Example: Initial Change of Balance Sheets Brought by the Bank's Asset Purchases



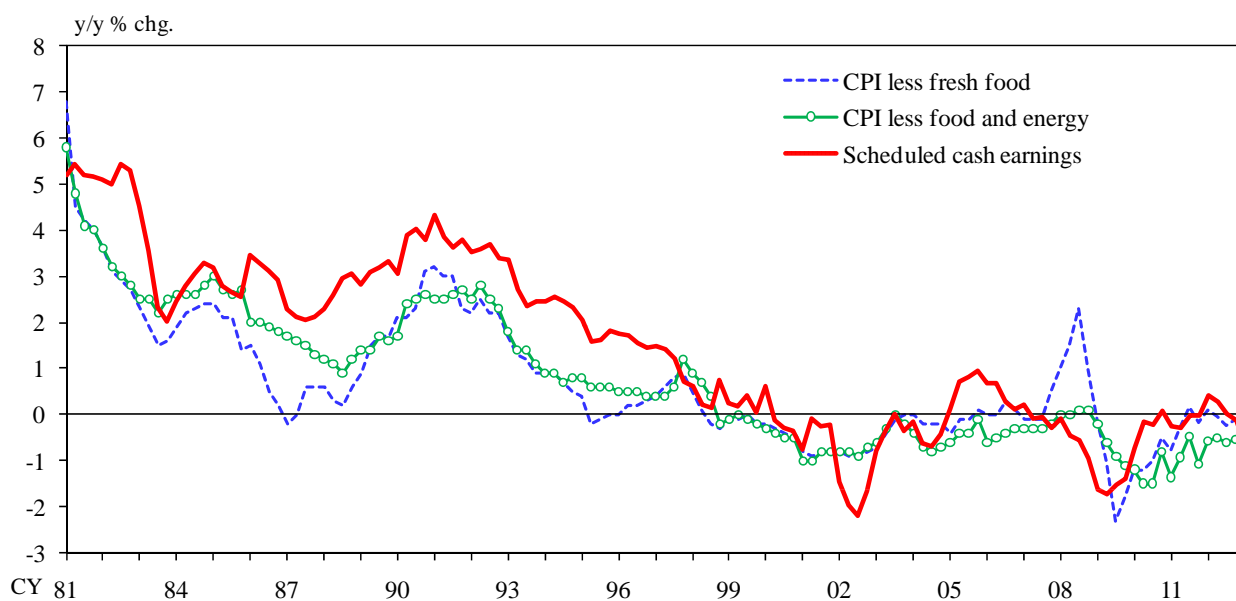
# Wages and Prices (1)

## (1) Phillips Curve (CPI 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.  
 3. The output gap is estimated by the Research and Statistics Department, Bank of Japan. For the estimation procedures, see "The New Estimates of Output Gap and Potential Growth Rate," Bank of Japan Review Series, 2006-E-3.  
 4. The number of lags is chosen so that the cross-correlation between the output gap and the CPI is maximized.

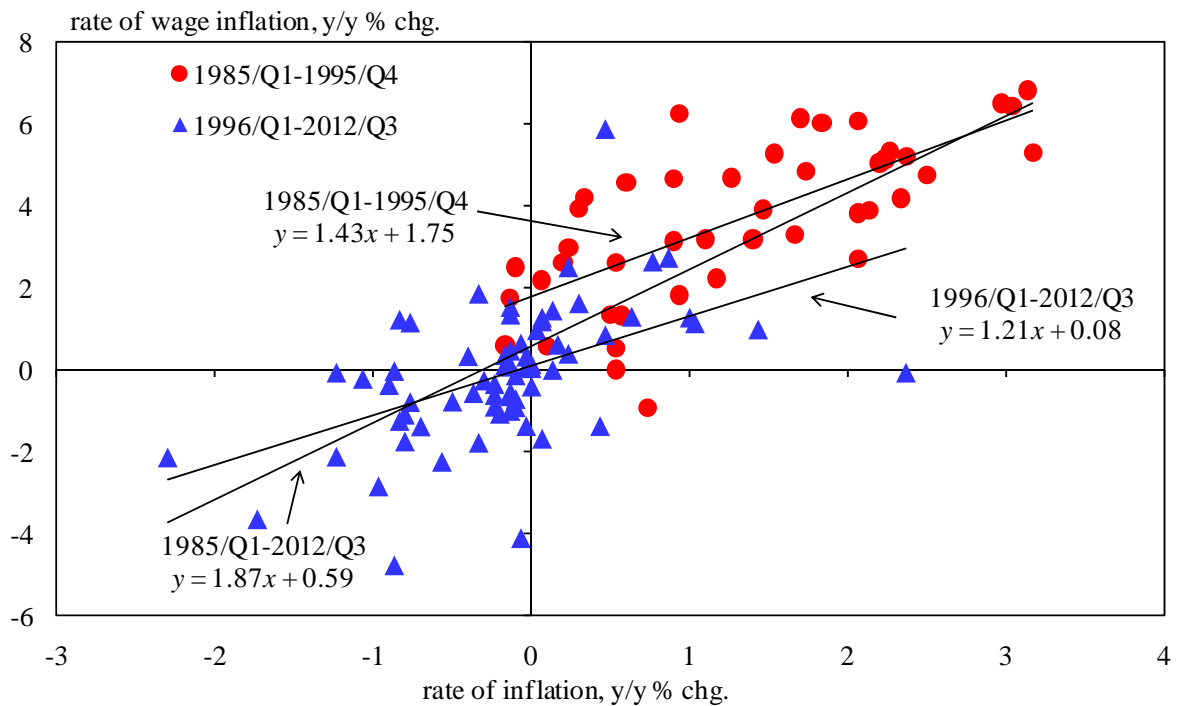
## (2) CPI and Scheduled Cash Earnings



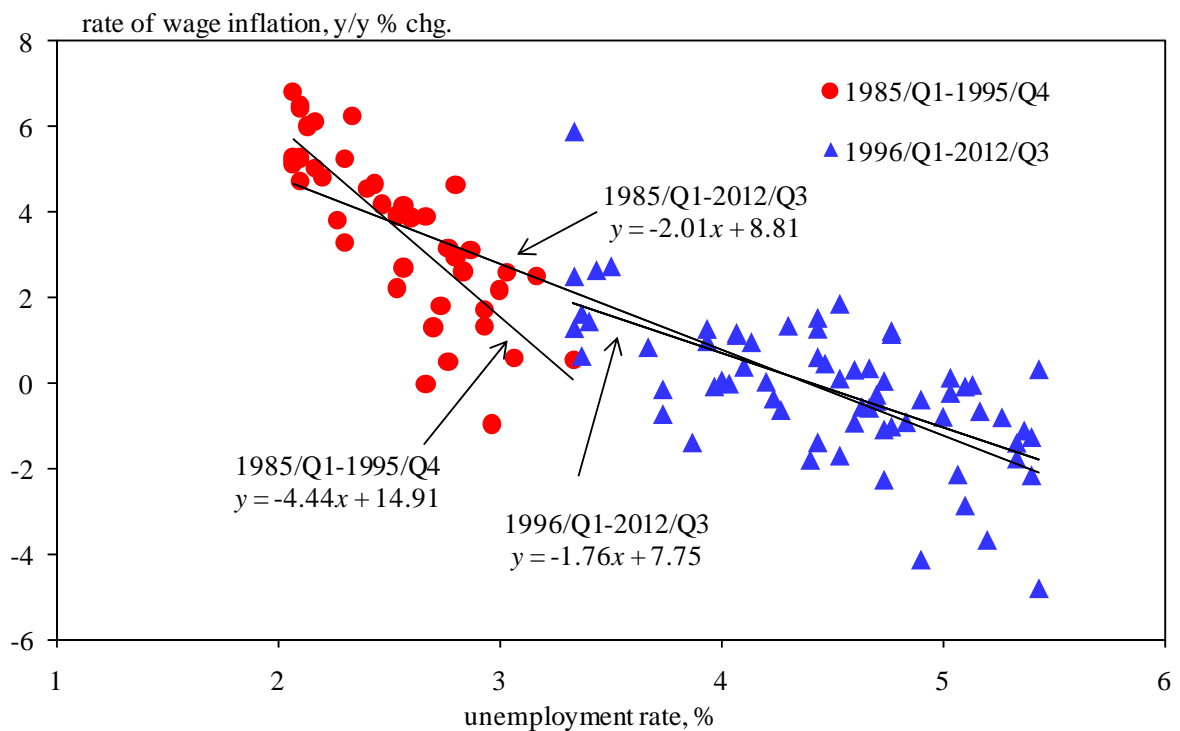
- Notes: 1. The figure for "scheduled cash earnings" is based on establishments with at least 30 employees in the "Monthly Labour Survey."  
 2. Figures for the CPI are adjusted to exclude the effect of changes in the consumption tax rate.  
 Sources: Ministry of Internal Affairs and Communications; Cabinet Office; Ministry of Health, Labour and Welfare, etc.

## Wages and Prices (2)

### (1) Inflation Rate and Wage Inflation Rate



### (2) Unemployment Rate and Wage Inflation Rate (Wage Phillips Curve)



Notes: 1. The wage is the hourly wage. Figures for wages are calculated as "total cash earnings (establishment with 30 or more employees)" divided by "total hours worked."  
 2. The CPI for all items less fresh food is used for the inflation rate.  
 3. Figures for the CPI are adjusted to exclude the effects of changes in the consumption tax rate.  
 Sources: Ministry of Health and Welfare; Ministry of Internal Affairs and Communications.

## Outlook for Economic Activity and Prices: Interim Assessment (as of July 2013)

### Forecasts of the Majority of Policy Board Members

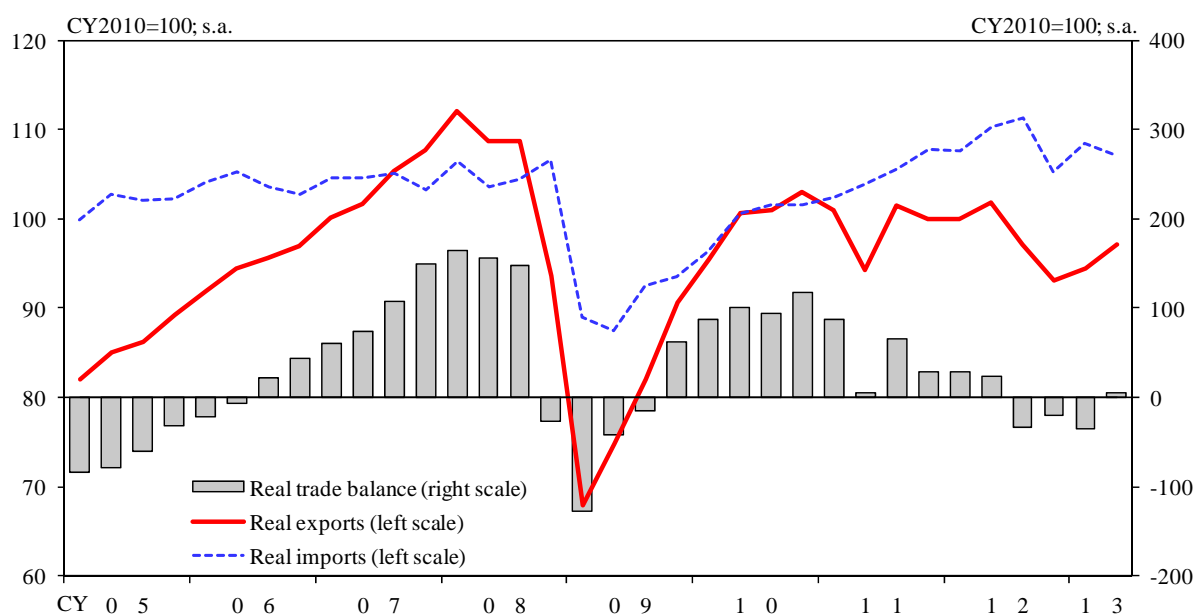
y/y % chg.

	Real GDP	CPI (all items less fresh food)	Excluding the effects of the consumption tax hikes
Fiscal 2013	+2.5 to +3.0 [+2.8]	+0.5 to +0.8 [+0.6]	/
Forecasts made in April 2013	+2.4 to +3.0 [+2.9]	+0.4 to +0.8 [+0.7]	
Fiscal 2014	+0.8 to +1.5 [+1.3]	+2.7 to +3.6 [+3.3]	+0.7 to +1.6 [+1.3]
Forecasts made in April 2013	+1.0 to +1.5 [+1.4]	+2.7 to +3.6 [+3.4]	+0.7 to +1.6 [+1.4]
Fiscal 2015	+1.3 to +1.9 [+1.5]	+1.6 to +2.9 [+2.6]	+0.9 to +2.2 [+1.9]
Forecasts made in April 2013	+1.4 to +1.9 [+1.6]	+1.6 to +2.9 [+2.6]	+0.9 to +2.2 [+1.9]

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

## External Balance and Production

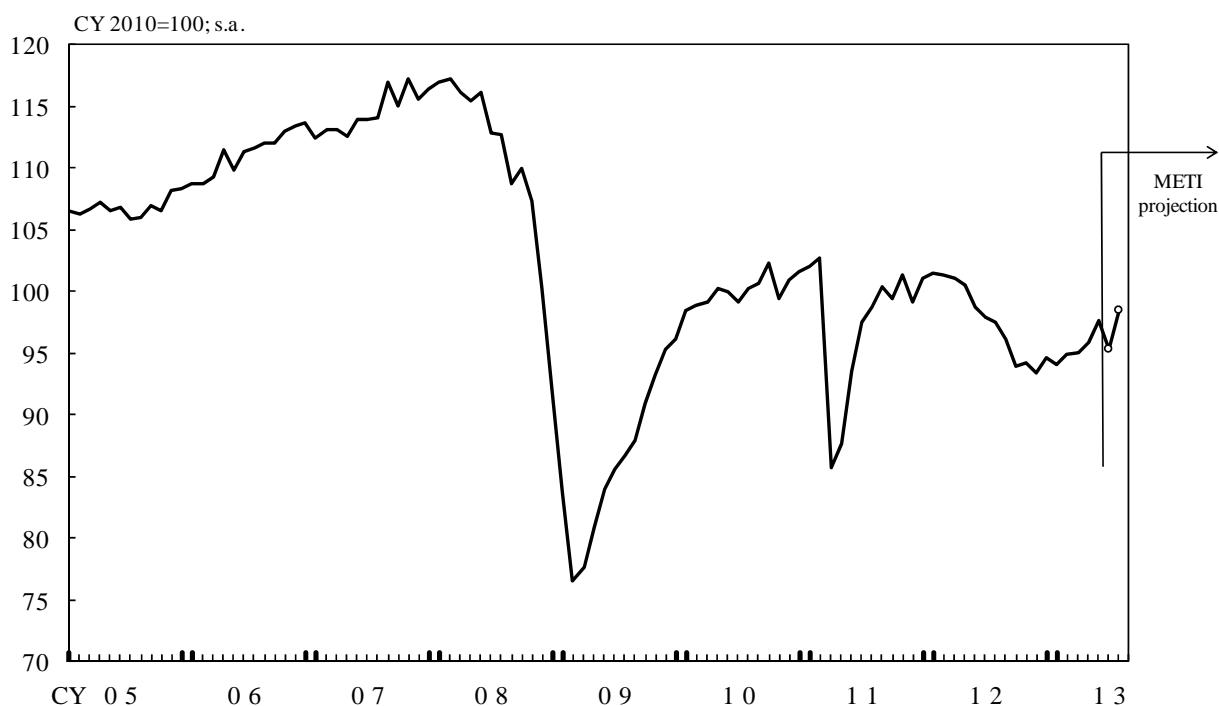
### (1) Real Exports, Real Imports, and Real Trade Balance



Notes: 1. Seasonally adjusted by X-12-ARIMA.

2. Real exports/imports are the value of exports and imports in "Trade Statistics" deflated by corresponding price indexes. "Real trade balance" is defined as real exports minus real imports.

### (2) Production

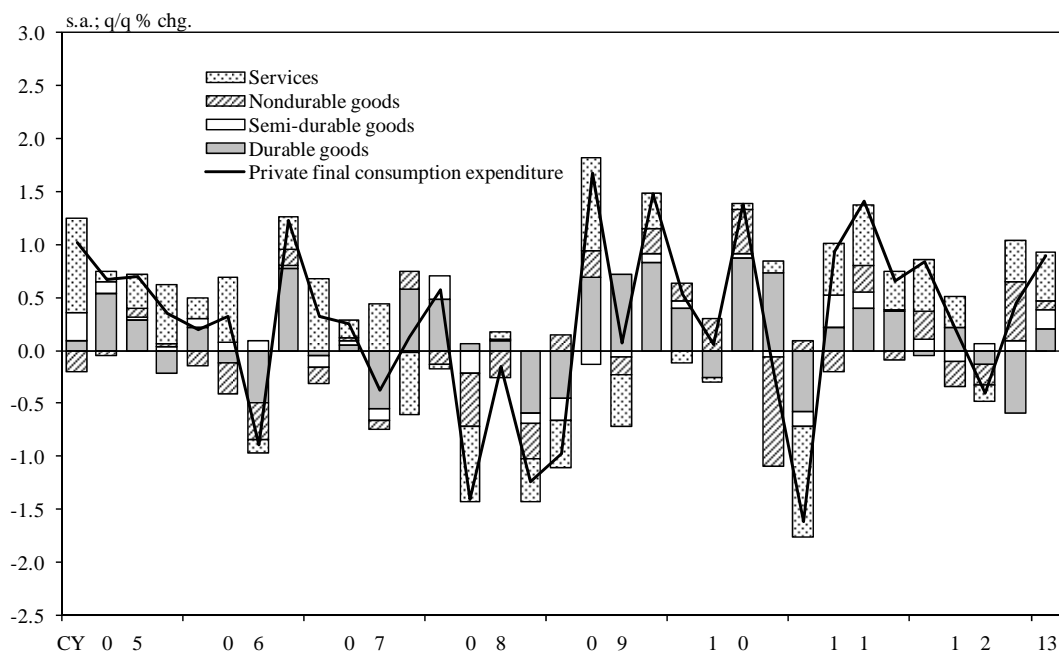


Sources: Ministry of Finance; Bank of Japan; Ministry of Economy, Trade and Industry.

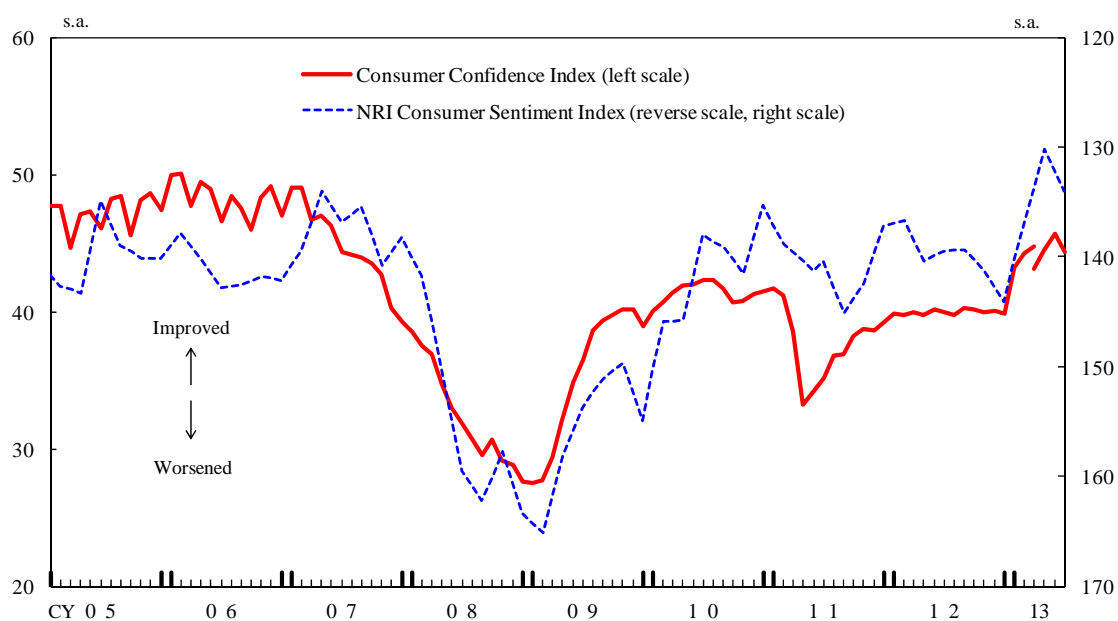


# Private Consumption and Consumer Confidence

## (1) Private Final Consumption Expenditure (Real)



## (2) Consumer Confidence



Notes: 1. The Consumer Confidence Index (covering about 5,700 samples on a nationwide basis from April 2013 onward) and the NRI Consumer Sentiment Index (1,200 samples on a nationwide basis) are based on surveys on consumer confidence.

2. In April 2013, the Cabinet Office changed the method for conducting the Consumer Confidence Survey to a postal method, along with some other changes. For this reason, there is a discontinuity between data up to March 2013, which were obtained from the survey on visit-and-leave method, and those thereafter. The figure for March 2013 on a postal-method basis is obtained from an examination survey.

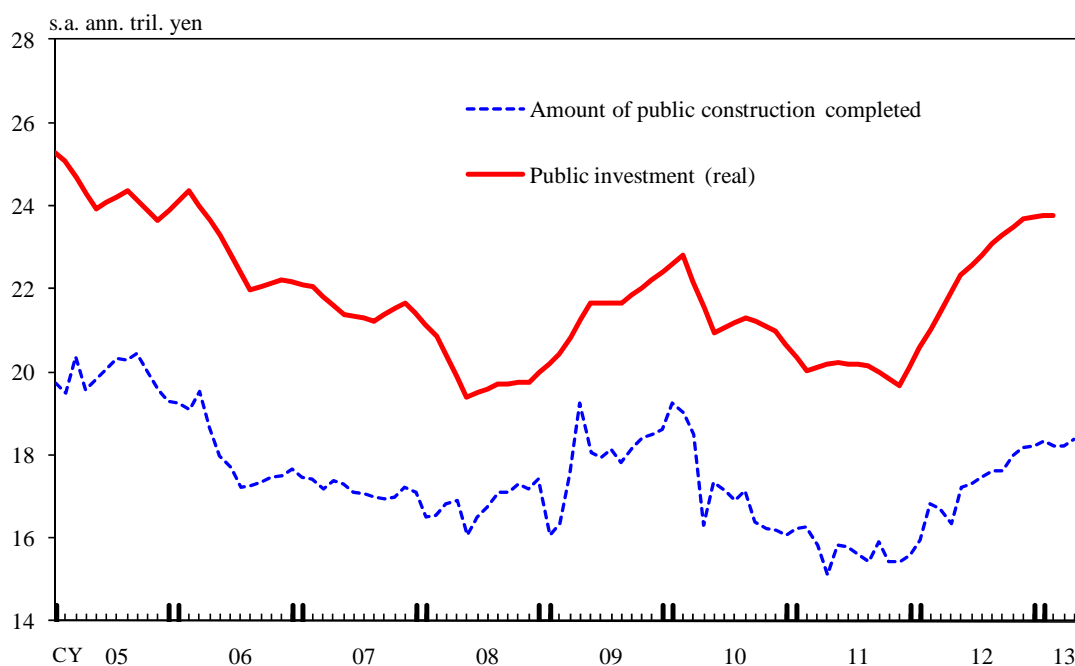
3. Figures are plotted for each surveyed month and the data for the intervening months are linearly interpolated.

4. Figures are seasonally adjusted by X-12-ARIMA.

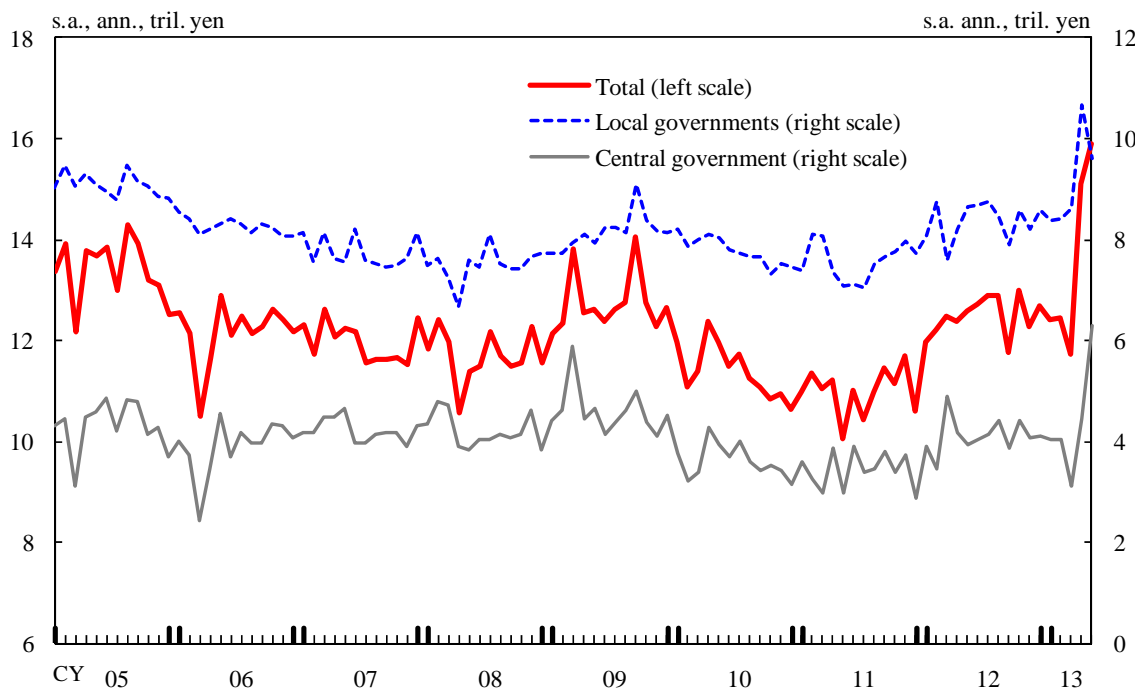
Sources: Cabinet Office; Nippon Research Institute (NRI).

## Public Investment

### (1) Amount of Public Construction Completed and Public Investment



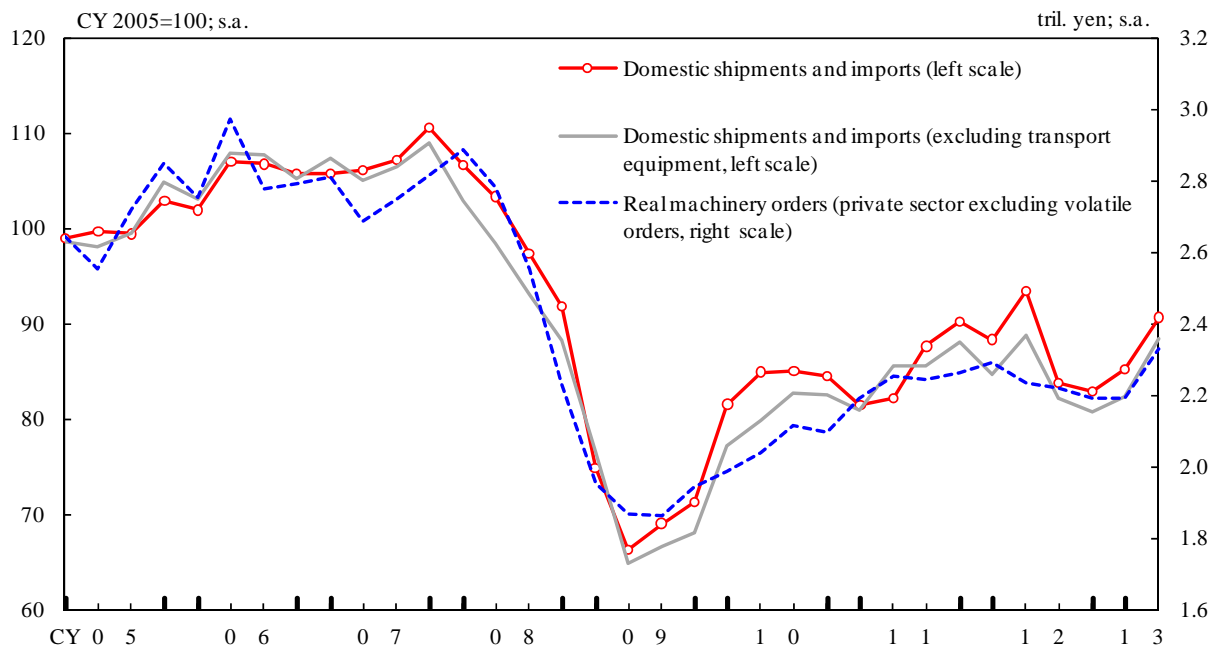
### (2) Value of Public Works Contracted



- Notes: 1. Quarterly figures of public investment are plotted at the middle month of each quarter.
2. The amount of public construction completed is based on the general tables in the "Integrated Statistics on Construction Works."
3. Figures of the value of public works contracted and the amount of public construction completed are seasonally adjusted by X-12-ARIMA. As figures of the amount of public construction completed are seasonally adjusted on a monthly basis, the data are retroactively revised every month.
- Sources: Cabinet Office; East Japan Construction Surety etc.; Ministry of Land, Infrastructure, Transport and Tourism.

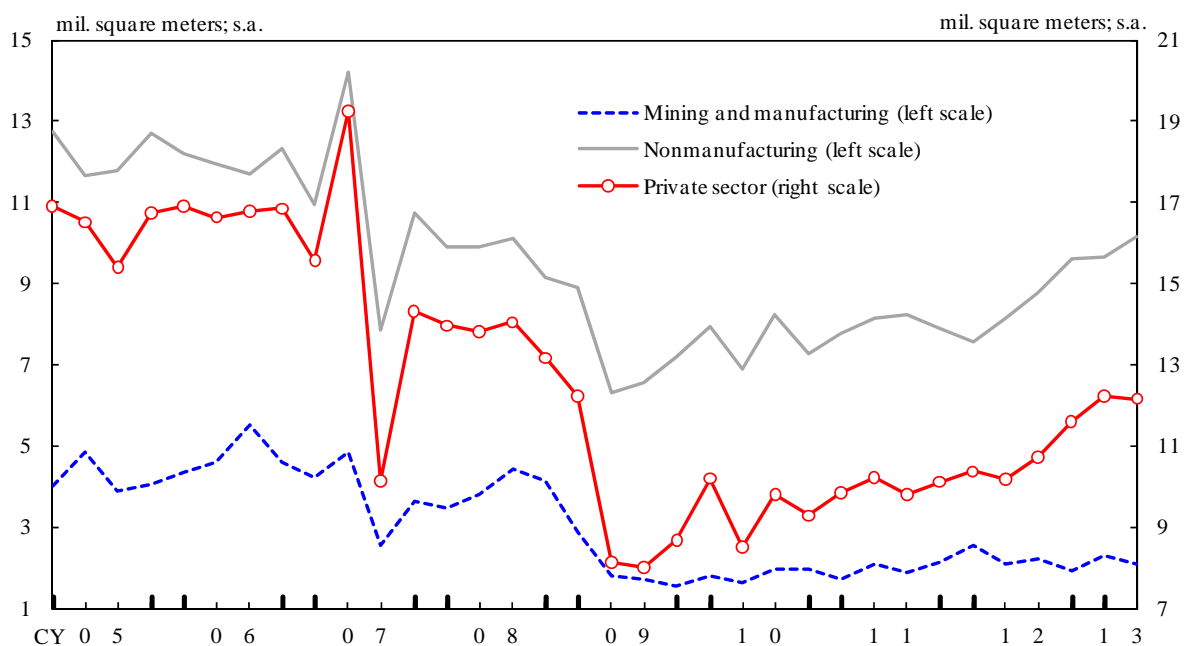
# Machinery and Construction Investment

## (1) Machinery Investment



- Notes: 1. CGPI is used to convert "machinery orders" into "real" figures.  
 2. Figures of real machinery orders for 2005/Q1 are estimated by the Cabinet Office.  
 3. Volatile orders: orders for ships and those from electric power companies.

## (2) Construction Starts (Floor Area, Private, Nondwelling Use)

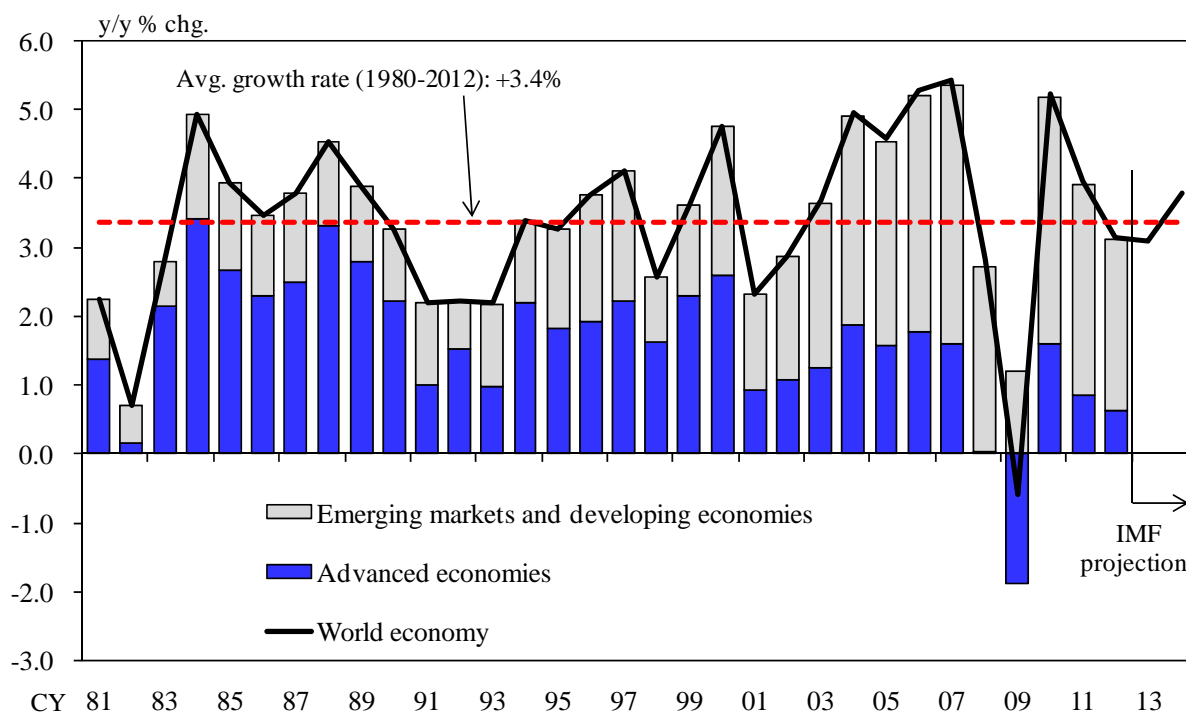


Note: Seasonally adjusted by X-12-ARIMA.

Sources: Cabinet Office; Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism; Bank of Japan.

# World Economy

## (1) Real GDP Growth Rate of the World Economy



## (2) IMF Projections (as of July 2013)

CY	real GDP growth rate, %			
	2011	2012	2013 projection	2014 projection
World	3.9	3.1	3.1 (-0.2)	3.8 (-0.2)
Advanced economies	1.7	1.2	1.2 (-0.1)	2.1 (-0.2)
United States	1.8	2.2	1.7 (-0.2)	2.7 (-0.2)
Euro area	1.5	-0.6	-0.6 (-0.2)	0.9 (-0.1)
Japan	-0.6	1.9	2.0 (0.5)	1.2 (-0.3)
Emerging market and developing economies	6.2	4.9	5.0 (-0.3)	5.4 (-0.3)
Developing Asia	7.8	6.5	6.9 (-0.3)	7.0 (-0.3)
China	9.3	7.8	7.8 (-0.3)	7.7 (-0.6)
Brazil	2.7	0.9	2.5 (-0.5)	3.2 (-0.8)

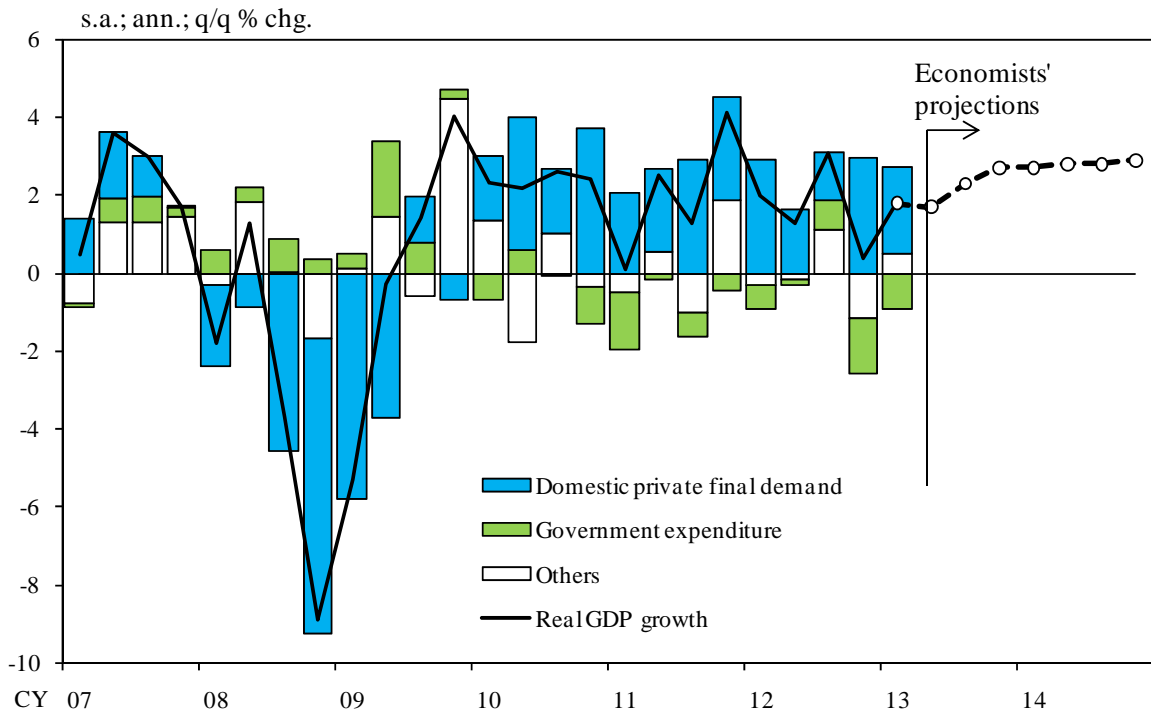
Notes: 1. Figures are calculated using GDP based on purchasing power parity (PPP) shares of the world total from the IMF.

2. The numbers in parentheses are the difference from the April 2013 World Economic Outlook projections.

Source: International Monetary Fund.

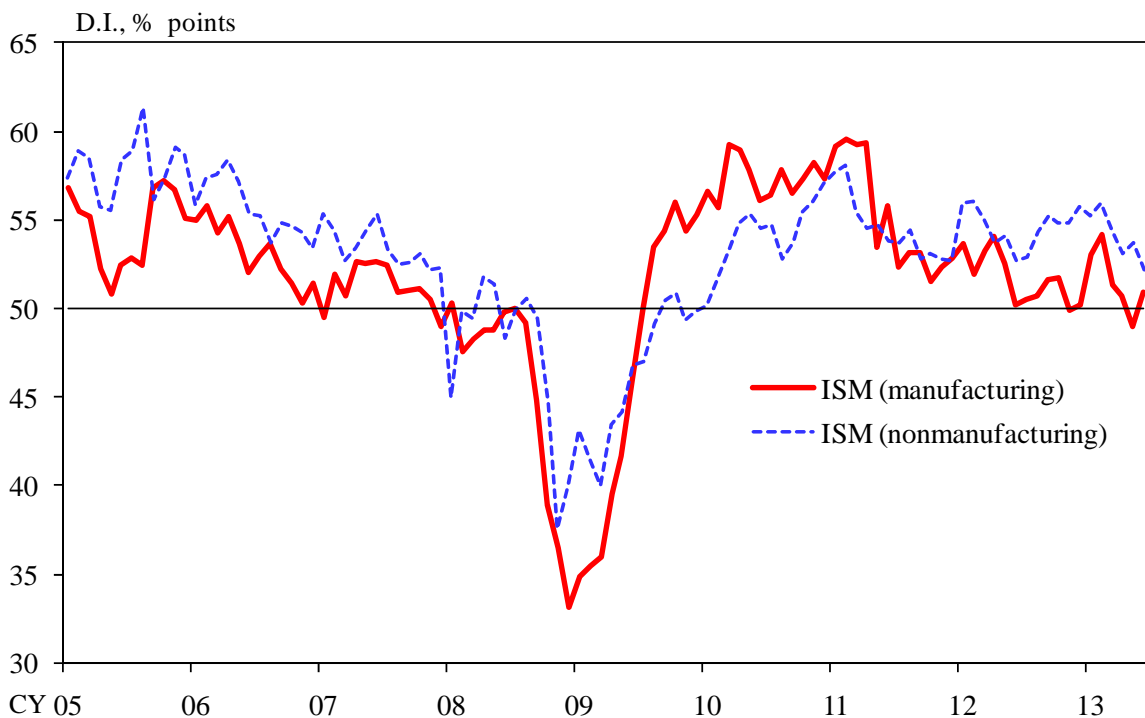
# U.S. Economy (1)

## (1) U.S. Real GDP Growth Rate



- Notes: 1. Domestic private final demand consists of private consumption expenditures and private fixed investment.  
2. Economists' projections are from Blue Chip Economic Indicators (July 2013).

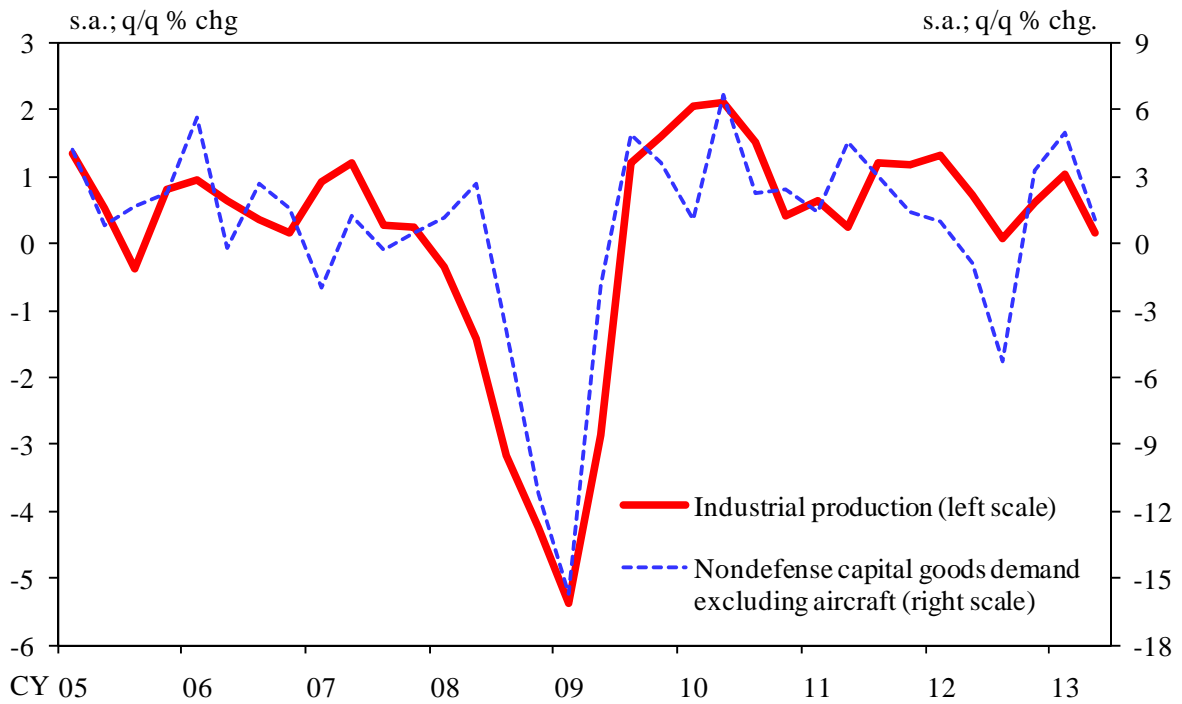
## (2) Corporate Sector Confidence



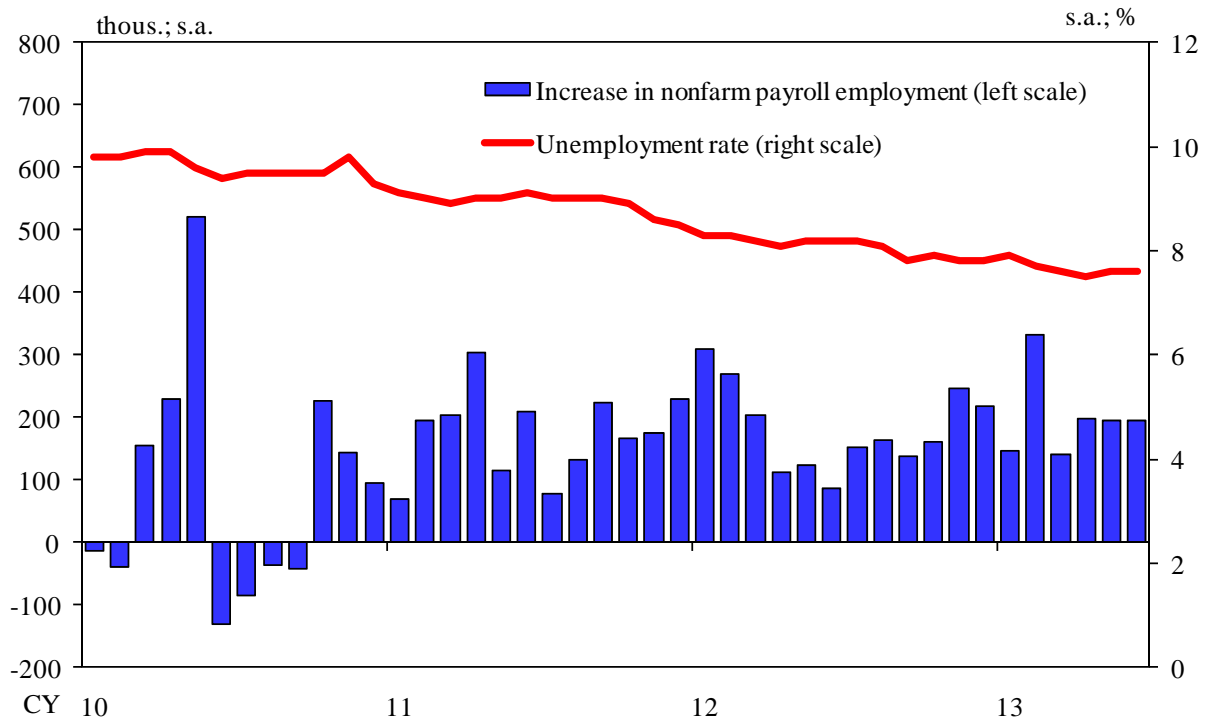
Sources: BEA; Bloomberg; Blue Chip Economic Indicators.

# U.S. Economy (2)

## (1) Industrial Production and Capital Goods Orders



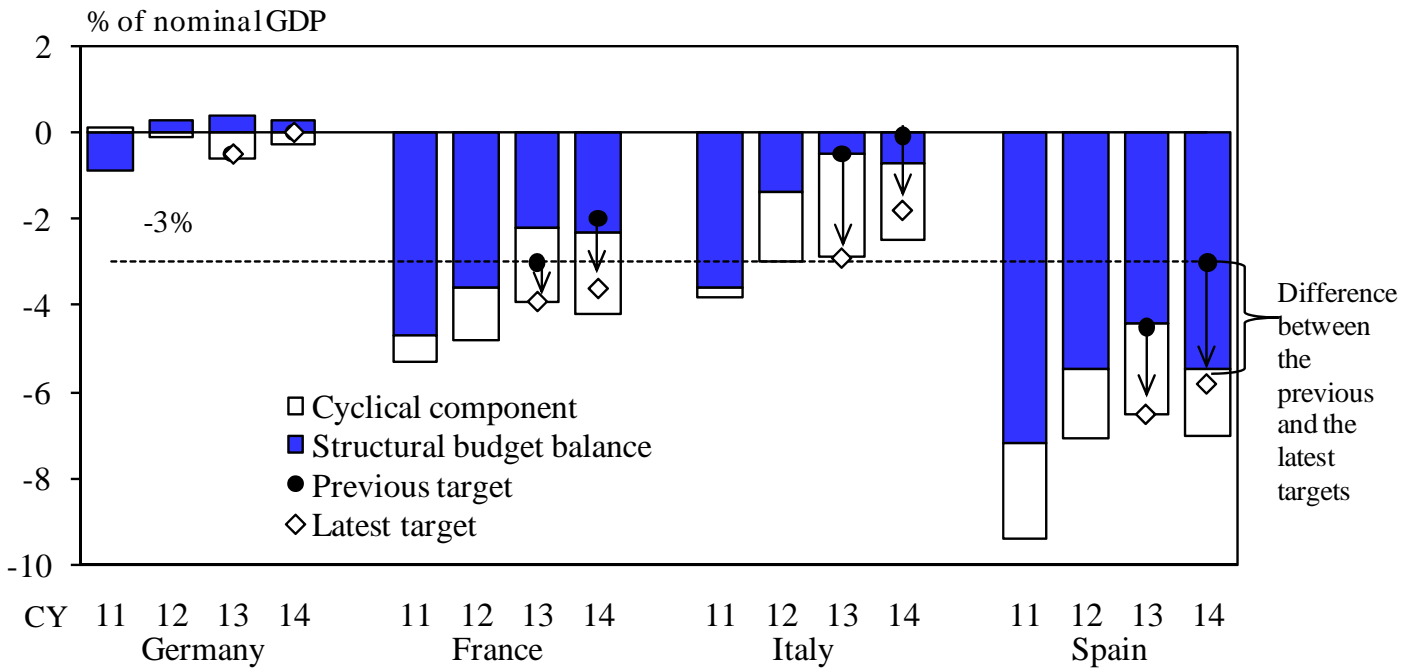
## (2) Nonfarm Payroll Employment and Unemployment Rate



Source: Bloomberg.

## European Economy (1)

### Outlook for Fiscal Budget Balances and Extension of the Deadlines for Achievement of the Fiscal Target



Notes 1: Figures for the previous target are based on the Stability Programmes in 2012. Since Spain and France have modified their targets, the modified targets are used for these countries.

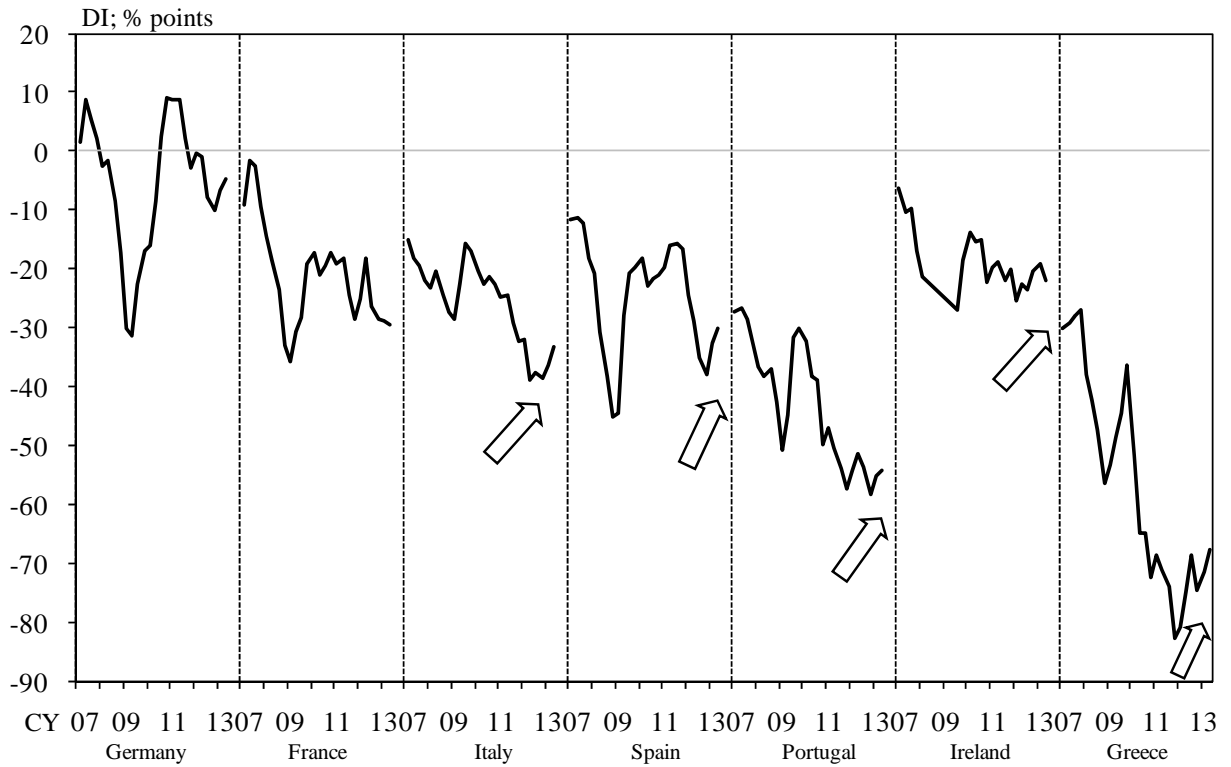
2: Figures for the latest targets are based on the recommendation by the European Commission on May 29. For Germany and Italy, the figures for this year's Stability Programmes in their countries are used as the latest targets.

3: Figures for the outlook for fiscal budget balances are based on the European Commission's Economic Forecast (Spring 2013) released on May 3. The figure for Spain in 2012 excludes the effect of international financial assistance to the banking sector.

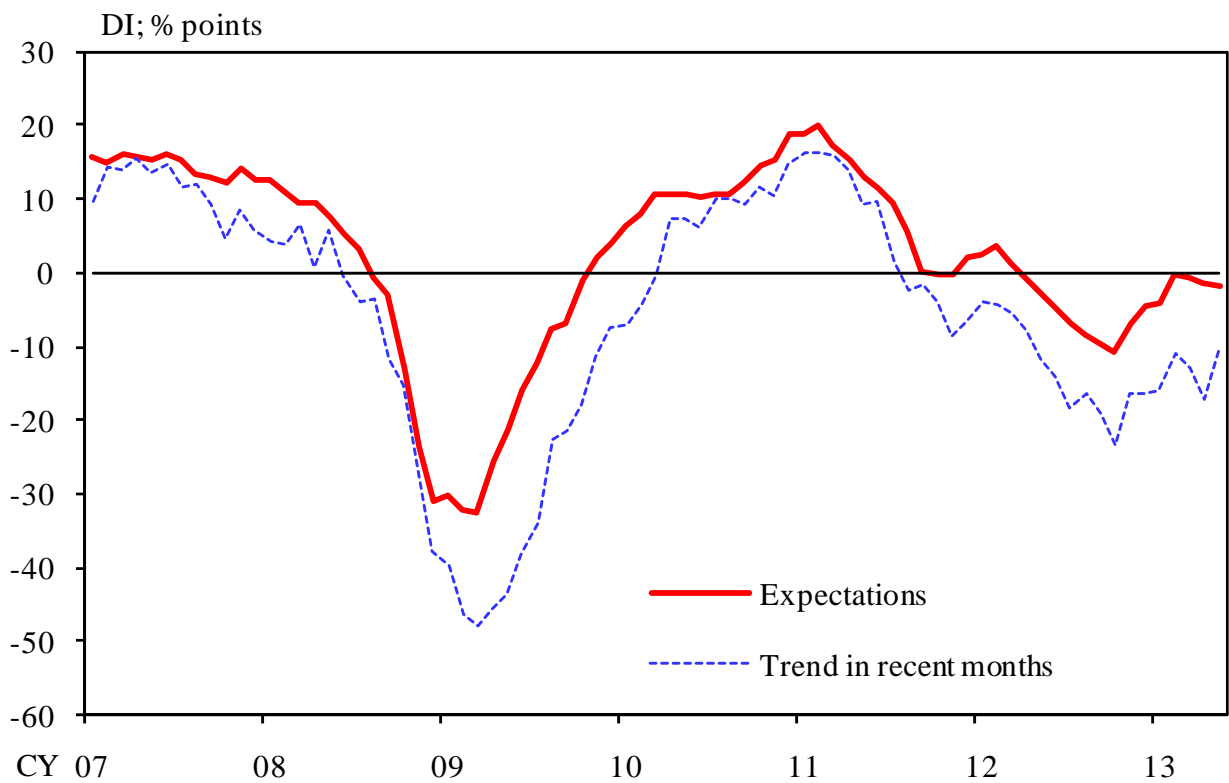
Source: European Commission.

# European Economy (2)

## (1) Consumer Confidence by Country



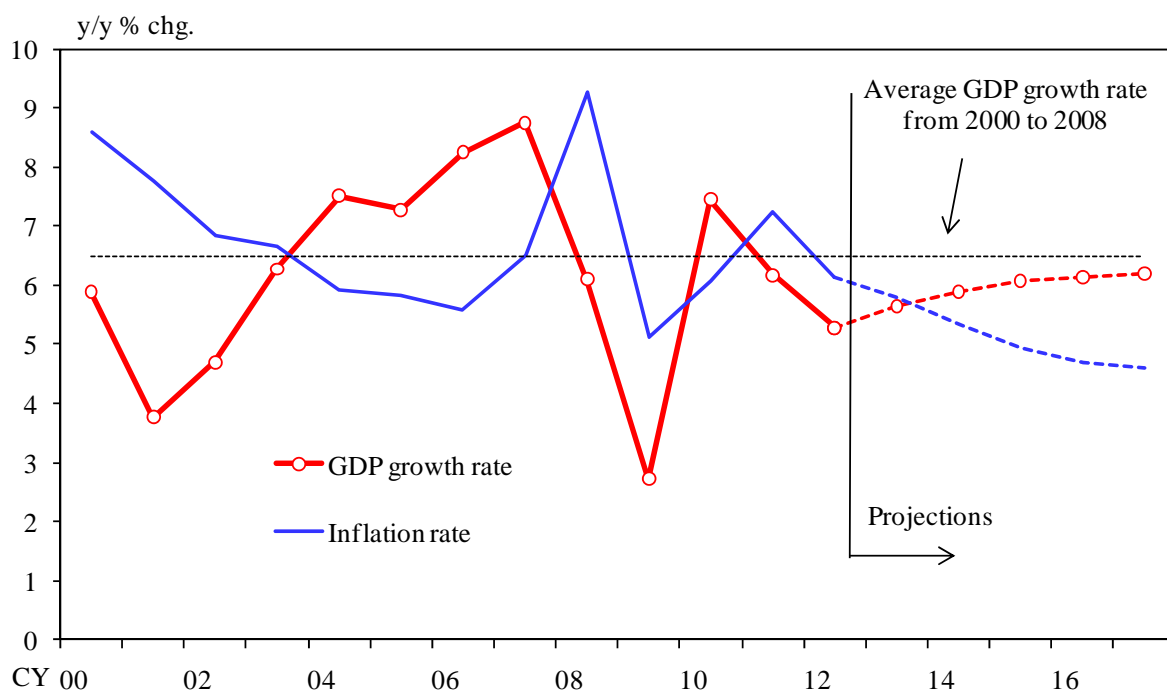
## (2) Manufacturing Confidence





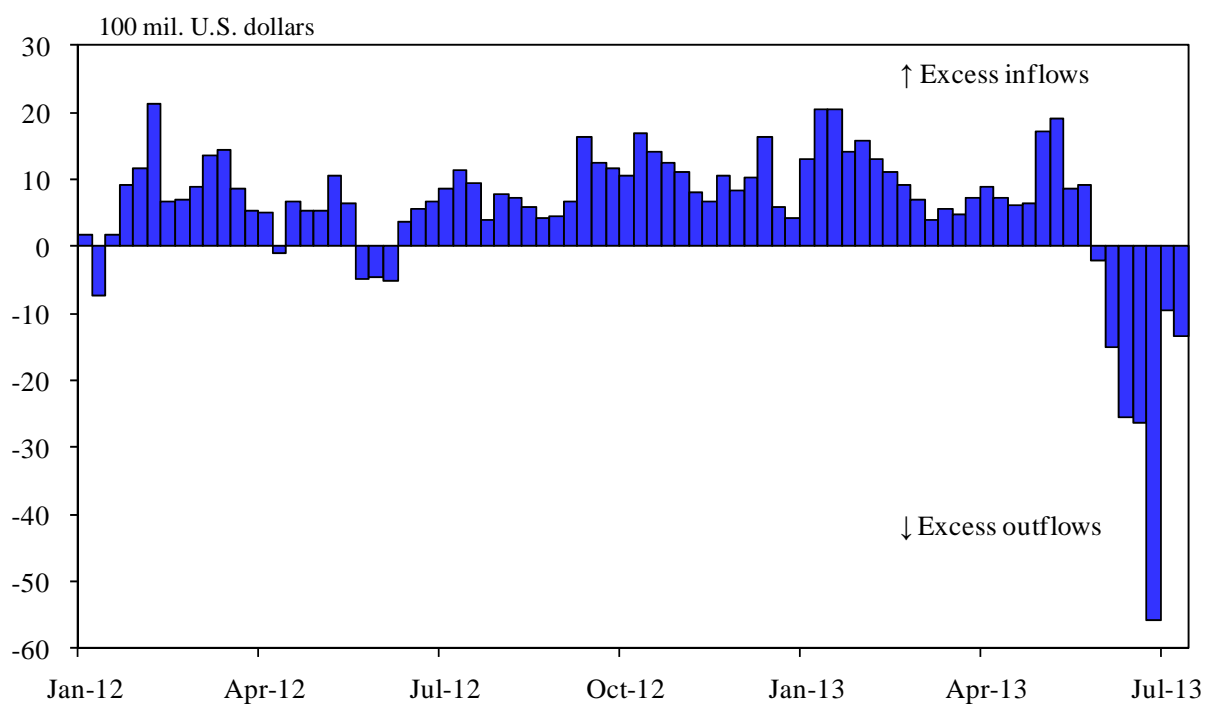
# Emerging Economies

## (1) Economic Outlook of the IMF for Emerging Countries



Note: Data are from the World Economic Outlook (April 2013).

## (2) Bond Flows into Emerging Markets

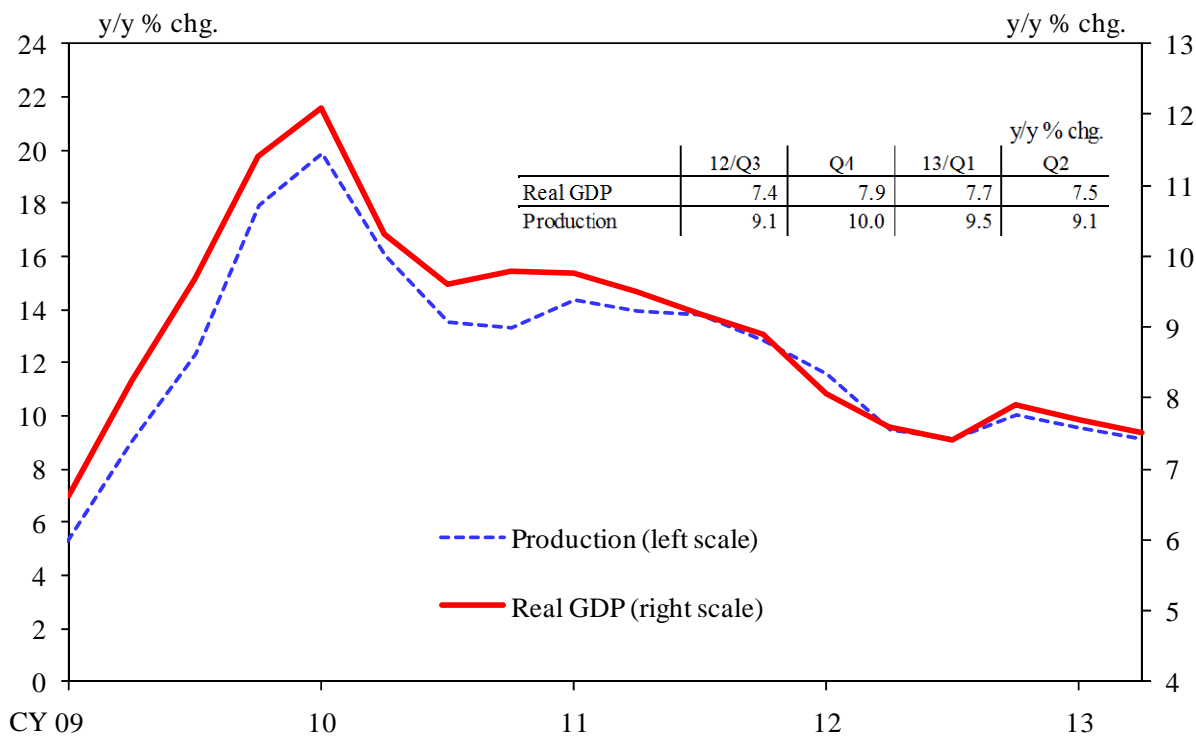


Note: Weekly data up to July 10, 2013.

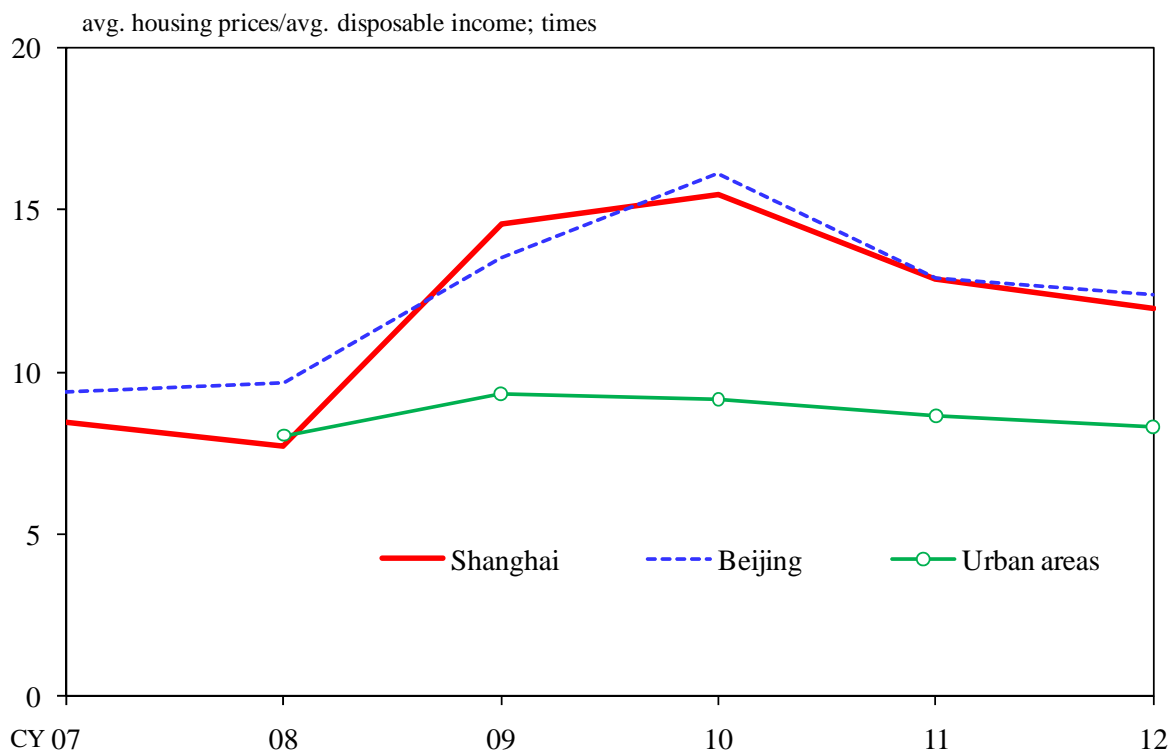
Sources: IMF; EPFR Global.

# Chinese Economy (1)

## (1) Real GDP and Production



## (2) Housing Prices against Annual Income



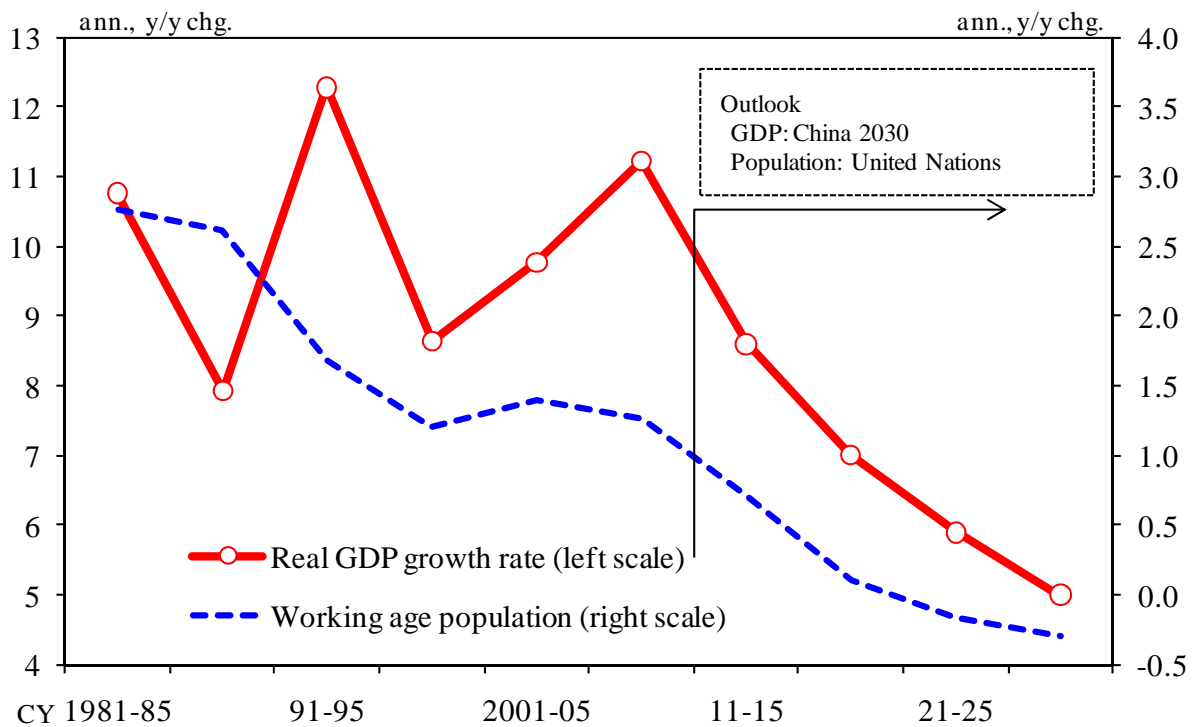
Notes: 1. Figures for "urban areas" include those for Shanghai and Beijing.

2. Estimates by the Bank of Japan.

Source: CEIC Data.

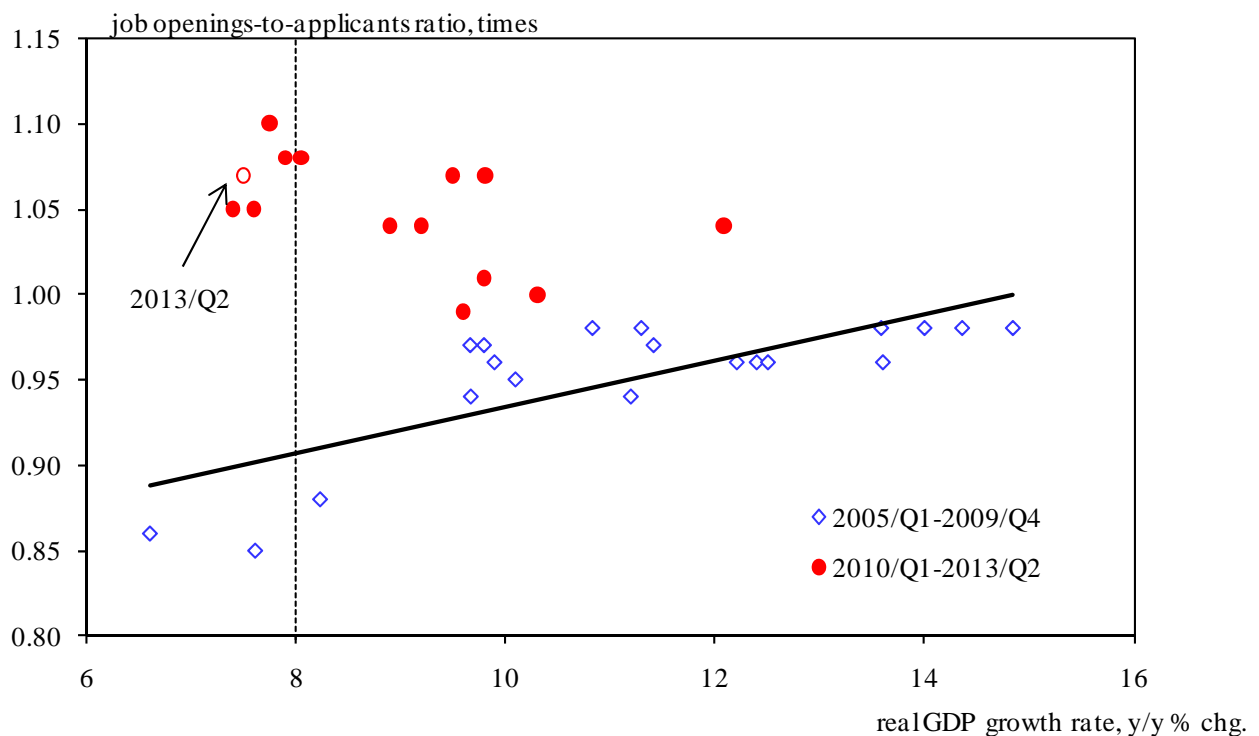
## Chinese Economy (2)

### (1) Long-Term Economic Outlook ("China 2030")



Note: "China 2030" is a joint research project of the Development Research Center of the State Council, P. R. China and The World Bank.

### (2) GDP and Employment

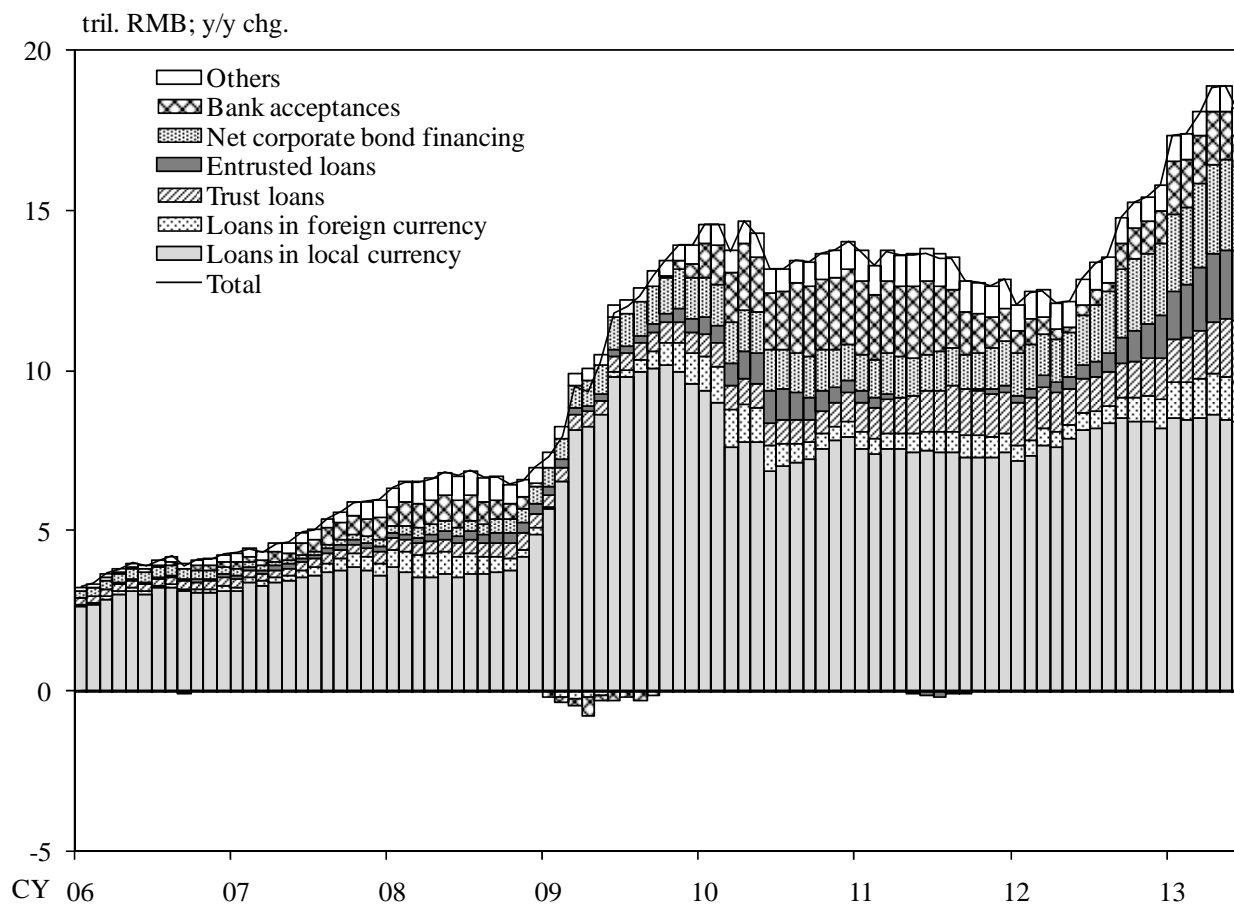


Note: Solid line is the regression line of 2005/Q1-2009/Q4 data.

Source: The World Bank; Development Research Center of the State Council, P. R. China; United Nations; CEIC Data.

## Chinese Economy (3)

### Amount Outstanding of Total Social Financing



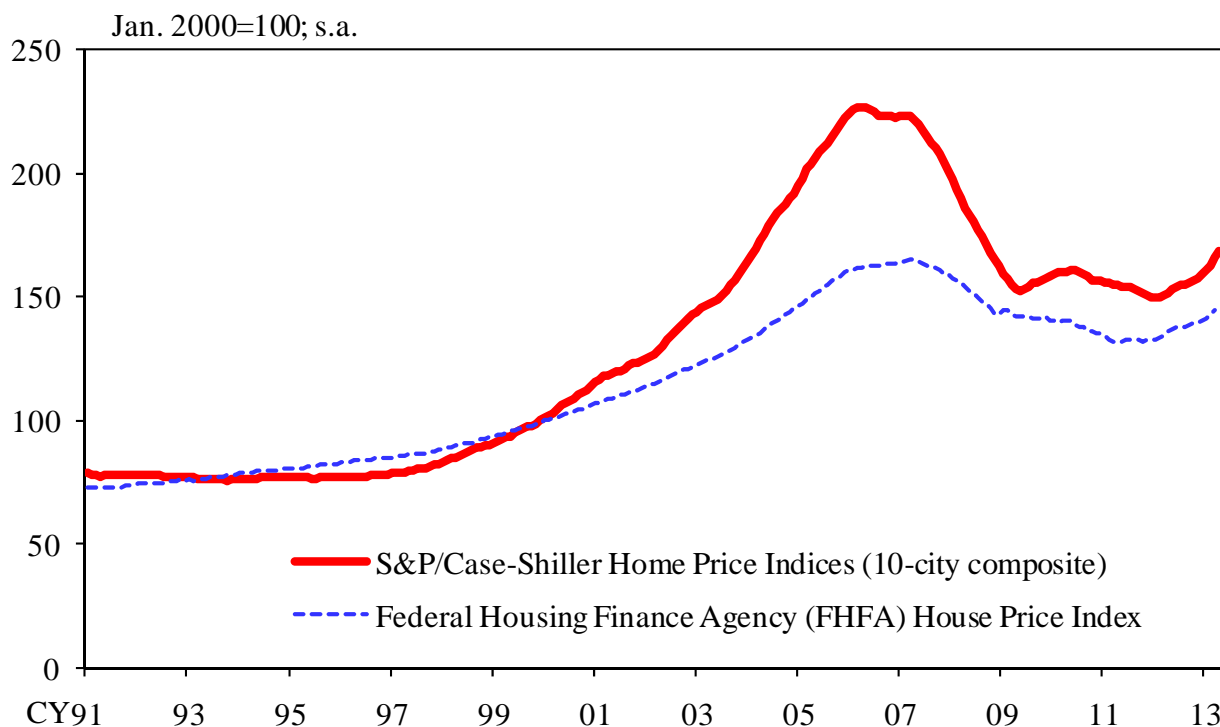
Notes: 1. Total social financing is a broad measure for credit in China.

2. The year-on-year change is the cumulative amount of the differences from previous months' disclosed outstanding.

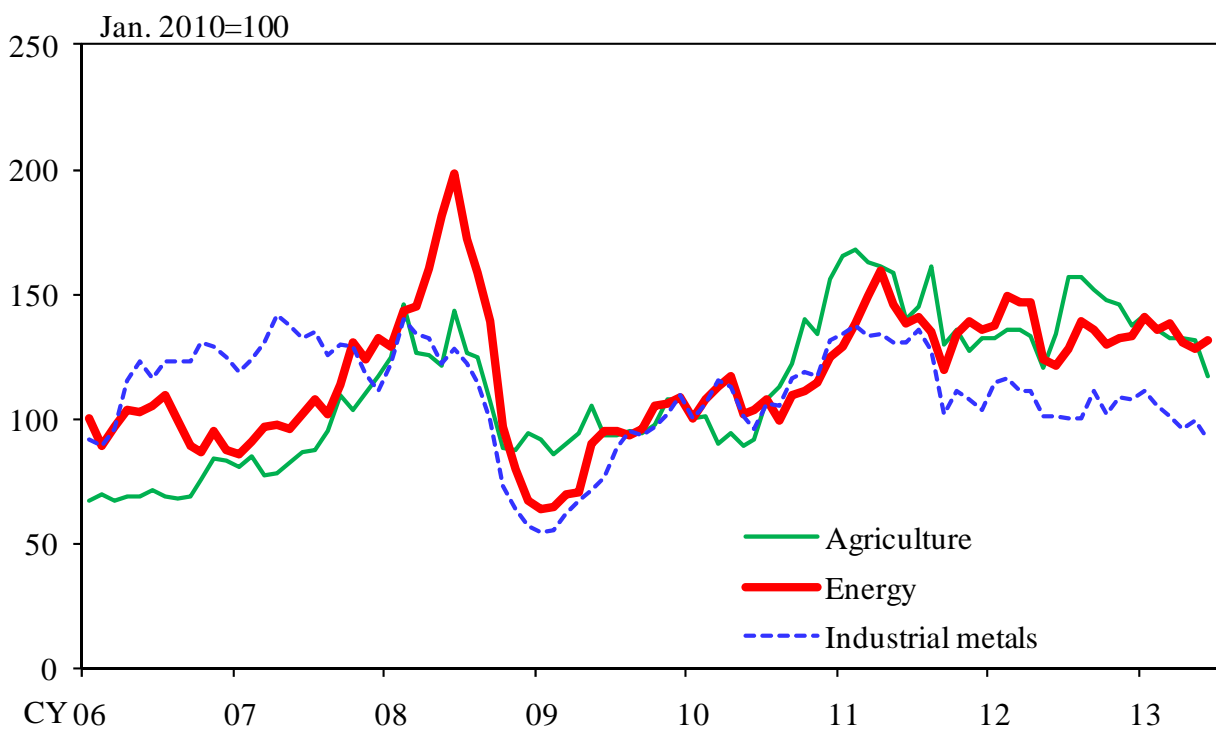
Source: CEIC Data.

# U.S. Housing Prices and International Commodity Prices

## (1) U.S. Housing Prices



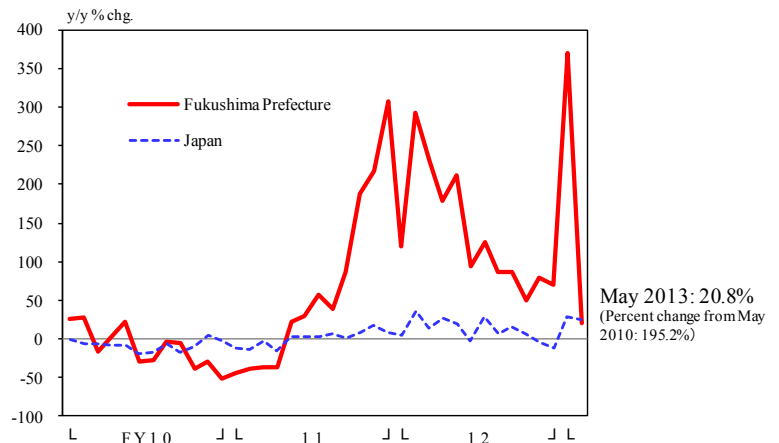
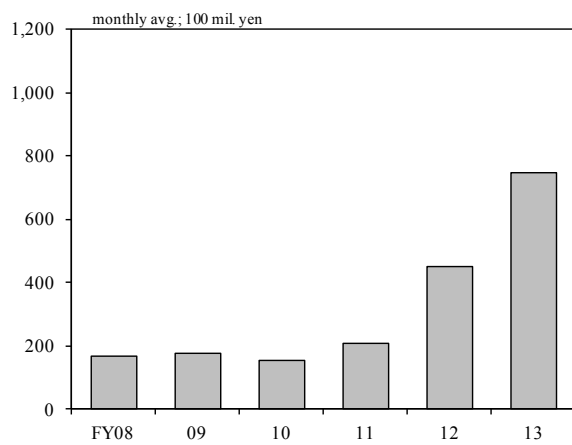
## (2) International Commodity Prices (S&P GSCI Commodity Index)



Source: Bloomberg.

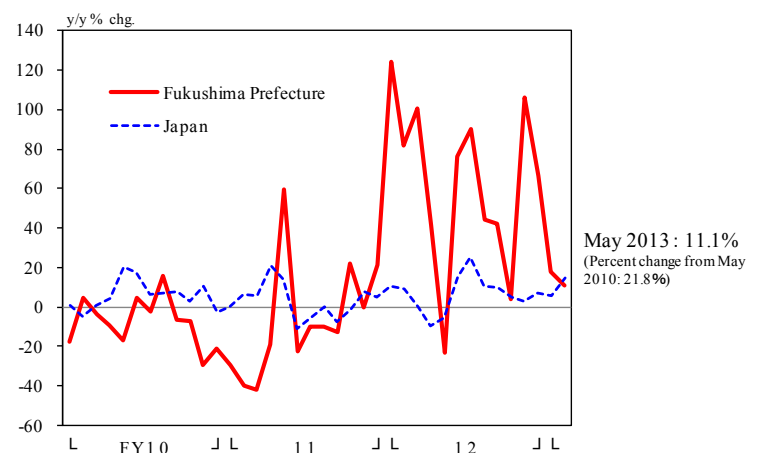
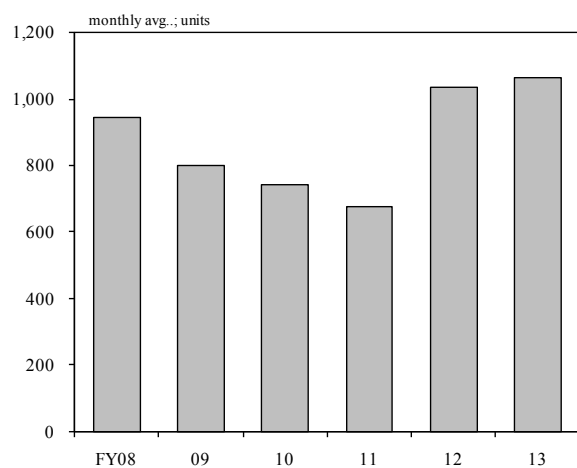
# Economy of Fukushima Prefecture (1)

## (1) Value of Public Works Contracted



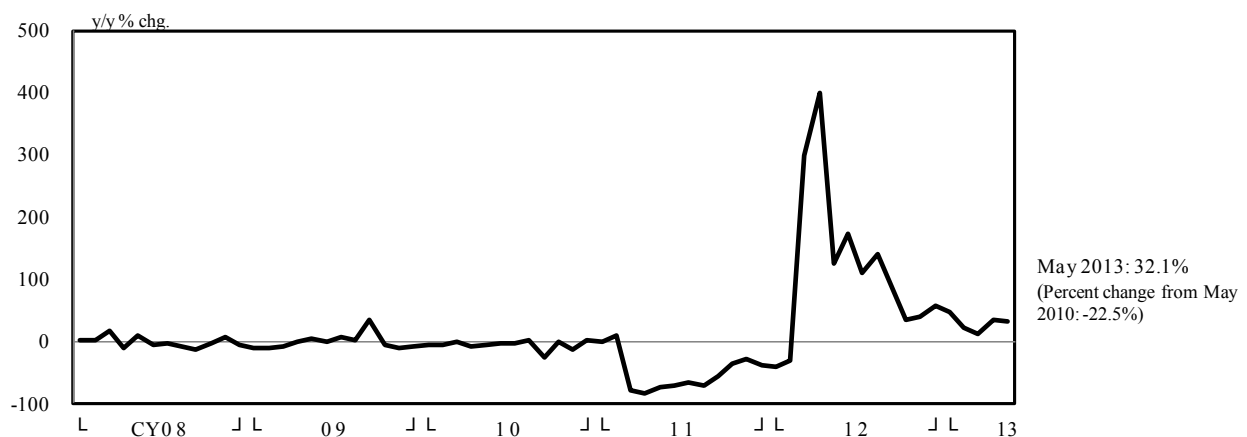
Note: Figures for fiscal 2013 are the monthly average amount in April and May 2013.

## (2) Housing Starts



Note: Figures for fiscal 2013 are the monthly average amount in April and May 2013.

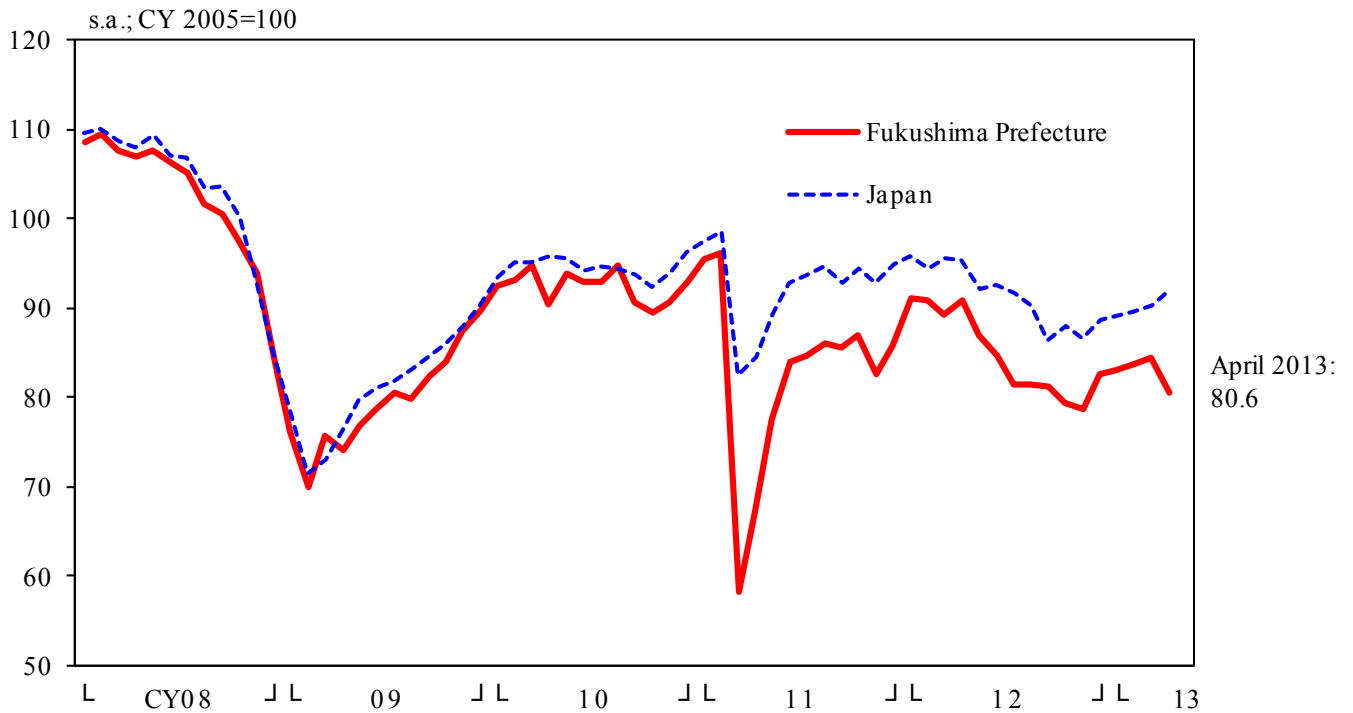
## (3) Number of Visitors to Major Tourist Facilities



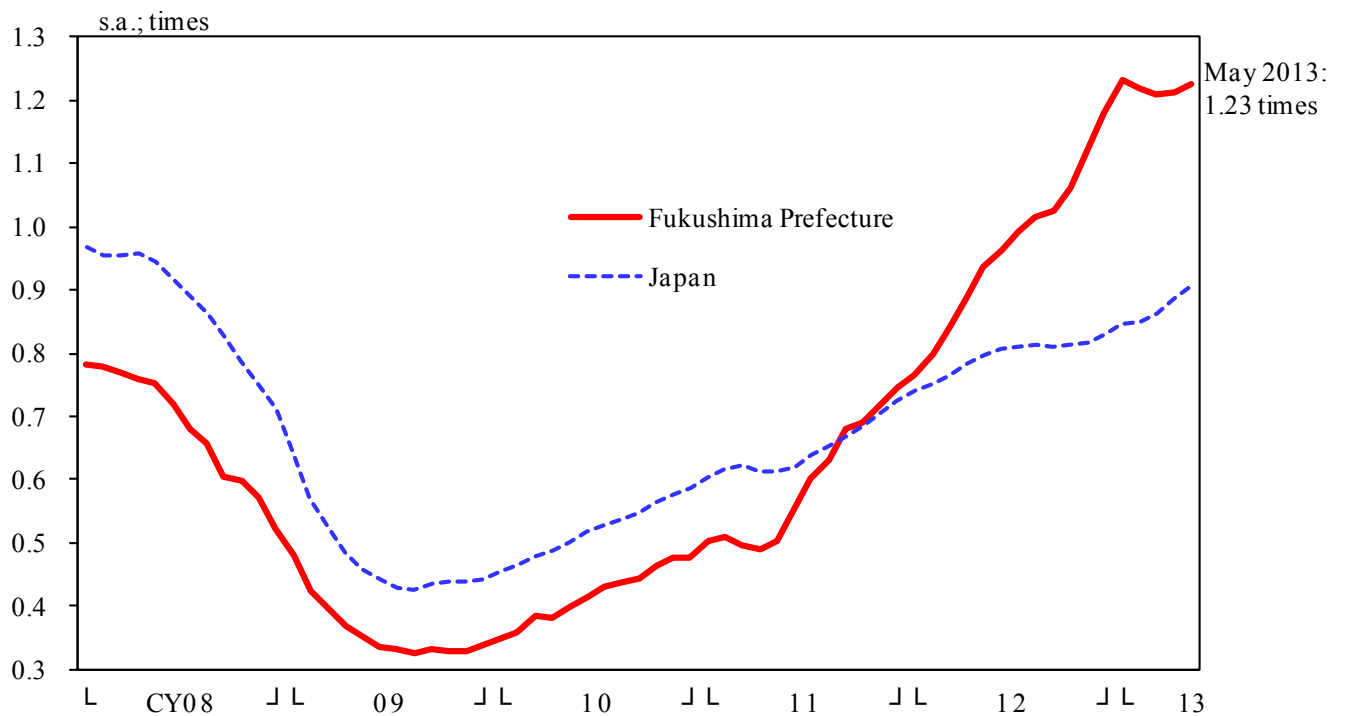
Note: Nine facilities were counted through 2010 and twelve facilities were counted from 2011.  
Sources: East Japan Construction Surety; Ministry of Land, Infrastructure, Transport and Tourism; Bank of Japan.

## Economy of Fukushima Prefecture (2)

### (1) Indices of Industrial Production



### (2) Active Job Openings-to-Applicants Ratio



Sources: Fukushima Prefecture; Ministry of Economy, Trade and Industry; Fukushima Labor Bureau; Ministry of Health, Labour and Welfare.