January 22, 2013 Cabinet Office Ministry of Finance Bank of Japan

# Joint Statement of the Government and the Bank of Japan on Overcoming Deflation and Achieving Sustainable Economic Growth

The Government and the Bank of Japan decided to release the attached statement jointly. They will strengthen their policy coordination in order to overcome deflation and achieve sustainable economic growth.

# Joint Statement of the Government and the Bank of Japan on Overcoming Deflation and Achieving Sustainable Economic Growth

- 1. In order to overcome deflation early and achieve sustainable economic growth with price stability, the Government and the Bank of Japan will strengthen their policy coordination and work together as follows.
- 2. The Bank of Japan conducts monetary policy based on the principle that the policy shall be aimed at achieving price stability, thereby contributing to the sound development of the national economy, and is responsible for maintaining financial system stability. The Bank aims to achieve price stability on a sustainable basis, given that there are various factors that affect prices in the short run.

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.

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.

3. The Government will, in order to revitalize Japan's economy, not only flexibly manage macroeconomic policy but also formulate measures for strengthening competitiveness and growth potential of Japan's economy, and promote them strongly under the leadership of the Headquarters for Japan's Economic Revitalization. Those measures include all possible decisive policy actions for reforming the economic structure, such as concentrating resources on innovative research and development, strengthening the foundation for innovation, carrying out bold regulatory and institutional reforms and better utilizing the tax system.

In addition, in strengthening coordination between the Government and the Bank of Japan, the Government will steadily promote measures aimed at establishing a sustainable fiscal structure with a view to ensuring the credibility of fiscal management.

4. The Council on Economic and Fiscal Policy will regularly review the progress in the conduct of macroeconomic policies including monetary policy, the current condition and future prospects of prices in the context of the price stability target under those policies, economic and fiscal situation including employment conditions, and progress in economic structural reform.

# 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.
ation targeting	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.

# Giving Flexibility to Monetary Policy Frameworks in Considering Financial Systems

### (Federal Reserve Board)

"Inflation, employment, and long-term interest rates fluctuate over time in response to economic and financial disturbances. Moreover, monetary policy actions tend to influence economic activity and prices with a lag. Therefore, the Committee's policy decisions reflect its longer-run goals, its medium-term outlook, and its assessments of the balance of risks, including risks to the financial system that could impede the attainment of the Committee's goals."

("FOMC Statement of Longer-Run Goals and Policy Strategy," January 25, 2012)

### (Reserve Bank of Australia)

"This statement also records our common understanding of the Reserve Bank's longstanding responsibility for financial system stability....Without compromising the price stability objective, the Reserve Bank seeks to use its powers where appropriate to promote the stability of the Australian financial system."

("Statement on the Conduct of Monetary Policy," September 30, 2010)

### (Bank of Canada)

"At the time of the last renewal of the inflation-targeting agreement, however, the Bank recognized that because the effects of financial imbalances on output and inflation could manifest themselves over a long period of time, some flexibility might be needed with regard to the time horizon over which inflation should be expected to return to target. While this flexibility might involve sacrificing some inflation performance over the usual policy horizon, it would lead to greater financial, economic and, ultimately, price stability over a somewhat longer horizon."

("Renewal of the Inflation-Control Target: Background Information," November 9, 2011)

### (Reserve Bank of New Zealand)

"The PTA (Policy Targets Agreement) also includes a stronger focus on financial stability, by including asset prices in the range of indicators the Bank monitors, and requiring the Bank to have regard to the soundness and efficiency of the financial system in setting monetary policy. 'I believe that the existing policy targets agreement has served New Zealand well and there are benefits in maintaining consistency in the agreement,' Mr English says. 'Therefore, I did not feel that any major changes were required.' However, the Global Financial Crisis has focused some attention on monetary policy frameworks, and I want to ensure the PTA continues to reflect best international practice."

("New Policy Targets Agreement signed today," September 20, 2012)

# Additional Steps Taken by the Bank of Japan to Provide Monetary Accommodation Decisively (January 22, 2013)

## 1. 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.

# 2. Introduction of the "Open-Ended Asset Purchasing Method"

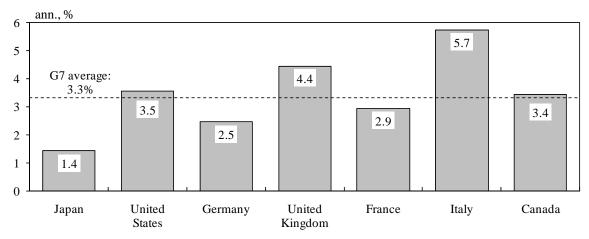
- The Bank will pursue aggressive monetary easing, aiming to achieve the above-mentioned price stability target, through a virtually zero interest rate policy and purchases of financial assets, as long as the Bank judges it appropriate to continue with each policy measure respectively.
- With respect to the Asset Purchase Program, after completing the current purchasing method, from January 2014, the Bank will introduce a method of purchasing a certain amount of financial assets every month without setting any termination date.
- ➤ Particularly, for some time, following the introduction of this method, the amount of monthly purchases is specified at about 13 trillion yen, 2 trillion yen of which is JGBs.

## (Joint statement of the Government and the Bank of Japan)

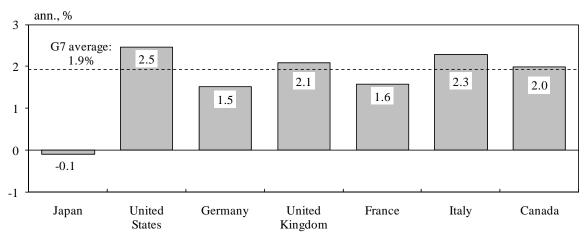
The Bank and the Government released a statement titled "Joint Statement of the Government and the Bank of Japan on Overcoming Deflation and Achieving Sustainable Economic Growth."

## Consumer Price Indexes in Advanced Economies

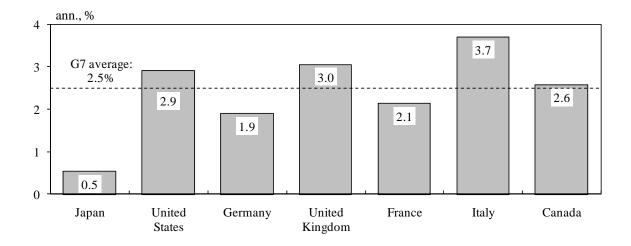
## 1. (1) CY 1985-1995



### 2. (2) CY 1996-2011



## 3. (3) CY 1985-2011

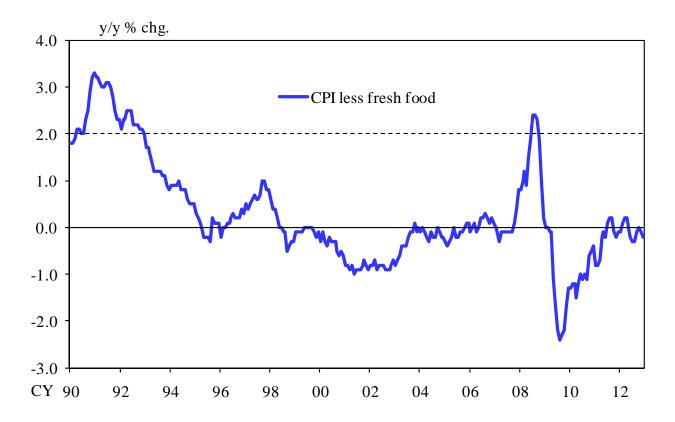


Notes: 1. Figures are the averages of the year-on-year rates of change in the CPI (all items) during the specified periods.

2. Figures for Germany prior to 1991 are those for the former West Germany.

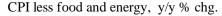
Source: Organization for Economic Co-operation and Development.

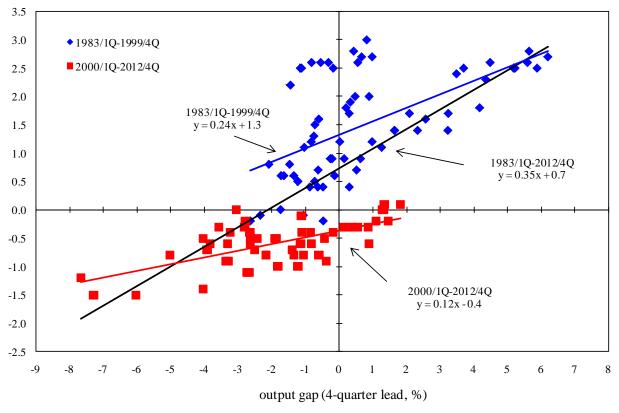
# Consumer Price Index



Note: Figures for the CPI are adjusted to exclude the effect of changes in the consumption tax rate. Source: Ministry of Internal Affairs and Communications.

# Output Gap and Inflation Rate





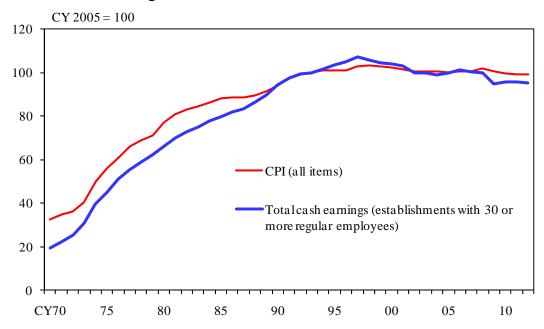
Notes: 1. Figures for the CPI are adjusted to exclude the effect of changes in the consumption tax rate.

- 2. The output gap is estimated by the Research and Statistics Department of the 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.
- 3. The number of lags is chosen so that the cross-correlation between the output gap and the CPI is maximized.

Source: Ministry of Internal Affairs and Communications, Cabinet Office, etc.

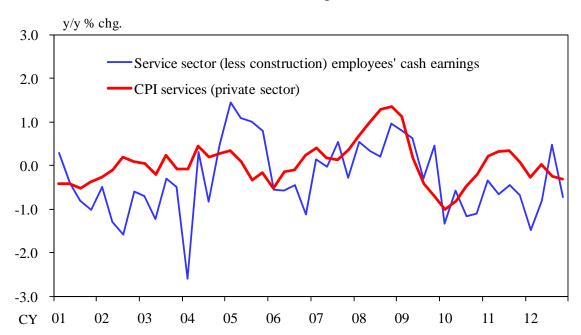
# Consumer Price Index and Nominal Wages

### (1) CPI and Nominal Wages



Sources: Ministry of Internal Affairs and Communications; Ministry of Health, Labor and Welfare.

## (2) CPI Services Prices and Service Sector Wages

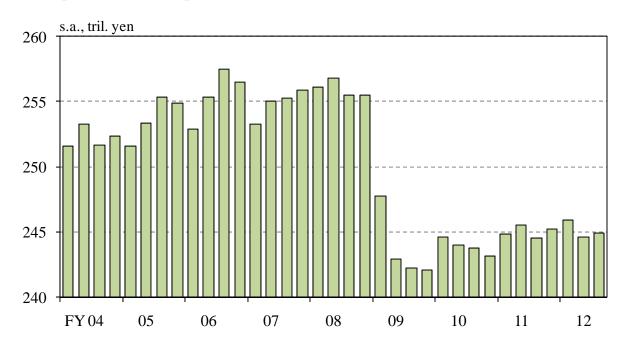


Notes: 1. Service sector (less construction) cash earnings = scheduled cash earnings of nonmanufacturing firms with full or part-time workers of five or more/total hours worked. Figures for the service sector (less construction) exclude those for "manufacturing," "mining and quarrying of stone and gravel," and "construction."

2. Figures for CPI services (private sector) exclude those for "public sector," and "rent." Sources: Ministry of Internal Affairs and Communications; Ministry of Health, Labor and Welfare.

# Compensation of Employees and Labor Share of Income Distribution

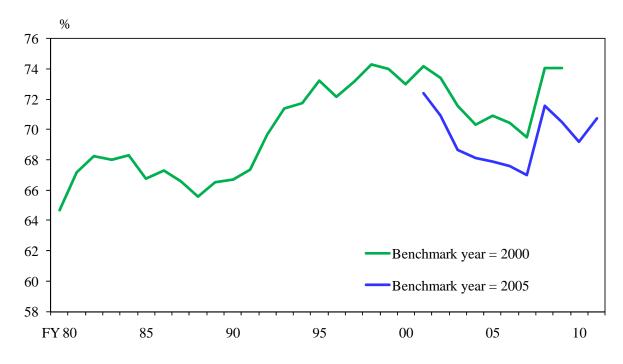
## (1) Compensation of Employees at Current Prices



Note: Figures are based on GDP and annualized.

Source: Cabinet Office.

### (2) Labor Share

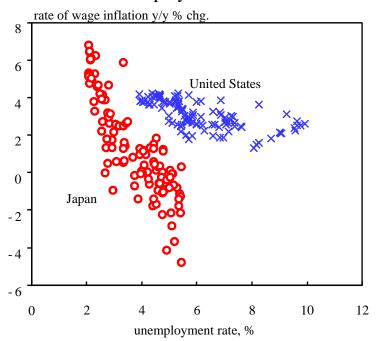


Note: Labor share = compensation of employees/national income.

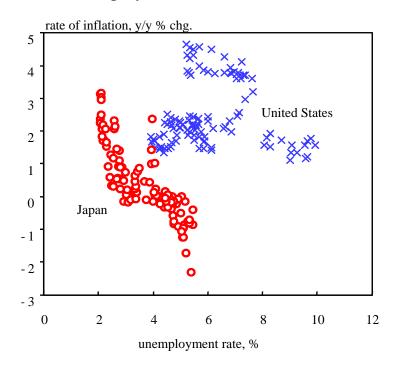
Source: Cabinet Office.

## Phillips Curve in Japan and the United States

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



### (2) Rate of Inflation and Unemployment Rate



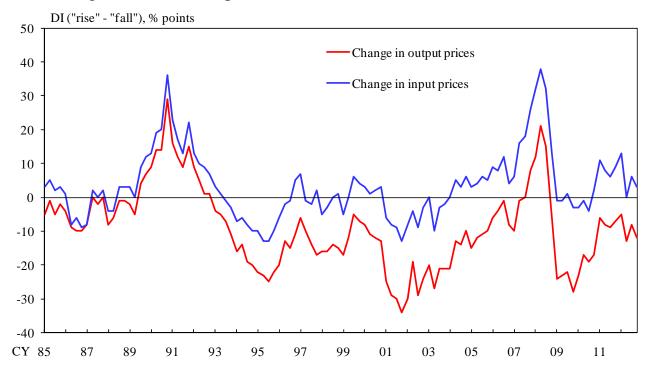
Notes: 1. The period covers the period from 1985/1Q through 2012/3Q.

- 2. The wage is the hourly wage. Figures for wages in Japan are calculated as "total cash earnings (establishment with 30 or more employees)" divided by "total hours worked." Figures for wages in the United States use "average hourly earnings of production and nonsupervisory employees: total private."
- 3. The consumer price index (CPI) for all items less fresh food and personal consumption expenditures excluding food and energy are used for figures for the inflation rate in Japan and the United States, respectively.
- 4. Figures for the CPI in Japan are adjusted to exclude the effects of changes in the consumption tax rate in 1989 (from 0 percent to 3 percent) and in 1997 (from 3 percent to 5 percent).

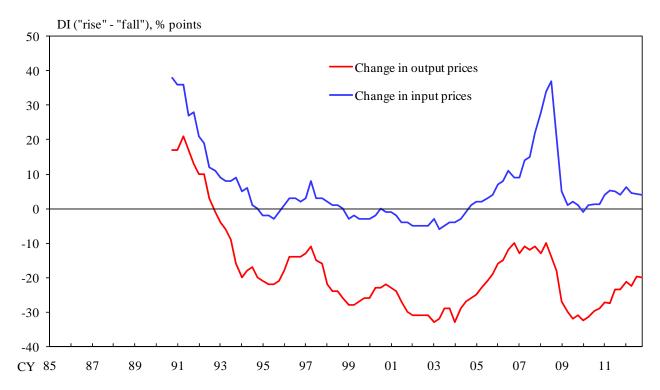
Sources: Ministry of Health and Welfare; Ministry of Internal Affairs and Communications; U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics.

# **Pricing Power of Firms**

## (1) Retailing (All-Sized Enterprises)



## (2) Services for Businesses and Individuals (All-Sized Enterprises)

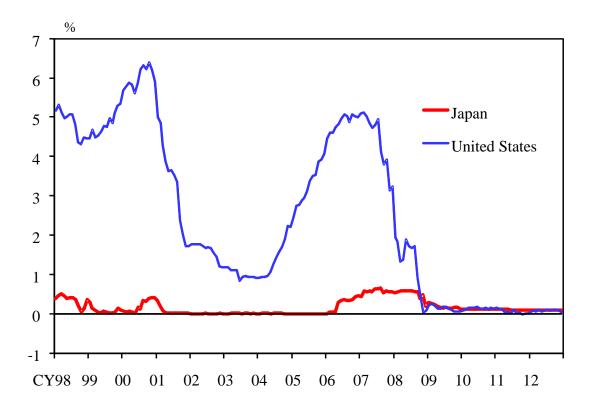


Note: Figures from 2010 are weighted averages of the services for businesses and individuals by the number of reporting companies.

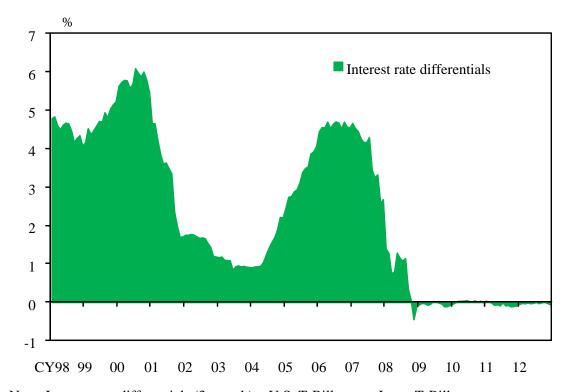
Source: Bank of Japan.

# Interest Rate Differentials between Japan and the United States

## (1) T-Bill Rates (3-month)



### (2) Interest Rate Differentials (3-month)

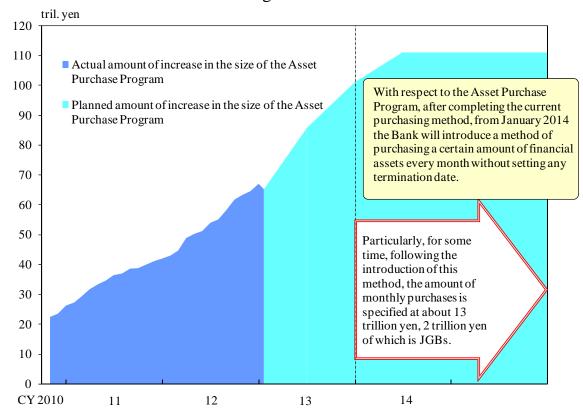


Note: Interest rate differentials (3-month) = U.S. T-Bill rates - Japan T-Bill rates.

Source: Bloomberg.

# **Asset Purchase Program**

### (1) Amount of the Asset Purchase Program



### (2) Breakdown of the Asset Purchase Program

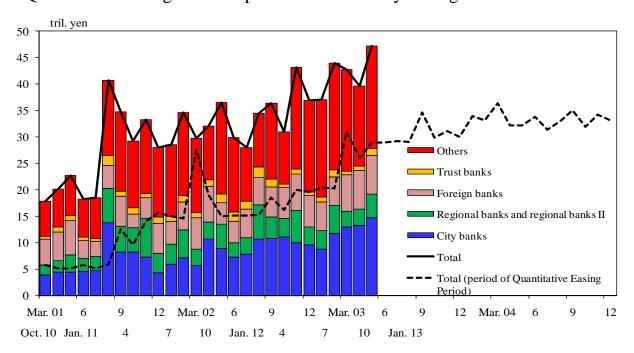
tril. yen

		Started in Oct. 2010	Amount outstanding (as of Jan. 20)	Program size (end-Dec. 2013)	From Jan. 2014
Т	otal size	About 35	65.3	About 101	
Α	Asset purchases	5.0	40.2	76.0	
	JGBs	1.5	24.6	44.0	Open-ended asset
	T-Bills	2.0	9.4	24.5	purchasing method (the amount of monthly purchases is specified at about 13 trillion yen, 2 trillion yen of which is
	СР	0.5	1.8	2.2	
	Corporate bonds	0.5	2.9	3.2	
	ETFs	0.45	1.5	2.1	JGBs)
	J-REITs	0.05	0.11	0.13	
	ixed rate peration	30.0	25.0	25.0	

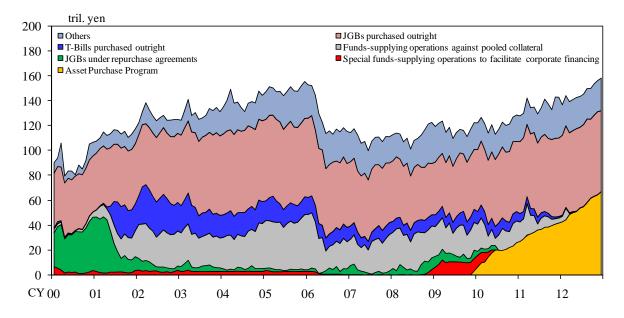
Note: In addition to purchases under the Program, the Bank of Japan regularly purchases JGBs at the pace of 21.6 trillion yen per year.

# Outstanding Balance of BOJ Accounts and the Asset Purchase Program

(1) Comparison of the Outstanding Balance of BOJ Accounts between the Periods of Quantitative Easing and Comprehensive Monetary Easing



### (2) Developments in the Asset Purchase Program



Notes:1. "Asset Purchase Program" includes fixed-rate funds-supplying operations against pooled collateral.

- 2. "Special funds-supplying operations to facilitate corporate financing" includes outright purchases of CP (including purchases of asset backed securities), outright purchases of corporate bonds, and purchase of CP with repurchase agreements.
- 3. "Funds-supplying operations against pooled collateral (excluding "fixed-rate funds-supplying operations against pooled collateral")" includes outright purchases of bills and outright purchases of bills collateralized by corporate debt obligations.
- 4. "JGBs under repurchase agreements" includes borrowing of JGBs against cash collateral (JGB repos).
- 5. "Others" includes T-Bills underwritten.

Source: Bank of Japan.

# Argument for Purchasing Foreign Bonds

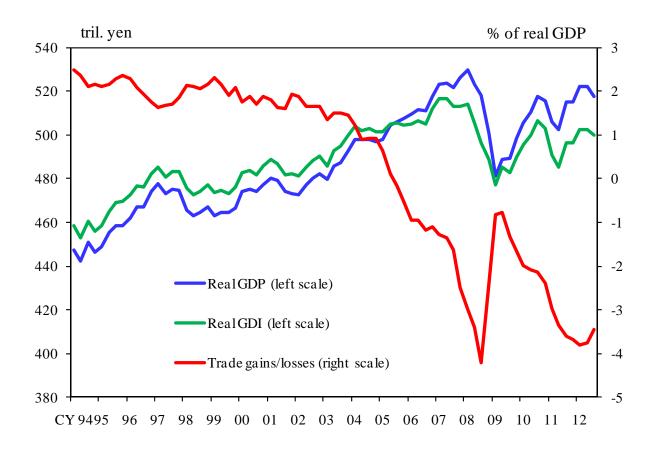
### (1) Bank of Japan Act (Article 40, excerpt)

- Article 40 The Bank of Japan may, when necessary, buy and sell foreign exchange on its own account or as an agent handling national government affairs pursuant to Article 36, paragraph 1, and it may also buy and sell foreign exchange on behalf of foreign central banks, etc. (foreign central banks and those equivalent thereto; the same shall apply hereinafter) or international institutions (international institutions of which Japan has a membership, including the Bank for International Settlements; the same shall apply hereinafter) as their agent in order to cooperate with them as the central bank of Japan.
  - (2) The Bank of Japan shall buy and sell foreign exchange as an agent handling national government affairs pursuant to Article 36, paragraph 1, when the purpose of the buying and selling is to stabilize the exchange rate of Japanese currency.

### (2) Bank of Japan Act (Article 43, excerpt)

Article 43 The Bank of Japan may not conduct any business other than that specified by this Act as the business of the Bank; provided, however, that this shall not apply to the case where such business is necessary to achieve the Bank's purpose specified by this Act and the Bank has obtained authorization from the Minister of Finance and the Prime Minister.

# Real GDP and Real GDI

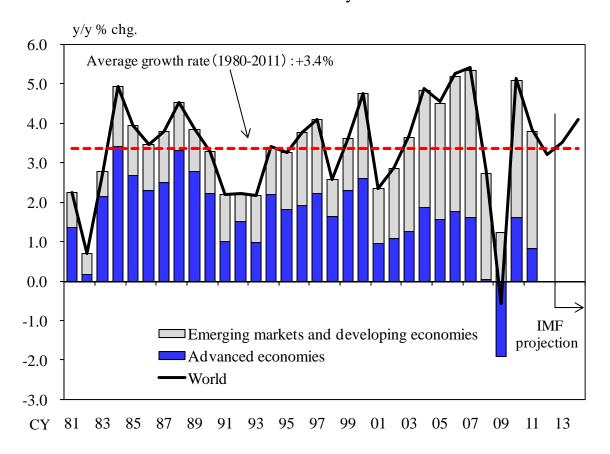


Note: real GDI = real GDP + trade gains/losses.

Source: Cabinet Office.

## Overseas Economies

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



### (2) IMF Projections (as of Jan. 2013)

real GDP growth rate, %

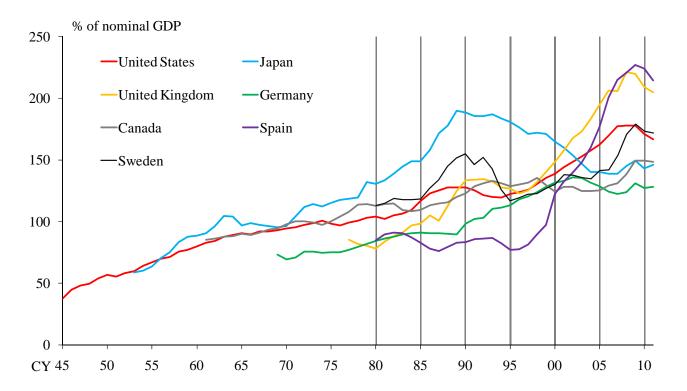
				rear C	DP growth rate, %
CY	Y	2011	2012	2013 projection	2014 projection
W	orld	3.9	3.2	3.5	4.1
				(-0.1)	(-0.1)
	Advanced ecnomies	1.6	1.3	1.4	2.2
	- Advanced cenomics			(-0.2)	(-0.1)
	United States	1.8	2.3	2.0	3.0
	United States			(-0.1)	(0.1)
	E	1.4	-0.4	-0.2	1.0
	Euro area			(-0.3)	(-0.1)
	T	-0.6	2.0	1.2	0.7
	Japan			(0.0)	(-0.4)
	Emerging Markets and	6.3	5.1	5.5	5.9
	developing economies			(-0.1)	(0.0)
	Developing Asia	8.0	6.6	7.1	7.5
				(-0.1)	(0.0)
	China	9.3	7.8	8.2	8.5
	China	9.5		(0.0)	(0.0)
	D . '1	2.7	1.0	3.5	4.0
	Brazil			(-0.4)	(-0.2)

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 October 2012 WEO projections.

Source: International Monetary Fund.

## Private Debt



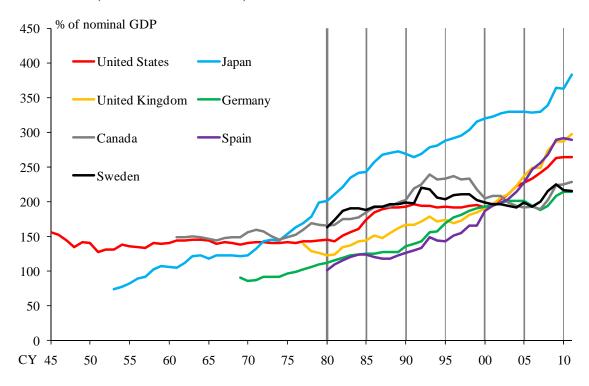
Notes: 1. Private sector includes households and nonfinancial corporations. Figures are based on the "Flow of Funds."

- 2. Debt is the sum of loans and fund-raising in the financial market (e.g., CP and corporate bonds).
- 3. For Japan, the private sector includes households and private nonfinancial corporations. Loans by nonfinancial institutions are not included.
- 4. For Sweden, loans between nonfinancial institutions are not included.

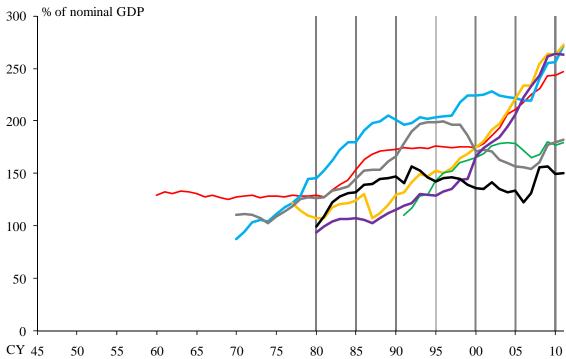
Sources: U.S. Bureau of Economic Analysis; Federal Reserve; Bank of Japan; Office for National Statistics; Deutsche Bundesbank; European Commission; Eurostat; Statistics Canada; Statistics Sweden; Organisation for Economic Co-operation and Development; International Monetary Fund.

## **Total Debt**

### (1) Total Debt (Private Plus Public)



## (2) Total Debt (Private Plus Public [Net Basis])

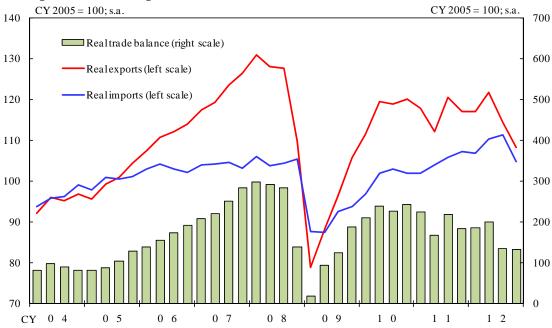


Notes: Figures for gross public debt are taken from the statistics of each country. Figures for net public debt are taken from the OECD statistics. Total debt is the sum of public (both net and gross) and private debt taken from the statistics of each country.

Sources: U.S. Bureau of Economic Analysis; Federal Reserve; Bank of Japan; Office for National Statistics; Deutsche Bundesbank; European Commission; Eurostat; Statistics Canada; Statistics Sweden; Organisation for Economic Co-operation and Development; International Monetary Fund.

# External Balance<sup>1</sup> and Production



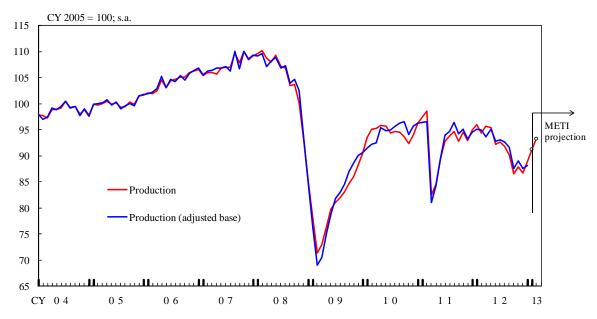


Notes: 1. Seasonally adjusted by X-12-ARIMA.

2. Real exports/imports are the value of exports and imports in the "Trade Statistics" deflated by the "Export and Import Price Index." From May 2012 and onward, deflators are calculated by extending the 2005 base deflators using monthly changes of the 2010 base price indices. "Real trade balance" is defined as real exports minus real imports.

Sources: Minstry of Finance, Bank of Japan

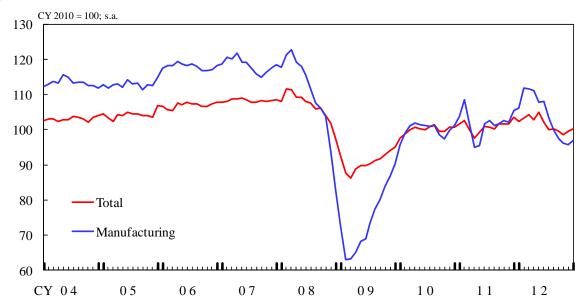
### (2) Production



Note: Industrial production (adjusted base) is calculated by detecting large fluctuations after the Lehman shock as outliers (estimation by the Research and Statistics Department of the Bank of Japan). Source: Ministry of Economy, Trade and Industry, "Indices of Industrial Production."

# Non-Scheduled Hours Worked<sup>2</sup> and Surveys of Bonus Payments

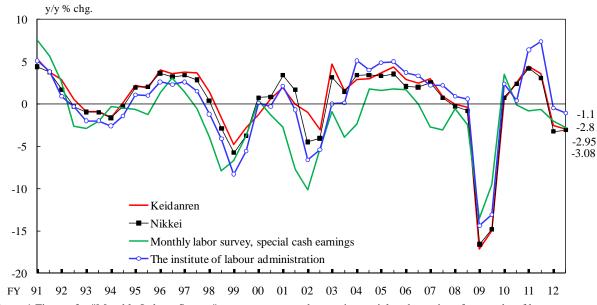
### (1) Non-Scheduled Hours Worked<sup>2</sup>



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

Sources: Ministry of Internal Affairs and Communications, Ministry of Health, Labour and Welfare.

### (2) Surveys of Bonus Payments



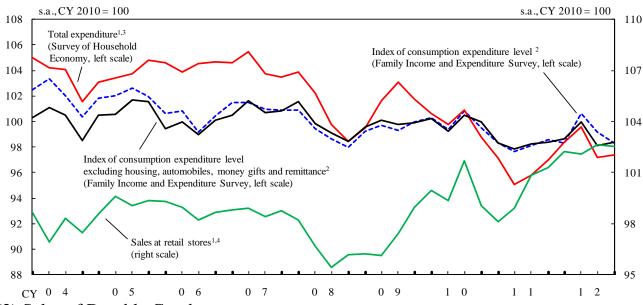
Notes: 1.Figures for "Monthly Labour Survey" are year-on-year changes in special cash earnings for months of bonus payments (Summer: June-August. Winter: November-January).

- 2. Data from "Monthly Labour Survey" are for establishments with at least five employees. The figure for the winter bonus payments for FY2012 is November-December average.
- 3. Figures for "Keidanren" are based on 247 large enterprises belonging to 21 major industries. Figures for the winter bonus payments for FY2012 are based on the final tabulation released on 12/26.
- 4. Figures for "Nikkei Inc." are based on listed companies and selected non-listed companies, summed up to 3759 companies. Figures for the winter bonus payments for FY2012 are based on the final tabulation released on 12/3.
- 5. Figures for "The institute of labour administration" are based on listed companies in TSE first section whose labour unions join in major single industry unions. The winter bonus payments for FY2012 are based on September 12 tabulation.

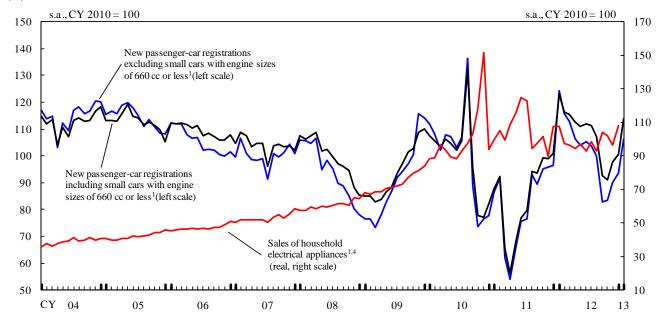
Sources: Ministry of Health, Labour and Welfare,; Keidanren; Nikkei Inc.; The Institute of Labour Administration.

# **Indicators of Private Consumption**

## (1) Household Spending (Real)<sup>5</sup>



### (2) Sales of Durable Goods

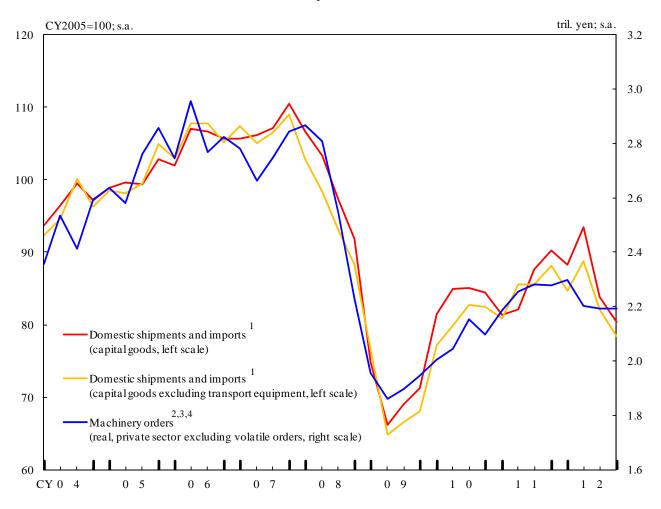


Notes: 1. Total expenditure, sales at retail stores, sales of household electrical appliances and new passenger-car registrations are seasonally adjusted by X-12-ARIMA.

- 2. "Index of consumption expenditure level" is based on two-or-more-person households, and is adjusted using the distribution of household by number of household members and age group of household head.
- 3. "Total expenditure" is based on two-or-more-person households, and is deflated by the "consumer price index (CPI)" excluding imputed rent.
- 4. "Sales at retail stores" is deflated by the CPI for goods (excluding electricity, gas & water charges). "Sales of household electrical appliances" is calculated as follows: indices of retail sales, of machinery and equipment in the "Current Survey of Commerce" are deflated by the geometric means of the corresponding CPI.
- 5. Figures for 2012/Q4 are those of October-November averages in quarterly amount.

Sources: Ministry of Internal Affairs and Communications, "Consumer Price Index," "Monthly Report on the Family Income and Expenditure Survey," "Survey of Household Economy"; Ministry of Economy, Trade and Industry, "Current Survey of Commerce"; Japan Automobile Dealers Association, "Domestic Sales of Automobiles"; Japan Mini Vehicles Association, "Sales of Mini Vehicles."

# **Machinery Investment**



Notes: 1. Figures for 2012/Q4 are October-November averages.

- 2. Machinery orders (real) are deflated by the consumer goods price index (CGPI) for capital goods (domestic goods).
- 3. Figures up to fiscal 2004 are estimated by the Cabinet Office. Volatile orders: orders for ships and those from electric power companies.
- 4. Figures for 2012/Q4 are October-November averages in terms of quarterly amount.

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

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

### Baseline scenario

#### (Outlook for Economic Activity)

Japan's economy is expected to level off more or less for the time being, and thereafter, it will return to a moderate recovery path as domestic demand remains resilient partly due to the effects of various economic measures and overseas economies gradually emerge from the deceleration phase.

#### (Outlook for Prices)

The year-on-year rate of change in the CPI is expected to turn negative due to the reversal of the previous year's movements, and thereafter, it is likely to be around 0 percent again. The CPI is expected to start rising gradually thereafter as the aggregate supply and demand balance improves.

Compared with the forecasts presented in the October 2012 Outlook for Economic Activity and Prices, growth prospects will likely be somewhat lower for fiscal 2012, but they will likely be higher for fiscal 2013 partly due to the effects of various economic measures. Growth prospects for fiscal 2014 will likely be broadly in line with the October forecasts. The year-on-year rate of change in the CPI will likely be broadly in line with the October forecasts.

#### Forecasts of the Majority of Policy Board Members

y/y chg.

	Real GDP	Domestic CGPI	CPI (all items less fresh food)
Fiscal 2013	+2.3	+0.8	+0.4
Forecasts made in Oct. 2012	(+1.6)	(+0.5)	(+0.4)
Fiscal 2014	+0.8	+4.1	+2.9
Forecasts made in Oct. 2012	(+0.6)	(+4.2)	(+2.8)
Excluding the effects of the consumption tax hike		+1.2	+0.9
Forecasts made in Oct. 2012		(+1.3)	(+0.8)

### Upside and Downside Risks

(Outlook for Economic Activity)

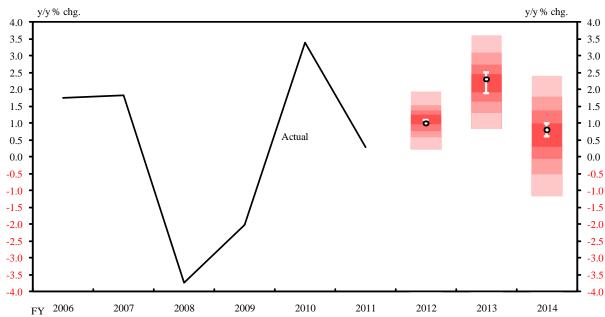
- 1. Developments in global financial markets and overseas economy, including the prospects for the European debt problem, the momentum toward recovery for the U.S. economy, the possibility of emerging and commodity-exporting economies making a smooth transition to the sustainable growth path, and the effects of the recent bilateral relationship between Japan and China.
- 2. Uncertainty with regard to firm's and households' medium to long-term growth expectation
- 3. Uncertainty with regard to the effect of consumption tax hike
- 4. Various problems regarding Japan's fiscal sustainability

#### (Outlook for Prices)

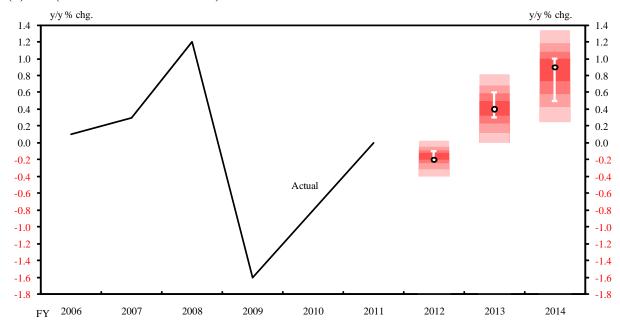
- 1. Uncertainty associated with the responsiveness of prices to aggregate supply and demand
- 2. Developments in firms' and households' medium- to long-term inflation expectations
- 3. Developments in import prices

# Forecast Distribution Charts of Policy Board Members: Interim Assessment (as of Jan. 2013)





#### (2) CPI (All Items Less Fresh Food)



Notes: 1. Based on the aggregated probability distributions (i.e., the Risk Balance Charts) compiled from the distributions of individual Policy Board members, the Forecast Distribution Charts are compiled as follows. First, upper and lower 10 percentiles of the aggregated distributions are trimmed and second, colors indicated below are used to show the respective percentiles of those distributions.

Upper 40% to lower 40%	Upper 30 to 40%	Upper 20 to 30%	Upper 10 to 20%
Opper 40% to lower 40%	& lower 30 to 40%	& lower 20 to 30%	& lower 10 to 20%

- For the process of compilation of the Risk Balance Charts, see the box on page 9 of the April 2008 Outlook for Economic Activity and Prices.
- 3. The circles in the bar charts indicate the median of the Policy Board members' forecasts (point estimates). The vertical lines in the bar charts indicate the range of the forecasts of the majority of Policy Board members.
- 4. The forecast for the CPI excludes the direct effects of the scheduled consumption tax hikes.