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Bank of Japan

**Quantitative and Qualitative Monetary Easing and
Japan's Recent Economic and Financial Developments**

*Speech at a Newspaper Editorial Writers' Meeting
Held at Kyodo News in Tokyo*

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Introduction

Thank you for providing me with an opportunity to speak in front of this large group of columnists.

Today, I want to explain the content and basic thinking behind quantitative and qualitative monetary easing (QQE) introduced by the Bank of Japan in April last year. I will also touch on the role-sharing between our monetary policy and the growth strategy being implemented by the government.

I. Inflation Targeting Policy and Deflation

A. Downside of Deflation

Let me ask two basic questions. Why is deflation problematic, and why did the Bank adopt an inflation targeting policy?

Deferring Spending and Decline in Aggregate Demand

Deflation, which can be defined as a persistent decline in prices, causes economic stagnation through several routes (Chart 1).

First, if prices decline persistently, one can purchase more goods and services with the same amount of money as time passes. In other words, the value of cash and deposits will rise simply by hoarding them; thus, firms and households will defer their investment and spending. Consequently, this will lead to a decline in aggregate demand.

Such a decline will make firms reduce their production activity at a level consistent with the drop in sales. Corporate profits will deteriorate and employee income will fall accordingly, and these factors will contribute to a further decrease in spending, housing investment, and firms' business fixed investment. All this will lead to yet another decline in aggregate demand, which will induce a further drop in prices. Hence, a vicious cycle of price declines and stagnation prevails.

Increase in Effective Debt Burden

A persistent decline in prices means that the value of money for goods and services will increase. For those who borrow money, the value of money that they will have to repay will increase. This represents an increase in the effective burden of debt.

Thus, firms and households will become cautious about borrowing money. The effective burden of debt brought about by money that has already been borrowed will become heavier, weighing on consumption and investment. As a result of shrinking aggregate demand, a vicious cycle of price declines and stagnation will prevail once again. Such a mechanism can also be referred to as "debt deflation."

Excessive Appreciation of the Yen

A persistent decline in prices means continued appreciation in the value of the yen; that is, the value of money to buy goods and services. If deflation only takes place in Japan, it will lead to a rise in the yen's value against foreign currencies; hence, the appreciation of the yen will prevail.

The excessive appreciation of the yen will generate negative effects on the export sector through a decline in international competitiveness in prices and a decline in the value of foreign currencies exchanged in the yen. Moreover, it will raise the cost of labor and capital, compared with overseas economies; thus, the production sites of Japanese firms will shift to overseas and inward investment in Japan will stagnate. This, in effect, will reduce the employment opportunities in Japan and generate a decline in growth rates. Owing to these developments, through the excessive appreciation of the yen, deflation will exert negative effects on Japan's economy.

B. Merit of Stable and Moderate Inflation

By contrast, in an environment of stable and moderate inflation -- for example, in a case where the consumer price index (CPI) rises about 2 percent year-on-year -- a mechanism that is a reversal of what I have just explained under deflation will work (Chart 2).

Namely, if one can envisage that prices will rise, an incentive to spend and invest as early as possible will consistently be at work. With stimulated spending activity and an increase in aggregate demand within the economy, firms will boost their spending activity to a level consistent with a rise in sales.

Modifying the inflation differentials with trading partners will lead to an adjustment in excessive appreciation of the yen. Moreover, narrowing the differentials of inflation expectations with other economies will contribute to the stability of foreign exchange rates.

In this way, corporate profits will start to improve and employee income will increase. Thus, spending and housing investment by households as well as business fixed investment by firms will be rejuvenated further. A steady increase in aggregate demand will lead to a persistent rise in prices; henceforth, a virtuous cycle of economic recovery and rise in prices will be generated.

C. Advantages of Inflation Targeting Policy

In order to achieve stable and moderate inflation, what kind of policy will be desirable?

One answer is a policy framework called inflation targeting. The Bank has been pursuing monetary easing under the price stability target of 2 percent in terms of the year-on-year rate of change in the CPI. This can be understood as a typical example of an inflation targeting policy (Chart 3).

Enhancing Policy Credibility and Predictability

An inflation targeting policy has a number of advantages.

To begin with, as the policy contains a specific numerical target for the future inflation rate, it can be judged objectively whether the target has been met. Through enhanced transparency, a central bank's obligation to be accountable with regard to policy judgment and the status of achieving the target will become crucial. This will create a situation in which credibility in monetary policy is likely to be enhanced.

As it becomes easier to forecast price levels, various economic entities can conduct their activity on the basis of such forecasts. The predictability of future prices will be further reinforced as credibility in monetary policy becomes enhanced.

Preventing Hyperinflation

Regarding the Bank's policy, some raise concern that, when the time comes for the Bank to change the course of monetary policy, it might be difficult to do so due to pressure from financial markets or the government, and this eventually leads to inducing hyperinflation. The adoption of inflation targeting is effective in terms of alleviating such concern.

The reason for this is that an inflation targeting policy is a device to hold a specific numerical target for the future inflation rate and make a commitment to achieving a situation that generates neither inflation above the target rate nor deflation.

Though an inflation targeting policy is often discussed in Japan as a measure to overcome deflation, it was originally adopted in the 1980s in countries that suffered high inflation, such as New Zealand.

I would like you to understand that, in case the economy should overheat and the inflation rate should rise well above the 2 percent price stability target, the Bank will take appropriate measures in line with the framework of an inflation targeting policy. This has already been made as a firm commitment.

I should stress that, in line with the mission stipulated in the Bank of Japan Act, the Bank will conduct monetary policy based on its judgment and responsibility while facilitating communication with the government.

II. Quantitative and Qualitative Monetary Easing

Now, I will talk about the content and transmission mechanism of the QQE, which was introduced as a policy to overcome deflation.

A. Two Pillars of the QQE

The Bank set the price stability target of 2 percent in terms of the year-on-year rate of change in the CPI. It has been pursuing bold monetary easing policy, called the QQE, in order to achieve this target since April 2013 (Chart 4).

The QQE consists of two pillars (Chart 5). The first pillar is the commitment under which the Bank will achieve the price stability target of 2 percent as soon as possible. The Bank has made a clear commitment that it "will achieve the price stability target of 2 percent at the earliest possible time, with a time horizon of about two years."

The second pillar is to engage in actions that embody the commitment specified in the first pillar. As exemplified by the phrase "quantitative and qualitative monetary easing," these actions are to increase the "quantity" of the Bank's balance sheet and change the "quality" of its asset purchases.

An increase in "quantity" means increasing the monetary base at an annual pace of about 60-70 trillion yen, mainly by massively purchasing Japanese government bonds (JGBs).

A change in "quality" refers to purchasing assets with a higher risk profile. Among JGBs, the Bank has started purchasing those with longer remaining maturities. In addition, it has increased the amounts of purchases in exchange-traded funds (ETFs) and Japan real estate investment trusts (J-REITs) in order to reduce risk premiums on assets.

B. Transmission Mechanism

The most important factor in the QQE's transmission channels is to lower expected real interest rates (Charts 6 and 7).

Expected real interest rates are obtained by subtracting the expected rates of inflation by economic entities from the nominal interest rates actually observed in financial markets or over the counter. Viewed from the borrowers' side, real interest rates are equivalent to borrowers' subjective expectations regarding their real costs of borrowing, taking into account price changes, when they borrow money at a certain nominal interest rate.

By committing clearly to achieving the inflation target and taking bold monetary easing actions that underpin such commitment, one can generate the effect of raising inflation expectations. On the other hand, while short-term nominal interest rates are close to zero percent, one can generate the effect of restraining the rise in long-term nominal rates by massively purchasing JGBs. Consequently, the combination of restraining the rise in nominal rates and raising inflation expectations will provide downward pressure on expected real interest rates that are derived as a difference between the two.

If firms and households lower their expected real interest rates, this will stimulate demand in the real economy in a number of ways.

For example, when real interest rates decline, people will shift their portfolios from cash, deposits, and fixed-income securities to equities and tangible assets such as land and housing, or to foreign currency-denominated assets with higher returns. The rise in equity prices and the appreciation of foreign currencies will stimulate private consumption through the wealth effect (Charts 8 and 9).

In addition to the decline in expected real interest rates, other factors -- including an increase in consumption and an improvement in export conditions due to the depreciation of the yen -- will encourage firms to be more aggressive in their business fixed investment (Chart 10).

A shortage of aggregate demand within the economy as a whole will be eliminated through an increase in demand such as private consumption and investment, and thus price levels will naturally rise. This will further raise inflation expectations toward the price stability target; hence, a virtuous cycle prevails.

Those who are skeptical of the Bank's ability to achieve the price stability target often say that the 2 percent target cannot easily be achieved unless there is further depreciation of the yen. Nonetheless, as I just explained, the main driver in the QQE's transmission mechanism is to generate the virtuous cycle by raising inflation expectations and improving

the output gap. By no means is it intended to rely on a rise in import prices backed by the yen's depreciation.

If the rise in the CPI since the beginning of the QQE last April stems from the cost-push inflation triggered by the rise in import prices on the back of the weaker yen, then the real GDP should have declined and an unemployment rate should have risen. We should have been in stagflation by now.

Looking at the economy, the real GDP growth rate was negative for two consecutive quarters (-0.6 percent and -0.8 percent in the second and third quarter of 2012, respectively) shortly before Abenomics was announced. Since the fourth quarter of 2012, however, it has registered positive growth for six quarters in a row. Thus, the real GDP growth has marked a big jump from 0.7 percent in fiscal 2012 to 2.3 percent in fiscal 2013.

As for the unemployment rate, it has come down to 3.6 percent in March 2014 from 4.1 percent in March 2013, shortly before the introduction of the QQE. The unemployment rate of 3.6 percent is equivalent to the level registered in July 2007 before the Lehman crisis.

This leads me to conclude that the rise in inflation we observe after the QQE is characterized by demand-pull rather than cost-push, as it accompanies an expansion of the real GDP and an improvement in employment.

In Japan, in the midst of prolonged deflation since the latter half of the 1990s, people's inflation expectations declined and deflationary expectations were firmly embedded in society. One of the striking features of the QQE is that it sets the overcoming of such deflationary expectations by working directly on people's expectations, or the lifting of their inflation expectations, at the center of policy effects.

C. Current Assessment

It has been a year and two months since the Bank introduced the QQE. So far, the QQE has been exerting its intended effects. Looking at the survey results that summarize the

views of a wide range of economic entities as well as break-even inflation, observed in the JGB market, inflation expectations in Japan have been rising on the whole. In addition, nominal rates, including those of JGBs, have remained stable at low levels (Chart 11).

Under such accommodative financial conditions, Japan's economy has been recovering moderately, accompanying a virtuous cycle among production, income, and spending. On the price front, the year-on-year rate of change in the CPI, excluding fresh food, had been below zero percent for a prolonged period of some years, but finally has risen to around 1¼ percent (Chart 12). As such, Japan's economy has been steadily following a path toward realizing the price stability target of 2 percent -- that is, a path to overcome deflation -- and we are now getting an increasingly better response under the QQE (Charts 13, 14, and 15).

III. Monetary Policy and Economy's Growth Potential

A. Growth Strategy and Monetary Policy: Respective Roles

Lastly, I wish to touch on an issue of the relationship between the Bank's monetary policy and the growth potential of Japan's economy.

As we all know, Japan has engaged in macroeconomic policy that combines bold monetary policy, flexible fiscal policy, and a growth strategy to encourage private investment.

Under such mix of policies, the role of monetary policy is in essence to overcome deflation and achieve the price stability target of 2 percent. That said, we can streamline the relationship with the economy's growth potential as follows (Chart 16).

The first role of monetary policy is to stimulate aggregate demand through bold monetary easing, close the negative output gap, and return the economy to a path toward achieving potential growth. It can be said that the aim is to end the vicious cycle between deflation and stagnation by overcoming deflation.

During the course of closing the negative output gap after the introduction of the QQE, the potential growth rate is expected to rise to some extent as employees will be able to work more efficiently and firms with improved sentiment will take more risk, increase their

capital stocks, and become more innovative. At the same time, in order to raise the potential growth rate even further, it is not the role of monetary policy but that of the government which is equipped with policy tools including regulatory reform.

This leads me to say that the second role of monetary policy is to set out an environment necessary for the government to embark on the growth strategy and raise potential growth by overcoming deflation.

Unless the economy exhibits favorable performance, structural reform to raise its efficiency and dynamism as well as lift its productivity cannot proceed. This is because, under a deflationary slump, the pain caused by promoting competition through deregulation encounters strong resistance. One often refers to "creative destruction," but under deflation there is no creation after destruction.

Furthermore, even though structural reform is making progress under the growth strategy, it is supply-side policy that enhances the production capacity of Japan's economy. Unless there is aggregate demand to meet such new capacity, it will end up aggravating the deflationary pressure. It is for this reason too that monetary easing needs to alleviate deflationary pressure stemming from structural reform.

B. Further Challenges

If the government policy for the growth strategy and accompanying measures in the private sector are delayed, and the strengthening of growth potential does not proceed, it is possible that the achievement of the price stability target will bring about an economy with low real growth rates under mild inflation.

I must emphasize that it is already a significant achievement to end the deflation that had lasted for a long period, but this is not enough to rejuvenate Japan's economy. The Bank has high expectations that the government will continue to make further progress in its growth strategy in order to strengthen the growth potential of Japan's economy.

It may be that, as a result of progressing with structural reform under the growth strategy, the potential growth rate may rise, worsen the output gap temporarily, and put downward pressure on prices. Nevertheless, the Bank will continue with the QQE, aiming to achieve the price stability target of 2 percent, as long as it is necessary for maintaining that target in a stable manner. Thus, it can address such downward pressure on prices.

We will steadily pursue the QQE with a view that Japan's economy will be able to grow at a higher rate in an environment of a stable inflation rate of about 2 percent.

Thank you.

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Why is Deflation Problematic?

Decline in Aggregate Demand due to Deferred Spending

The more you wait, the more goods and services available at the same price (value of cash and deposits increases just by holding them)

- ⇒ Firms and households defer investment and consumption
- ⇒ Aggregate demand declines

Increase in Effective Debt Burden

Decline in prices = Increase in the value of money for goods and services
= Increase in the effective debt burden for borrowers

- ⇒ Willingness of firms and households to borrow declines
- ⇒ Aggregate demand declines

Excessive Appreciation of the Yen

Decline in prices = Increase in the value of the yen

- ⇒ Excessive appreciation of the yen against other key currencies
- ⇒ Negative on export, companies move outward, domestic investments decline

Why is Stable and Moderate Inflation Desirable?

Increase in Aggregate Demand due to Rejuvenated Spending

Persistent increase in prices

(Value of cash and deposits increases just by holding them)

⇒ Stimulates consumption and investment

⇒ Aggregate demand increases

⇒ Expanded production, better employment situation

⇒ A virtuous cycle of a buoyant economy and moderate inflation

~~Hyper-inflation~~

- Decline in real income and real value of savings
- Unexpected income transfer from creditors to debtors
- High interest rates and difficult fund-raising
- ∴ Economic turmoil

Advantages of Inflation Targeting Policy

In order to achieve stable and moderate inflation...

⇒ Inflation Targeting

Enhancing Policy Credibility and Predictability

- Specific numerical target for the future inflation rate
 - ⇒ Enhanced transparency, accountability and credibility in monetary policy
- Forecast of price levels becomes easier
 - ⇒ Better environment for economic activities

Preventing Hyperinflation

- Commitment to prevent both inflation above the target and deflation
(i.e., Commitment to prevent hyperinflation is already embedded in the framework)

Price Stability Target and QQE

Policy Framework for Sustainable Economic Growth
Under Stable and Moderate Inflation

Price Stability Target
= 2 % y/y rate of change in the
consumer price index (CPI)

Means to achieve
the Price Stability Target

Quantitative and
Qualitative Monetary
Easing (QQE)



Two Pillars of the QQE

Quantitative and Qualitative Monetary Easing

Commitment

Clear commitment that the BoJ "will achieve the price stability target of 2 % at the earliest possible time, with a time horizon of about 2 years."

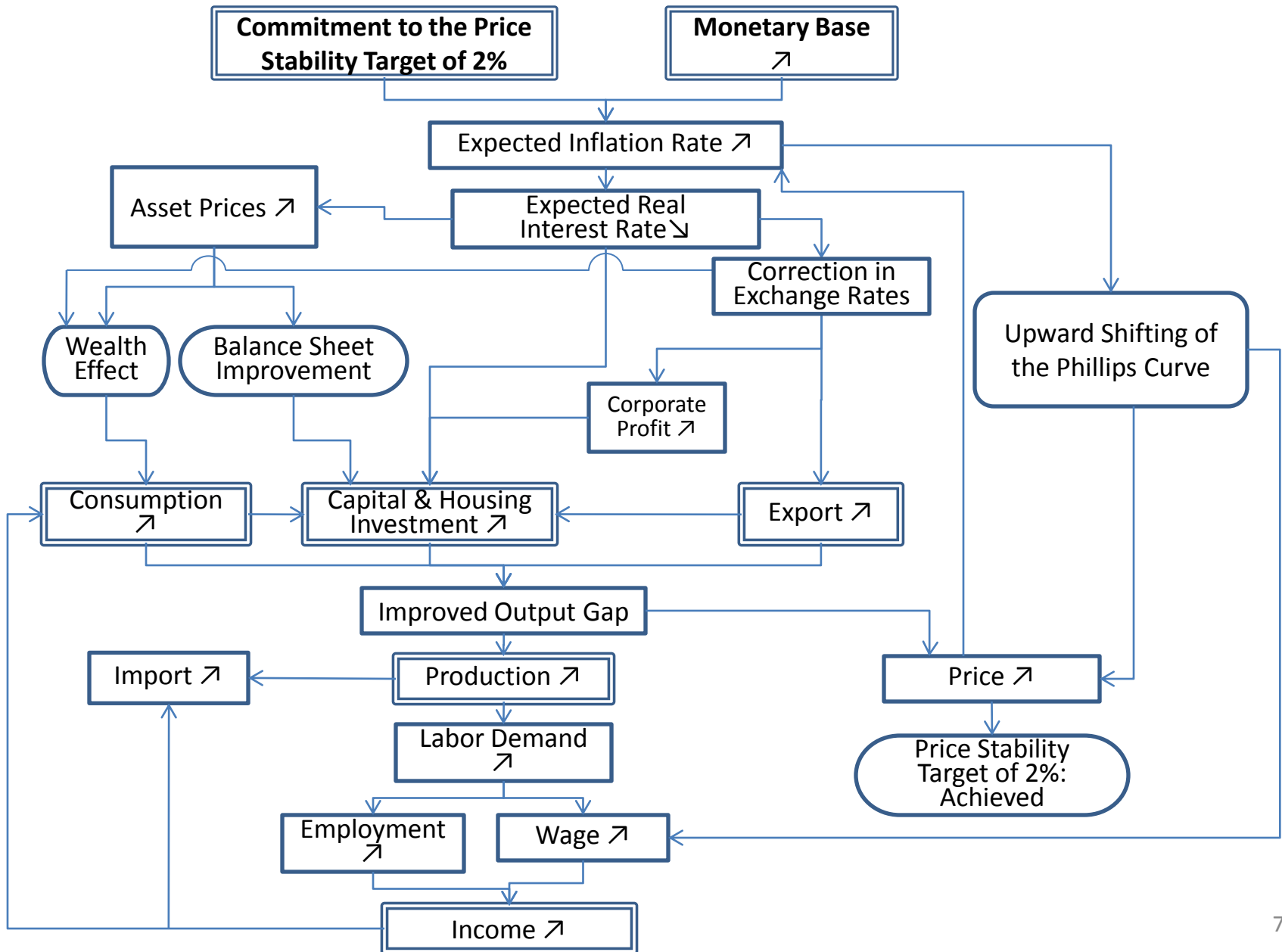
Actions

- **Increase in Quantity**
Increase monetary base* at annual pace of about ¥60-70 trillion (mainly through purchases of JGBs)
- **Change in Quality**
Purchasing assets with higher risk profile (JGBs with longer duration, ETFs and J-REITs)

*Money supplied to the financial system directly by the central bank

Chart 6

Transmission Channels of the QQE



Working on Expected Real Interest Rates

Real costs of borrowing,
taking into account price changes
(Borrowers' subjective expectations)

Subjective forecast
based on respective
price projections

Visible in financial
markets or over the
counter

Expected real interest rates = Nominal interest rates
— Expected rates of inflation

Downward
Pressure
by the QQE

Chart 8

Stock Price and Exchange Rate



Source: Bloomberg.

Chart 9

Household Assets

		2012				2013				Amounts outstanding in December-end 2013 in trillion yen (percentage ratio in parentheses)
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Amounts outstanding (End of period, trillion yen)		1,520	1,518	1,513	1,552	1,579	1,602	1,609	1,645	
C h a n g e s (%)	Total assets	1.3	0.5	1.6	3.2	3.8	5.5	6.4	6.0	1,645 (100.0)
	Currency and deposits	2.2	1.8	1.9	2.0	1.7	2.1	2.1	2.3	874 (53.1)
	Bonds	-8.4	-7.9	-8.7	-9.3	-8.1	-9.0	-8.6	-7.7	30 (1.8)
	Investment trust beneficiary certificates	-4.9	-11.3	2.0	13.3	20.1	29.0	33.0	28.4	79 (4.8)
	Shares and other equities	3.0	-3.4	0.6	15.0	21.4	39.9	51.9	38.5	155 (9.4)
	Insurance and pension reserves	0.9	1.1	1.8	2.5	2.1	2.3	2.5	2.4	439 (26.7)
	Others	1.1	2.1	3.8	5.3	4.2	5.3	4.0	7.4	69 (4.2)

Source: Bank of Japan, "Flow of Funds."

Chart 10

Business Fixed Investment

<Private Non-Residential Investment>

s.a.; q/q % chg.

2013				2014
Q1	Q2	Q3	Q4	Q1
-2.0	1.0	0.7	1.4	4.9

Source: Cabinet Office, "National Accounts."

<Domestic Shipments and Imports>

s.a.; q/q % chg.

	2013				2014
	Q1	Q2	Q3	Q4	Q1
Domestic Shipments and Imports	6.3	-4.3	1.9	6.4	8.9
(excluding transport equipment)	4.9	0.2	-0.9	6.3	11.2

Source: Ministry of Economy, Trade and Industry, "Indices of Industrial Domestic Shipments and Imports."

Note: Figures for 2014/Q1 are those of January and February.

<Machinery Orders>

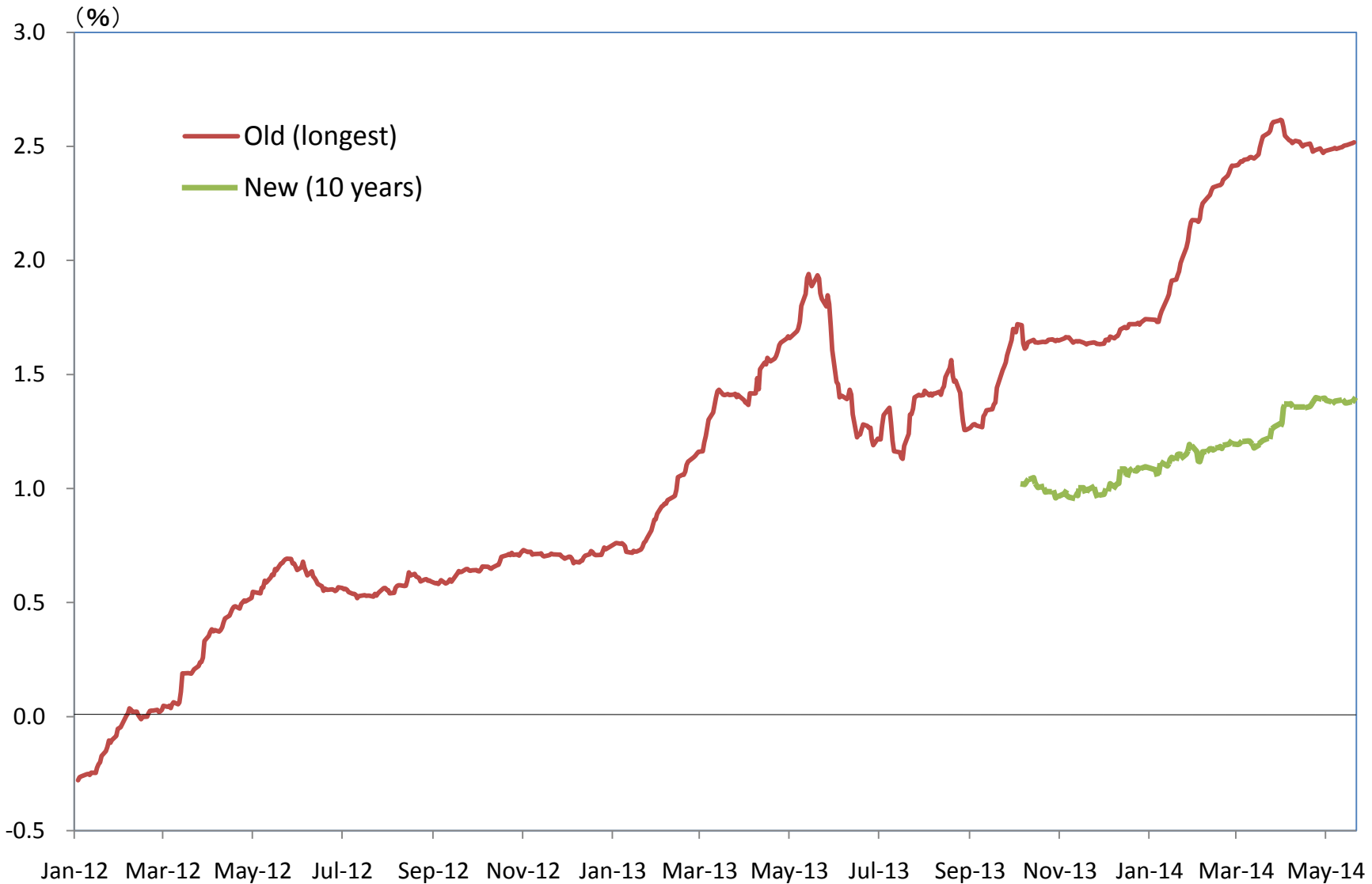
s.a.; excluding volatile orders; q/q % chg.

2013				2014
Q1	Q2	Q3	Q4	Q1
-0.0	6.8	4.8	1.9	4.2

Source: Cabinet Office, "Orders Received for Machinery."

Chart 11

BEI for Inflation-Indexed JGBs

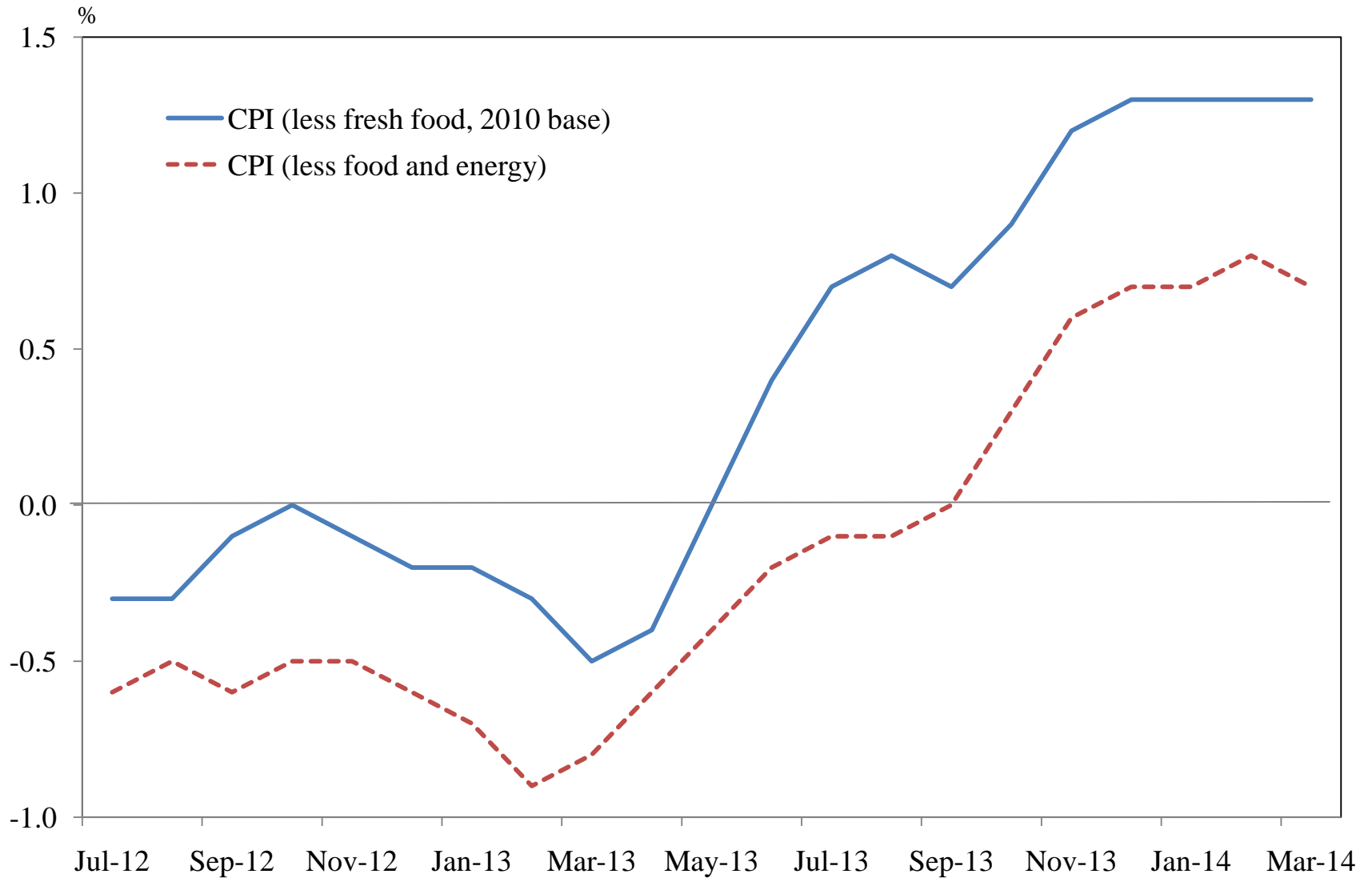


Jan-12 Mar-12 May-12 Jul-12 Sep-12 Nov-12 Jan-13 Mar-13 May-13 Jul-13 Sep-13 Nov-13 Jan-14 Mar-14 May-14
Source: Bloomberg.

Note: Yield spreads between fixed-rate coupon-bearing JGBs and inflation-indexed JGBs. Inflation-indexed JGBs issued since October 2013 are designated as “new,” while the rest as “old.” Figures for “old (longest)” are calculated using yield data for issue No. 16 of the inflation-indexed JGBs, which matures in June 2018.

Chart 12

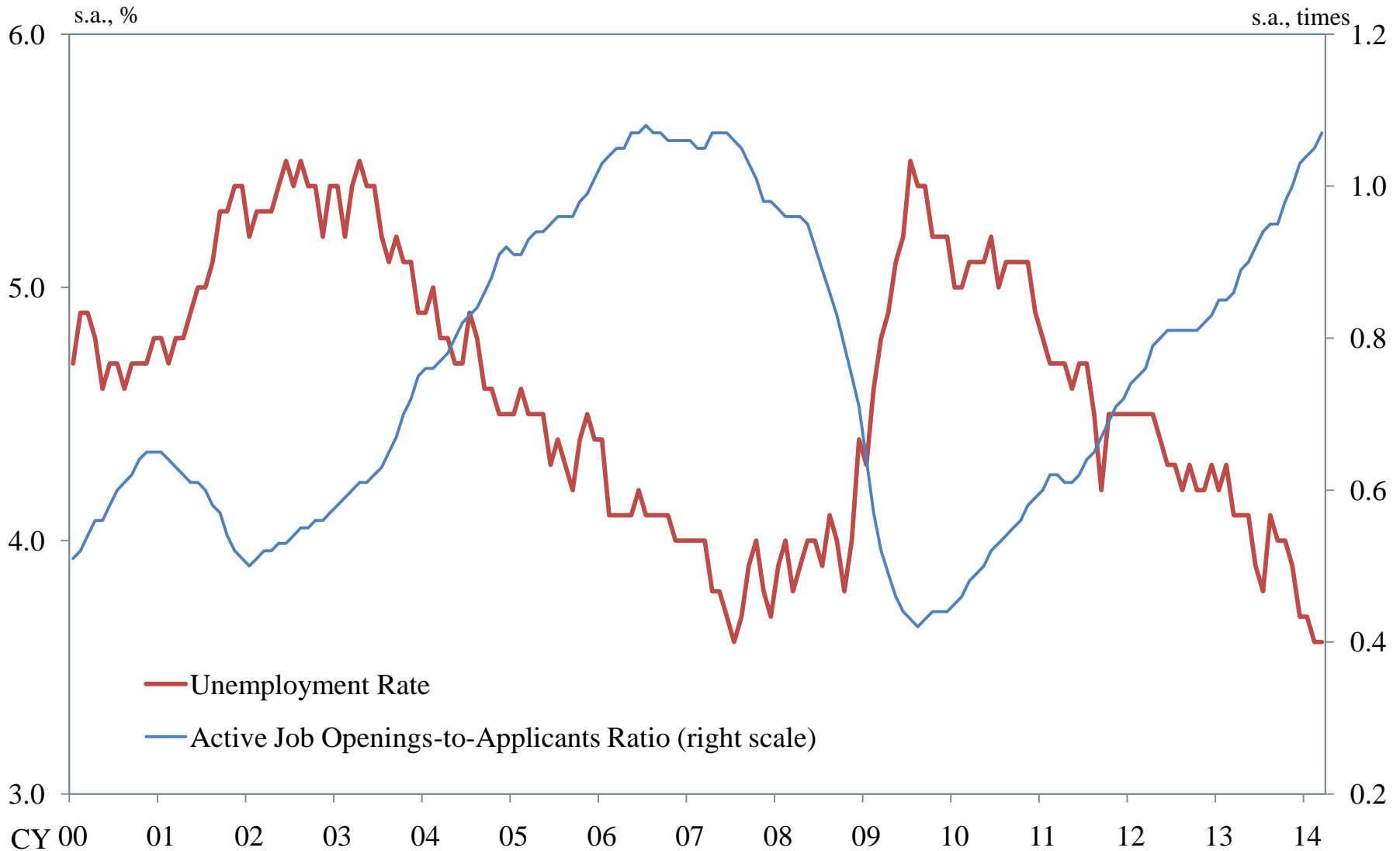
Consumer Prices



Source: Ministry of Internal Affairs and Communications, "Consumer Price Index."

Chart 13

Employment Conditions



Sources: Ministry of Internal Affairs and Communications, "Labour Force Survey";
Ministry of Health, Labour and Welfare, "Report on Employment Service."

Chart 14

Real GDP Growth

s.a.; q/q % chg.

	2013				2014
	Q1	Q2	Q3	Q4	Q1
Real GDP	1.2	0.9	0.3	0.1	1.5
<Annual rate>	<4.9>	<3.5>	<1.3>	<0.3>	<5.9>
Private Consumption	1.0	0.7	0.2	0.4	2.1
Residential Investment	1.8	0.8	3.3	4.3	3.1
Non-Resi. Investment	▲2.0	1.0	0.7	1.4	4.9
Government Consumption	0.9	0.7	0.2	0.3	0.1
Public Investment	4.5	6.4	6.9	1.2	▲2.4
Exports	4.3	2.9	▲0.7	0.5	6.0
Imports	1.1	1.8	2.4	3.7	6.3

Source: Cabinet Office, "National Accounts."

Chart 15

Forecasts of Policy Board Members

y/y % chg.

	Real GDP	CPI (all items less fresh food)	Excluding the effects of the consumption tax hikes
FY 2014	<u>+1.1</u>	+3.3	<u>+1.3</u>
FY 2015	<u>+1.5</u>	+2.6	<u>+1.9</u>
FY 2016	<u>+1.3</u>	+2.8	<u>+2.1</u>

*Figures indicate the median of the Policy Board members' forecasts (point estimates) as of April 2014.

Chart 16

Respective Roles of Monetary Policy and Growth Strategy

