

## Haruhiko Kuroda: Overcoming deflation and quantitative and qualitative monetary easing

Speech by Mr Haruhiko Kuroda, Governor of the Bank of Japan, at the Kisaragi-kai Meeting, Tokyo, 20 September 2013.

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### Introduction

Thank you for giving me the opportunity to address you today.

I assumed the position of Bank of Japan Governor just six months ago, on March 20. At the time, as the Governor of the Bank, which has a mission to ensure price stability, I resolved to pull Japan's economy out of the deflation that has lasted for some 15 years. This is because, due to prolonged deflation, "deflationary expectations" (the recognition that prices will decline or not increase) were entrenched among people and firms, and this situation had been depriving Japan's economy of vitality. Reflecting my determination, the new policy of quantitative and qualitative monetary easing (QQE) was introduced in April. The policy has already started to exert effects. Positive developments in the real economy and financial markets have been spreading, and people's expectations in terms of economic activity and prices have been improving.

Today, I will first briefly discuss developments in economic activity and prices at home and abroad. Then I will turn to a description of the deflation that has continued in Japan for some 15 years and delve somewhat into the background and what should be done to overcome it.

### I. Recent developments in economic activity and prices

Let me start with recent developments in economic activity and prices. To summarize, with the QQE making steady progress, Japan's economy has been proceeding smoothly along a path toward achieving the "price stability goal" of 2 percent, as the Bank has presented in its outlooks.

#### ***Economic activity and prices***

Japan's economy is recovering moderately, as a virtuous cycle from income to spending is gradually starting to operate in both the corporate and household sectors. In the corporate sector, corporate profits and business sentiment have improved significantly. A focus of attention had been whether this improvement would genuinely lead to an increase in spending, namely, business fixed investment, and recent data have confirmed that business fixed investment is starting to pick up mainly in the nonmanufacturing sector (Chart 1). For example, in the GDP statistics, business fixed investment in real terms for the April-June quarter increased on a quarter-on-quarter basis for the first time in six quarters. Machinery orders – a leading indicator for business fixed investment – also turned to an increase on a quarter-on-quarter basis in the April-June quarter, for the first time in five quarters, and have been expanding since then. As for the household sector, the pick-up in housing investment has become evident. Private consumption has also been resilient, registering three consecutive quarters of increase in real terms in the GDP statistics (Chart 2). Sales at department stores have remained firm, notably in imports and high-end products, and consumption of services such as outlays for travel and sales in the food service industry have held steady. Such resilience in private consumption had been supported by wealth effects from the rise in stock prices and an improvement in consumer confidence in the first half of 2013, and recently it has begun to be backed also by improvement in the income situation, such as employment and wages. Specifically, the ratio of job offers to applicants and the unemployment rate have both improved to a level observed for the first time in five years, with the former rising to 0.94 and the latter declining to 3.8 percent in July. As for

wages, total cash earnings per employee was around the year-ago level in July, after having turned to an increase on a year-on-year basis in the April-June quarter mainly due to the fact that summer bonus payments rose (Chart 3). In addition to these positive developments in both the corporate and household sectors, as public investment has increased and exports have generally been picking up, production is increasing moderately. Looking ahead, Japan's economy is expected to continue a moderate recovery as a virtuous cycle operates among production, income, and spending.

In a situation where the economy is recovering, for prices the year-on-year rate of change in the consumer price index (CPI, excluding fresh food) accelerated to 0.7 percent in July, after having turned positive to 0.4 percent in June (Chart 4). Although the rise in energy-related goods such as petroleum goods has indeed pushed up prices, an improvement has been observed in a wide range of goods and services against the backdrop of resilient private consumption. In addition, looking at surveys conducted on households, economists, and market participants, inflation expectations are judged to be rising on the whole. The year-on-year rate of increase in the CPI is likely to rise gradually.

### ***Features of the current economic recovery***

Let me touch on the main features of the current economic recovery. This recovery has been following a pattern that differs from typical ones in the past. In many cases, the pattern of postwar economic recovery in Japan was that it started with improvement of corporate profits due to an increase in exports and production, which in turn led to an increase in business fixed investment. The longest postwar economic recovery – from 2002 to 2008 – also followed this pattern, on the back of an unprecedented expansion in the global economy, with the rise of emerging economies and housing bubbles in advanced economies. In this type of pattern, large enterprises in the manufacturing sector – which have an advantage in exports – are the first to recover and, as the employment and income situation improves on the whole, a recovery spreads gradually to the nonmanufacturing sector and small enterprises.

However, this time the major feature of the recovery is that the nonmanufacturing sector has been leading it on the back of firm domestic demand, such as private consumption and public investment. Therefore, business fixed investment is weak in the manufacturing sector but strong in the nonmanufacturing sector. The Indices of Tertiary Industry Activity, which show developments in the nonmanufacturing sector, have recovered close to a level prior to the Lehman shock, while the Indices of Industrial Production have remained at about 80 percent of their peak prior to the Lehman shock (Chart 5).

Taking into account the difference in recovery pattern, how should we view the sustainability of economic recovery in the future? What is important is, first, for the firmness in domestic demand to continue and, second, for exports, production, and business fixed investment in the manufacturing sector – which are lagging – to improve. In regard to the first point, as mentioned earlier, a virtuous cycle from income to spending has started to steadily operate, and thus firm domestic demand is likely to be sustained. Let me next touch on the second point. The key here is, above all, developments in overseas economies.

### ***Current state of and outlook for overseas economies***

Overseas economies as a whole are gradually heading toward a pick-up, although a somewhat weak performance is partly seen. The economies are expected to gradually pick up mainly as the U.S. economy moderately accelerates its pace of recovery and the European economy slowly bottoms out.

By region, the U.S. economy has been on a moderate recovery trend against the background of steady private demand. Five years have passed since the Lehman shock, and U.S. households have finally begun to heal after the major damage caused by the subprime loan problem. Private consumption has been increasing moderately in the face of a termination of

tax cuts at the beginning of the year. The housing market has entered a recovery process, albeit still at a low level, and housing investment has been improving despite the effect of an increase in mortgage rates. Such firmness in the household sector has gradually been spreading to the corporate sector, and business sentiment has started to improve. As accommodative financial conditions are likely to continue and downward pressure from the fiscal side is expected to diminish gradually, the pace of recovery in the United States is likely to accelerate modestly.

In Europe, April-June real GDP registered the first positive quarter-on-quarter growth in seven quarters, and the economy seems to have bottomed out. Severe fiscal austerity measures were revised, and downward pressure from the fiscal side has weakened somewhat. Financial markets, which were under pressure on a number of occasions during the past several years, have generally been stable. Firms and consumers have gained some breathing space, and their sentiment has been improving. Production has stopped decreasing as exports have bottomed out. Of course, although the European debt problem has yet to be fully resolved and the consequences continue to warrant attention, the European economy is likely to pick up gradually as recent developments continue.

The Chinese economy has continued to see stable growth, albeit at a lower level than before, as the government has engaged in a variety of structural reforms. Private consumption has been firm on the back of the favorable employment and income situation, although effects of the government's frugality campaign are still observed. The pace of increase in fixed asset investment has been solid, mainly due to rises in investment in infrastructure and real estate. While the government has been placing weight on the quality of growth, at the same time it has given due consideration to economic activity. As for the outlook, there is a high degree of uncertainty associated with the effects of structural reforms, such as the response to the shadow banking problem, and the content and effects of policy measures to underpin the economy. However, supported by firm domestic demand, the Chinese economy is likely to register stable growth at the current pace.

Some emerging economies have suffered instability in their financial markets, such as a plunge in stock prices and depreciation of currencies. A number of factors have been cited as the background. Examples include global investors' renewed focus on the vulnerable economic structure of these countries as seen in current account deficits amid waning strong growth expectations, speculation on monetary policy conduct in advanced economies, and intensified risk aversion. Such movements in financial markets entail risks that the real economies of these countries will be affected by tightened financial conditions and worsened business and household sentiment. Although resilience has strengthened in terms of external debt and events are unlikely to lead to a severe situation, future developments warrant continued vigilance.

As mentioned, each country and region has its own respective risk, but the baseline scenario is that the global economy will pick up gradually as the U.S. and the European economies improve. This will underpin an increase in exports and production, leading to a pick-up in the manufacturing sector's business fixed investment in Japan.

## **II. Deflation lasting for some 15 years, and the countermeasures**

Now let me move on to the main topic of my speech, the deflation that has continued for some 15 years in Japan. Here, I would like to make two points. The first is how the problem in Japan differs from that in other economies. Second, by looking at the past 15 years, I will show how Japan's economic activity and prices have developed. By reviewing the problem of Japan's deflation based on a comparison with overseas and historical perspectives, I hope to make the measures against deflation – namely, the Bank's QQE – better understood.

## **A. Challenges facing overseas economies and Japan's economy**

Let me start by viewing the problem of Japan's deflation through a comparison with overseas economies.

As mentioned, overseas economies as a whole are gradually heading toward a pick-up, although the pace is quite modest. Therefore, in the United States and Europe a negative output gap remains – excess labor force and excess facilities – and unemployment rates remain elevated (Chart 6). Unemployment rates in the major advanced economies are at levels substantially higher than those prior to the Lehman shock. In the euro area, the rate surged after the Lehman shock and has increased further due mainly to the European debt problem. In the United Kingdom, the rate has remained at a high level. In the United States, while the rate has been declining moderately, its level remains somewhat high. In contrast, Japan's unemployment rate has declined to 3.8 percent, almost the same level as the low of 3.6 percent prior to the Lehman shock.

On the price front, even though many economies have registered somewhat lower growth compared with their potential, the year-on-year rate of change in consumer prices has been hovering around 2 percent, the rate targeted by central banks. The year-on-year rate of increase in the CPI in the United States, the euro area, and the United Kingdom has centered around 2 percent from a long-term perspective, albeit with some fluctuations (Chart 7). Firms' and households' medium- to long-term inflation expectations have also been stable generally around 2 percent. In this situation, we can say that inflation expectations are anchored. This means that even when the observed inflation rate is affected by economic conditions, inflation expectations do not deviate substantially from, and are thus anchored to, the central bank's target inflation rate.

Taking into account the economic and price developments across countries, at present – in the United States and Europe – the top priority is to continue to provide or to further strengthen the stimulus to the real economy. While this sounds like an orthodox challenge, from the standpoint of central banks, it presents difficulties in terms of steering their policy. As a result of fiscal actions taken in response to the economic plunge following the Lehman shock, the room is limited for providing further stimulus to the economy from the fiscal side, and there are strong expectations for policy responses from the monetary policy side. However, if the inflation rate continues to exceed the inflation target due to monetary easing, there is a risk that people's confidence in the price stability target will be lost. It can be said that central banks in the United States and Europe have been addressing the challenge of how to stimulate the real economy from the monetary policy side while avoiding the risk of de-anchoring inflation expectations and inducing future inflation. In the United States and the United Kingdom, the central banks have declared that they will continue with monetary easing until unemployment rates decline to some extent, with the condition that inflation forecasts do not deviate significantly from the price stability target. These actions reflect an attempt to strike a balance in the trade-off between inflation and unemployment.

In contrast, Japan faces a different type of challenge. In the United States and Europe, people's inflation expectations have been anchored around the central banks' targeted inflation rates. In Japan, amid some 15 years of deflation, deflationary expectations have become entrenched among people – in other words, people's inflation expectations have been anchored at a substantially low level of around 0 percent. We need to de-anchor such expectations, increase them to the price stability target of 2 percent, and anchor the expectations again at this level. How can this be achieved? I will discuss this next while looking back at the changes in economic activity and prices since the second half of the 1990s.

## **B. Changes since the second half of the 1990s**

### ***Economic and price developments, and their effects since the second half of the 1990s***

In retrospect, since the second half of the 1990s a series of events – such as banks' nonperforming-loan problems, the Asian currency crisis, the Lehman shock, and the Great East Japan Earthquake – weighed strongly on Japan's economy. In addition, a variety of factors put direct downward pressure on prices. These included low-priced imports from emerging economies, firms' low-price strategies to counter intensifying competition stemming from deregulation, and a reduction in the wage level due to firms' increased reliance on non-regular employment.

In response, the Bank implemented a series of monetary easing policies such as the zero interest rate policy, the quantitative easing policy, and the comprehensive easing policy. Thanks to these policies that stimulated the real economy, from time to time the economy began to head toward recovery. However, except for a period reflecting the effects of a surge in oil prices, these policies failed to put an end to the trend of a price decline. On the contrary, as deflation became protracted, deflationary expectations became entrenched, which made overcoming of deflation even more difficult, producing a vicious circle. Once the tendency to act based on such expectations becomes entrenched among households and firms, change is not an easy task. In this way, by becoming prolonged, deflation became a challenge that was even more difficult to overcome.

### ***Changes in the Phillips curve***

Let me explain the changes I have just mentioned by using the concept of the Phillips curve (Chart 8). The Phillips curve illustrates the relation between the output gap and the inflation rate. Put simply, it shows that when the economy is strengthening with the labor market as well as the goods and services markets being tightened, prices tend to increase. In the Phillips curve, the vertical axis depicts the inflation rate and the horizontal axis depicts the output gap. It is assumed that the relation of the two is an upward-sloping curve, that is, when the economy recovers and the output gap moves to the right, the inflation rate moves upward accordingly.

Let us look at the change in the Phillips curve for Japan over the past 15 years. The blue line is the Phillips curve based on data through the first half of the 1990s. The red line is the Phillips curve based on data since the second half of the 1990s. As you can see, the entire curve has shifted downward. This means that, even with the same economic conditions, the inflation rate is now lower than in the past. When the output gap is zero – that is, when the economy is at an average level – the year-on-year rate of change in consumer prices is 1.1 percent on the blue Phillips curve, while it is 0.3 percent on the red Phillips curve, showing a substantial decline.

As a result of this downward shift, based on the current shape of the Phillips curve for Japan, a substantially positive output gap of 6 percent would be necessary to achieve the 2 percent price stability target. This gap matches the peak of the bubble period from the end of the 1980s to the early 1990s. Of course, the Bank does not aim to reproduce such a large output gap. Even if 2 percent inflation is achieved when the economy is booming, the inflation rate will decline again during the economic cycle. To achieve 2 percent inflation in a stable manner, therefore, it is necessary to create a relation between prices and economic activity such that inflation becomes 2 percent when the economy is in an ordinary state. If we think of it in this way, it becomes clear that the 2 percent price stability target cannot be achieved in a sustainable manner by simply following the past approach of increasing the inflation rate by stimulating the economy. A policy that aims at shifting the Phillips curve upward is required. To put it differently, a policy that is designed to change people's deflationary expectations is necessary. To use the metaphor of the anchor, it is a policy to raise the anchor and set it at the new level of 2 percent.

## **C. Overcoming challenges**

As I have explained, in Japan, due to prolonged deflation of some 15 years, the Phillips curve has shifted downward. In other words, there is an entrenched expectation that it is difficult for prices to increase. I will next explain how to escape from this situation.

Of course, the traditional path of stimulating the economy through monetary easing and thereby narrowing the negative output gap continues to be important. At present, a negative output gap remains in Japan's economy, and this needs to turn positive. In the process, the experience of an actual increase in the inflation rate will help increase people's inflation expectations.

However, given that deflation expectations are entrenched in Japan – that is, that the shape of the Phillips curve has changed – turning the output gap positive by itself will not suffice to overcome deflation. Therefore, the Bank considered it necessary to take a step significantly different from the previous policies by working directly on people's expectations to dispel deflationary expectations – to shift the Phillips curve upward. Given that the continuation of deflation in itself makes overcoming of deflation even more difficult, the Bank judged it necessary to implement its new initiatives as soon as possible. This led to the introduction of the QQE (Chart 9).

### ***A strong and clear commitment as well as a new phase of monetary easing both in terms of quantity and quality***

The QQE comprises two features aimed at drastically changing people's expectations at the earliest possible time.

First, to eliminate deflationary expectations that were entrenched among firms and households, the Bank showed its determination that it would definitively overcome deflation through a strong and clear commitment. The Bank clearly stated that it would achieve the price stability target of 2 percent in terms of the year-on-year rate of change in the CPI at the earliest possible time, with a time horizon of about two years, thus clearly specifying the period in which it would achieve the target.

Second, considering that deflation had continued for some 15 years, even with a strong commitment, it was difficult for the Bank's strong determination to be seen as convincing without underpinning measures in place. In particular, from the viewpoint of achieving the target "at the earliest possible time," it was important for the Bank to take measures bold enough to be considered different from the measures in the past. The Bank therefore decided to change the main operating target for money market operations from the uncollateralized overnight call rate (i.e., interest rates) to the monetary base (i.e., quantity), to be doubled in two years. In addition, to achieve this target the Bank also decided to double its holdings of Japanese government bonds (JGBs) and exchange-traded funds (ETFs) in two years. Furthermore, the Bank decided to extend the average remaining maturity of its JGB purchases so that it would more than double. In this way, the Bank decided to introduce a new phase of monetary easing both in terms of quantity and quality.

### ***Continuation of monetary easing***

In addition, with regard to the future policy stance, the Bank clearly stated that it would continue with the QQE as long as it is necessary for maintaining the target of 2 percent in a stable manner. While the Bank's commitment is to achieve a 2 percent inflation rate at the earliest possible time, this does not mean that a temporary achievement of this rate is sufficient. It is important to maintain the 2 percent target in a stable manner. To this end, it is necessary for not only the observed inflation rate but also medium- to long-term inflation expectations to be about 2 percent. If the observed inflation rate hovers around 2 percent on average and firms and households act on the assumption that prices will increase by about 2 percent, this will lead to price stability in the medium to long term. To use the metaphor of the anchor, the aim is to set the 2 percent anchor deeply in people's understanding and

make the observed inflation rate hover around the anchor. In terms of the Phillips curve, this means that when the economy is in an average state – when the output gap is zero – the 2 percent inflation rate will be achieved. This is what the Bank means when it says “maintain 2 percent in a stable manner.” The Bank will continue with the QQE as long as it is necessary to achieve such a state while assessing the trend developments in inflation.

If I may hasten to add one point, to this end it becomes more necessary than ever to gauge inflation expectations as accurately as possible. However, inflation expectations are intrinsically difficult to measure. They are not directly observable, and there are a variety of inflation expectations depending on who is forecasting what type of prices. With this in mind, the Bank has been carefully analyzing a number of indicators of inflation expectations, such as the break-even inflation rate using inflation-linked bonds as well as various surveys conducted on households, economists, and market participants, and doing its utmost to gauge accurately the changes in people’s inflation expectations. The Bank will continue to improve the accuracy of its judgment by thoroughly examining a wide range of data, including firms’ inflation expectations, which are scheduled to be added to the *Tankan* (Short-Term Economic Survey of Enterprises in Japan) survey in the first half of 2014.

### **Concluding remarks**

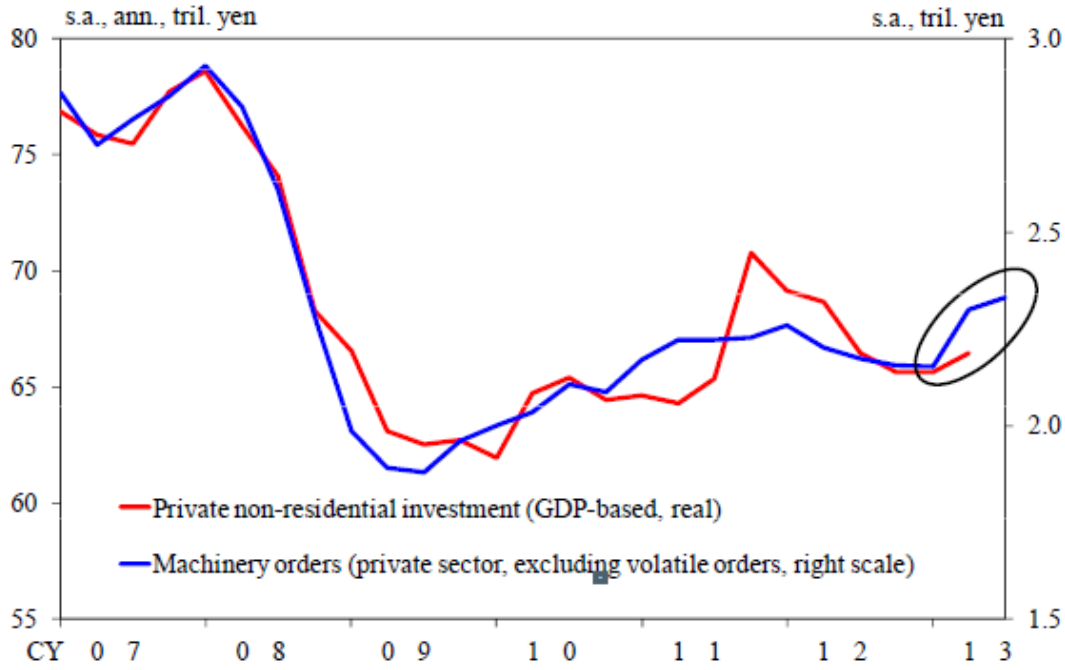
A little less than six months have passed since the introduction of the QQE. The Bank has been steadily pursuing the policy as initially scheduled (Chart 10). The monetary base expanded to 177 trillion yen as of end-August from 146 trillion yen as of end-March, steadily accumulating toward the targeted 200 trillion yen as of the end of 2013. The Bank’s JGB holdings increased to 123 trillion yen as of end-August from 91 trillion yen as of end-March, smoothly increasing toward the targeted 140 trillion yen as of the end of 2013. The average remaining maturity of the Bank’s JGB purchases has been extended to about seven years.

The QQE is truly an unprecedented policy in the sense that it aims to increase inflation expectations in a situation where there is no room to further reduce the short-term interest rate, which is the main policy tool for a central bank. While the task is by no means easy, developments thus far have been encouraging. Improvements are observed in a number of areas such as economic activity, financial markets, and people’s sentiment, and Japan’s economy has been moving smoothly along the path to achieving the 2 percent “price stability target.” To overcome deflation, which has been weighing on Japan’s economy for a protracted period, as soon as possible, the Bank will continue to pursue the proper monetary policy.

Thank you for your attention.

Chart 1

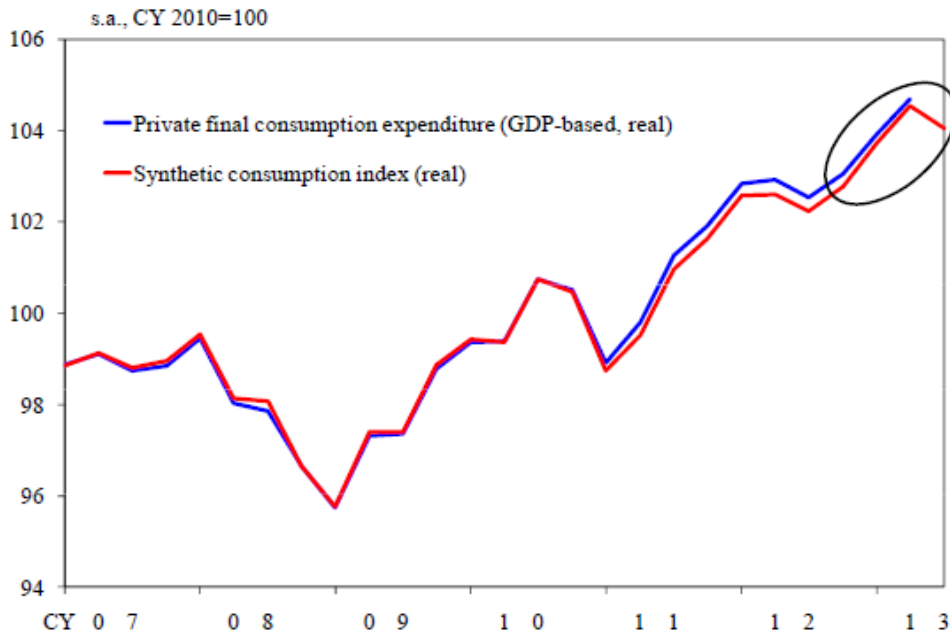
## Business Fixed Investment



Note: The figure for 2013/Q3 is that of July.  
Source: Cabinet Office.

Chart 2

## Private Consumption

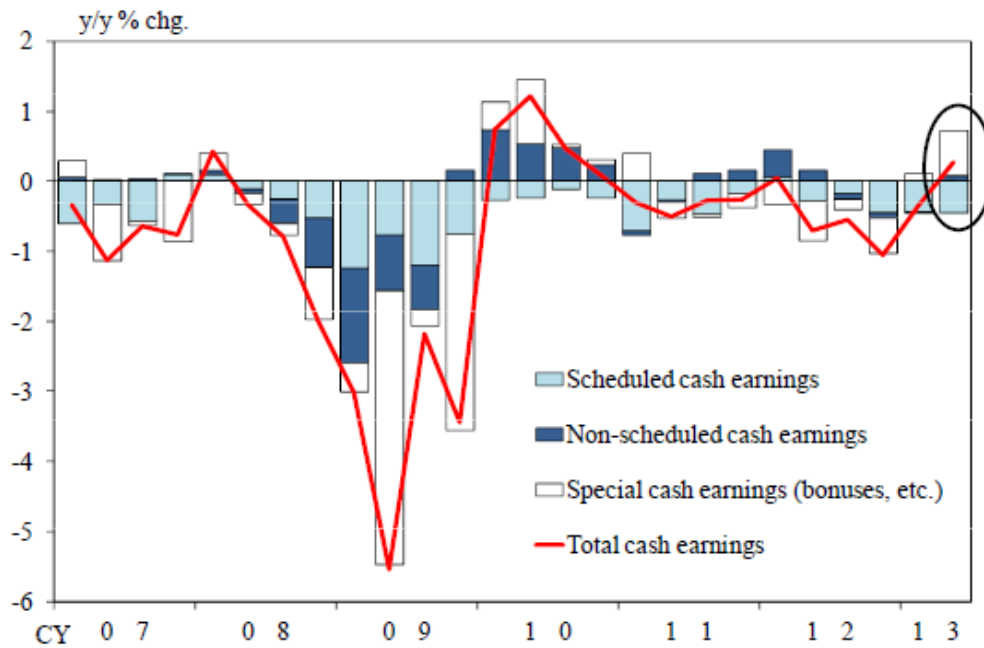


Note: The figure for 2013/Q3 is that of July.  
Source: Cabinet Office.



Chart 3

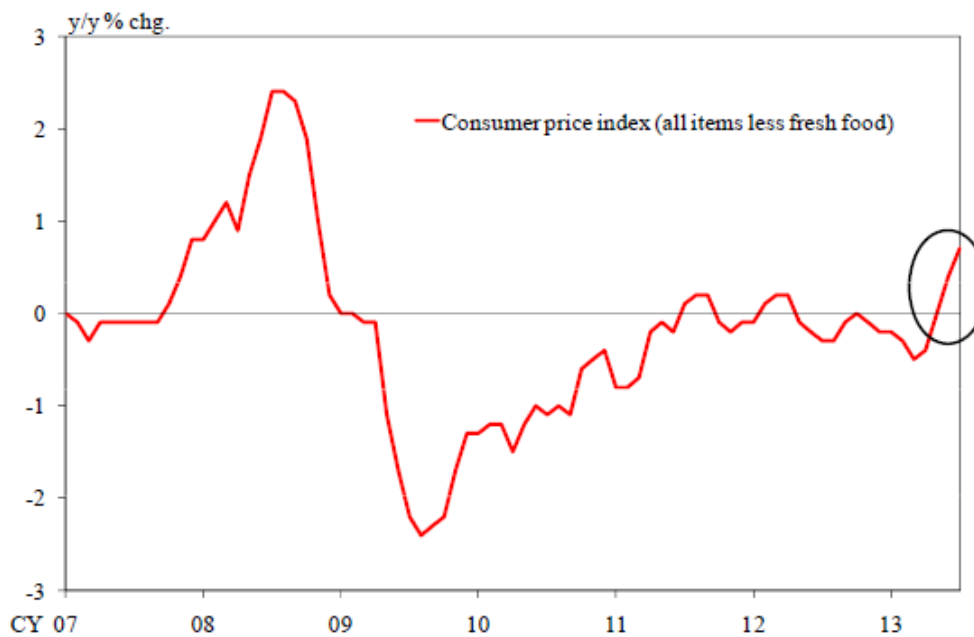
### Total Cash Earnings



Note: Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.  
 Figures for 2013/Q2 are June-July averages.  
 Source: Ministry of Health, Labour and Welfare.

Chart 4

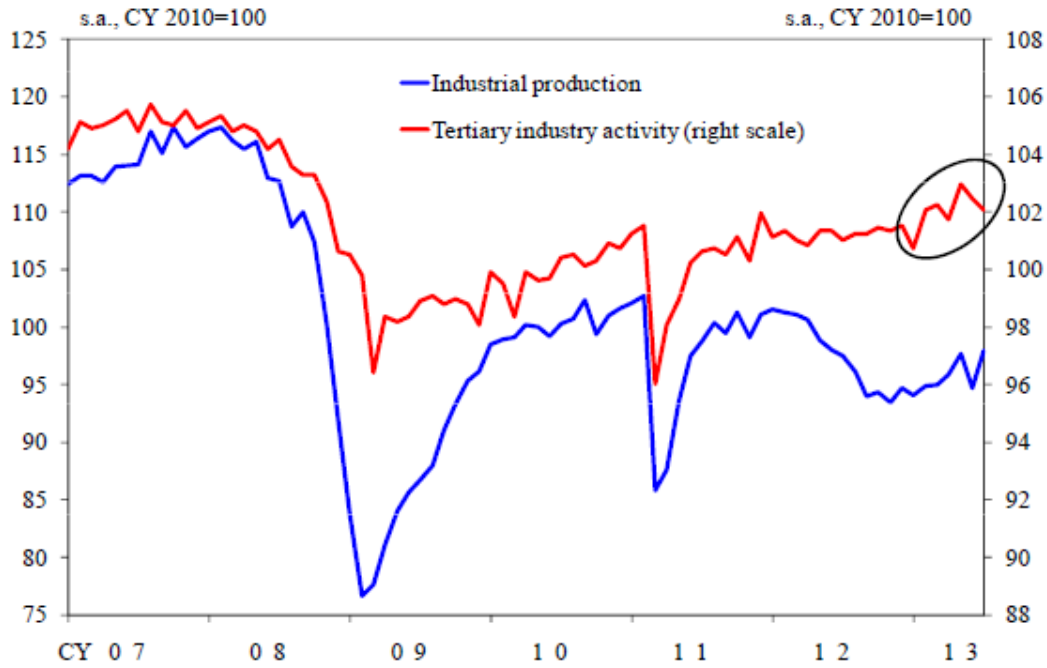
### Consumer Prices



Source: Ministry of Internal Affairs and Communications.

Chart 5

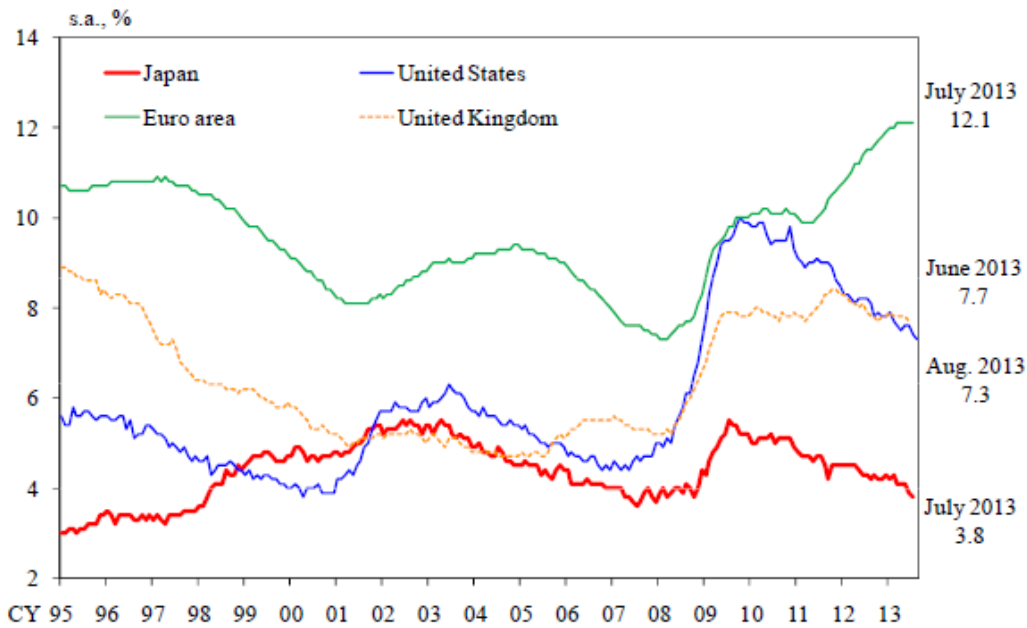
## Production and Industrial Activity



Source: Ministry of Economy, Trade and Industry.

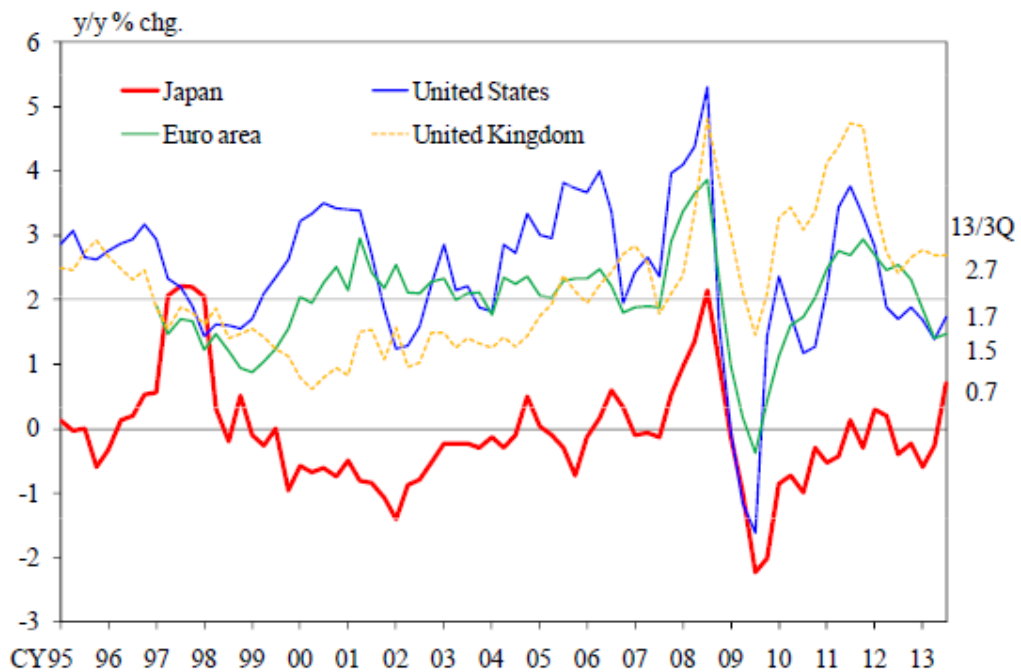
Chart 6

## Unemployment Rate



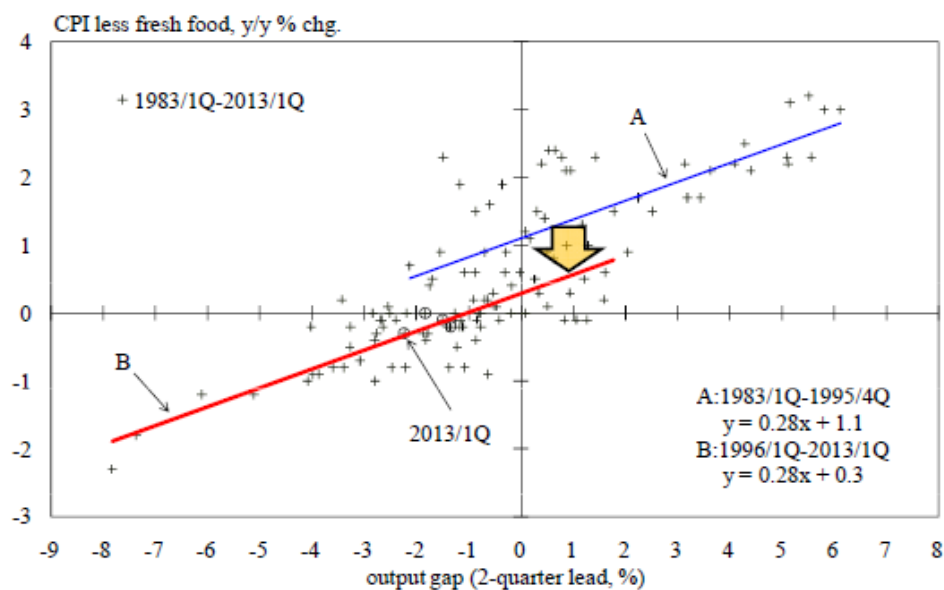
Sources: Ministry of Internal Affairs and Communications; BLS; Eurostat; ONS.

### Consumer Price Index (All items)



Note: The figure for 2013/Q3 in Japan is that of July. Figures for 2013/Q3 in the other areas are July-August averages.  
Sources: Ministry of Internal Affairs and Communications; BLS; Eurostat; ONS.

### Output Gap and Inflation Rate (Phillips Curve)



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

## Quantitative and Qualitative Monetary Easing

### Strong and Clear Commitment

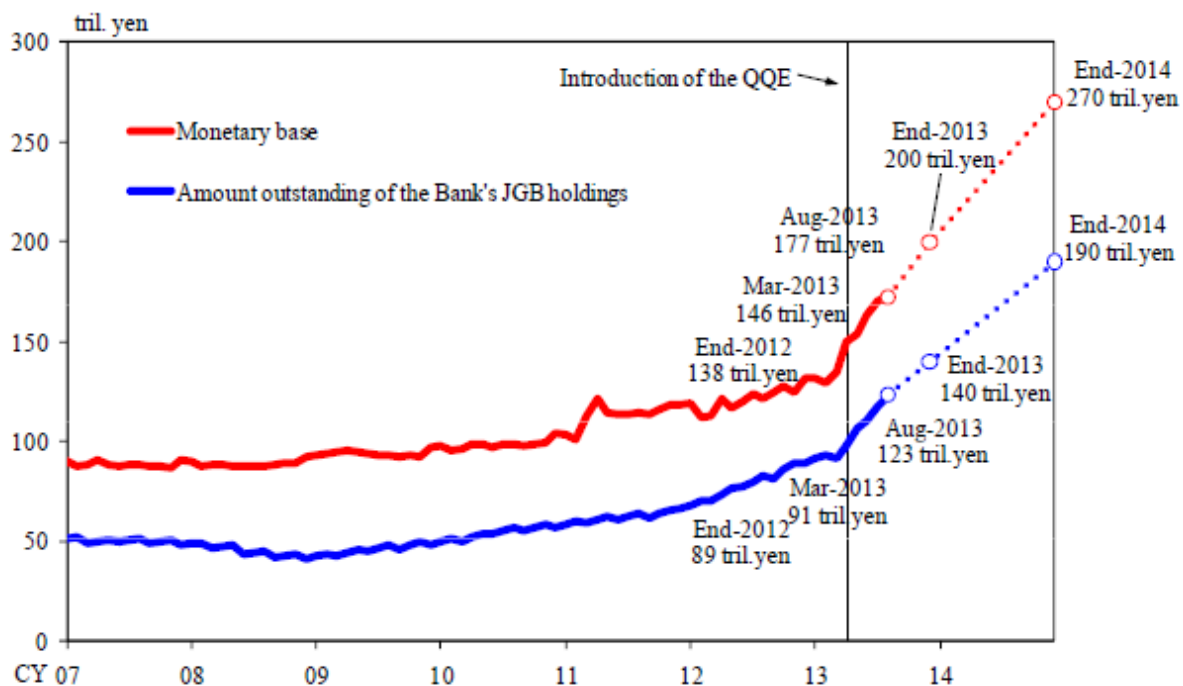
- Achieve the price stability target of 2%, at the earliest possible time with a time horizon of about 2 years.

### New Phase of Monetary Easing Both in Terms of Quantity and Quality

- Monetary base: Annual increase of about 60-70 tril. yen (x2 in 2 years).
- Amount outstanding of the Bank's JGB holdings: Annual increase of about 50 tril. yen (more than x2 in 2 years).
- Average remaining maturity of the Bank's JGB purchases: Extended to about 7 years (more than x2).
- Amount outstanding of ETF holdings: Annual increase of about 1 tril. yen (more than x2 in 2 years).

Chart 10

## Expansion in the Monetary Base and JGB Holdings



Source: Bank of Japan.