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Bank of Japan

**Moving Forward: Japan's Economy under
Quantitative and Qualitative Monetary Easing**

Speech at the Japan Society in New York

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Introduction

It is a great honor to be invited to speak at the Japan Society today.

More than two years have passed since the Bank of Japan introduced Quantitative and Qualitative Monetary Easing (QQE) to achieve the price stability target of 2 percent. Let me briefly look back at these two years. In the first year, Japan's economy improved impressively, registering both rising growth and inflation. Real GDP growth in fiscal 2013 exceeded 2 percent and annual CPI inflation (consumer price index, all items less fresh food) increased from minus 0.5 percent just before the introduction of QQE to 1.5 percent in April 2014 (Chart 1).

In contrast, in fiscal 2014, the second year after the introduction of QQE, Japan's economic performance was a little disappointing. One reason is that the negative impact of the consumption tax hike in April 2014 was larger than expected. The tax hike brought about swings in demand and a decrease in real income, both of which resulted in sluggish private consumption, in particular of durable goods such as automobiles. On the inflation front, crude oil prices declined substantially from the beginning of autumn. Although the oil price decline should have a favorable impact on economic activity in the longer term, in the short term it has a downward impact on inflation through the decline in energy prices such as gasoline and electricity prices. As a result, annual CPI inflation rapidly declined toward the end of last year and has been about 0 percent this year so far.

Against this background, it is not surprising that some wonder whether the Bank's price stability target of 2 percent can really be achieved. Has the trend toward overcoming deflation come to an end? This is far from the case.

What I would most like to stress here is that the two factors -- the consumption tax hike and the substantial decline in oil prices -- only temporarily have a downward impact on inflation. The growth and inflation figures were strongly affected by these factors and were indeed disappointing, but if we take a closer look at the underlying trends, we find that significant changes that were not observed during the deflationary period are taking place.

Let me highlight two of these changes. The first is that Japanese firms are seeing record profits and their investment stance has become increasingly positive. The other change is that wages have clearly risen for the first time in two decades, reflecting that the tight labor market has brought about "full employment" -- that is, a situation in which, from a statistical perspective, there is no unemployment other than that due to the frictional mismatch between job openings and job applicants.

What I would like to focus on today are the remarkable changes that have been taking place in Japan's economy during the past two years under QQE. I would also like to review the transmission mechanism of QQE and how QQE has brought about those changes. I believe that at the end of my speech you will share our outlook for Japan's economy.

I. Changes in Japan's Economy

Record Profits and Firms' Positive Investment Stance

I would like to start by touching on the improvement in the corporate sector. As I mentioned, Japanese firms have been making record profits. In fact, their profits have considerably exceeded those around 1990 at the peak of the bubble economy (Chart 2).

Let me briefly review what has happened in Japan's economy over the past several years. Japan's economy was hit much harder than the U.S. economy by the global financial crisis triggered by the failure of Lehman Brothers in 2008, even though the United States had been the epicenter of the crisis caused by subprime mortgages. In fiscal 2008, industrial production in Japan fell by more than 10 percent and real GDP contracted by about 4 percent. There were a number of reasons why Japan's economy was hit particularly hard. One notable factor is that, since Japanese products and technologies play an essential part in global supply chains, the decline in global final demand affected Japanese firms especially severely. Subsequently, in 2011, Japan was hit by the Great East Japan Earthquake, which caused widespread damage to people and facilities. The situation was further exacerbated by the sharp appreciation of the yen. In sum, Japan's economy was confronted with a series of adverse shock during these years. In the face of this adversity, firms made progress in improving their efficiency and profitability through a wide range of efforts such as

reorganizing production and shifting operations overseas. Having survived the hardship of the recent past, Japanese firms improved their profitability considerably.

Under Abenomics, the excessive appreciation of the yen has been corrected. This correction has not only improved Japanese firms' export profitability, but also raised the yen value of the profits generated through foreign subsidiaries and other overseas-related business. The latter effect is larger than in the past because of the expansion of firms' overseas operations in recent years. In addition, the decline in oil prices since last autumn has been pushing up profits in a wide range of sectors in Japan's economy, which is almost completely dependent on imports for crude oil supply. Meanwhile, despite of the correction of the yen's excessive appreciation, the recovery in exports -- compared to past recovery phases -- remained sluggish due to the expansion of Japanese firms' overseas production. However, since the July-September 2014 quarter, exports have clearly been picking up, rising for three quarters in a row before registering a small decline in the latest quarter.

Looking ahead, corporate profits are expected to remain high. According to the Bank of Japan's June *Tankan* (Short-Term Economic Survey of Enterprises in Japan), firms have revised their fiscal 2014 profits upward and the outlook for fiscal 2015 remains strong. Given this favorable profit situation, firms are more confident about their business outlook and the recovery in business fixed investment is becoming more pronounced. A particularly significant change is that, after prioritizing overseas investment in the past few years, firms are turning to domestic investment in response to the correction of the yen's excessive appreciation.

There has been some concern over the weakness in exports and production in recent months, but we see this as temporary, mainly reflecting the sluggishness of the U.S. economy in the January-March quarter and the recent slowdown in Asian economies. Indeed, in the recent *Tankan*, business sentiment has remained favorable, and firms expect corporate profits to remain high and plan to increase business fixed investment further in fiscal 2015. Moreover, leading indicators such as machinery orders and construction starts also point at an increase in business fixed investment. At the same time, due attention needs to be paid to risks such as

the situation in emerging and commodity-exporting economies and recent developments in global financial markets.

Full Employment and the Positive Feedback between Wage Increases and Inflation

Another significant change is that, with the economy virtually at full employment, wages have increased for the first time in two decades. There now is a positive feedback mechanism operating between wage increases and moderate inflation. I would like to elaborate on this point since it is the key to overcoming deflation.

Japan's economy was mired in deflation -- a persistent decline in prices -- for more than 15 years, starting in the mid-1990s. A key feature of deflation is that it tends to become entrenched in a self-fulfilling manner once the economy falls into it. Under deflation, people engage in economic activities based on the expectation that prices will continue to decline in the future or that, at least, prices will not increase. The decline in prices of goods and services in turn results in a decline in firms' sales and profits, leading to stagnant wages. Households become cautious in their consumption, since they do not expect their wages to increase. As a result, the economy falls into a vicious cycle of sluggish demand and a decline in prices of goods and services. John Maynard Keynes argued that during a recession downward rigidity in nominal wages would cause unemployment to increase. However, in Japan, downward rigidity in nominal wages, which was widely considered rock-solid, started to disappear in the mid-1990s and the economy fell into an equilibrium with declining wages and prices (Chart 3).

Under deflation, there were various changes in economic and social practices that had been built on the assumption that prices would rise. For instance, in Japan, workers and management engage in wage negotiations every year called *shunto* or the spring offensive, which take place collectively across industries in early spring. Until the mid-1990s, base pay increases, that is, across-the-board wage increases reflecting inflation, were common as part of the *shunto*. In the late 1990s, such base pay increases disappeared. Another long-standing tradition in Japan was that prices of a wide range of goods and services were raised at the beginning of each fiscal year in April. This practice also disappeared.

In order to escape from this deflationary equilibrium, it was necessary to dispel the deflationary mindset -- that is, the entrenched view that prices will not rise -- and achieve a state in which firms and households act based on the assumption that prices will continue to rise moderately in the future. In the economics jargon, inflation expectations needed to be raised. In plain English, this means that we have to change firms' and households' views on prices, which form the basis for their economic activities.

In this context, there have been very encouraging changes since the introduction of QQE. The practices that disappeared in the deflationary period have come back.

First, in the *shunto* last year, base pay was increased for the first time in two decades. And in the *shunto* this year, base pay was raised for the second year in a row and at many firms the increases were larger than last year. In addition, base pay increases have become widespread across industries and firms of different size.

The practice of hiking prices at the beginning of the fiscal year also seems to have returned this year. Let me provide you with some evidence. First, looking at the items that make up the CPI (all items less fresh food), the share of items whose prices rose minus the share of items whose prices fell has risen markedly since the beginning of this fiscal year and has reached the highest level since the early 2000s (Chart 4). Second, daily and weekly indices of the prices of food and daily necessities -- namely, the University of Tokyo Daily Price Index and the SRI-Hitotsubashi Consumer Purchase Price Index -- since April this year also point at clear price increases on a year-on-year basis. Moreover, the rate of increase shown by these indicators has continued to go up. Many firms attempted to raise their prices at the beginning of the last fiscal year as well, but this coincided with the consumption tax hike, which was followed by a decline in demand. Firms were therefore forced to quickly take price rises back. The price changes this year present a clear contrast with those last year. For example, in April this year, the price of ketchup was raised for the first time in 25 years -- I should note that this price hike was not due to purchases by the Bank of Japan.

The simultaneous comeback of these practices -- base pay increases in the *shunto* and price hikes at the start of the fiscal year -- is by no means a coincidence. Workers have demanded

increases in base pay, since they expect the rising trend in prices to continue and want to avoid a decline in real wages. On the other hand, firms' management has agreed to such demands, since they expect that the wage increases can be absorbed by raising sales prices. The government's initiative at the joint meeting of representatives from the government, labor unions, and firms' management may have facilitated these developments, but it is clear that a positive feedback loop between wage increases and moderate inflation is now firmly in place.

Finally, I would like to mention the tight labor market conditions behind these wage increases. Japan's unemployment rate, which was above 4 percent before the introduction of QQE, has declined to a range of 3.0-3.5 percent (Chart 5). The decline in the unemployment rate has been accompanied by increases in both the labor force participation rate and the number of employees. Based on the relationship between job openings and job applicants in the past, the current unemployment rate of 3.0-3.5 percent can be regarded as corresponding to "full employment," that is, the remaining unemployment is solely due to the mismatch between job openings and job applicants and there is no excess labor. In the United States, against the background of higher-than-normal long-term unemployment, there has been intense debate on the degree of slack in the labor market. In contrast, in Japan, all relevant indicators strongly suggest that labor market conditions are very tight. For example, the broadly-defined unemployment rate, which counts so-called marginally attached workers as unemployed and corresponds to U-6 in the United States, has declined to about 6 percent, which is low compared to past levels.

II. Transmission Mechanism of QQE

As I just explained, remarkable changes have been taking place in Japan's economy in the last two years. Of course, these changes cannot entirely be attributed to the effects of QQE implemented by the Bank of Japan. However, it can be judged that QQE has been producing its intended effects through the transmission mechanism envisioned at the time of its introduction. Let me review the transmission mechanism of QQE.

Japan's monetary policy has been constrained for a long time by the zero lower bound on short-term nominal interest rates. In this situation, QQE aims to achieve further easing effects by reducing long-term real interest rates. Specifically, the mechanism is as follows.

The Bank raises inflation expectations through a strong and clear commitment to achieving the price stability target of 2 percent and large-scale monetary easing to underpin the commitment (Chart 6). At the same time, the Bank exerts downward pressure on nominal interest rates across the entire yield curve through massive purchases of Japanese government bonds (JGBs). As a result, long-term real interest rates decline. With private demand being stimulated, the output gap improves, and actual inflation rates rise accordingly. Once people actually experience increases in inflation, their inflation expectations rise, further reinforcing this process.

The changes we have witnessed since the introduction of QQE are broadly consistent with this transmission mechanism. Nominal long-term interest rates have declined, with yields of 10-year JGBs down by about 0.3 percentage point. Medium- to long-term inflation expectations seem to have increased by about 0.5 percentage point. The combined effects of these two factors -- the decline in nominal long-term yields and the increase in inflation expectations -- have brought about a decline in real interest rates by slightly less than 1 percentage point. Studies for the United States and Europe suggest that the effects of a downward shift of the entire yield curve -- i.e., including long-term interest rates -- on economic activity and prices are several times larger than those of a decline in short-term rates under conventional monetary policy. Along similar lines, empirical research by our staff suggests that the effects of QQE are roughly equivalent to those arising from lowering the short-term policy rate by 2 percentage points. Given how powerful monetary easing under QQE has been, it is no wonder that Japan's economy has been experiencing the drastic changes I mentioned.

The former Fed Chairman, Ben Bernanke, is quoted to have said, "The problem with QE is it works in practice but it doesn't work in theory." The effectiveness of QE likely differs across economies, depending on economic conditions and financial structures, and academics have not reached a consensus on how effective QE is. However, in the case of Japan, we believe that it is possible to explain how QQE works in theory, and QQE has been working as envisaged.

Based on this belief, the Bank will continue to steadily pursue QQE to achieve the price stability target of 2 percent at the earliest possible time. It will examine both upside and downside risks to economic activity and prices, and make adjustments without hesitation if necessary.

Conclusion

With the prospect of overcoming deflation in sight, efforts to raise the growth potential of Japan's economy should gather steam. The government is currently implementing various regulatory and institutional reforms as part of its growth strategy. I am aware that many have found previous proposals to raise Japan's growth potential disappointing. In hindsight, it is clear that there has been a lack of sufficient incentive and impetus to make change happen. Firms had few incentives to grow and simply removing obstacles to growth had little effect. Partly because of this, the political will to remove such obstacles was also weak. But this time is different. Since Japanese firms now believe that deflation is over, there will be strong incentive for change. Under deflation, sticking to the status quo was a reasonable business strategy. This is no longer the case and, aware of the drastic changes that have occurred in the domestic business environment, a growing number of Japanese firms are now taking action. This should be a major driving force for removing regulatory and institutional obstacles. For instance, low labor participation by women has long been an issue for Japan's economy; however, faced with a tight labor market, firms have recently made efforts to promote labor participation by women. At the same time, the government has also tried to do so by incorporating institutional reforms in the growth strategy. As a result, labor participation by women has finally increased. The key to raising the growth potential is "action" and there is no better time than now to move forward. The Bank of Japan will contribute to raising the growth potential of Japan's economy by achieving the price stability target of 2 percent at the earliest possible time through QQE and dispelling the deflationary mindset that has taken hold of Japan.

Thank you very much for your attention.

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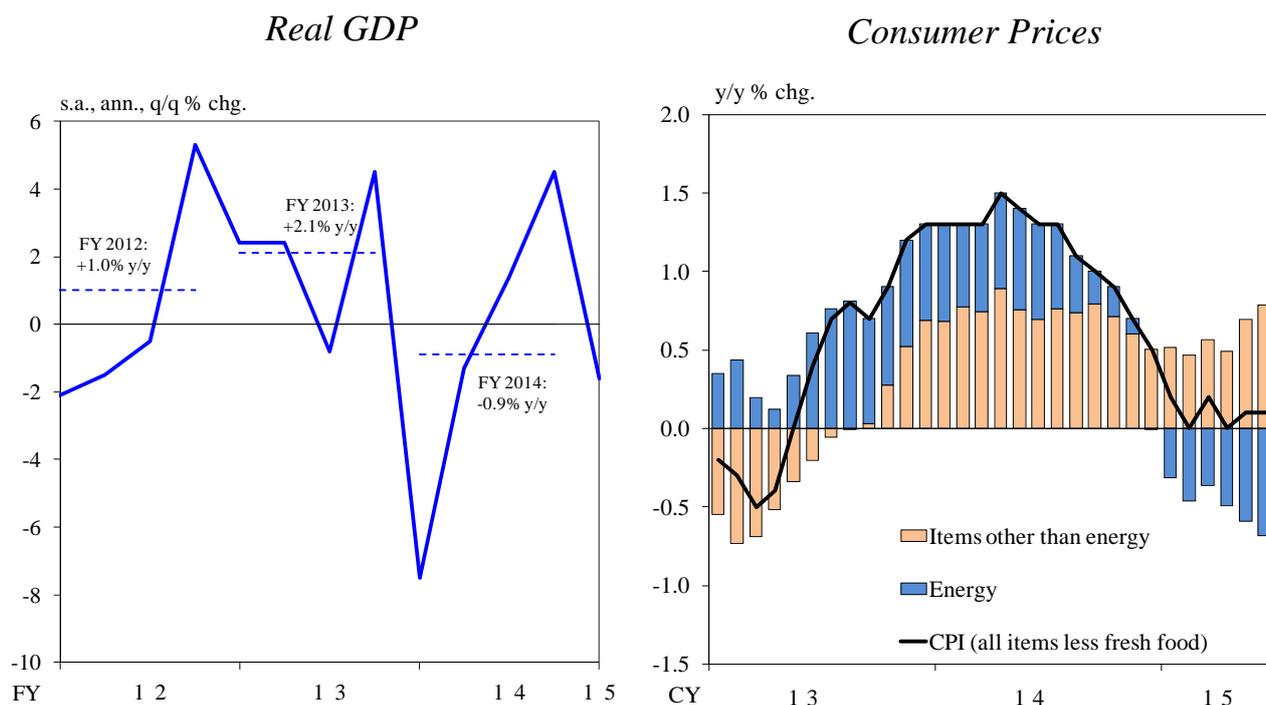
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Chart 1

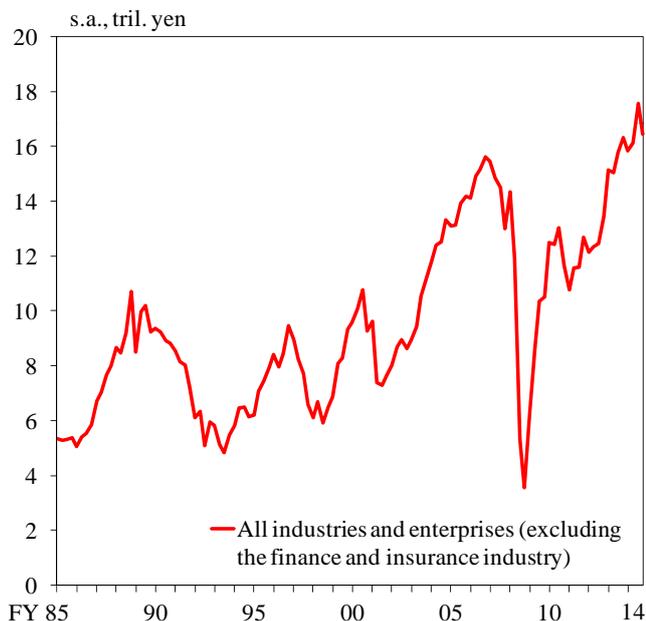
GDP and Consumer Prices



Note: Figures for consumer prices are adjusted for the direct effects of the consumption tax hike in April 2014.
Sources: Cabinet Office; Ministry of Internal Affairs and Communications.

Corporate Profits and Business Fixed Investment

Current Profits

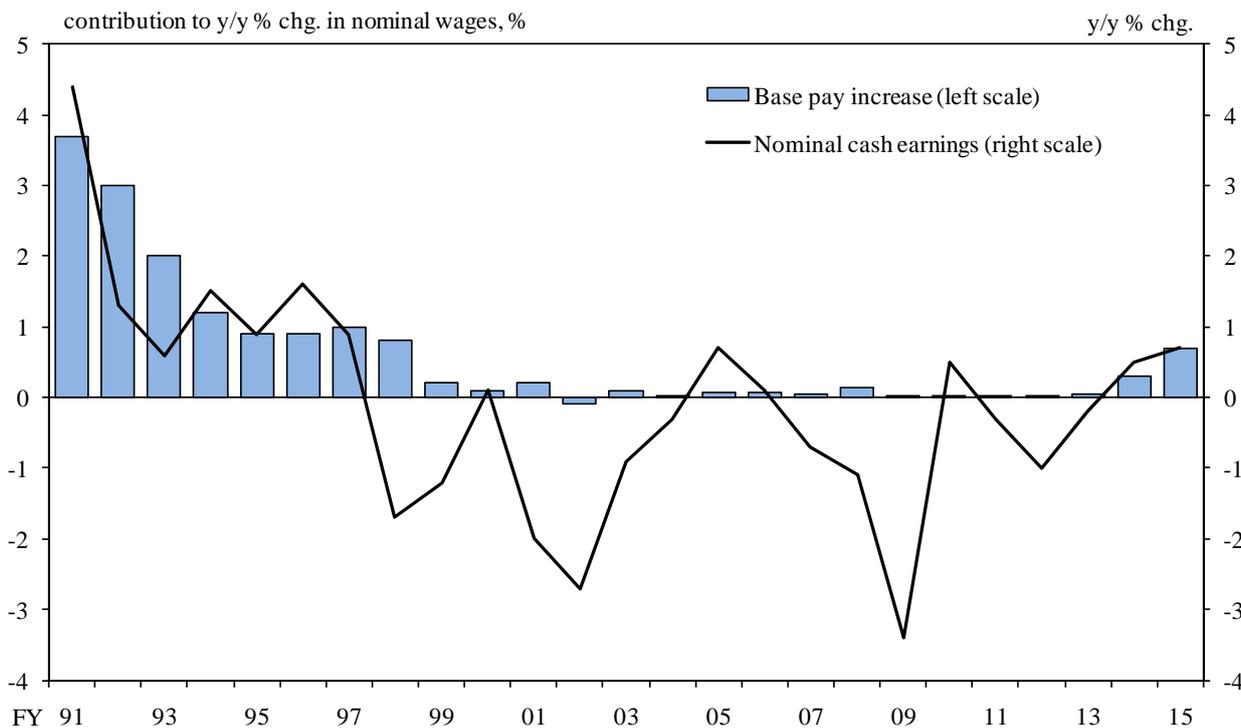


Tankan: Business Fixed Investment Plans

| | | y/y % chg. | |
|-------------------|------------------|------------|-------------------|
| | | FY2014 | FY2015 (Forecast) |
| Large Enterprises | Manufacturing | + 6.2 | + 17.3 |
| | Nonmanufacturing | + 3.3 | + 6.6 |
| | All industries | + 4.3 | + 10.3 |
| Small Enterprises | Manufacturing | + 9.1 | - 5.0 |
| | Nonmanufacturing | + 1.3 | - 15.6 |
| | All industries | + 3.7 | - 12.1 |
| All Enterprises | Manufacturing | + 7.0 | + 13.1 |
| | Nonmanufacturing | + 3.3 | + 1.7 |
| | All industries | + 4.6 | + 5.6 |

Note: Figures for business fixed investment plans of the *Tankan* include software investment but exclude land purchasing expenses.
Sources: Ministry of Finance; Bank of Japan.

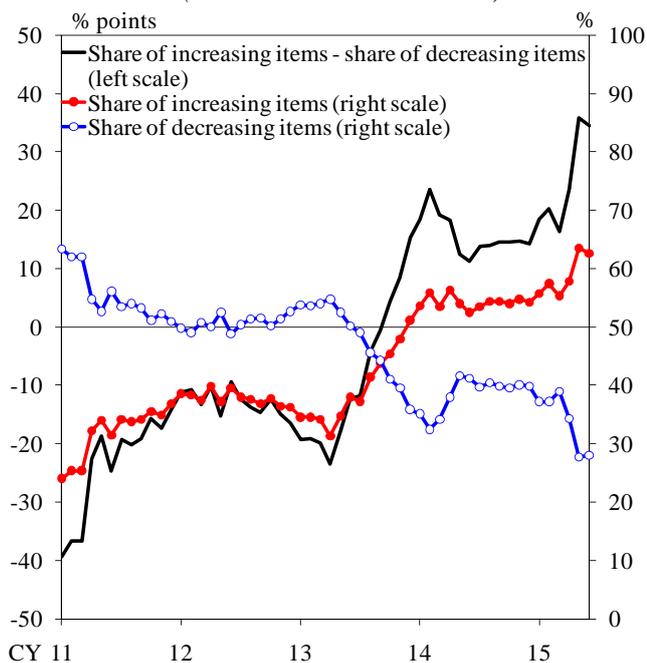
Nominal Cash Earnings and Base Pay Increase



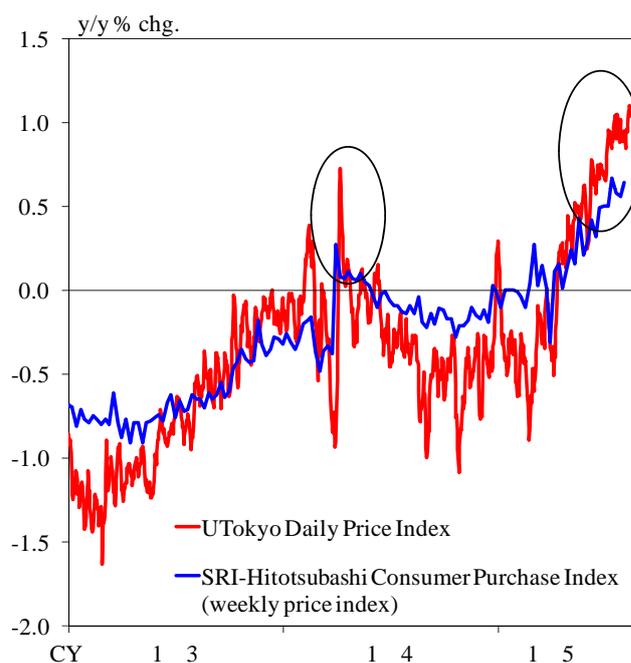
Notes: 1. The figure for fiscal 2015 for nominal cash earnings is the April-May average.
2. Figures for the base pay increase up through fiscal 2014 are taken from the Central Labour Relations Commission, and the figure for fiscal 2015 is taken from the Japanese Trade Union Confederation (RENGO).
Sources: Ministry of Health, Labour and Welfare; Central Labour Relations Commission; Japanese Trade Union Confederation (RENGO).

Price Developments

*Share of Increasing and Decreasing Items
(Consumer Price Index)*



*UTokyo Daily Price Index and
SRI-Hitotsubashi Consumer Purchase Index*

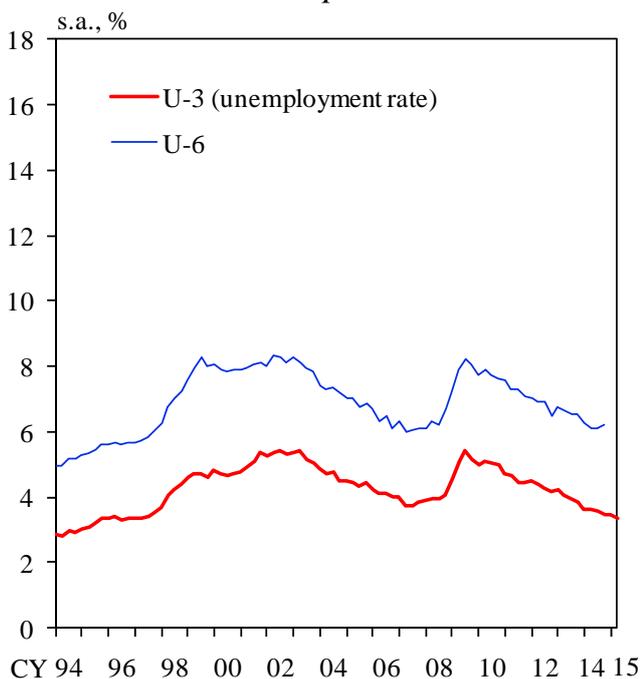


Notes: 1. The share of increasing/decreasing items is the share of items in the consumer price index (all items less fresh food) whose price indices increased/decreased from a year earlier. The price indices are adjusted for the direct effects of the consumption tax hike in April 2014.
2. The UTokyo Daily Price Index is a 7-day backward moving average.

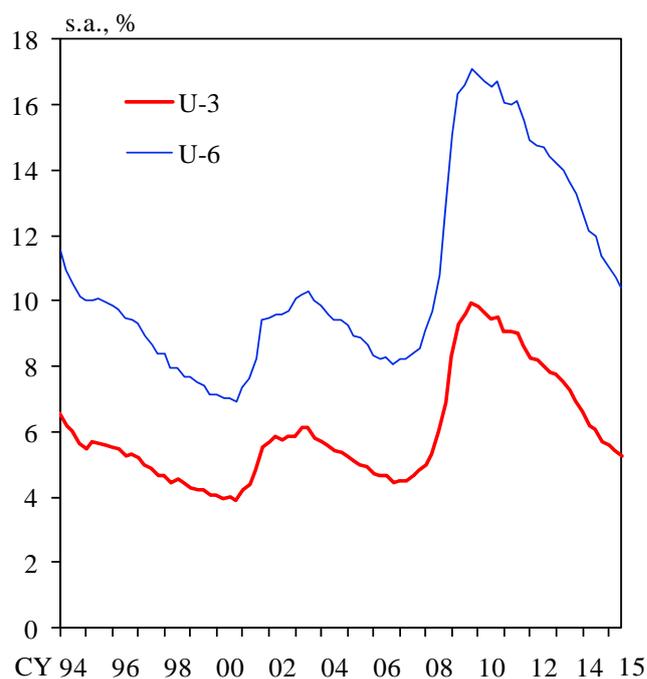
Sources: Ministry of Internal Affairs and Communications; UTokyo Daily Price Index Project; Research Center for Economic and Social Risks, Institute of Economic Research, Hitotsubashi University.

Unemployment Rates

Japan



United States



Notes: 1. Figures for 2015/Q3 in United States are those for July.

2. U-6 (Japan) = (unemployed persons + marginally attached workers + part time for economic reasons) / (labor force + attached workers). For details of its definition, see Note 2 to Chart 37 in the April 2015 *Outlook for Economic Activity and Prices*.

Sources: Ministry of Internal Affairs and Communications; BLS.

Mechanism of QQE

