Hiroshi Nakaso: Japan's economy and monetary policy

Speech by Mr Hiroshi Nakaso, Deputy Governor of the Bank of Japan, at a meeting with business leaders, Kumamoto, 27 July 2015.

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Accompanying charts can be found at the end of the speech or on the Bank of Japan's website.

Introduction

It is my pleasure to have the opportunity today to exchange views with administrative, financial, and business leaders in Kumamoto Prefecture. I would like to take this opportunity to express my sincerest gratitude for your cooperation with the activities of the Bank of Japan's Kumamoto Branch.

The Bank introduced quantitative and qualitative monetary easing (QQE) in April 2013 with the aim of overcoming deflation that has lasted for about 15 years. Thereafter, QQE has been exerting its intended effects, and Japan's economic activity and prices have improved markedly. The underlying trend in inflation, as I will explain later, has continued to be of improvement, although the year-on-year rate of increase in the consumer price index (CPI) has declined, due in particular to the effects of the substantial decline in crude oil prices since last summer, and recently has been about 0 percent.

Today, before exchanging views with you, I would like to explain the Bank's view on the current situation of and outlook for economic activity at home and abroad. I will then touch on the mechanism and effects of QQE and move on to Japan's price developments and the Bank's monetary policy.

I. Current situation of and outlook for economic activity at home and abroad

To start with, let me talk about economic developments at home and abroad. Japan's economy has continued to recover moderately, and a virtuous cycle from income to spending is becoming more evident in both the corporate and household sectors. That is, in the corporate sector, profits marked a record high, and an increase in fixed investment is becoming clear. In the household sector, wages have been growing, as seen in the raise in base pay for two consecutive years, and private consumption has been resilient.

In contrast, exports – which had been increasing since last autumn – have recently shown some weakness in their momentum. However, this is due to a temporary slowdown in overseas economies. Exports are expected to increase moderately, albeit with some fluctuations, against the background of the recovery in overseas economies and supported by past developments in foreign exchange rates.

Overseas economies and Japan's exports

First, I would like to touch on overseas economies. Overseas economies – mainly advanced economies – have been recovering, albeit with a lackluster performance still seen in part of emerging economies. Overseas economies weakened rather substantially in the January-March quarter of 2015, particularly in the United States and China, but they are expected to continue recovering moderately, mainly in the advanced economies, and the positive effects of this are likely to gradually spread to the emerging economies. This view is shared among international organizations such as the International Monetary Fund (IMF). According to the World Economic Outlook (WEO) Update published in July by the IMF, global economic growth in 2015 has been revised downward to 3.3 percent, due to its weakening in the January-March quarter, but is projected to accelerate moderately and register 3.8 percent in 2016 (Chart 1).

Looking closely at the developments in overseas economies by region, the U.S. economy has continued to recover solidly, assisted by household spending, although adjustments have been seen in the industrial production sector, mainly on the back of the decline in crude oil prices and the appreciation of the U.S. dollar. In the January-March quarter of 2015, the economy exhibited slightly negative growth due to transitory factors such as the effects of the severe winter weather and the strikes at West Coast ports (Chart 2). Nevertheless, the growth momentum of the economy has recently recovered from the temporary stall in winter against the backdrop of the continued favorable employment and income situation. From spring, private consumption clearly has rebounded, as seen mainly in improvements in retail and automobile sales. Going forward, there will be sectors that are affected by the decline in crude oil prices and the appreciation of the U.S. dollar, but the U.S. economy is likely to continue to see growth led mainly by private demand, with robust household spending assisted by the favorable employment and income situation.

Regarding monetary policy, the next step toward normalization will come into sight; namely, raising the target range for the federal funds rate. This seems to suggest that the U.S. economy has recovered to a considerable level. However, it is necessary to monitor with due attention whether markets, especially those in emerging economies, will be affected unexpectedly through a reversal of the global flow of funds as the federal funds rate – which has been at the zero lower bound after the global financial crisis – will be raised.

Next, I will move on to the European economy. The euro area economy has continued to see moderate recovery, as can be observed in positive growth in the real GDP for eight consecutive quarters (Chart 3). The European economy has recently been seeing a clear increase in private consumption given the improvement in labor market conditions, as well as reflecting the effects of the decline in crude oil prices and of a rise in stock prices. It also has been seeing a recovery trend in business sentiment and industrial production resulting from an improvement in exports and corporate profits due to the depreciation of the euro. As for prices, the year-on-year rate of change in the Harmonized Index of Consumer Prices (HICP) for all items, which had once been negative, has recently recovered to a slight positive, and concerns about deflation have been alleviating. Going forward, the European economy is expected to continue to see moderate recovery as depreciation of the euro and the monetary easing measures by the European Central Bank (ECB) are taking effect.

Currently, the largest uncertainty over Europe is the sovereign debt problem in Greece. At the Euro Summit this month, leaders agreed in principle that they were ready to start negotiations on a European Stability Mechanism (ESM) program on the condition that various requirements would be met by Greek authorities. The scenario in which Greece will exit from the eurozone was avoided, and global financial markets have reacted positively. That said, Greece is still confronted with large problems; namely, reorganizing its economy and financial system, as well as fiscal consolidation. In particular, I believe that it is essential for the reconstruction of the Greek economy to restore its financial intermediary function through swift recapitalization and liquidity assistance to financial institutions. The Bank strongly expects that there will be steady progress toward resolution of the sovereign debt problem in Greece with support by the institutions and European countries.

Now, turning to emerging economies, the growth momentum of the Chinese economy has been slowing against the backdrop of the deceleration in fixed asset investment – under excess production capacity – and of continued adjustments in the real estate market (Chart 4). In this situation, the Chinese authorities have been taking both fiscal and monetary measures toward underpinning the economy in a more proactive manner since spring. Going forward, due attention needs to be paid to the possibility that excess production capacity and adjustments in the real estate market will be prolonged, but the economy is likely to follow a generally stable growth path, although the pace of growth is expected to be somewhat reduced. That said, even if the Chinese economy maintained its growth rate, the main contribution would likely be public investment, so the degree of effects on Asian economies' and Japan's exports continues to warrant due attention.

In sum, overseas economies as a whole temporarily slowed their pace of growth due to the slowdown in the U.S. and Chinese economies, but are expected to continue to recover moderately, mainly in advanced economies. There are various uncertainties concerning overseas economies, such as effects of normalization of monetary policy in the United States on the global financial markets, the sovereign debt problem in Greece, and developments of emerging economies including China, and close attention will continue to be paid to these issues.

In light of the developments in overseas economies, Japan's exports and production had been increasing but are slightly lacking momentum recently (Chart 5). The lack of momentum in exports is temporary due to the effects of the slowdown in overseas economies for the January-March quarter appearing with a time lag; as for production, it is due to inventory adjustments of compact cars (with engine sizes of 660cc or less) as well as of iron and steel, in addition to the slowing in exports. Looking ahead, as overseas economies are expected to maintain their moderate recovery, mainly in advanced economies, and as it seems that inventory adjustments will be completed sooner or later with an improvement in domestic demand, exports and production are expected to increase moderately, albeit with some fluctuations.

Corporate sector: high profits and positive investment stance

Turning to Japan's economy, in the corporate sector, profits increased to a record high owing in part to the decline in crude oil prices and to effects of the correction of the appreciation of the yen (Chart 6). They are expected to continue on their solid increasing trend as sales grow accompanied by an increase in domestic and external demand.

With corporate profits increasing to their highest level, firms' positive investment stance is maintained. Real business fixed investment in the GDP statistics for the January-March quarter has increased markedly. According to the June *Tankan* (Short-Term Economic Survey of Enterprises in Japan), firms seem to have increased their fixed investment this fiscal year, as they did last fiscal year. The plans of large manufacturing firms in particular marked a high level at this time of the year, the highest since fiscal 2004, reflecting in part an increase in domestic investment as it appears that the situation of a weaker yen will be prolonged. The continued positive investment stance appears to suggest that firms consider the current weakness in exports and production as temporary. Business fixed investment is projected to keep rising moderately as the improvement in corporate profits and monetary easing effects continue to exert upward pressure, and as firms will continue increasing their domestic investment.

Household sector: continued improvement in the employment and income situation and resilient private consumption

Next, I will turn to the household sector. Positive developments in the corporate sector have led to a tightening in labor market conditions and to an improvement in the employment and income situation in accordance with that tightening. The unemployment rate was 3.3 percent, a low level last seen in 1997 (Chart 7). Judging from firms' view on employment, the labor shortage is growing further. Tight labor market conditions have been creating upward pressure on wages. Nominal wages have increased moderately, albeit with fluctuations, due partly to the fact that many firms increased wages, including base pay, which was raised to a larger extent than last year in the annual labor-management wage negotiations this spring. Consequently, since the number of employees has been increasing and nominal wages per employee have risen, overall employee income has been increasing moderately (Chart 8).

Private consumption for fiscal 2014 was relatively weak. This is due to the effects of the consumption tax hike having been larger than expected and of the bad weather during the summer, both creating a strong headwind to private consumption. However, this wind grew calm this fiscal year, and a tailwind has started to blow. Nominal wages have continued to increase, as they did last year, and the increase has been seen in small and medium-sized enterprises (SMEs) as well. Moreover, reflecting in part the past decline in crude oil prices, real wages are projected to increase in a sustainable manner. Consumer sentiment, which fell considerably towards last year-end, has evidently been picking up. In this situation, private consumption has become more resilient, and with steady improvement in the employment and income situation continuing going forward, supported in part by the wealth effects resulting from the rise in stock prices, private consumption is expected to maintain its resilience.

Interim assessment of the outlook for economic activity and prices

Regarding Japan's economy, with a virtuous cycle from income to spending in both the corporate and household sectors expected to continue operating, domestic private demand is likely to be firm, and exports are expected to increase moderately, albeit with some fluctuations. The Bank released its interim assessment in July of the April 2015 *Outlook for Economic Activity and Prices* (the Outlook Report). In fiscal 2015, the growth rate is likely to deviate somewhat downward compared to the projection made in April, due to the recent weakness in exports and production, but the economy is projected to continue growing at a pace above its potential – estimated to be around 0.5 percent or lower – in both fiscal 2015 and 2016. In fiscal 2017, the economy is projected to maintain its positive growth, although with a slowing in the pace to around a level somewhat below the potential growth rate due mainly to the effects of the consumption tax hike planned in April 2017. According to the Bank's interim assessment, the median of the Policy Board members' forecasts of the real GDP growth rate was 1.7 percent for fiscal 2015, 1.5 percent for fiscal 2016, and 0.2 percent for fiscal 2017 (Chart 9).

II. Japan's price developments and monetary policy

I will next talk about the price situation in Japan and the Bank's monetary policy.

Transmission mechanism of QQE

First, let me review the transmission mechanism of QQE that the Bank is currently pursuing. Under QQE, the decline in real interest rates, adjusted by the inflation rate, is envisioned as a main transmission channel (Chart 10). Namely, (1) inflation expectations will be raised through a strong and clear commitment to achieving the price stability target of 2 percent and through large-scale monetary easing to underpin the commitment, (2) downward pressure will be put on nominal interest rates across the entire yield curve through massive purchases of Japanese government bonds (JGBs), and thereby (3) real interest rates will decline, and this will be the starting point of QQE's effects. The decline in real interest rates will stimulate private demand, which will lead to an upturn in the economy, improving the output gap. The improvement in the output gap will increase inflation rates. As people experience actual inflation, their inflation expectations will rise further.

Effects of QQE

QQE has been producing its intended effects through the policy transmission mechanism I have just described. Nominal long-term interest rates have declined with the Bank's massive purchases of JGBs. Yields on 10-year JGBs have declined by about 0.3 percentage point. While there are wide-ranging indicators for medium- to long-term inflation expectations such as various surveys and figures implied by inflation-indexed bonds that are traded in markets, inflation expectations seem to have increased by about 0.5 percentage point compared to the period before QQE. The degree of decline in real interest rates seems to have been slightly less than 1 percentage point, as calculated by adding the degree of the decline in nominal long-term yields and that of the increase in inflation expectations.

The changes in financial markets, economic activity, and prices after the introduction of QQE are broadly consistent with the roughly 1 percentage point decline in real interest rates.

Financial markets responded to the introduction of QQE relatively swiftly. Stock prices have increased substantially and the excessive appreciation of the yen before the introduction has been corrected. The pace of increase in lending has been moderately accelerating and recently reached around 2.5 percent on a year-on-year basis. In addition to the decline in real interest rates, such developments have made financial conditions even more accommodative. With such accommodative financial conditions, a virtuous cycle from income to spending has been operating in both the corporate and household sectors, and Japan's economy has seen a significant turnaround. I am aware that some firms have had difficulties in passing increased costs, including wages, on to sales prices smoothly; thus, some may not share the sentiment that the economic condition has improved. However, the positive feedback between higher profits/wages and higher inflation – where higher corporate profits feed through into higher wages, leading to higher sales prices, which in turn results in even higher profits/wages – is now in place. This is the opposite of the negative feedback that was observed in the deflationary period. To this end, the temperature of the economy is gradually rising.

Outlook for prices and the bank's monetary policy going forward

Reflecting this turnaround in the economy, the underlying trend in inflation has also steadily improved. The year-on-year rate of change in the CPI (all items less fresh food), which was about minus 0.5 percent before the introduction of QQE, improved to 1.5 percent last April excluding the direct effects of the consumption tax hike (Chart 11). Thereafter, the rate of increase in the CPI has slowed, recently to about 0 percent, against the background of the substantial decline in crude oil prices since summer 2014 and somewhat weak demand following the consumption tax hike.

Looking forward, due to the effects of the decline in energy prices, the year-on-year rate of increase in the CPI is likely to be about 0 percent during this summer. But thereafter it is projected to increase at an accelerated pace and reach around 2 percent – the price stability target – around the first half of fiscal 2016. Some may wonder how the rate of increase in the CPI can really reach 2 percent around the first half of fiscal 2016, given that the current level is about 0 percent. In response to this question, it may help you understand if we decompose the changes in consumer prices into two parts: the contribution of energy prices and the underlying trend in inflation.

First, I will describe the contribution of energy prices. Crude oil prices were over 100 dollars per barrel up until mid-2014 but then declined substantially, temporarily falling to about 40 dollars per barrel, which accounts for the decline in prices of more than 60 percent. The decline in crude oil prices will lead to pushing down various energy prices, including gasoline and electricity charges, with some time lag. The negative contribution to the CPI will be largest this summer, pushing down the year-on-year rate of increase in the CPI by about 1 percentage point. In other words, if crude oil prices had not declined, the year-on-year rate of increase in the CPI this summer would be higher by about 1 percentage point than what is observed. Furthermore, unless crude oil prices continue to decline, the negative contribution to the year-on-year rate of increase in the CPI will eventually dissipate. Although it is difficult to precisely forecast future crude oil prices, if we assume that they will rise very moderately from the current level – and there are many who predict such a rise, as prices in the futures markets suggest – the negative contribution is expected to dissipate gradually from the second half of fiscal 2015 and be around 0 percentage point in the first half of fiscal 2016. In other words, as the negative contribution of energy prices dissipates, this alone will push up the year-on-year rate of increase in the CPI for the first half of next fiscal year by about 1 percentage point, compared with that for this summer.

In addition to these changes, the underlying trend in inflation is expected to improve further. The underlying trend in inflation is determined by the output gap of the economy as a whole and by inflation expectations. First, when it comes to the output gap, this was about minus 2 percent just before the introduction of QQE, but with the tightening in labor market conditions and heightening utilization of production capacity, it has improved to around 0 percent, which is the past long-term average. Going forward, as the economy continues to grow at a pace above its potential, the output gap is expected to improve further into positive territory.

Next, as I described earlier, inflation expectations appear to be rising on the whole. In particular, the recent changes in firms' wage- and price-setting behavior are drawing specific attention. As for wage setting, many firms have increased their base pay for two consecutive years. Moreover, their price-setting has also been shifting from a low-price strategy to raising sales prices while increasing value-added. Under deflation, firms could not raise sales prices against weak demand, and thus focused on lowering costs as much as possible – including personnel expenses – in order to secure profits. However, as economic activity continues to improve, an increasing number of firms seem to be able to pass increased costs, including the rise in input prices and personnel expenses, on to sales prices. In particular, since the turn of the fiscal year in April, upward price revisions have been more widespread, which is something that has not been observed in recent years. At the meeting of general managers of the Bank's branches held recently, many reported in this context.

These changes also can be observed in hard data (Chart 12). The index calculated as the number of items for which prices rose minus that of items for which prices declined – among 524 items that CPI (all items less fresh food) consists of – has recently risen further, and the most recent index for May 2015 is the highest since 2003. Furthermore, the University of Tokyo Daily Price Index and SRI-Hitotsubashi Consumer Purchase Indices, which promptly report prices of daily use items and food, turned clearly positive on a year-on-year basis in April this year, and have continued to rise to the present. Compared with last year, when prices of many items rose in April with the consumption tax hike, quickly followed by the decline in prices due to weak sales, price movements this year present a clear contrast.

As I have explained, QQE has been exerting its intended effects and a mechanism has been operating in which the year-on-year rate of increase in prices rises moderately, accompanied by an improvement in corporate profits and increases in employment and wages. The year-on-year rate of increase in the CPI is likely to be about 0 percent for the time being, but as the underlying trend in inflation steadily rises and as the effects of the decline in crude oil prices dissipate, it is projected to accelerate toward 2 percent – the price stability target. The timing of reaching around 2 percent, as I described earlier, is projected to be around the first half of fiscal 2016, assuming that crude oil prices will rise moderately from the recent level (Chart 9).

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

Strengthening growth potential of Japan's economy

So far, I have described the developments in economic activity and prices, as well as the Bank's monetary policy. Let me now touch on the challenges Japan's economy faces; namely, strengthening its growth potential.

Japan's potential growth rate has been on a declining trend since the 1990s (Chart 13). Raising the growth potential is an important challenge for Japan's economy, and the government is currently undertaking various structural reforms. Under the initiatives by the government, it is very encouraging that various regulatory and institutional reforms have steadily been implemented. That said, I would like to note two points.

First, the current situation where the economic condition has been improving presents a good opportunity to push ahead with structural reforms. As the economy improves, the need for structural reforms and challenges to overcome is now clearer. For instance, many can easily understand that, in order to strengthen Japan's economic growth, it is important to shore up the labor participation of women and the elderly in view of the declining birthrate and aging population. However, this has not been recognized as a critical challenge under a high unemployment rate. As the economy improved and the labor market became tight, firms and people have started to recognize the supply constraint of the labor force, and measures have been taken to enhance the labor participation of women and the elderly. Also, in the context of regulatory reforms, with firms and households becoming more proactive in economic activity, it will become clear which regulatory and institutional aspects have hampered economic activity. Actual needs will become a powerful driving force in promoting regulatory reforms.

Second, I will describe the impact of structural reforms on the economy. Structural reforms, in principle, are needed to raise the long-term growth of the economy and its sustainability. In some countries, and in Europe in particular, it is often discussed whether, in the short run, structural reforms entail pain and thus impede economic activity. However, there are various types of structural reforms that raise growth expectations and thereby enhance consumption and investment in the short run, resulting in stimulated demand. For example, regulatory reforms, which broaden the frontier of corporate activities and free up firms to conduct activities in which they have wanted to engage or ignite their animal spirits, will produce expectations that the productivity and profits of firms will be raised in the future. Such a rise in growth expectations would stimulate investment even in the short run. If people are more confident in the sustainability of social welfare, households will be able to spend money without worry.

In order to achieve sustainable growth for Japan’s economy, it is necessary to overcome deflation as well as to raise the potential growth through strenuous efforts both of the public and private sectors. The Bank will contribute to strengthening the growth potential of Japan’s economy by dispelling the deflationary mindset that persisted among people. Such change will encourage firms and households to be more proactive with their economic activities. With this in mind, the Bank will steadily pursue QQE and achieve the price stability target of 2 percent at the earliest possible time.

Conclusion

In concluding, let me touch on the economy of Kumamoto Prefecture.

The economy has generally continued to see moderate recovery. A virtuous cycle from income to spending has been operating in both the corporate and household sectors, as in Japan’s economy as a whole. In the corporate sector, manufacturers in particular, including of electronic parts and devices and production machinery – both of which are the driving force of the region – have kept production at a high level while incorporating domestic and external demand, and in this situation, business fixed investment has been on an increasing trend. Even in the Kumamoto Branch’s June *Tankan*, business fixed investment plans for fiscal 2015 registered a double-digit increase, particularly in manufacturers. In the household sector, the pick-up in private consumption after the consumption tax hike is still sluggish compared to that in metropolitan areas. Nevertheless, labor market conditions have tightened, as observed in the active job openings-to-applicants ratio for May marking 1.11 times – the highest level since these statistics started to be kept. Against the background of the tight labor market conditions, there has been a spread of initiatives among firms in the prefecture to increase wages, including raising base pay, with the aim of mooring human resources. In line with the improvement in the employment and income situation, the recovery trend in private consumption is expected to gradually become evident.

About 40 years ago, when I worked at the Bank’s Fukuoka Branch, I remember that Kumamoto Prefecture had a plan of technopolis construction, putting efforts into accumulating advanced technology. The prefecture continued to vigorously invite firms thereafter, and through the accumulation of firms related to electronic parts and devices, as well as machinery, those firms currently contribute largely to the industry in the region.

Kumamoto Prefecture is endowed with tourist attractions such as Kumamoto Castle, Mount Aso, and Amakusa. The Manda Coal Mine and Misumi West Port have been approved for inscriptions on UNESCO's World Heritage List as "Sites of Japan's Meiji Industrial Revolution." An increase in international charter flights and the establishment of regular flights to and from Kumamoto Airport, as well as an increase in the number of cruise ships visiting Yatsushiro Port, are being planned. Other than reinforcing the tourism industry, Kumamoto Prefecture is intensifying its efforts to vitalize the region with cooperation among industry, the government, academia, and local financial institutions. An issue worth considering in strengthening regional growth is to fully and effectively utilize the tangible and intangible resources each region possesses. Kumamoto Prefecture enjoys various advantages including (1) industrial clusters such as of electronic parts and devices, as well as machinery, (2) tourist attractions composed of abundant nature and landscapes, as well as of history and culture, (3) a competitive agricultural, forestry, and fishing industry, and (4) geographical proximity to other Asian economies that are growing considerably. The fact that Kumamoto Prefecture is making various efforts utilizing these advantages is quite propitious.

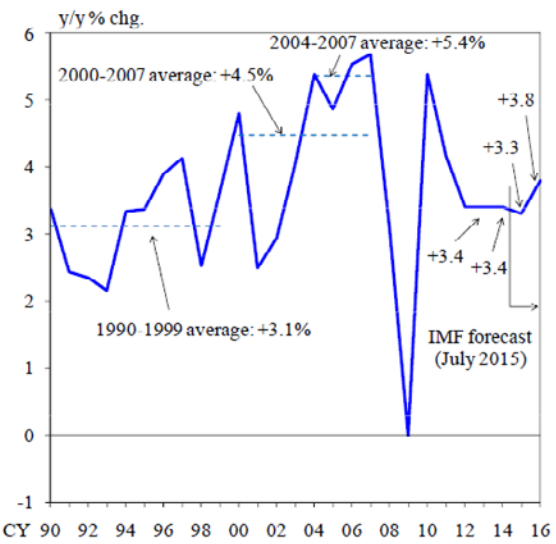
The Bank hopes, centering on its Kumamoto Branch, to contribute as much as possible to the initiatives in the prefecture to vitalize the region. In closing, I wish all the best for the further development of the economy of Kumamoto Prefecture.

Thank you.

Chart 1

World Economy

Real GDP Growth Rate



Projections for Major Economies

y/y % chg.

	2013	2014	Projections 2015	Projections 2016
World	3.4	3.4	3.3 (-0.2)	3.8 (0.0)
Advanced Economies	1.4	1.8	2.1 (-0.3)	2.4 (0.0)
United States	2.2	2.4	2.5 (-0.6)	3.0 (-0.1)
Euro Area	-0.4	0.8	1.5 (0.0)	1.7 (0.1)
Japan	1.6	-0.1	0.8 (-0.2)	1.2 (0.0)
Emerging Market and Developing Economies	5.0	4.6	4.2 (-0.1)	4.7 (0.0)
China	7.7	7.4	6.8 (0.0)	6.3 (0.0)

Note: Figures in parentheses are the difference from the April 2015 WEO projections.
Source: IMF.

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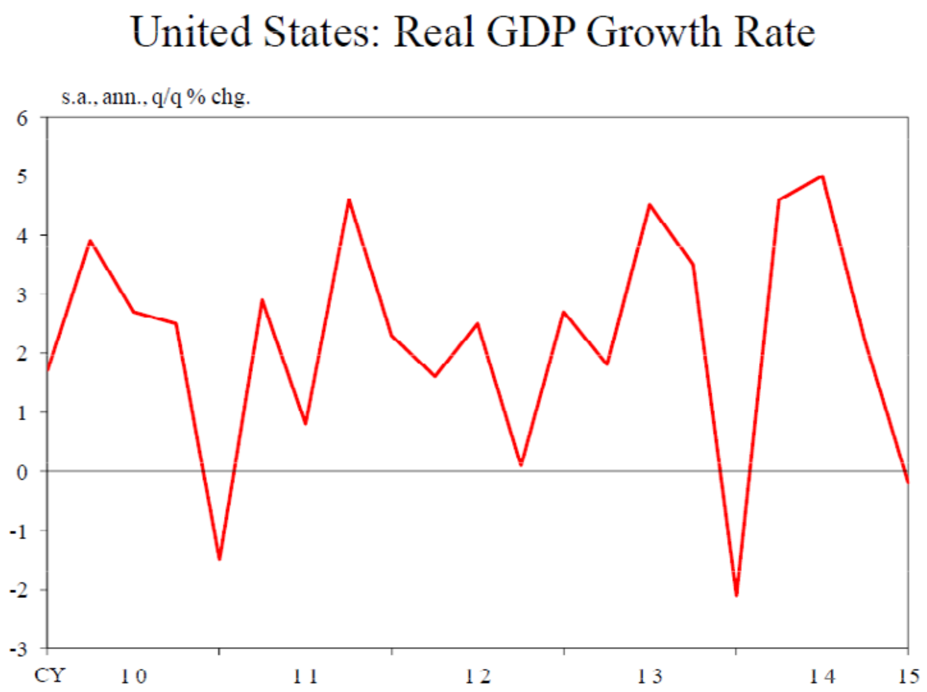
Chart 2



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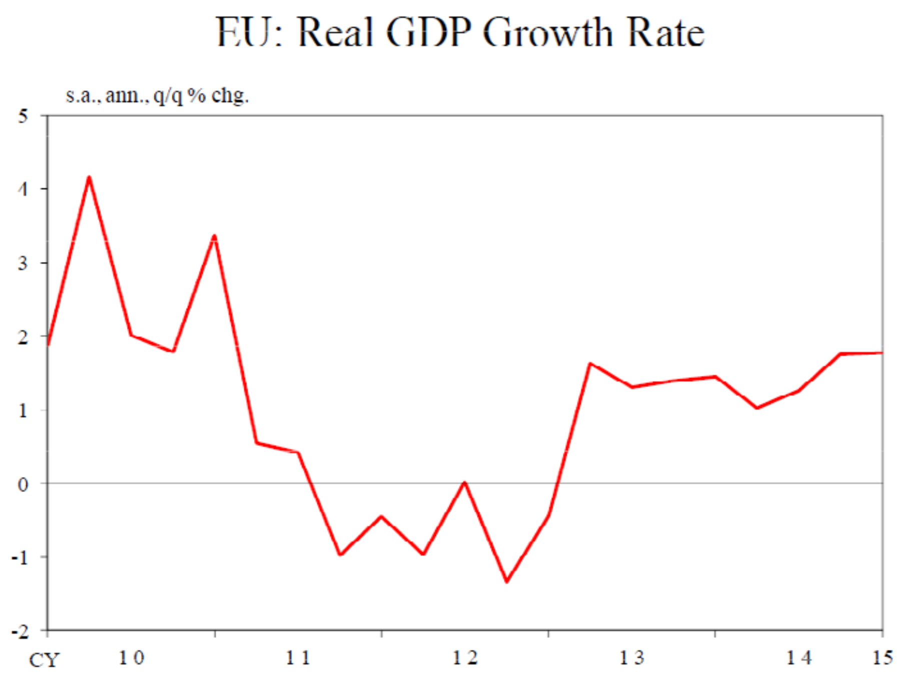
Source: BEA.

Chart 3



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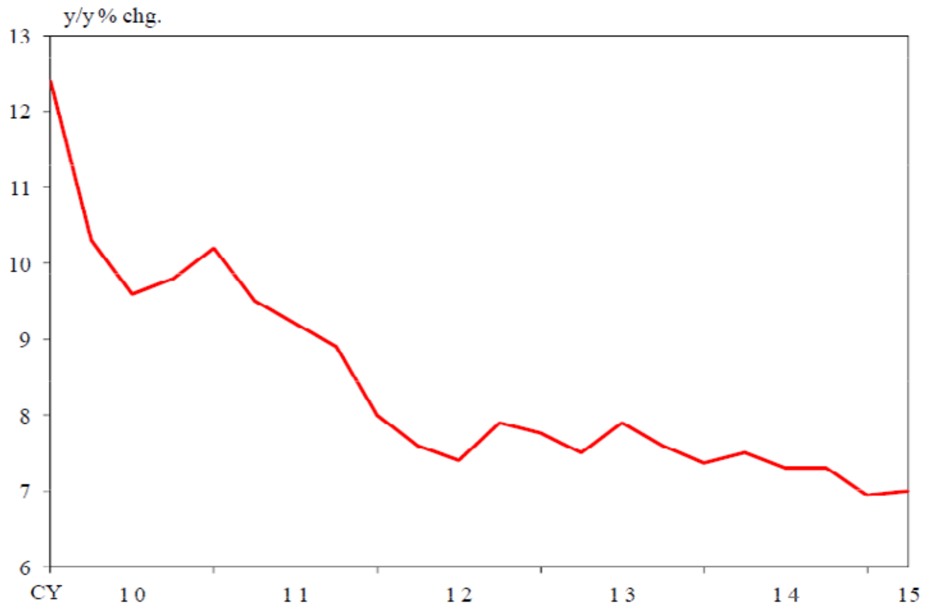
Source: Eurostat.

Chart 4

China: Real GDP Growth Rate



Source: CEIC.

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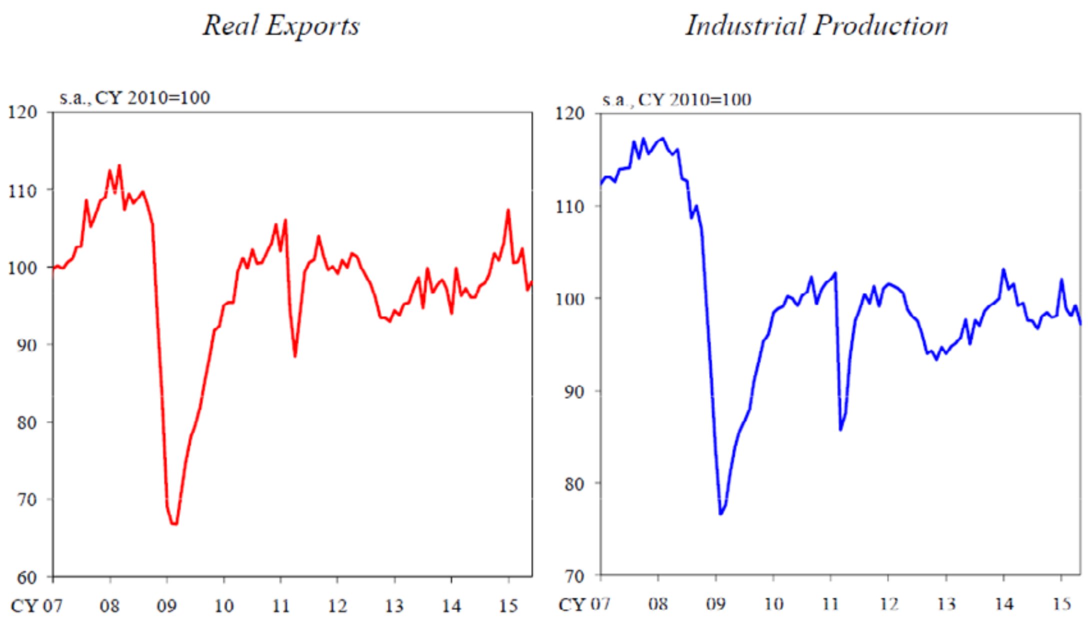
Chart 5

Exports and Production



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

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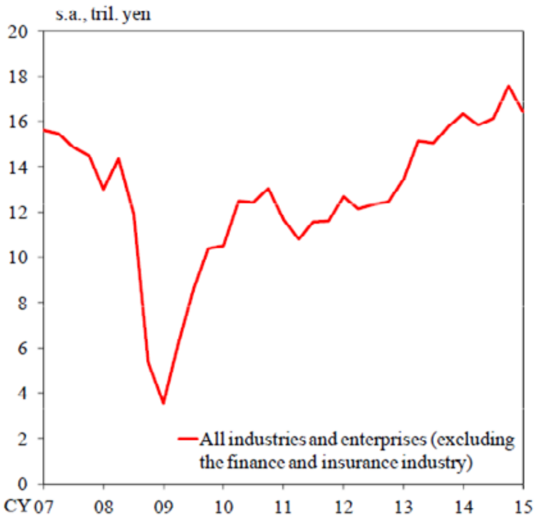
Chart 6

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.

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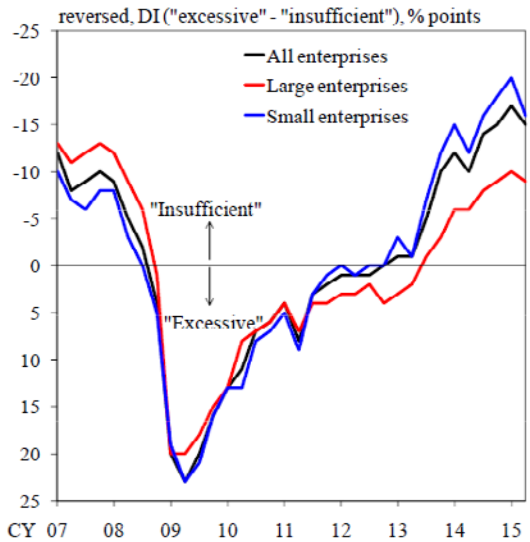
Chart 7

Labor Market Conditions

Unemployment Rate

Tankan: Employment Conditions DI



Sources: Ministry of Internal Affairs and Communications; Bank of Japan.

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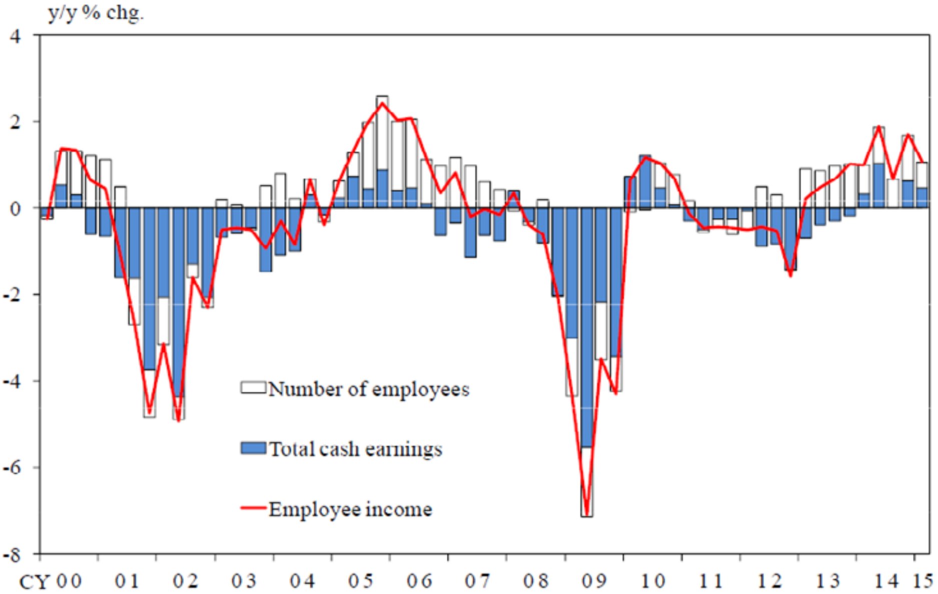
Chart 8

Employee Income



Notes: 1. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.
2. Figures for "employee income" are calculated as the "number of employees" (Labour Force Survey) times "total cash earnings" (Monthly Labour Survey).
Sources: Ministry of Health, Labour and Welfare; Ministry of Internal Affairs and Communications.

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Chart 9

Outlook for Economic Activity and Prices (as of July 2015)

y/y % chg.

	Real GDP	CPI (all items less fresh food)	Excluding the effects of the consumption tax hikes
Fiscal 2015	+1.7	+0.7	
Forecasts made in April 2015	+2.0	+0.8	
Fiscal 2016	+1.5	+1.9	
Forecasts made in April 2015	+1.5	+2.0	
Fiscal 2017	+0.2	+3.1	+1.8
Forecasts made in April 2015	+0.2	+3.2	+1.9

Note: Figures indicate the median of the Policy Board members' forecasts (point estimates).
Source: Bank of Japan

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Chart 10

Mechanism of QQE

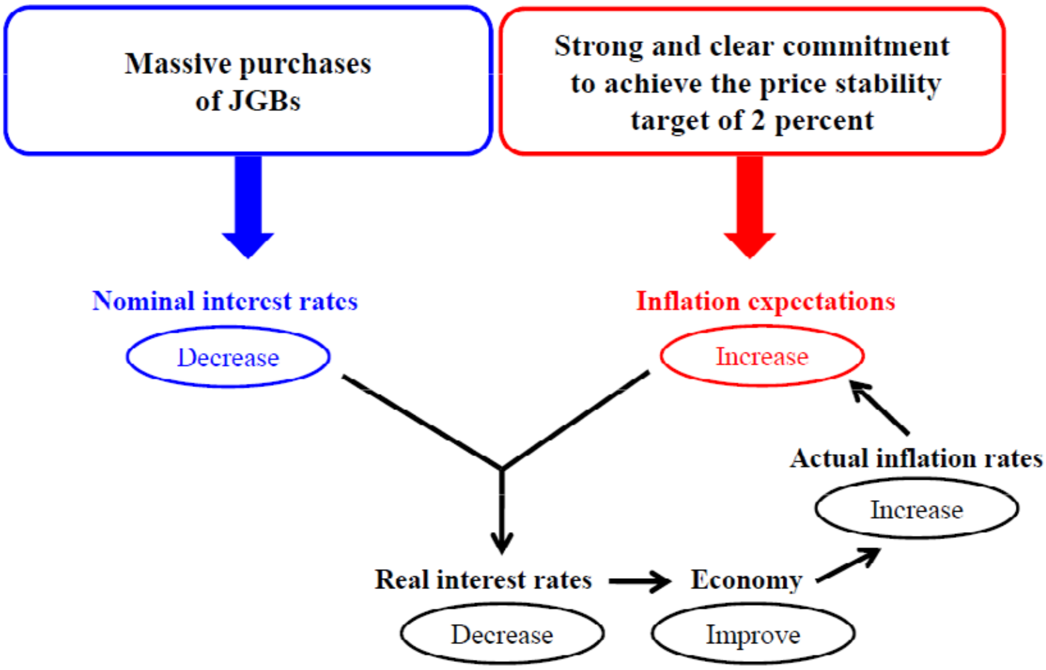
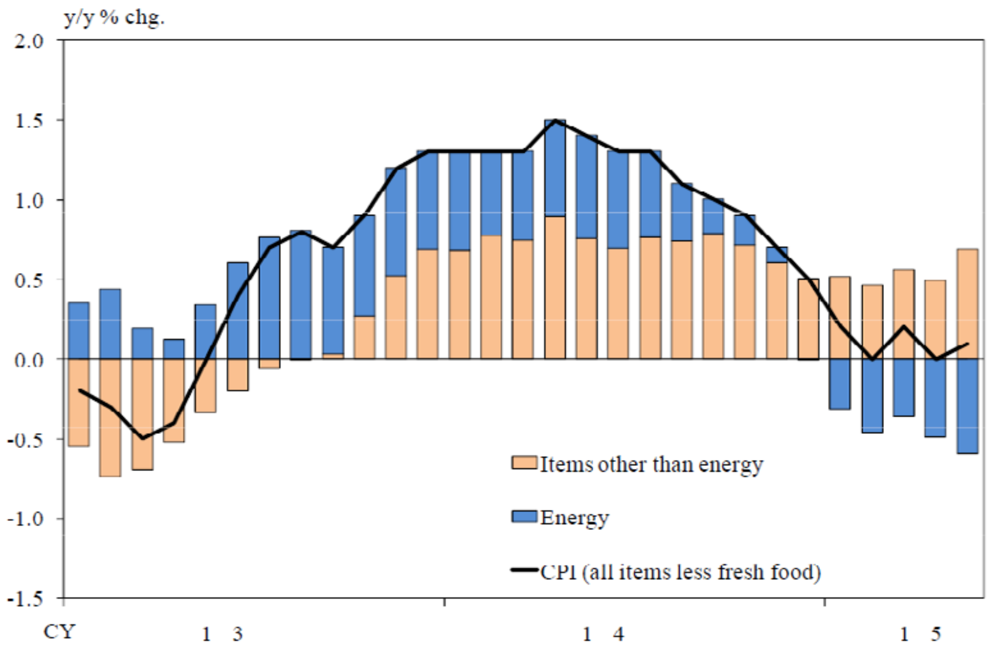


Chart 11

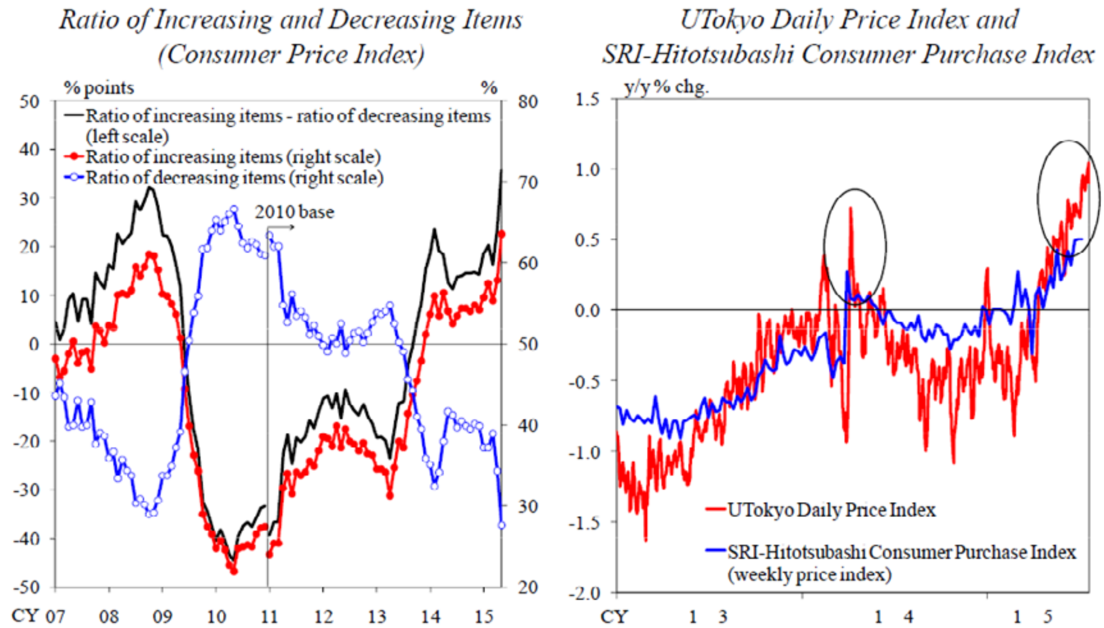
Consumer Prices



Note: Figures are estimated by adjusting the direct effects of the consumption tax hike in April 2014.
Source: Ministry of Internal Affairs and Communications.

Chart 12

Price Developments



Notes: 1. Figures for the ratio of increasing and decreasing items are proportions of items whose indices increased/decreased from a year earlier. All items less fresh food. Figures are estimated by adjusting the direct effects of the consumption tax hike in April 2014.
2. 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.

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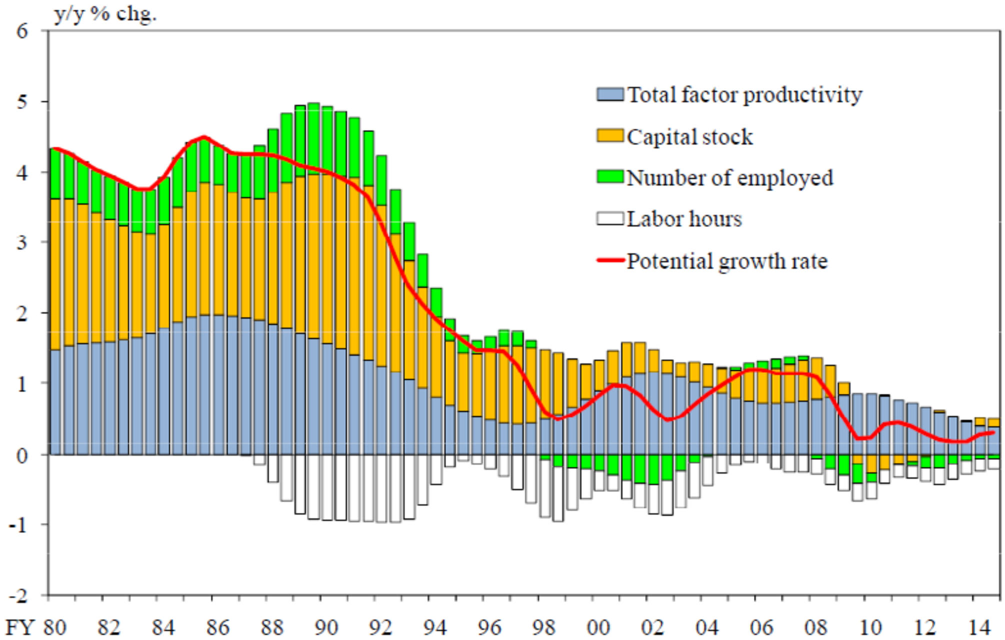
Chart 13

Potential Growth Rate



Note: The potential growth rate is estimated by the Research and Statistics Department, Bank of Japan. For the estimation procedures, see "The New Estimates of Output Gap and Potential Growth Rate," Bank of Japan Review Series, 2006-E-3. Figures for the second half of fiscal 2014 are those of 2014/Q4.

Sources: Cabinet Office; Bank of Japan; Ministry of Internal Affairs and Communications; Ministry of Health, Labour and Welfare; Ministry of Economy, Trade and Industry, etc.

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