July 26, 2017
Bank of Japan

Japan's Economy and Monetary Policy

Speech at a Meeting with Business Leaders in Hiroshima

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(English translation based on the Japanese original)

Introduction

It is my pleasure to have the opportunity today to exchange views with administrative, financial, and business leaders in Hiroshima 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 Hiroshima Branch.

At the Monetary Policy Meeting (MPM) held last week, the Bank formulated its projections, such as for Japan's economic activity and prices through fiscal 2019, and released them in the July 2017 *Outlook for Economic Activity and Prices* (Outlook Report). Today, I would like to talk about the Bank's outlook for Japan's economic activity and prices as well as its thinking behind the conduct of monetary policy, while outlining the Outlook Report.

I. Recent Developments in and Outlook for Economic Activity

Overseas Economies

Let me start by talking about developments in economic activity. I would first like to touch on developments in overseas economies.

Overseas economies have continued to grow at a moderate pace on the whole (Chart 1). In particular, remarkable improvements have been observed in the manufacturing sector and trade activity, and their positive effects have spread globally. Indicators of business sentiment in the manufacturing sector have been on an improving trend in many economies since the second half of 2016, and trade volumes have accelerated their pace of increase recently on a global basis, mainly for the United States and Asia.

By region, the U.S. and European economies have continued to recover firmly, mainly in the household sector, particularly owing to an improvement in the employment and income situation. The Chinese economy has continued to see stable growth on the whole, partly due to the effects of authorities' measures to support economic activity. Under such circumstances, other emerging economies and commodity-exporting economies have picked up on the whole, particularly reflecting a pick-up in exports and a bottoming out of commodity prices. Positive developments have started to be observed in Russia and Brazil, for which economic recovery had been lagging behind.

With regard to the outlook, the growth rates of overseas economies are expected to increase moderately as advanced economies continue growing steadily and a recovery in emerging economies takes hold on the back of the steady growth in advanced economies and the effects of policy measures taken by emerging economies. Looking at the weighted averages of the International Monetary Fund's (IMF's) July 2017 projections for real GDP growth rates of individual economies and regions, by value of exports from Japan, the growth rates of overseas economies are projected to increase moderately through 2018 from 3.1 percent in 2016, and remain stable at around 3.5 percent.

Recent Developments in Japan's Economic Activity

Japan's economy is expanding moderately, strongly supported by such growth in overseas economies, along with an increase in domestic demand (Chart 2). It is the first time in about nine years -- since March 2008, that is, before the collapse of Lehman Brothers -- that the Bank assesses the current situation of the economy as "expanding." This assessment is based on the fact that, with a virtuous cycle from income to spending operating, the output gap that shows the utilization of capital and labor has exceeded the long-term average of 0 percent and that a positive output gap has taken hold.

Let me elaborate on this point. First, in the corporate sector, exports have been on an increasing trend on the back of a pick-up in emerging economies, and production also has been on an increasing trend reflecting an increase in demand both at home and abroad (Chart 3). In this situation, corporate profits have improved, and the ratio of current profits to sales for all industries and enterprises marked a record high level for two consecutive quarters since the October-December quarter of 2016. It was reconfirmed in the Bank's June 2017 *Tankan* (Short-Term Economic Survey of Enterprises in Japan) released at the beginning of July that business sentiment has improved, and across a wider range of industries, as seen in the diffusion index (DI) for business conditions for all industries and enterprises having improved for four consecutive quarters. Under such a favorable environment, business fixed investment has been on a moderate increasing trend.

Turning to the household sector, supply-demand conditions in the labor market have continued to tighten steadily and employee income has increased moderately (Chart 4). The active job openings-to-applicants ratio for May 2017 stands at 1.49 times, exceeding the highest figure during the bubble period and reaching a level last seen in 1974. The unemployment rate has declined to around 3 percent recently, which shows that the employment situation has remained close to full employment. Against the background of such tightening of labor market conditions, wages have risen moderately. In particular, the year-on-year rate of increase in hourly scheduled cash earnings of part-time employees has seen a clear improvement, being in the range of 2.0-2.5 percent of late. Meanwhile, with regard to private consumption, although relatively weak developments had been seen in some of its indicators through the first half of 2016, it has picked up thereafter and has increased its resilience recently (Chart 5). Although replacement demand for durable goods such as automobiles and household electrical appliances is pushing up private consumption to a certain degree, a steady improvement in the employment and income situation -- including its effects on consumer sentiment -- is likely to be substantially contributing to growth in private consumption.

Outlook for Japan's Economic Activity

Next, I would like to turn to the Bank's outlook for Japan's economic activity. Japan's economy is likely to continue its moderate expansion. Specifically, exports are expected to continue their moderate increasing trend backed by an improvement in overseas economies, and business fixed investment and private consumption are projected to follow an increasing trend on the back of highly accommodative financial conditions and the effects of the government's large-scale stimulus measures. Japan's economy is likely to see sustainable expansion in a well-balanced manner in which demand at home and abroad increases with a virtuous cycle from income to spending being maintained. In the July 2017 Outlook Report, the medians of the Policy Board members' forecasts of the real GDP growth rates for fiscal 2017 and fiscal 2018 are 1.8 percent and 1.4 percent, respectively (Chart 6). These rates are revised somewhat upward from the projections made three months ago, being above the potential growth rate, which is estimated to be in the range of 0.5-1.0 percent. In fiscal 2019, the growth pace is projected to decelerate, mainly reflecting cyclical adjustments in capital stock after the prolonged economic expansion, Olympic Games-related demand peaking out, and the effects of the scheduled consumption tax hike. Nevertheless, the economy is expected to continue expanding, supported by the increase in exports on the back of the growth in overseas economies, and the median of the real GDP growth rate for fiscal 2019 is 0.7 percent.

There are, of course, upside and downside risks to this baseline scenario of the outlook for Japan's economic activity. The biggest risk factor is developments in overseas economies. As I have explained, the main scenario is that the growth rates of overseas economies are expected to increase moderately, but it is subject to various uncertainties. For example, with regard to the U.S. economic policies, heightened uncertainties concerning fiscal policy and the impact of the pace of the policy interest rate hike on global capital flows warrant attention. The following are also considered as risks: developments in emerging and commodity-exporting economies; negotiations on the United Kingdom's exit from the European Union (EU) and their effects; prospects regarding the European debt problem, including the financial sector; and geopolitical risks. If these risks were to materialize, they could exert downward pressure on economic activity. Therefore, the Bank will continue examining these developments thoroughly.

II. Price Developments and their Outlook

Price Developments

Let me move on to the price developments in Japan. Although energy prices had exerted downward pressure on prices since the second half of 2014, they have been pushing up prices reflecting a pick-up in crude oil prices since last spring. Against this backdrop, the year-on-year rate of change in the consumer price index (CPI) for all items less fresh food turned positive in January 2017 for the first time in 13 months, and rose to 0.4 percent in May (Chart 7).

Nevertheless, when excluding the effects of energy prices, price developments in Japan have been relatively weak. The year-on-year rate of increase in the CPI excluding fresh food and energy has remained on a decelerating trend after marking a peak of 1.2 percent at end-2015, and has been at around 0 percent lately. This is partly attributable to temporary factors such as a reduction in sales prices of and charges for mobile phones. However, as I will explain later, the fact that increases in wages and prices have been sluggish, despite tight labor market conditions and high corporate profits, also affects price developments.

Outlook for Prices

As I have explained, the recent developments in prices have been relatively weak. However, I believe that we can expect to see a turnaround in such developments going forward.

Specifically, the year-on-year rate of change in the CPI is likely to continue on an uptrend and increase toward 2 percent, which is the Bank's price stability target. This is expected to be realized through the following mechanism.

First, prices of items such as processed food and daily necessities -- which are responsive to economic activity -- are likely to rise gradually as private consumption increases its resilience, and the yen's depreciation as well as the pick-up in crude oil prices to date are expected to push up import prices.

Second, as the economy continues to expand, the output gap is expected to widen further within positive territory and remain positive. Under such circumstances, firms' stance is likely to gradually shift toward raising wages and prices, and the inflation rate is projected to rise accompanied by wage increases (Chart 8).

Third, with these factors pushing up actual inflation rates, people's inflation expectations are also expected to rise accordingly, leading to an increase in the underlying trend in inflation.

Based on the underlying scenario that I just explained, the July Outlook Report presents that the medians of the Policy Board members' forecasts for the year-on-year rate of change in the CPI excluding fresh food are 1.1 percent for fiscal 2017, 1.5 percent for fiscal 2018, and on a basis excluding the effects of the consumption tax hike, 1.8 percent for fiscal 2019 (Chart 6). As the recent price developments have been relatively weak, the forecasts for fiscal 2017 and fiscal 2018 in particular were revised downward from those presented in the previous Outlook Report three months ago. The year-on-year rate of change in the CPI will likely reach about 2 percent around fiscal 2019.

Relationship among Labor Market Conditions, Wages, and Prices

So far, I have explained Japan's economic activity and prices. This can be briefly summarized as somewhat strong economic activity and relatively weak prices. That being said, I believe the question that many would pose is why the rates of increase in wages and prices are not rising despite the moderate economic expansion -- especially when labor market conditions have tightened so acutely that the issue of labor shortage has been covered by the media day after day. Another question is whether the mechanism for higher inflation, which I just mentioned, would operate as intended. Although both are difficult questions, I would like to offer possible answers to them, while focusing on the relationship among labor market conditions, wages, and prices in Japan.

To begin with, from a theoretical point of view, the fact that there is a correlation between labor market conditions and prices can be found in almost every economic textbook, and also can be confirmed based on historical data in Japan. The following mechanism is assumed to be in place. First, firms that have come to face a labor shortage would raise wages in order to secure the number of employees needed. Then, in order to secure a certain level of profits, these firms are likely to consider raising their products' sales prices in light of the rise in labor costs. At the same time, another possible channel for raising prices is that, when wages increase, employee income would increase and consumption activity would rise accordingly, leading to a raising of prices in reflection of an increase in demand. As this shows, the tightening of labor market conditions essentially would push up prices through increases in wages and demand.

In other words, such a theoretical mechanism is not operating sufficiently in Japan's economy today. In what follows, I would like to consider this point from two aspects, first touching on the relationship between labor market conditions and wages, and then that between wages and prices.

The first point is that the pace of improvement in wages has remained only moderate despite the tightening of labor market conditions. This is likely to be attributable to a certain degree to the structure of Japan's labor market, in which the wage-setting mechanism between full-time and part-time employees is different. As I explained earlier, wages of part-time employees are rising in response to the tightening of labor market conditions, and the pace of increase is almost in line with the relationship between wages of part-time employees and labor market conditions observed in the past. On the other hand, wages of full-time employees are not rising as much as those of part-time employees (Chart 9). As a reason for this, some point to the fact that since both labor and management in Japan have been placing priority on the long-term stability of employment and wages over wage increases, the following has been observed: employment adjustment and wage reductions had rarely been conducted even under deflation, and firms' stance can hardly shift toward raising wages even if labor market conditions tighten.

The second point is the relationship between wages and prices; namely, that the recent developments in prices have been relatively weak, although nominal wages have been rising, albeit at a moderate pace (Chart 10). This can be explained by the following three cases of firms' initiatives.

First, it has been pointed out that these developments reflect firms' initiatives to absorb a rise in costs resulting from wage increases by streamlining their business process. Specifically, firms recently appear to be increasingly cutting back services for which labor costs are high in light of profitability, even those that had been taken for granted thus far. For example, even in the case of a discontinuation of business late at night and early in the morning, at which time sales are low, reducing business hours -- or the amount of labor input -- might not lower sales as much. This results in a rise in labor productivity. Even if hourly wages of employees are raised, firms' overall labor costs would not rise due to the reduction in business hours. In this case, firms would not have to pass on the rise in labor costs to sales prices, and thus the upward pressure on prices would be limited accordingly.

Second, labor-saving and efficiency-improving investment that makes use of information technology is likely to bring about similar effects to those explained earlier. In recent years, such items as self-checkout machines and online reservation systems have been widely introduced, mainly in sectors such as "retailing" and "accommodations, eating and drinking services." This would produce the same effects as streamlining of the business process, in that the same amount of sales can be realized even with a reduced amount of labor input, and also would result in a rise in labor productivity. As the effects of raising employees' wages on the overall labor costs are limited, wage increases would not necessarily lead to inflation, as was the case earlier.

Third, it also can be pointed out that firms are trying to make better use of existing human resources. A typical example is to reallocate employees to divisions that have relatively high work demand from those with low work demand. In such a case, labor productivity will improve because firms increase their sales without having to increase the total amount of labor input. The pass on to sales prices would be limited as a rise in labor costs is constrained.

In further examining the background to these initiatives that I have just mentioned, what appears to lie behind them is the mindset and behavior based on the assumption that wages and prices will not increase easily, having been deeply entrenched among firms and households in Japan. It is a well-known fact that wages of full-time employees are not so responsive to developments in labor market conditions due to the relationship between labor and management over the years, which is specific to Japan, including base pay increases. In addition, consumers are not used to price rises and firms become cautious in raising prices in expectation of consumers' response to price rises; this seems to be a reason why firms refrain from passing on cost increases to sales prices. As I mentioned earlier, firms' initiatives to absorb a rise in labor costs lead to a reduction in upward pressure on prices in the economy as a whole. There is no doubt that each initiative is the outcome of firms' earnest and reasonable decision-making, though. This situation might reflect the difficulty in dispelling the deflationary mindset that has been entrenched among people for a long period.

That being said, I would like to add that the Bank does not hold the view that this situation will last forever. The output gap has been improving steadily, and under such circumstances, firms' stance is likely to gradually shift toward raising wages and prices. We should not be optimistic, given that the timing of manifestation of this stance is uncertain. However, it might be difficult for firms to address the labor shortage going forward only by increasing the number of part-time employees in particular, given that the employment rate already has increased significantly amid the labor shortage intensifying. In fact, the ratio of part-time employees in Japan, which had been on the rise for more than ten years, has shown a clearer trend of peaking out since the turn of the year (Chart 11). There is a certain limit to a reduction in business hours and a cutback in services, and it is not the case that labor-saving investment can be promoted in all industries. Initiatives such as reallocation of employees have their limit. That being said, if households' consumption is stimulated, reflecting economic expansion and an improvement in the employment and income situation, price rises will be widely accepted across the entire economy. The DI for output prices in the June 2017 *Tankan* shows that an increasing trend in sales prices has become widely evident in labor-intensive sectors such as "transport and postal activities," "wholesaling and retailing," and "accommodations, eating and drinking services" (Chart 12). Recently, it is reported more frequently that the number of firms that are considering raising prices going forward is on the increase.

If actual prices start to rise reflecting these developments, medium- to long-term inflation expectations are expected to increase accordingly. Recently, some indicators have started to show that firms' and households' inflation expectations are rising, which also serves as a positive factor for overcoming deflation (Chart 13). Once an expectation that prices will go up is shared widely among firms and households, a rise in wages of full-time employees will be observed clearly and it will become easier for firms to pass on wage increases to sales prices. I am convinced that, if that happens, a virtuous cycle between an increase in wages for a wide range of employees and a sustainable rise in the inflation rate will start operating fully.

Before I conclude this part of my speech, I would like to touch on labor productivity once again. While giving you labor-saving investment as an example, I explained that a rise in labor productivity has been exerting downward pressure on prices. However, that only explains part of its impact on prices. I do not intend at all to say that an improvement in labor productivity should be viewed negatively. If the value-added per worker increases along with an improvement in productivity, firms' profitability will be enhanced accordingly. From a somewhat longer-term perspective, once firms have additional profits, they will start to consider raising wages in a manner that is consistent with an improvement in productivity. In fact, when analyzing developments in base pay increases in recent years, it can be observed that a rise in labor productivity leads to an acceleration in base pay increases.

Moreover, if labor productivity of the economy as a whole improves and the long-term economic growth rate rises, business fixed investment and private consumption are likely to be stimulated through rises in growth expectations and permanent income, and prices are expected to rise with the improvement in the output gap. Although it would take time, structural policies also will support this path. For example, if labor market reform makes it possible to smoothly reallocate needed staff to firms and industries that face a labor shortage, productivity of the economy as a whole will increase. It is said that there is greater room for improvement in mobility in Japan's labor market compared with other major economies, and this implies that the government's initiatives of late -- including working-style reforms -- are very meaningful. Thus, the current labor shortage can be described as having an aspect of the ultimate growth strategy for Japan's economy to powerfully urge its structural reform.

III. The Bank's Conduct of Monetary Policy

So far, I have explained the reasons why prices are not rising as much despite the tightening labor market conditions. In this regard, some of you may ask why the Bank is aiming at a rise in prices. Rather, it may be natural to believe that lower goods prices are favorable. Therefore, in explaining the Bank's conduct of monetary policy, I would like to start with the reason why the Bank is aiming at a situation in which prices rise in a stable manner. Under deflation, or a sustained decline in prices, a decline in prices of goods and services leads to a decrease in firms' sales and profits, which in turn results in wage restraint. Consequently, the economy falls into a vicious cycle where sluggish consumption leads to a further decline in prices. On the other hand, the opposite cycle would arise if prices rise in a stable manner, and firms and households start to behave based on this assumption. If firms' sales and profits increase due to rises in prices of goods and services, wages would increase accordingly, leading to more active consumption. What the Bank is aiming at is realizing such a virtuous cycle, and this consequently would bring about benefits to a wide range of economic entities.

What is important is that prices rise in a stable manner. The Bank considers the annual rate of increase in the inflation rate of around 2 percent to represent a "stable manner," and sets this as the target of monetary policy conduct. We sometimes receive comments that the 2 percent inflation target is too high, perhaps given that recent economic activity is already firm. However, we believe that it is crucial to aim at 2 percent for the following three reasons.

First, the CPI has a statistical tendency of demonstrating a higher inflation rate than the actual one. Therefore, in order to actually ensure price stability, the inflation rate should be sufficiently positive.

Second, the policy response needs a buffer to a certain extent. In order not to fall into deflation again, it is desirable to ensure that the inflation rate be positive to some extent. In general, a central bank can respond to higher inflation by raising its policy interest rate. On the other hand, in the case of deflation, despite the central bank's efforts to stimulate the economy, it is difficult to lower the policy interest rate substantially below 0 percent, and room for the monetary policy response as a tool for macroeconomic policy would be limited.

Third, the 2 percent target is a global standard. Major advanced economies set the target level of inflation rate at 2 percent. When relevant economies aim at the same target level, it will contribute to the stability of foreign exchange rates in the long run as well as that of corporate activities and the economy as a whole.

The Bank has conducted "Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control" since September 2016 with a view to achieving the price stability target of 2 percent. The framework of this policy consists of two components (Chart 14).

The first is an inflation-overshooting commitment. This is a strong commitment that the Bank will continue expanding the monetary base until the year-on-year rate of increase in the actual CPI exceeds 2 percent and stays above that level in a stable manner. It is crucial that people actually experience inflation above 2 percent and thereby the perception takes hold among them that prices of goods and services tend to go up every year by around 2 percent.

The second component is yield curve control. Under yield curve control, the Bank has been facilitating the formation of the yield curve that is considered most appropriate for achieving the price stability target of 2 percent at the earliest possible time, taking account of developments in Japan's economic activity and prices as well as financial conditions. Specifically, the Bank sets the short-term policy interest rate at minus 0.1 percent and the target level of the 10-year Japanese government bond (JGB) yields at around 0 percent, conducting JGB purchases so as to achieve this target level. Based on this yield curve, issuance rates for CP and corporate bonds have remained at extremely low levels. Financial institutions' lending attitudes have been proactive, and lending rates have declined to around historical low levels. In these circumstances, the year-on-year rate of increase in the amount outstanding of bank lending has accelerated at a moderate pace to the range of 3.0-3.5 percent. Meanwhile, firms' financial positions have improved for all firm sizes. These developments suggest that accommodative financial conditions brought about by yield curve control have been strongly supporting corporate activities in Japan.

As I have explained thus far, price developments in Japan have been relatively weak compared with the improvement seen in economic activity, and there is still a long way to go to achieve the price stability target of 2 percent. We are well aware that the Bank should take this point seriously. Going forward, firms' stance is likely to gradually shift toward raising wages and prices with the steady improvement in the output gap. Medium- to long-term inflation expectations are projected to rise steadily as further price rises come to be observed widely with some indicators of such expectations showing a rise. As such, the momentum toward achieving the price stability target of 2 percent is maintained firmly. Therefore, in order to maintain these positive developments and achieve the price stability target of 2 percent at the earliest possible time, the Bank will persistently pursue the current powerful monetary easing. I believe that the Bank's monetary policy and the government's structural policy working perfectly in line with each other will bring Japan's economy back to a sustainable growth path.

Conclusion

So far, I have explained the developments in economic activity and prices in Japan as well as the Bank's policy response. To conclude, I would like to talk about some of my impressions of the economy of Hiroshima Prefecture.

Hiroshima Prefecture's economy is currently expanding moderately. Exports are picking up on the back of growth in overseas economies, and private consumption is increasing its resilience against the backdrop of a steady improvement in the employment and income situation. Reflecting the increase in demand both at home and abroad, production is increasing at a moderate pace.

Hiroshima Prefecture's active job openings-to-applicants ratio marked 1.77 times in May, which suggests that labor market conditions of the prefecture are tighter than those of Japan as a whole. Under such circumstances, local firms are devising various ways to address the labor shortage, such as the introduction of automated systems that utilize the excellent technologies and ideas developed over the years -- even in areas in which automation had been regarded as impossible. In addition, in the automobile industry -- the main industry of this prefecture -- bold efforts are being made to introduce new technologies with the aim of responding to stricter environmental regulations and further improving safety. As I mentioned earlier, if the value-added per worker increases thanks to such initiatives, firms' productivity will improve and their profitability will be enhanced accordingly. From such a viewpoint, the current labor shortage not only leads to enhancing the growth potential of the prefecture's economy as a whole in the long run, but also might provide an opportunity to tackle structural issues of the local economy such as the declining population and the outflow of young people.

In Hiroshima Prefecture, there are efforts toward creating new demand not only in the field of manufacturing but also in tourism and other services industries. For example, in addition to two World Heritage sites, Hiroshima Prefecture has garnered both domestic and international attention as a result of the visit by the President of the United States in May 2016 and the first baseball Central League championship by Hiroshima Toyo Carp in 25 years. Thus, the number of tourists visiting the prefecture has increased considerably of late. Nevertheless, spending per visitor is below the national average, suggesting that the prefecture is not making full use of its opportunities. In order to address such a situation, Hiroshima Prefecture is working on strengthening support for tourism products and services aimed at promoting tours and extending visitors' stay by providing subsidies to private business operators. In addition, Hiroshima Prefecture, together with the six neighboring prefectures, set up in spring last year the "Setouchi DMO" -- a destination management/marketing organization to promote tourism in the wider region. Members include regional financial institutions that provide support from the funding side. I place great trust in the active cooperation among industry, government, and the financial sector toward boosting the tourism industry of the Setouchi region.

The Bank will strive to contribute to these efforts toward the revitalization of the region through extensive information gathering and analyses by its Hiroshima Branch. In closing, let me express my sincere hopes for the further development of Hiroshima Prefecture's economy and convey my best regards.

Thank you.

Japan's Economy and Monetary Policy

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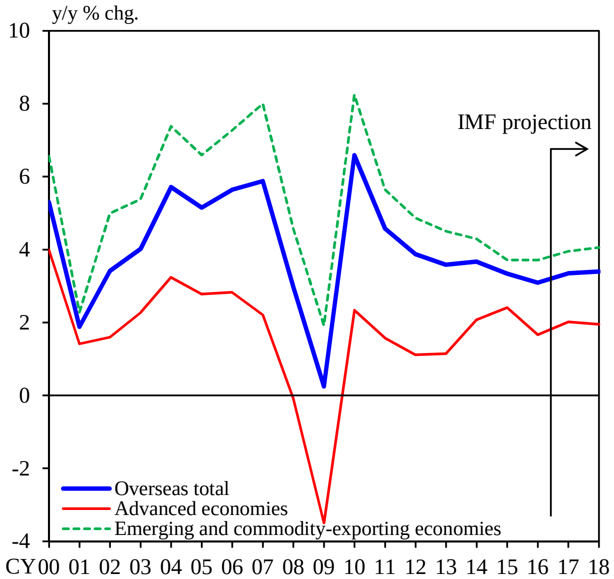
July 26, 2017

Hiroshi Nakaso
Deputy Governor of the Bank of Japan

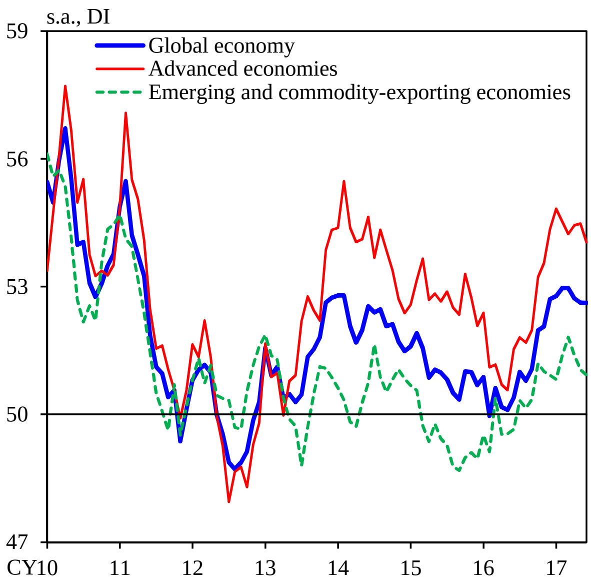
Chart 1

Overseas Economies

Real GDP Growth Rates of Overseas Economies



Manufacturing PMI

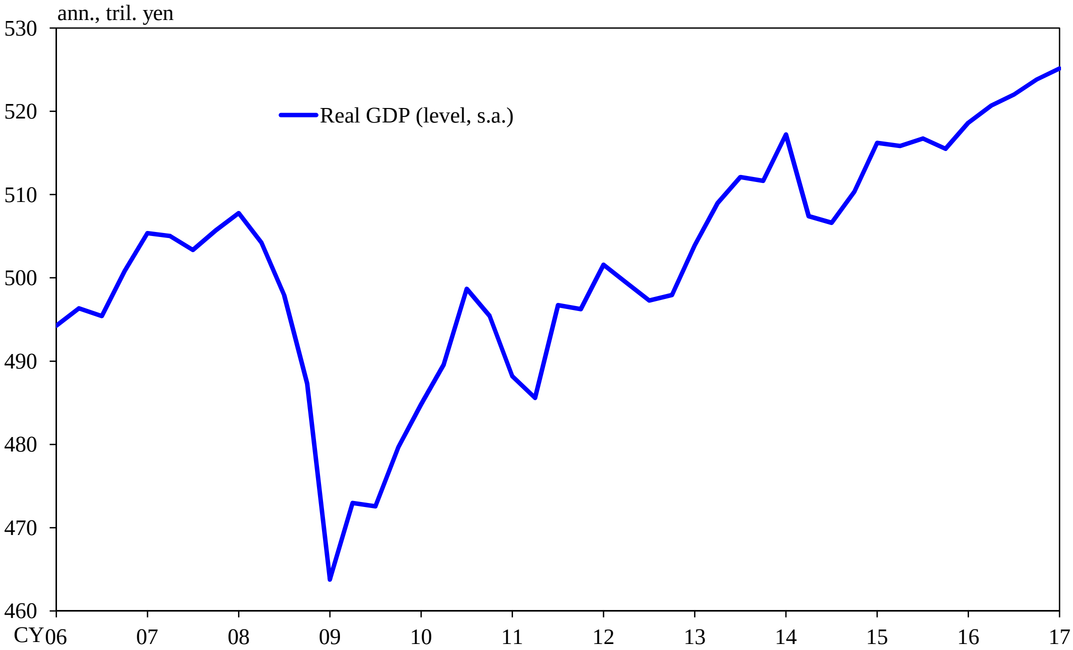


Notes: 1. Figures in the left chart are the weighted averages of real GDP growth rates using countries' share in Japan's exports as weights. Annual GDP growth rates are from the "World Economic Outlook (WEO)" as of July 2017. Since for some countries and regions the IMF does not provide projections in the July WEO, some figures are imputed using information provided in the April WEO. Advanced economies consist of the United States, the euro area, and the United Kingdom. Emerging and commodity-exporting economies consist of the rest of the world economy.

2. Figures in the right chart for the global economy are the "J.P. Morgan Global Manufacturing PMI." Figures for advanced economies as well as emerging and commodity-exporting economies are calculated as the weighted averages of the Manufacturing PMI using PPP-adjusted GDP shares of world total GDP from the IMF as weights. Advanced economies consist of the United States, the euro area, the United Kingdom, and Japan. Emerging and commodity-exporting economies consist of 17 countries and regions, such as China, South Korea, Taiwan, Russia, and Brazil.

Sources: IMF; Ministry of Finance; IHS Markit (© and database right IHS Markit Ltd 2017. All rights reserved.), etc.

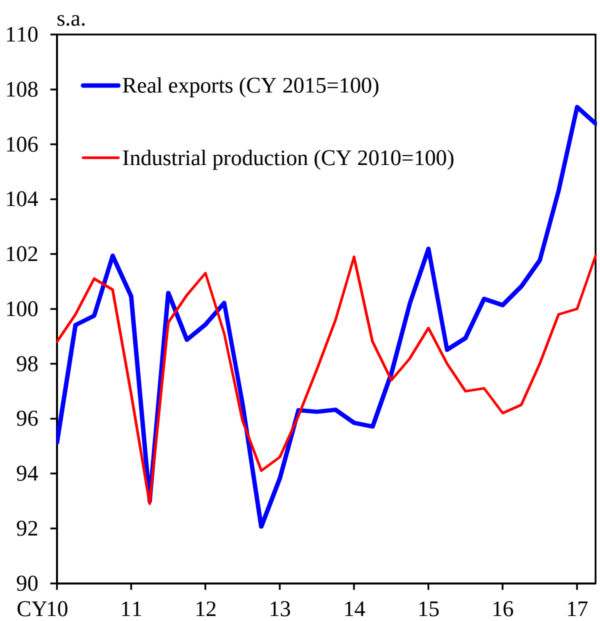
Real GDP



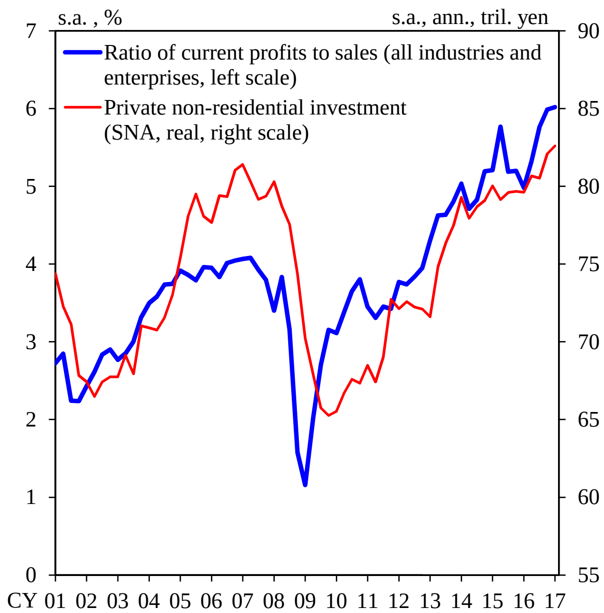
Source: Cabinet Office.

Corporate Activities

Exports and Industrial Production



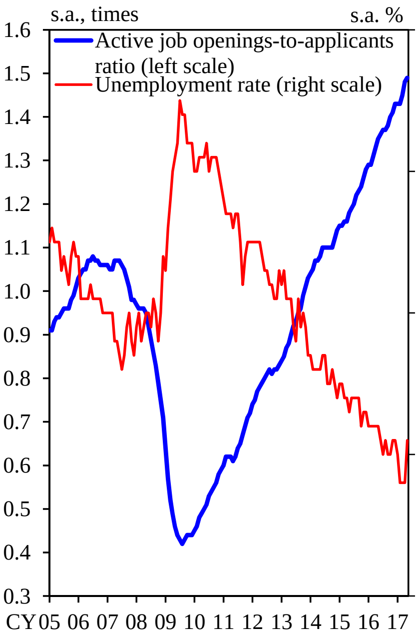
Corporate Profits and Business Fixed Investment



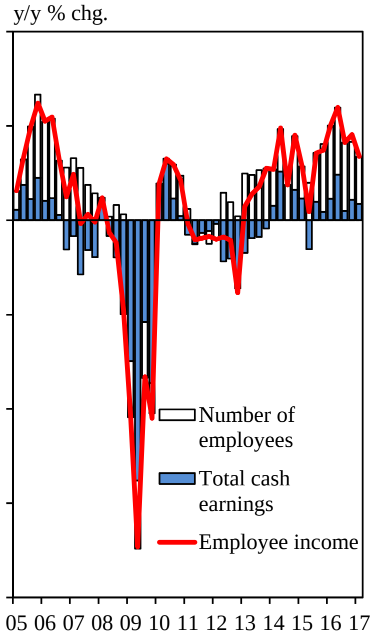
Note: Figures for corporate profits are based on the "Financial Statements Statistics of Corporations by Industry, Quarterly." Excluding "finance and insurance."
Sources: Bank of Japan; Ministry of Finance; Ministry of Economy, Trade and Industry; Cabinet Office.

Employment and Income Situation

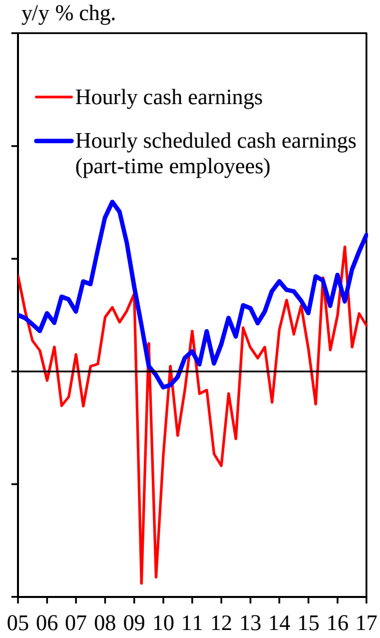
Active Job Openings-to-Applicants Ratio and Unemployment Rate



Employee Income

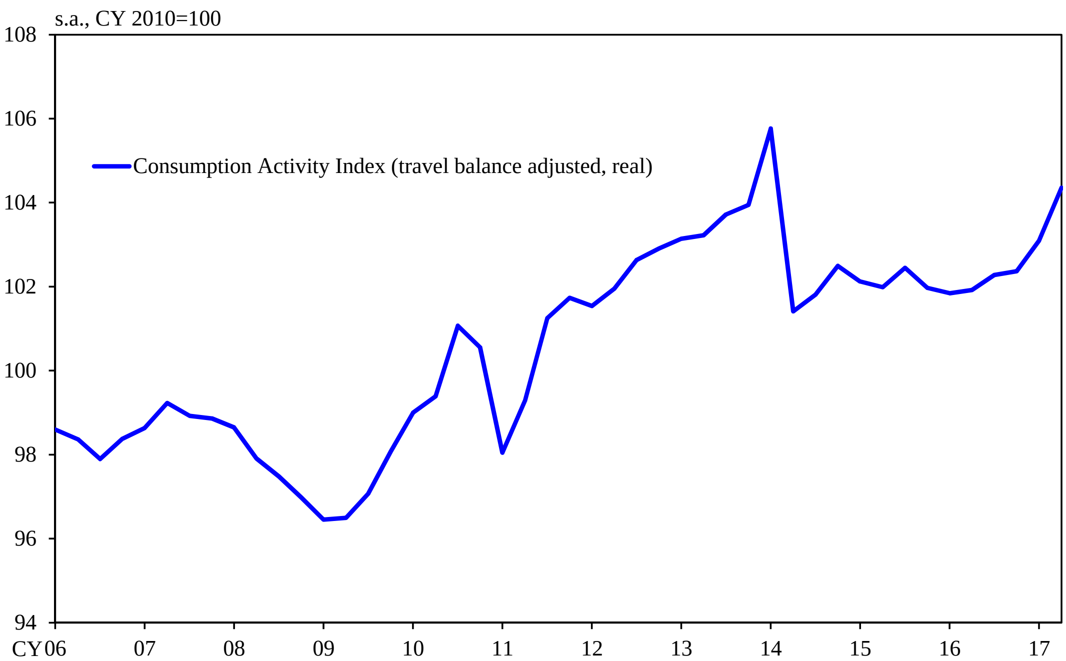


Hourly Cash Earnings



Note: For employee income and hourly cash earnings, Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.
Sources: Ministry of Health, Labour and Welfare; Ministry of Internal Affairs and Communications.

Private Consumption



Note: Figures are based on BOJ staff calculations (as of July 13). Figures exclude inbound tourism consumption and include outbound tourism consumption.
The figure for 2017/Q2 is the April-May average.
Source: Bank of Japan.

Chart 6

Outlook for Economic Activity and Prices (as of July 2017)

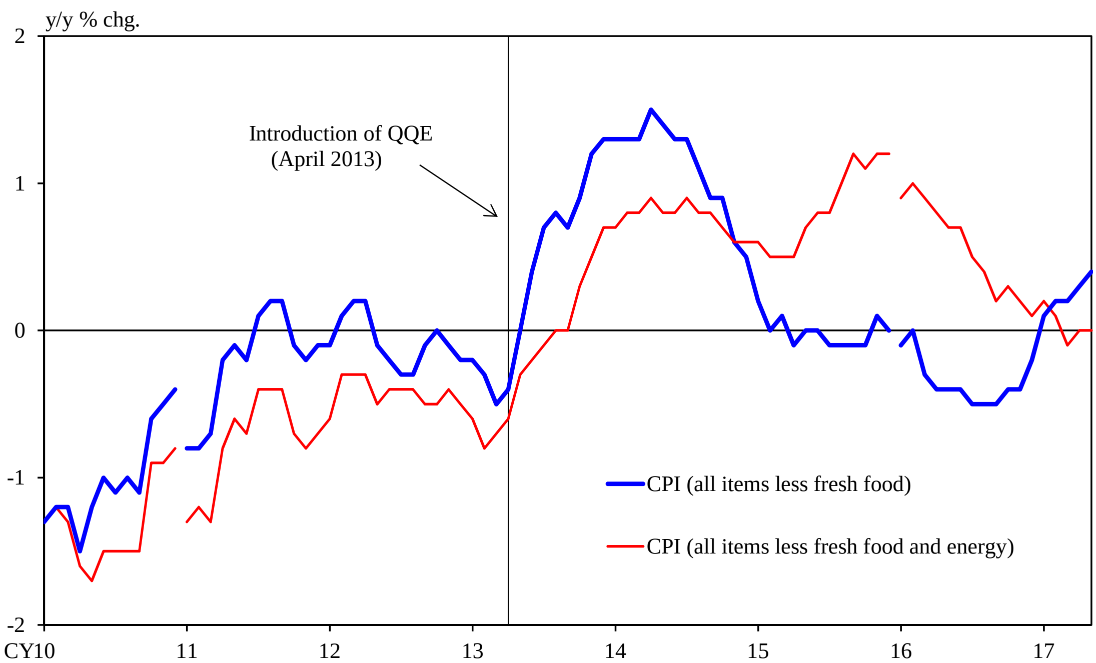
y/y % chg.

	Real GDP	CPI (all items less fresh food)
Fiscal 2017	+1.8	+1.1
Forecasts made in April 2017	+1.6	+1.4
Fiscal 2018	+1.4	+1.5
Forecasts made in April 2017	+1.3	+1.7
Fiscal 2019	+0.7	+1.8
Forecasts made in April 2017	+0.7	+1.9

Note: Figures indicate the medians of the Policy Board members' forecasts (point estimates). Figures for the CPI (all items less fresh food) exclude the effects of the consumption tax hikes.
Source: Bank of Japan.

Chart 7

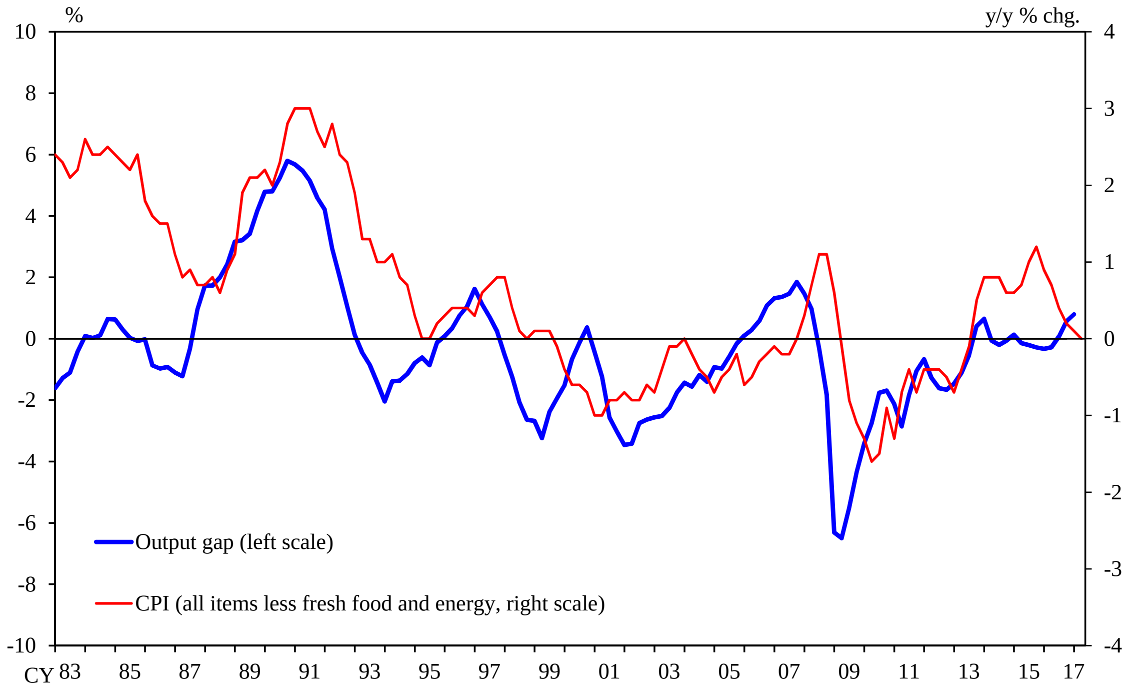
Consumer Prices



Note: The CPI figures are adjusted for changes in the consumption tax rate.
Source: Ministry of Internal Affairs and Communications.

Chart 8

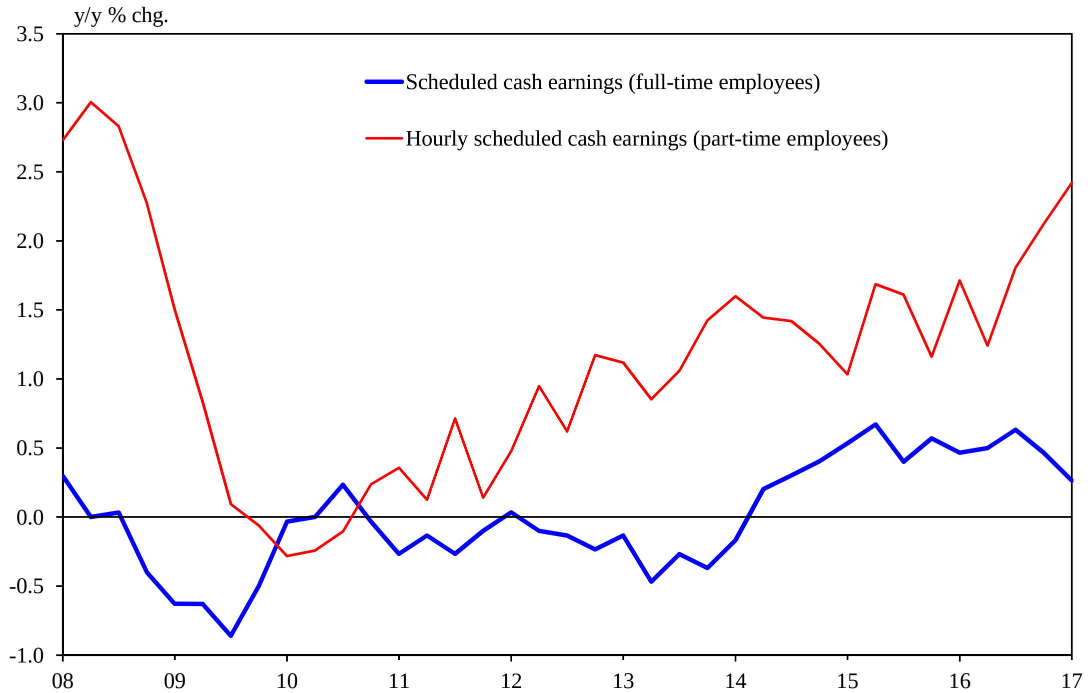
Output Gap and Prices



Notes: 1. The CPI figures are adjusted for changes in the consumption tax rate. The figure for 2017/2Q is the April-May average.
2. The output gap is based on BOJ staff estimations.
Sources: Ministry of Internal Affairs and Communications; Bank of Japan.

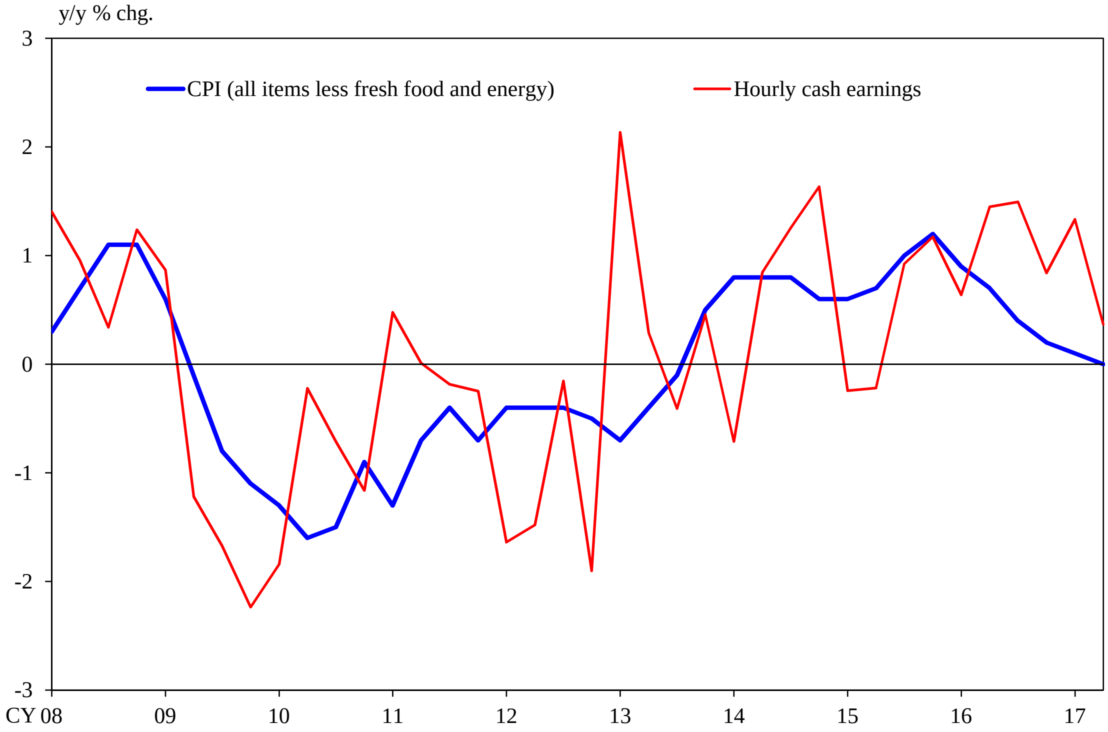
Chart 9

Wages of Full-time and Part-time Employees



Note: Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.
Source: Ministry of Health, Labour and Welfare.

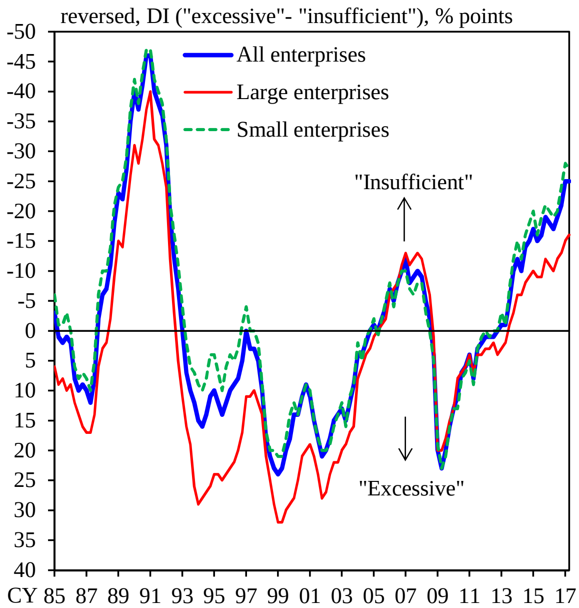
Wages and Prices



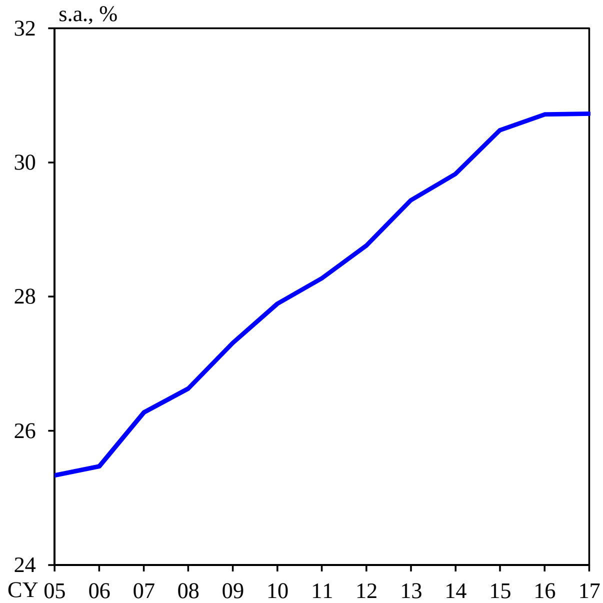
Note: 1. The CPI figures are adjusted for changes in the consumption tax rate.
2. Figures for 2017/2Q are April-May averages.
Sources: Ministry of Internal Affairs and Communications; Ministry of Health, Labour and Welfare.

Tightening of Labor Market Conditions and the Ratio of Part-time Employees

Tankan: Employment Conditions DI

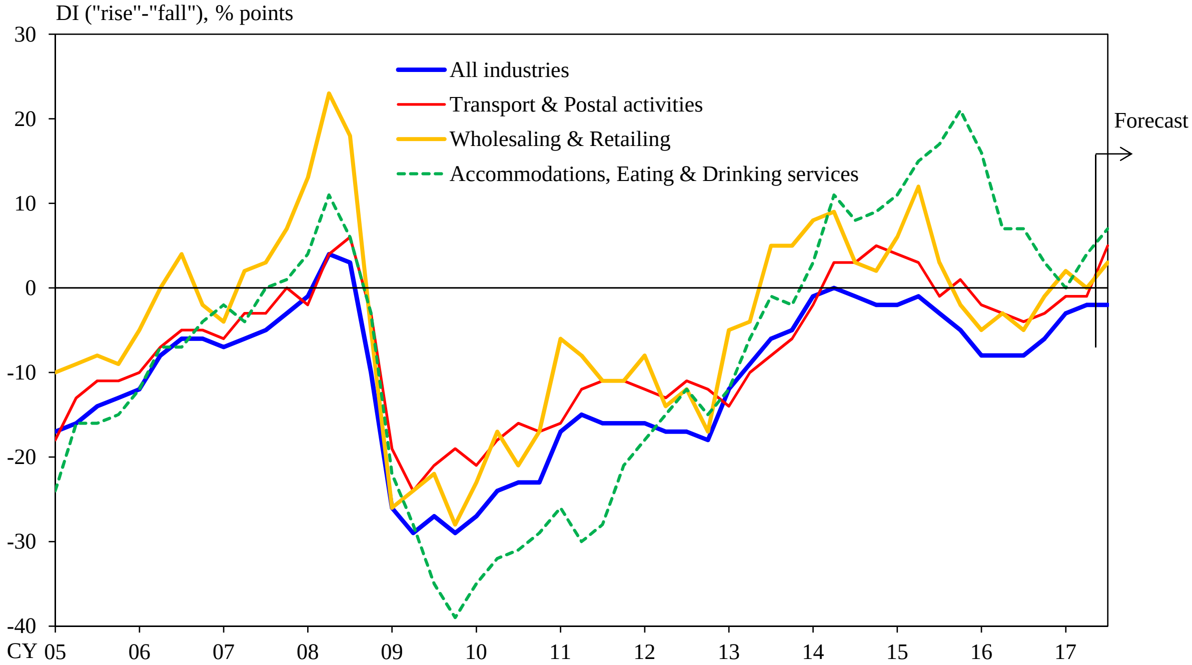


Ratio of Part-time Employees



Note: The figure for the ratio of part-time employees for 2017 is January-May average.
Sources: Bank of Japan; Ministry of Health, Labour and Welfare.

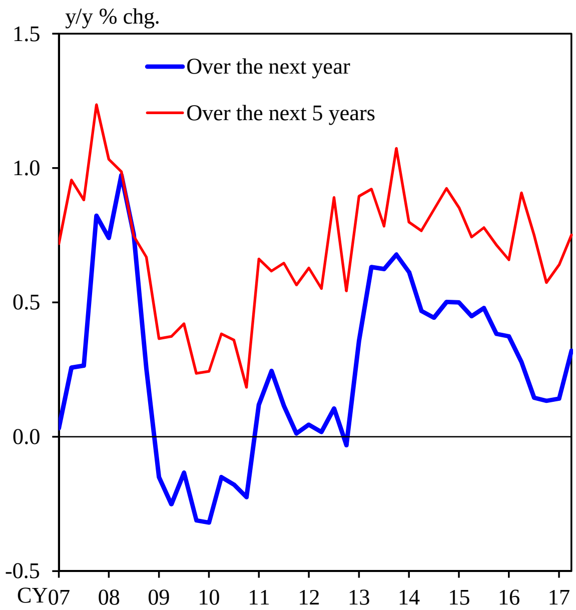
Tankan: Change in Output Prices DI



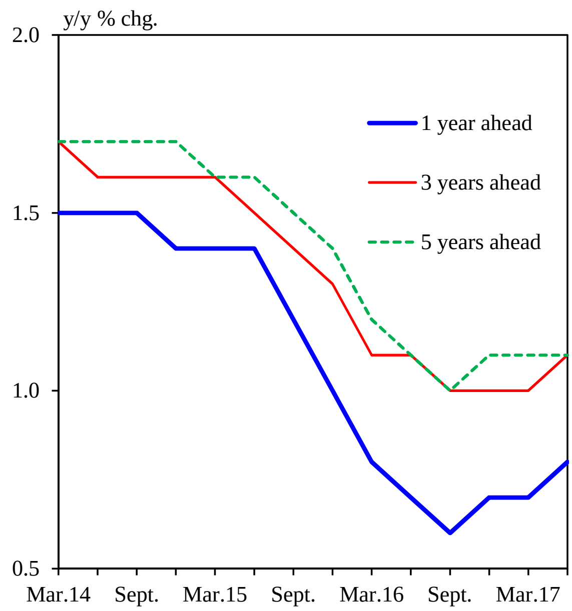
Source: Bank of Japan.

Inflation Expectations

Households
(Opinion Survey on the General Public's Views and Behavior)



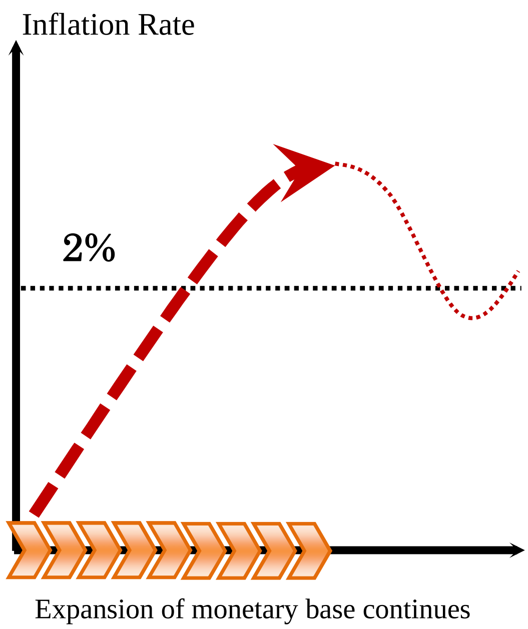
Firms
(Tankan, All Industries and Enterprises, Average)



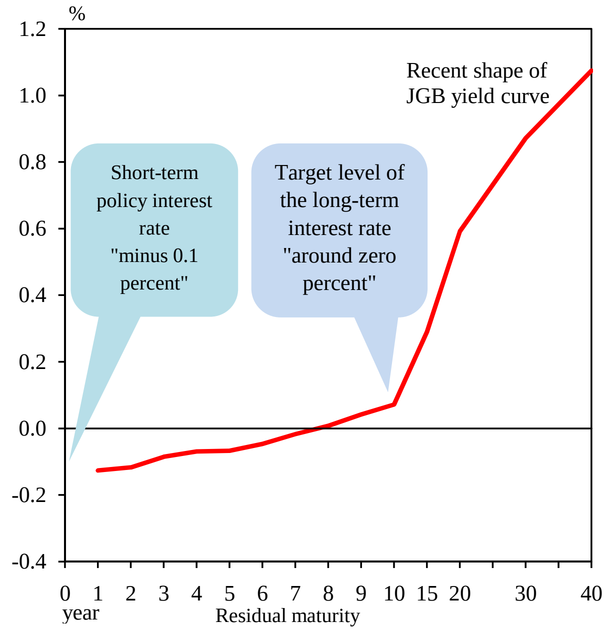
Notes: 1. Figures for households are estimated using the modified Carlson-Parkin method.
2. Figures for firms are "Outlook for General Prices."
Source: Bank of Japan.

QQE with Yield Curve Control

Inflation-Overshooting Commitment



Yield Curve Control



Source: Bloomberg.