August 2, 2018
Bank of Japan

Japan's Economy and Monetary Policy

Speech at a Meeting with Business Leaders in Kyoto

Masayoshi Amamiya
Deputy Governor of the Bank of Japan

(English translation based on the Japanese original)

Introduction

Before I begin my speech, I would like to extend my sincere condolences to the victims of the torrential rains last month and express my deepest sympathies to those who are suffering. Some areas, especially in the northern part of Kyoto Prefecture, continue to be severely affected and there is still much to be worried about.

I am very honored to have the opportunity to exchange views with administrative, financial, and business leaders in Kyoto Prefecture today. I would also like to take this opportunity to express my sincere gratitude for your cooperation with the activities of the Bank of Japan's Kyoto Branch.

At the Monetary Policy Meeting (MPM) two days ago, the Bank released its quarterly *Outlook for Economic Activity and Prices* (Outlook Report) containing the projections for Japan's economic activity and prices through fiscal 2020 and a detailed analysis on price developments. In addition, it strengthened the policy framework with a view to persistently continuing with the current powerful monetary easing. Today, I would like to explain the Bank's view on economic activity and prices as well as the new policy measures, while outlining the Outlook Report.

I. Economic Developments in Japan

Let me start with economic developments in Japan. Japan's economy has improved significantly over the past five years. The current economic recovery phase, which began in December 2012, has reached 66 consecutive months this May. If this recovery continues through January next year, it could overtake the longest post-war expansion of the economy so far, which lasted 73 months. Corporate profits have been at record high levels, and the labor market has been close to full employment, with the unemployment rate being in the range of 2.0-2.5 percent -- the lowest level in around 25 years (Chart 1). Confirming this situation by looking at the output gap, which represents the utilization of capital and labor, shows that it exceeded the long-term average of 0 percent around 2013, clearly turned positive in the second half of 2016, and since then has been widening further within positive territory (Chart 2). Turning to wages and prices, a base pay increase has been achieved for five consecutive years as a result of wage negotiations. In addition, the year-on-year rate of change in the consumer price index (CPI) excluding energy and fresh food has been on an uptrend for more than four and a half years since autumn 2013, and Japan's economy is no longer in deflation, in the sense of a sustained decline in prices.

II. Price Developments

Thus, Japan's economic activity and prices have improved steadily over the past five years. However, prices have continued to show relatively weak developments compared to the economic expansion and the labor market tightening, and the Bank's price stability target of 2 percent in terms of the annual inflation rate has not yet been achieved. For this reason, in formulating the latest Outlook Report, the Bank focused on examining the reasons for these sluggish price developments and their outlook. In what follows, I would like to present the contents of the report and talk in more detail about the price situation in Japan.

A. Why Is the Bank Aiming at 2 Percent Inflation?

Before explaining the background to the continued relatively weak developments in prices, I will first talk about the reasons why the Bank is aiming at achieving the price stability target of 2 percent. I start with this topic because people often make comments such as "The price stability target of 2 percent is too high in the first place and it may not be necessary to aim at it forcibly," or "As long as the economy is growing, it would be better if prices do not rise."

The fundamental mission of central banks in conducting monetary policy is to achieve price stability. Price stability is a situation that is neither deflationary nor inflationary -- in other words, prices neither rise nor fall -- and thus could mean that the year-on-year rate of change is 0 percent in numerical terms. However, the specific definition of price stability currently shared among advanced economies is that a slightly positive annual inflation rate, rather than a rate of 0 percent, would be desirable (Chart 3).

The first reason is that the CPI -- the price statistics that many central banks refer to -- has a statistical tendency of demonstrating a slightly higher inflation rate than the actual one. While I will not explain this in detail, as it is somewhat technical, considering such statistical tendency, or upward bias, an appropriate figure for price stability in terms of the

CPI is a slightly positive figure.

The second reason for aiming at 2 percent inflation is the need to have a buffer for monetary policy. Central banks usually respond to inflation and deflation by raising or lowering interest rates. In the event of inflation, central banks can raise interest rates as much as necessary to suppress inflation. The reason for this is that there is no ceiling to interest rates. On the other hand, when we face deflation, there is a limit to the extent to which interest rates can be lowered. In recent years, a new approach employing negative interest rates has been developed, but it remains impossible to lower interest rates without limits. Deflation is a more troublesome phenomenon than inflation in the sense that central banks' ability to respond to the former is limited. Thus, it is desirable to have a buffer for monetary policy; that is, to secure a certain "margin" of positive inflation and positive interest rates in advance, so that central banks can take appropriate responses through monetary easing if the economy heads toward deflation.

What these two reasons imply is that we should aim at a slightly positive inflation rate. However, there is no simple answer as to whether this should be 1 percent, 2 percent, or 3 percent. The important point is that central banks in major advanced economies more or less commonly define price stability as 2 percent. Of course, this is not based on a reckless argument that we should simply do what others are doing because there is no conclusive evidence as to what the inflation target should be. The reason why major advanced economies share the same inflation target and achieve a similar price situation is that, from a long-term perspective, this is likely to result in stable exchange rates. While exchange rates fluctuate due to a variety of factors in the short term, their trend over a longer term of 5 or 10 years reflects the difference in inflation between two countries. This is the concept of purchasing power parity. Therefore, aiming at the global standard of 2 percent inflation is very important in achieving stability in business management and in the economy as a whole through stable exchange rates.

So far, I have provided three reasons why the Bank is aiming at the price stability target of 2 percent. However, I would like you to understand that the Bank does not think that it is enough simply to achieve 2 percent inflation. If only prices rise, real wages will decrease and economic activity will stagnate. As clearly stipulated in the Bank of Japan Act, the Bank shall implement monetary policy "aimed at achieving price stability, thereby contributing to the sound development of the national economy." Thus, the Bank aims at an economy in which prices rise moderately, as economic activity becomes more dynamic through increases in firms' sales and fixed investment as well as improvement in households' employment, wages, and consumption. An economy in which a virtuous cycle among prices, wages, and economic activity continues to operate would create a world in which the price stability target of 2 percent is achieved.

B. Why Are Prices Sluggish?

However, we are still halfway toward achieving the price stability target of 2 percent. The latest Outlook Report presents a fairly detailed analysis on reasons why prices have remained sluggish even though the economy has improved significantly. Today I would like to present the essence of the report.

There are likely to be two main factors behind the fact that the pace of improvement in prices has remained moderate. One is that the mindset and behavior based on the assumption that wages and prices will not increase easily have been deeply entrenched among firms and households due to the experience of prolonged low growth and deflation. The other is that the large room to raise productivity and the technological progress in recent years have allowed firms to constrain price rises as much as possible. Let me explain these factors in detail by households' and firms' behaviors.

First, it has been taking time for wage increases to fully take hold despite labor shortage. In particular, scheduled cash earnings of regular employees, who account for the majority of total employees, have been sluggish. The year-on-year rate of increase in such earnings over the past year has remained at around 0.5 percent (Chart 4). It is said that regular employees, whose wage levels are relatively high, have a strong tendency to place priority on the stability of employment over wage increases. Such tendency still seems to be persistent, reflecting the experience of severe employment adjustments under prolonged low growth. In addition, wage developments also are affected by growing diversity in terms of worker type. From a long-term perspective, an increase in labor participation by women and seniors in recent years is essential to cope with the declining trend in the working-age population, which is a challenge for Japan's economy. In the short term, however, this increase will ease labor shortage, thereby constraining wage increases.

Second, the fact that households' tolerance of price rises has not been increasing clearly has been constraining a rise in inflation. According to the Bank's survey, following the introduction of quantitative and qualitative monetary easing (QQE) in 2013, the level of households' tolerance of price rises shifted upward in a favorable direction compared to past levels. However, the level has not risen further (Chart 5). This is likely to be attributable to the first reason mentioned earlier -- that is, it has been taking time for wage increases to fully take hold.

Third, firms' cautious price-setting stance also has been constraining a rise in inflation. Although wages have been rising, albeit moderately, and commodity prices such as of crude oil have been on an uptrend, firms that are concerned about possibly losing customers due to price hikes have been making efforts to absorb upward pressure of costs on prices by increasing labor-saving investment and streamlining their business process. Firms have been enthusiastic about making software investment in sectors such as "construction," "retailing," and "accommodations, eating and drinking services," where labor shortage is acute, and many firms have offset a rise in labor costs by introducing self-checkout machines and automatic ordering system (Chart 6). These efforts by firms are likely made possible through the recent progress in information technology.

So far, I have talked about firms' cautious wage- and price-setting stance as well as households' cautiousness toward price rises. Such mindset and behavior can be regarded as a kind of "social mode" in Japan that has been brought about by the experience of prolonged low growth and deflation, and it is likely to have been taking time to resolve this.

In addition, the effects of intensifying competition among firms cannot be ignored. For example, retailers such as supermarkets have maintained their cautious price-setting stance, reflecting in part the expansion of online shopping (Chart 7). This is the so-called Amazon Effect, which is another example of rapid progress in information technology constraining a rise in inflation.

C. Why Will Inflation Rise Going Forward?

Although it is taking time for inflation to rise, some changes have been seen amid the continued improvement in the economic and employment conditions that I mentioned earlier. For example, moves to raise sales prices are starting to be observed recently at a wide range of firms, mainly in the services sector, such as dining-out (Chart 8). In addition, according to the Bank's *Tankan* (Short-Term Economic Survey of Enterprises in Japan), the number of enterprises answering that the output prices have risen has been exceeding the number of those answering that such prices have fallen for the first time in a while. As the so-called baby boomers are reaching their 70s, labor market conditions are likely to tighten further and the pace of increase in wages of mainly part-time employees is expected to accelerate. As the effects of such moves of wage increases spread to regular employees' wages, this will lead to an increase in households' tolerance of price rises. When this happens, price rises by firms will be more easily accepted.

While price developments are affected by various factors that I have explained so far, the factor that determines the underlying trend in prices is the aggregate supply-demand balance. As the output gap has been maintained within positive territory -- showing excess demand -- for a long time, in reflection of economic expansion, many of the aforementioned factors that have been constraining inflation will likely be resolved gradually. If that happens, another important factor that forms the underlying trend in prices is likely to change -- that is, people's perception of prices, which means inflation expectations in a broad sense, including households' tolerance of price rises and firms' price-setting strategies.

The Bank assesses such factors that determine the underlying trend in prices by using the word "momentum." If you look up "momentum" in a dictionary, it is defined as "force" or "impetus," which imply a short period of time. However, as the objective of monetary policy is achieving price stability in the long term, the Bank assesses the "momentum" in terms of a somewhat longer time frame. Specifically, it makes a comprehensive judgment as to whether the momentum is maintained by examining the main factors that determine the underlying trend in prices, such as the output gap and medium- to long-term inflation expectations, while making use of various indicators and information.

In the latest Outlook Report, the Bank projects that the year-on-year rates of change in the CPI (less fresh food) for fiscal 2018 through fiscal 2020 are likely to be 1.1 percent, 1.5 percent, and 1.6 percent, respectively (Chart 9). We are in a difficult situation in terms of achieving 2 percent inflation by fiscal 2020, as it is taking more time than expected for inflation to rise. Nevertheless, the momentum whereby an improvement in the output gap leads to an increase in actual inflation, and then a rise in inflation expectations, is maintained. It is of utmost importance to sustain such positive momentum by maintaining the output gap as long as possible within positive territory, and this is likely to be the most certain path toward achieving 2 percent inflation.

III. The Bank's Conduct of Monetary Policy

Next, I would like to explain the Bank's conduct of monetary policy including the measures decided at the MPM held two days ago.

The Bank has been pursuing powerful monetary easing under the policy framework of "QQE with Yield Curve Control," aiming to achieve the price stability target of 2 percent (Chart 10). In order to achieve the price stability target at the earliest possible time, the Bank set the target level of 10-year Japanese government bond (JGB) yields at around zero percent, and has purchased large amount of JGBs so that the yield curve would be formed in line with the target. By conducting this operation, short- and long-term interest rates have been stable at low levels and lending rates as well as issuance rates for corporate bonds -- to which certain spreads are added in both cases -- also have remained at extremely low levels. The amount outstanding of bank lending has been increasing firmly. Thus, the current highly accommodative financial conditions, brought about by yield curve control, have largely contributed to an improvement in the output gap, stimulating firms' and households' spending activities. In addition, the Bank has purchased exchange-traded funds (ETFs) and Japan real estate investment trusts (J-REITs) with a view to exerting positive effects on economic activity and prices through lowering risk premia in the stock market.

As I explained, following the discussion at the latest MPM, the Bank released its economic projections, which show that it will take more time than expected to achieve the price stability target of 2 percent. However, the momentum toward 2 percent inflation has been maintained. Accordingly, as for the conduct of monetary policy, the Bank judged it appropriate to persistently continue with the current powerful monetary easing, thereby maintaining the output gap as long as possible within positive territory, in order to make the momentum sustainable.

During the discussion, we thought it necessary to address two challenges. The first is to firmly maintain confidence among the public regarding the Bank's current policy stance that aims at achieving the price stability target of 2 percent. The second is to strengthen the sustainability of the current powerful monetary easing so that the effects of monetary easing will not be reduced while taking care of such factors as the negative effects on financial markets, in a situation where monetary easing needs to be continued.

In order to address these two challenges, the Bank decided to newly implement measures to strengthen the framework of powerful monetary easing. Today, within the limited time provided, I would like to introduce particularly important measures (Chart 11).

First, the Bank decided to strengthen its commitment to achieving 2 percent inflation by introducing forward guidance for policy rates. You may not be familiar with the term, but forward guidance is a measure that guides the future policy path in order to strengthen market confidence and expectations toward monetary policy. At the latest MPM, the Bank publicly committed to "maintain the current extremely low levels of short- and long-term interest rates for an extended period of time, taking into account uncertainties regarding economic activity and prices including the effects of the consumption tax hike scheduled to take place in October 2019." I would like to reiterate that, even though the projected timing of reaching 2 percent inflation has been delayed, the Bank will not reduce the degree of monetary easing.

Second, the Bank decided to implement several measures to enhance the sustainability of "QQE with Yield Curve Control." For example, while the target level of 10-year JGB yields is around zero percent, as I mentioned earlier, the Bank made it clear that, under the target, the long-term yields might move upward and downward to some extent mainly depending on developments in economic activity and prices. Recently, there is a growing concern in the JGB market that the market functioning has been deteriorating, with the long-term yields being somewhat stuck and the transaction volume being on a declining trend, although this can be regarded in a sense as the consequence of powerful monetary easing. In continuing with monetary easing, the Bank judged it necessary to allow the long-term yields to move upward and downward to some extent mainly depending on developments in economic activity and prices, thereby maintaining the market functioning so as not to create more concern. However, the target level of the long-term yields remains at around zero percent. In case of a rapid increase in the yields, the Bank will purchase JGBs promptly and appropriately. The Bank does not expect the level of yields ratcheting up. In addition, as for ETF purchases, from the same aspect of enhancing the sustainability of the current monetary policy framework, the Bank made it clear that it might increase or decrease the amount of purchases depending on market conditions, while maintaining the annual pace of increase at about 6 trillion yen.

The aim of these policy measures is to strengthen the sustainability of the current powerful monetary easing, taking into account the side effects. The Bank recognizes that the effects of monetary easing will be strengthened as a whole, in consideration of this sustainability.

The Bank also recognizes the risk that, by continuing such powerful monetary easing, financial institutions' strength will be cumulatively affected by low profitability, mainly through a decrease in their lending margins, and thus the functioning of financial intermediation will be stagnant. Currently, as financial institutions have sufficient capital bases and their lending attitudes continue to be active, there is no serious problem with the functioning of financial intermediation. However, there is no change in the Bank's intention that it will thoroughly examine the risks considered most relevant to the conduct of monetary policy. As a central bank, the Bank will continue conducting monetary policy in an appropriate manner, taking account of developments in economic activity and prices as well as financial conditions, so that the momentum toward 2 percent inflation will be maintained and the economy thereby will grow in a balanced manner between economic expansion and price stability.

Conclusion

To conclude, I would like to talk about the economy of Kyoto Prefecture.

Kyoto Prefecture's economy can be judged as having been expanding, even though the effects of the torrential rains a while ago can be seen in part. In Kyoto, there are a number of global manufacturers that represent Japan in sectors of electronic parts and devices as well as industrial machinery. Moreover, Kyoto attracts attention from all over the world as an international tourist destination distinguished by more than 1,200 years of history. Thus, production and exports have been on an uptrend while steadily benefiting from the growth in overseas economies, and demand from foreign visitors also has been firm on the back of an increase in foreign tourists to Japan. In addition, business fixed investment has become more active, as seen in investment intended for capacity expansion as well as research and development in the manufacturing sector and that intended for extension of accommodation facilities such as hotels in the nonmanufacturing sector. Employee income also has increased moderately.

Reflecting such favorable economic conditions, labor shortage has been progressing in Kyoto Prefecture, as is the case nationwide. In this situation, active labor participation by women and seniors has been observed and labor-saving investment in various forms is becoming more dynamic. For example, a wide range of firms irrespective of sector have established sections specializing in promoting diversity and worked on creating various working systems, such as shorter and flexible working hours. As a result, some have expressed the opinion that such moves have led to an increase in female and senior workers. In addition, many firms in the eating and drinking services as well as accommodations sectors, which are underpinned by demand from foreign visitors, have been making up for labor shortage by raising productivity, such as through introducing tablet devices and making use of the Internet of Things (IoT). As I have explained today, such moves may weaken upward pressure on wages and prices in the short term, but in the longer term, they will raise the productivity of the economy as a whole, thereby strengthening its growth potential. As this potential rises, firms' spending behavior and households' consumption are likely to become more active, eventually contributing to pushing up prices. Such positive developments that have been clearly observed in the prefecture are expected to support the achievement of the 2 percent price stability target in a stable manner.

In closing, let me convey my best regards and express my sincere hope that you will continue to make Kyoto even more attractive while uniting tradition and innovation for the further development of the prefecture's economy.

Thank you very much for your attention.

Japan's Economy and Monetary Policy

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August 2, 2018

Masayoshi Amamiya
Deputy Governor of the Bank of Japan

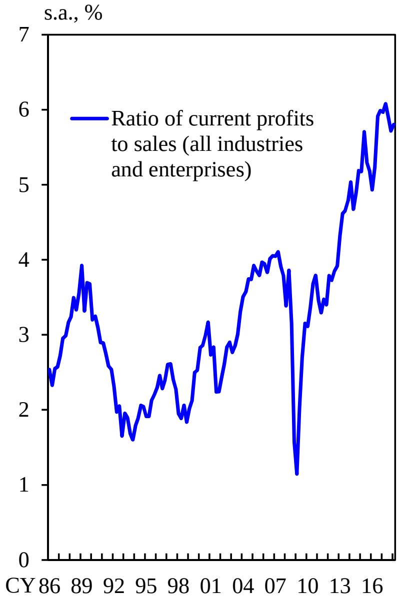
Chart 1

Japan's Economy

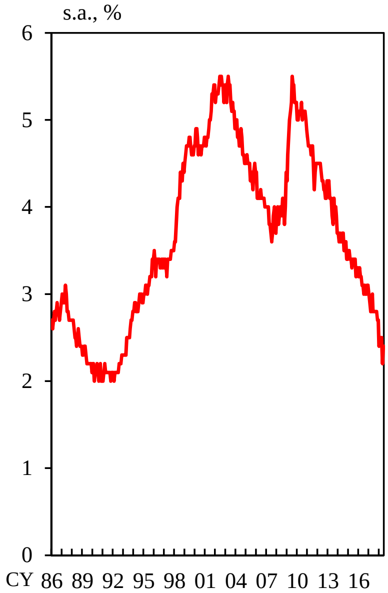
Length of Economic Recovery Period

Rank	Period	Length
1	February 2002- February 2008	73 months
2	December 2012-	66 months (as of May 2018)
3	November 1965- July 1970 (*Izanagi Boom*)	57 months
4	December 1986- February 1991 (*Bubble Boom*)	51 months
5	November 1993- May 1997	43 months

Corporate Profits



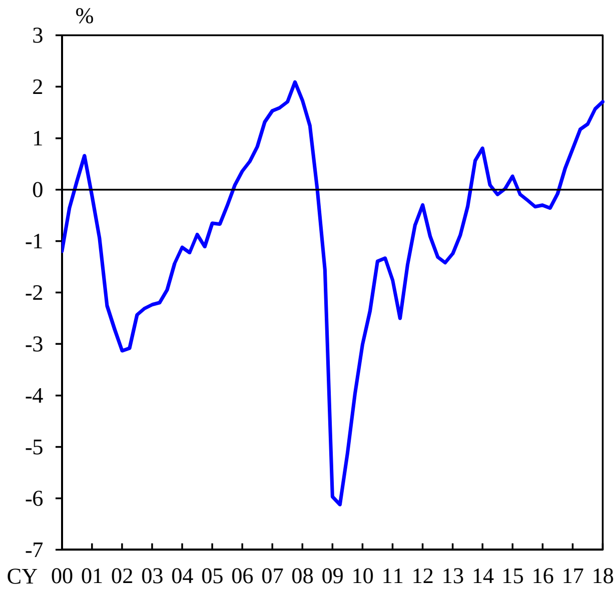
Unemployment Rate



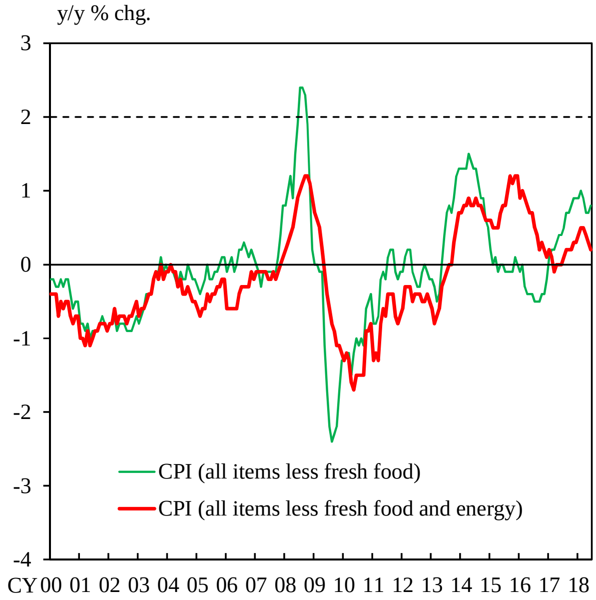
Note: Figures for corporate profits are based on the *Financial Statements Statistics of Corporations by Industry, Quarterly*. Excluding "finance and insurance."
Sources: Cabinet Office; Ministry of Finance; Ministry of Internal Affairs and Communications.

Output Gap and Consumer Prices

Output Gap



Consumer Prices



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

Why Is the Bank Aiming at 2 Percent Inflation?

Three Reasons

Upward bias in the CPI

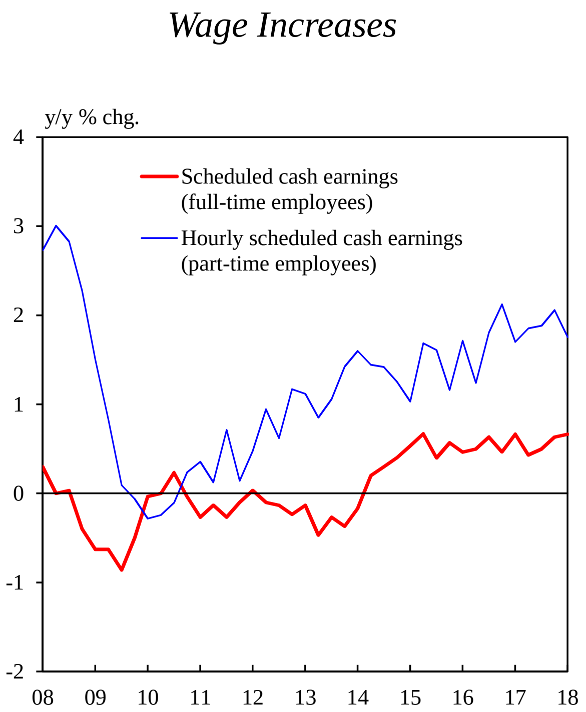
Buffer for monetary policy

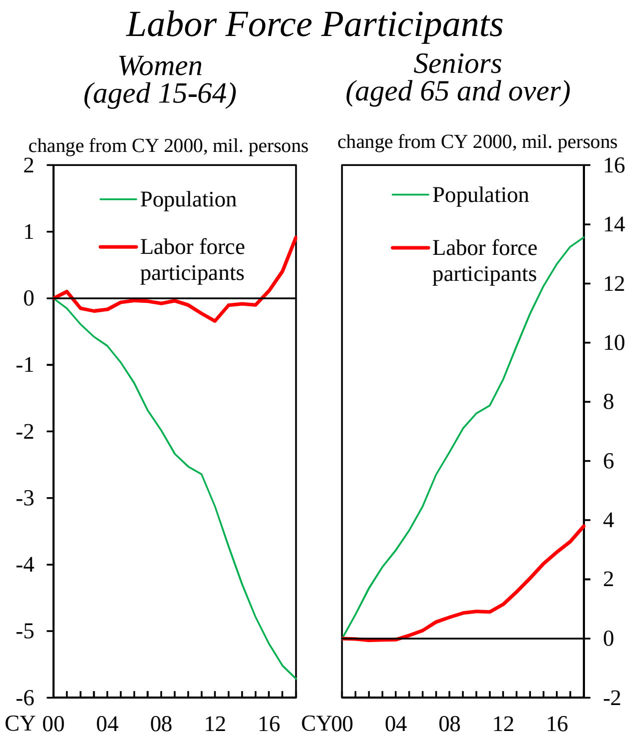
2 percent as a global standard

Price Stability in Advanced Economies

Country/ Region	Definition	Indicator Numerical expression (y/y chg.)
United States (FRB)	Longer-run goal	PCE deflator 2%
Euro area (ECB)	Quantitative definition	HICP Below, but close to, 2%
United Kingdom (BOE)	Target	CPI 2%
Japan (BOJ)	Price stability target	CPI 2%

Firms' Cautious Wage-Setting Stance

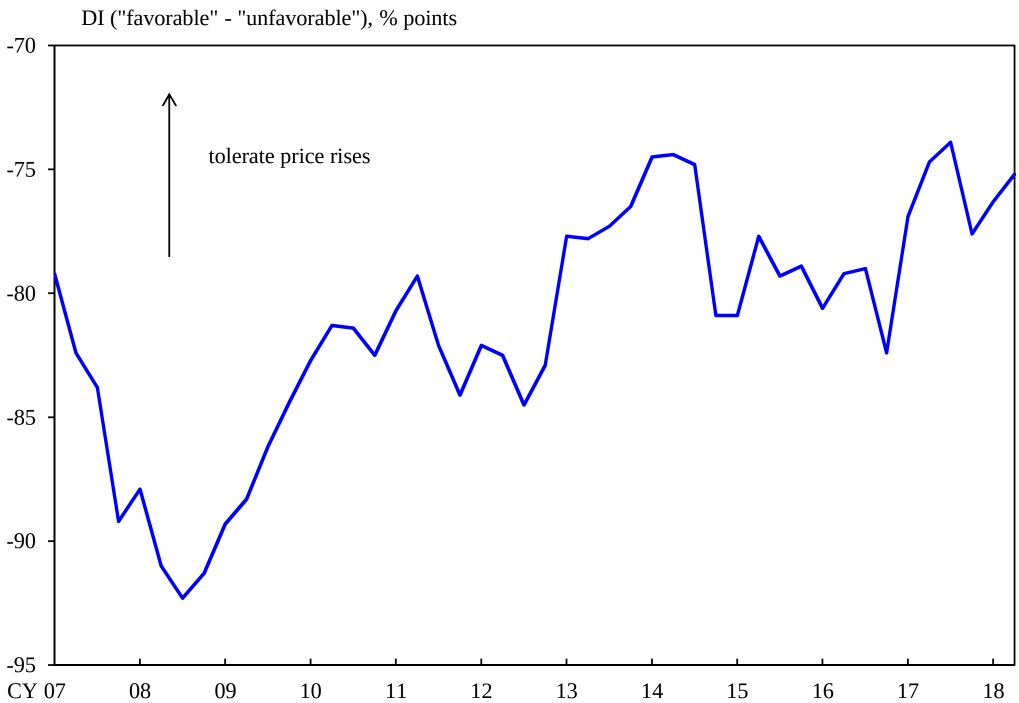




Notes: 1. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February in the wage graph. Wage figures from 2017/Q1 onward are based on existing respondents (continuing observation) following the sample revision of the *Monthly Labour Survey* in January 2018.
2. Figures for labor force participants and population for 2018 are January-May averages on a seasonally adjusted basis.

Sources: Ministry of Health, Labour and Welfare; Ministry of Internal Affairs and Communications.

Households' Tolerance of Price Rises



Note: Comments on the rise in prices are chosen among three alternatives: "rather favorable," "difficult to say," and "rather unfavorable."

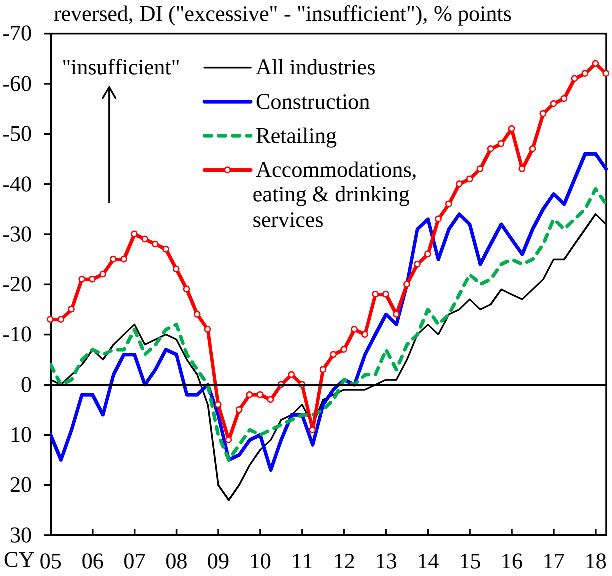
Source: Bank of Japan, *Opinion Survey on the General Public's Views and Behavior*.

Chart 6

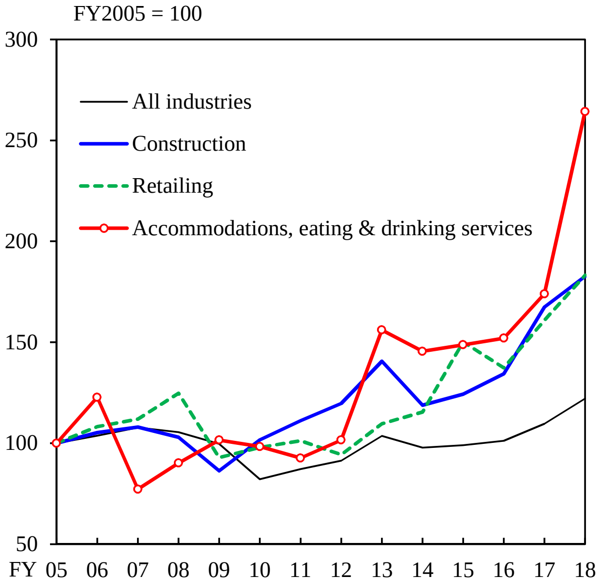
Firms' Cautious Price-Setting Stance

Labor-Saving Investment in Sectors Facing Acute Labor Shortage

Employment Conditions DI (Tankan)



Software Investment (Tankan)

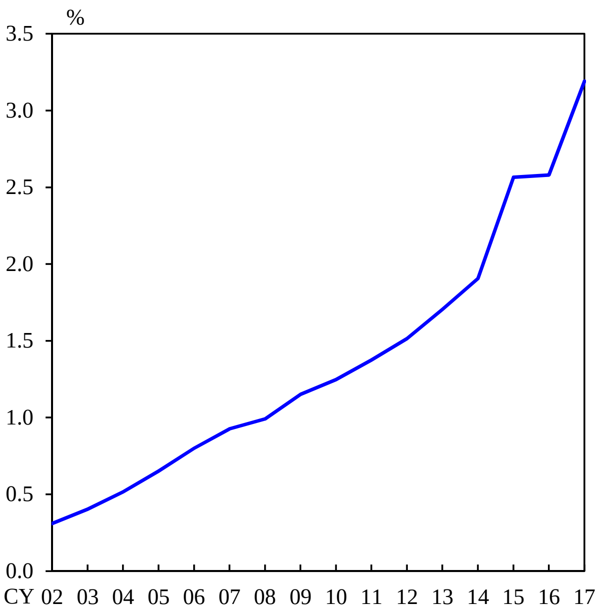


Note: Figures for software investment for fiscal 2018 are based on plans in the June 2018 survey.
Source: Bank of Japan.

Chart 7

Intensifying Competition

Online-Shopping Ratio to Total Expenditure



Interview Responses by Firms
- The Bank's Regional Economic Report (Jul. 2018)-

Since competitors have intensified their price-cutting strategies, we may also cut sales prices further in the future
(a supermarket [Sendai]).

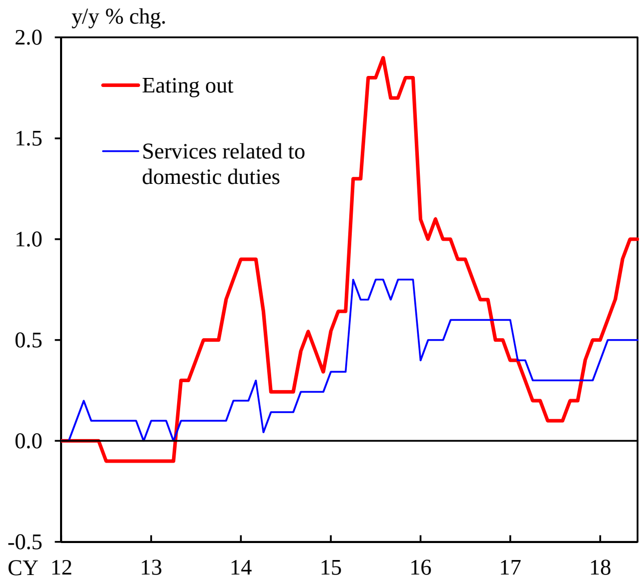
Consumers have a deep-rooted cost-saving mentality and we are losing customers to low-price retail businesses such as drugstores and online retailers (a supermarket [Kyoto]).

We are feeling the threat of other types of retail businesses that have intensified their price-cutting strategies at the expense of profits, and thus we have cut the sales prices of several hundred items, especially private-brand products (a supermarket [Hiroshima]).

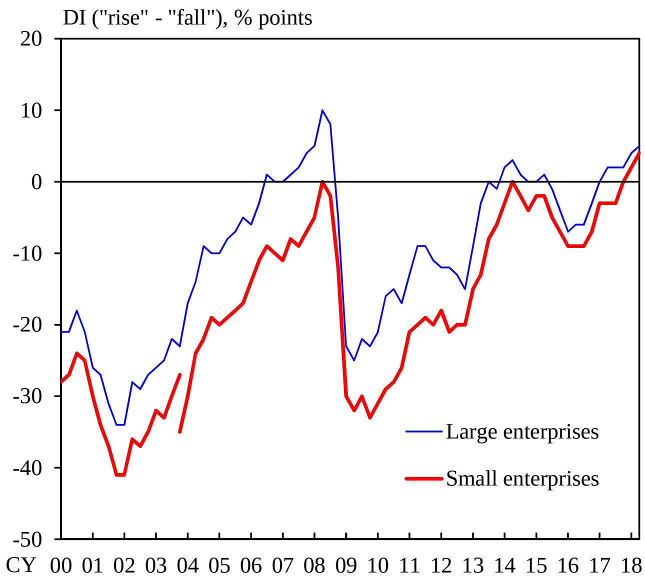
Notes: 1. Figures are calculated using "total expenditure on goods and services ordered over the Internet" from the *Survey of Household Economy* and "consumption expenditures" from the *Family Income and Expenditure Survey*.
2. In the right chart, the parentheses show the industry of the interviewee and the Bank branch.
Sources: Ministry of Internal Affairs and Communications; Bank of Japan.

Moves to Raise Sales Prices

Spread of Wage Increases to Prices



Output Prices DI (Tankan)



Notes: 1. The CPI figures are adjusted for changes in the consumption tax rate.
2. There is a discontinuity in the data of the output prices DI in the December 2003 survey due to a change in the survey framework.
Sources: Ministry of Internal Affairs and Communications; Bank of Japan.

Outlook for Economic Activity and Prices
(July 2018 Outlook Report)

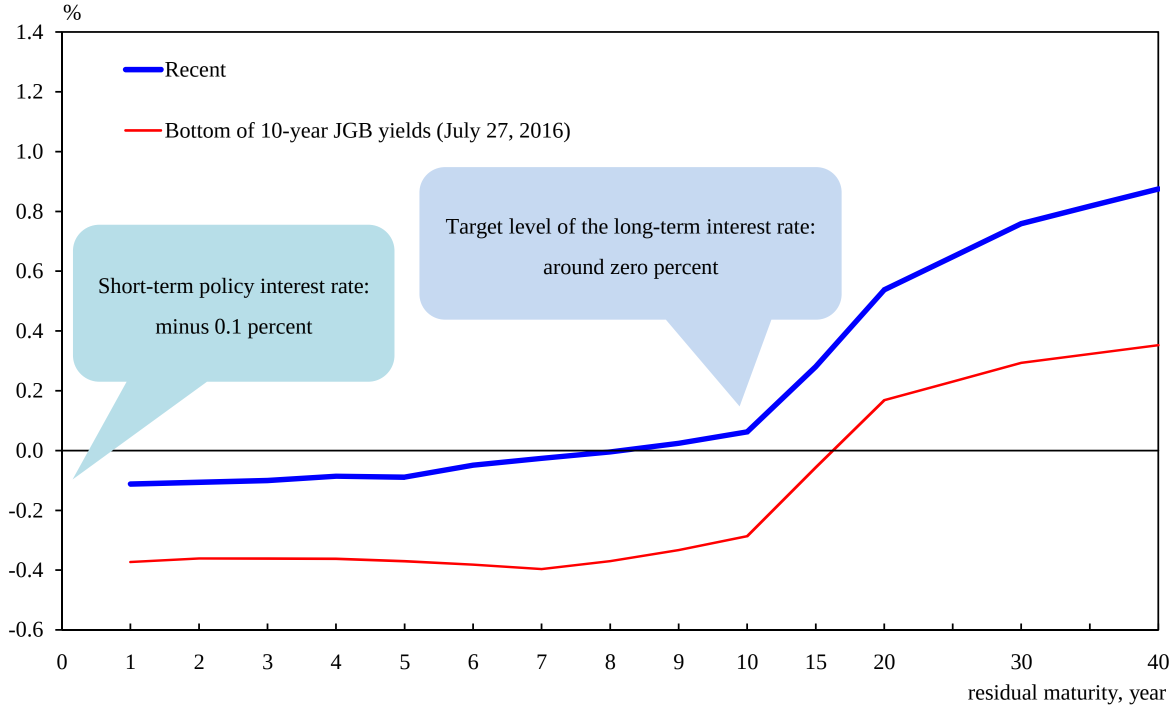
the medians of the Policy Board members' forecasts, y/y % chg.

	Real GDP	CPI (all items less fresh food)
Fiscal 2018	+1.5	+1.1
Forecasts made in April 2018	+1.6	+1.3
Fiscal 2019	+0.8	+1.5
Forecasts made in April 2018	+0.8	+1.8
Fiscal 2020	+0.8	+1.6
Forecasts made in April 2018	+0.8	+1.8

Note: Figures for the CPI (all items less fresh food) exclude the direct effects of the consumption tax hike.
Source: Bank of Japan.

Chart 10

Yield Curve Control



Source: Bloomberg.

Chart 11

Strengthening the Framework for Continuous Powerful Monetary Easing

Taking more time than expected to achieve the price stability target of 2 percent.
Maintaining the output gap as long as possible within positive territory is appropriate.

Persistently Continuing with Powerful Monetary Easing

Forward guidance for policy rates

"The Bank intends to maintain the current extremely low levels of short- and long-term interest rates for an extended period of time, taking into account uncertainties regarding economic activity and prices including the effects of the consumption tax hike scheduled to take place in October 2019."

⇒ Strengthening the commitment to achieving the price stability target

Enhancing the sustainability of "Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control"

Long-term interest rate: The Bank maintains the target level of around zero percent. While doing so, the yields may move upward and downward to some extent mainly depending on developments in economic activity and prices.

Purchases of ETFs: The Bank maintains the annual pace of increase in the amount outstanding of about 6 trillion yen. While doing so, the Bank may increase or decrease the amount of purchases depending on market conditions. etc.

Achieving the price stability target of 2 percent at the earliest possible time while securing stability in economic and financial conditions.