



February 28, 2019
Bank of Japan

**Economic Activity, Prices,
and Monetary Policy in Japan**

Speech at a Meeting with Business Leaders in Ibaraki

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(English translation based on the Japanese original)

I. Recent Economic and Price Developments

A. Developments in Overseas Economies

I would like to begin my speech by talking about overseas economies.

Overseas economies have continued to grow firmly overall, although the business sentiment of manufacturing firms has been mixed across economies and regions recently. In terms of the outlook, overseas economies are expected to continue growing firmly on the whole, amid firm domestic demand, although various developments of late warrant attention, such as the U.S.-China trade friction.

The U.S. economy has continued to grow firmly, supported in part by a favorable employment and income situation. It is likely to maintain its expansion, underpinned by expansionary fiscal measures.

As for the European economy, growth in production has been decelerating, due in particular to the tightening of gas emission regulations on automobiles, and the economic growth rate also has been on a downtrend recently. The economy has continued on a recovery trend, albeit at a slower pace, as seen in exports having shown signs of a pick-up and business fixed investment having been on an increasing trend; however, attention needs to be paid to the outlook for the economy.

The Chinese economy has continued to see stable growth on the whole. It is likely to broadly follow a stable growth path as the authorities conduct fiscal and monetary policy in a timely manner, despite recent concerns including fluctuations in exports -- namely, their front-loaded increase following the United States having raised import tariffs imposed on China and their subsequent decline -- as well as the effects of authorities' measures to push forward with deleveraging and a decline in business sentiment of manufacturing firms.

Emerging economies other than China and commodity-exporting economies have been recovering moderately on the whole, mainly reflecting an increase in exports and the effects of economic stimulus measures. Going forward, as domestic demand has remained firm,

those economies are likely to continue their moderate recovery, partly supported by trading with advanced economies.

B. Outlook for the Global Economy

According to the January 2019 *World Economic Outlook Update* released by the International Monetary Fund (IMF), the global economy is projected to continue growing at around 3.5 percent in 2019 and 2020, although the projections for both years were revised downward from those made in October 2018 (Chart 1).

Developments in stock markets and foreign exchange markets, however, were somewhat unstable from the end of 2018 to the turn of the year, as investors' risk aversion had heightened since autumn 2018, mainly reflecting uncertainties over the U.S.-China trade friction and over political developments in Europe, as well as relatively weak economic indicators in China. The fundamentals of the global economy do not seem to have changed substantially thus far, but due attention should be paid to the gradual heightening of uncertainties that could pose a downside risk to economic activity, including the risk of turmoil in financial markets seen around the turn of the year leading to deterioration in the economy. Specifically, close attention should continue to be paid to the following risks: U.S. protectionist moves and responses by its trading partners; developments in negotiations on the United Kingdom's exit from the European Union (EU); developments in crude oil prices that declined significantly from autumn 2018 to the end of the year; geopolitical risks; and deceleration in the Chinese economy. Moreover, in the United States, the amount outstanding of leveraged loans (with financial covenants) extended to firms with low credit ratings has increased to about 1 trillion U.S. dollars. The amount outstanding of covenant-lite loans (with eased financial covenants) has been increasing recently, and that of collateralized loan obligations (CLOs) (a securitized instrument in which several leveraged loans are packaged) has increased significantly over the past five years. So far, the default rate on leveraged loans has been at a low level; however, as has been pointed out in the very first issue of the *Financial Stability Report*, released by the Federal Reserve in November 2018, risks of an increase in the number of firms with high leverage warrant attention.

C. Current Situation of Japan's Economy

I will now discuss the economic situation in Japan.

Japan's economy is expanding moderately, with the output gap being maintained in excess demand and a virtuous cycle from income to spending operating. In 2018, the real GDP growth rate for the January-March quarter was negative for the first time in nine quarters, mainly reflecting weather conditions. That for the April-June quarter picked up and became positive, but for the July-September quarter, the growth rate fell into negative territory again, partly due to natural disasters exerting downward pressure on, for example, private consumption and exports. Despite these fluctuations, the recently released preliminary estimate for the October-December quarter returned to positive territory on the back of a pick-up in business fixed investment, private consumption, and exports (Chart 2).

According to the *Regional Economic Report* released by the Bank of Japan in January 2019, out of a total of nine regions across Japan, six -- including the Kanto-Koshinetsu region, in which Ibaraki Prefecture is located -- reported that their respective economies had been expanding, amid the progress in restoration and reconstruction in the Hokkaido and Chugoku regions affected by natural disasters such as the earthquake and heavy rain (Chart 3). In the Kanto-Koshinetsu region, business fixed investment had been increasing and private consumption had been doing so moderately, albeit with fluctuations, on the back of steady improvement in the employment and income situation. Ibaraki Prefecture reported that exports were at a high level, particularly those of parts for maintenance, in view of an increase in demand from emerging economies making an improvement in infrastructure including railways and roads. The prefecture also reported that, in response to acute labor shortage, an increasing number of small and medium-sized firms were boosting labor-saving investment, and that those firms had mainly utilized a manufacturing subsidy program provided by the government.

As Japan's economy has continued on an expanding trend, labor market conditions have tightened steadily. The unemployment rate has been at a low level of around 2.5 percent, and the active job openings-to-applicants ratio has remained at a high level (Chart 4). Firms' perception of labor shortage suggested by the diffusion indexes for employment conditions

in the December 2018 *Tankan* (Short-Term Economic Survey of Enterprises in Japan) released by the Bank remained at a high level in a wide range of industries. Against this background, firms in many industries have been proceeding proactively with labor-saving investment with a view to, for example, using artificial intelligence (AI), robotic process automation (RPA), and other means. On this point, although labor force participants in Japan have been at a record high level recently, they are likely to start declining in the near future, considering, for example, a shrinking national population and rapid progression of the declining birth rate and aging population (Chart 5).¹ Given this situation, the innovative use of AI and RPA is not only a temporary measure to addressing current labor shortage but also could serve as an important means to compensating for shortage of the working age population that Japan may face in the future. If the introduction of new technologies allows firms to provide goods and services at lower costs, output per worker will increase, pushing up corporate profits and wages. That being said, if human labor is to be replaced rapidly by new technologies, wages and employment might be affected following a decline in labor demand, and the gap between industries with sufficient labor and those with labor shortage might widen. Thus, in adapting new technologies, it also is important to foster resources in terms of know-how and skills so that human employees can effectively use such technologies. In other words, if three capital components -- labor force, facilities, and new technologies -- are combined appropriately, the challenges of a declining birth rate and an aging population and of a decline in labor force participants can be overcome, pushing up Japan's potential growth rate and the natural rate of interest accordingly.

D. Outlook for Japan's Economy

With regard to the outlook, Japan's economy is likely to continue on an expanding trend throughout the projection period -- that is, through fiscal 2020. In fiscal 2019, private consumption is expected to see an increase in its growth momentum in the first half of the fiscal year, reflecting the front-loaded increase in demand prior to the scheduled consumption tax hike in October 2019, but is likely to be pushed down in the second half of the fiscal year by the subsequent decline in demand following the tax hike and the decline

¹ According to the *Population Statistics* released in 2019 by the National Institute of Population and Social Security Research, it is estimated that labor force participants in Japan will total 63.81 million in 2020, declining to 61.69 million in 2030.

in real income. However, public investment is likely to increase clearly, due mainly to the implementation of the supplementary budgets to address the natural disasters that successively occurred in fiscal 2018, as well as the promotion of policy measures for national resilience. Exports are projected to maintain their increasing trend on the back of firm growth in overseas economies. With regard to business fixed investment, although it is likely to decelerate gradually, mainly reflecting the effects of Olympic Games-related investment peaking out, its increasing trend is projected to be maintained, due partly to demand for investment underpinned by the increase in exports.

In fiscal 2020, private consumption and housing investment, which are likely to decline in the second half of fiscal 2019 due to the effects of the consumption tax hike, are expected to gradually head toward a recovery. Under such circumstances, although business fixed investment is likely to decelerate somewhat against the background of heightening pressure stemming from cyclical adjustments in capital stock, the economy is projected to be underpinned mainly by the continued increasing trend in exports and an expansion in public expenditure owing to the Olympic Games. Therefore, Japan's economy is expected to continue on an expanding trend in fiscal 2020.

According to the Bank's January 2019 *Outlook for Economic Activity and Prices* (Outlook Report), the medians of the Policy Board members' forecasts for the real GDP growth rate are 0.9 percent for both fiscal 2018 and fiscal 2019, and 1.0 percent for fiscal 2020 (Chart 6).

For the scheduled consumption tax hike, the government will deliberate various measures to reduce the household burden. Taking this into consideration, private consumption is expected to continue on a moderate increasing trend, supported mainly by the effects of those government measures, an increase in employee income, and the wealth effects stemming from the past rise in stock prices.

E. Prices in Japan

Next, I will elaborate on price developments in Japan.

The year-on-year rate of change in the consumer price index (CPI) for all items less fresh food (core CPI) increased to 1 percent in February 2018 but thereafter declined slightly. After recovering to 1 percent, it has been in the range of 0.5-1.0 percent recently (Chart 7). With the price stability target set at 2 percent, the Bank has been conducting large-scale monetary easing, but there is still some way to go before achieving the target.

There are three aspects to consider when assessing price developments toward achieving the 2 percent target: the supply and demand conditions in the overall economy, factors from a micro perspective, and firms' and households' mindset.

1. Supply and demand conditions in the overall economy

Let me first explain the supply and demand conditions in the overall economy. The Bank estimates the output gap, which is the economic measure of the difference between aggregate demand (actual output) of the economy and average supply capacity (potential output) that is smoothed out for the business cycle. According to its estimation, the output gap has remained positive for eight consecutive quarters since the October-December quarter of 2016, on the back of the steady tightening of labor market conditions and a rise in capital utilization rates (Chart 8). This suggests that, in terms of the supply and demand conditions, the economy has been in excess demand and upward pressure has been exerted on prices.

2. Factors from a micro perspective

Now, I will touch on the second aspect: factors from a micro perspective. The CPI that I mentioned earlier is an indicator of prices that represents the aggregation of prices of various goods and services. Breaking down the CPI by item, energy prices -- which had been pushing up the year-on-year rate of change in the CPI -- are reducing their upward pressure on overall prices, reflecting the decline in crude oil prices since autumn 2018, and communication charges for mobile phones are likely to decline further. With regard to the producer price index (PPI) -- one of the measures of prices of goods traded in the corporate

sector -- the year-on-year rate of change for 2018 showed an average increase of 2.5 percent, due to rises in prices of raw materials and personnel expenses. Prices of goods traded in the corporate sector have been raised by more than 2 percent; however, the rise has not been fully passed on to retail prices. Nevertheless, there has been a gradual rise recently in prices of such items as household wheat flour, ice cream, bottled beverages, and frozen and refrigerated food; if such price rises are to spread to a wider range of industries, they likely will be a steppingstone to a rise in overall prices.

3. Firms' and households' mindset

The third aspect to consider when assessing price developments is firms' and households' mindset. I often hear concerns from corporate managers across various industries that, by raising prices, they may lose customers, and consequently their market share. This is because the competitive environment surrounding firms has become increasingly severe amid an expansion of online shopping, and, in the case of Japan, firms' and households' mindset and behavior based on the assumption that wages and prices will not increase easily have been deeply entrenched, due mainly to the experience of prolonged low growth and deflation. Moreover, consumers seem to be reluctant to increase their consumption, as it is now considered reasonable to expect to live for 100 years and therefore they have to save for future life events. Under these circumstances, firms' and households' medium- to long-term inflation expectations are more or less unchanged (Chart 9). Theoretically, inflation expectations are influenced by both the backward-looking (or adaptive) component that reflects past rates -- i.e., the observed inflation rate -- and the forward-looking component that reflects the progress in the Bank's pursuit of monetary easing through its strong commitment to achieving the price stability target. In practice, they seem to be greatly influenced by the observed inflation rate, as shown in the recent figures for firms' and households' inflation expectations. This suggests that, if prices start to rise gradually, inflation expectations will be pushed up, which in turn will lead to an increase in future actual prices. In other words, to start a virtuous cycle, a rise in prices is the key, as this will change the perception of firms and households regarding future prices, which can accelerate the pace of increase in actual prices.

On the consumer front, in a wide range of age groups, consumption based on preference or experience has begun to be observed recently. These categories of consumption are value-oriented, in that consumers actively make expenditures on, for example, products, services, and entertainments that fit well with their values. If consumption of items in such categories further expands and firms accordingly can set prices based on developments in consumer behavior, consumers will gradually become more tolerant of price rises.

F. Outlook for Prices in Japan

Based on these three aspects -- the supply and demand conditions in the overall economy, factors from a micro perspective, and firms' and households' mindset -- I will touch on the outlook for prices. Going forward, amid the positive output gap, firms' efforts to raise prices are likely to be seen broadly, and firms' and households' mindset is expected to change accordingly. As this virtuous cycle among the three aspects starts to operate gradually, prices are likely to rise. The momentum toward achieving the price stability target has been maintained, and thus the year-on-year rate of change in the CPI is likely to increase gradually toward 2 percent, albeit with fluctuations caused by the effects of such factors as developments in crude oil prices. Specifically, the medians of the Policy Board members' forecasts for the year-on-year rate of change in the core CPI presented in the January 2019 Outlook Report are 0.8 percent for fiscal 2018, 1.1 percent for fiscal 2019, and 1.5 percent for fiscal 2020 (Chart 6).

In order to achieve the price stability target and thereby contribute to the sound development of the economy, it also is essential for the Bank to not solely focus on price rises but also ensure subsequent rises in corporate profits and real wages. Corporate managers are making various efforts on a daily basis in terms of improving productivity and efficiency, cutting costs, and providing high-quality products and services. As a result of these efforts, in an environment where prices rise moderately through an increase in the value-added of products and services, corporate profits are likely to increase. In this case, wages of employees also would rise, as would household income. With increased household income, people are likely to spend more on products and services, making corporate profits increase even more. I consider it important to ensure that this virtuous cycle can operate.

II. Conduct of Monetary Policy

A. Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control

Let me now turn to the Bank's monetary policy.

Following the introduction of QQE in April 2013, the Bank has been pursuing QQE with Yield Curve Control since September 2016 toward achieving the price stability target of 2 percent.

Under this policy framework, controlling short- and long-term interest rates -- the so-called yield curve control -- facilitates the formation of term structure of interest rates that is most appropriate for achieving the price stability target. Specifically, in the guideline for market operations, the Bank sets the short-term policy interest rate at minus 0.1 percent and decides to purchase Japanese government bonds (JGBs) so that 10-year JGB yields will remain at around zero percent (Chart 10).

Since the introduction of QQE with Yield Curve Control in September 2016, short- and long-term interest rates have been maintained at levels consistent with the Bank's guideline for market operations, and the output gap has remained positive. As for prices, the year-on-year rate of change in the core CPI has increased by more than 1 percentage point over the past two and a half years, from minus 0.5 percent for September 2016 to the range of 0.5-1.0 percent for January 2019. With regard to inflation expectations, results of the Bank's December 2018 *Opinion Survey on the General Public's Views and Behavior* showed that, while medium- to long-term expectations remained low, the proportions of respondents who answered that prices would go up one year from now have increased recently, and that seems to be a sign of change in people's perception of future prices (Chart 11). Although there is still some way to go for the core CPI to increase toward the price stability target of 2 percent, it is crucial to resolutely continue with powerful monetary easing under QQE with Yield Curve Control.

B. Durability of Monetary Easing

Almost six years have passed since the introduction of QQE in April 2013. As I mentioned earlier, firms' efforts to raise prices and changes in firms' and households' mindset are likely

to gradually proceed on the whole. However, firms' cautious wage- and price-setting stance and households' cautiousness toward price rises remain deeply entrenched, and attention is warranted on the possibility that the rise in CPI inflation will continue to be constrained for a long period. With these factors in mind, durability of monetary policy should be considered in the future policy conduct.

So, what are the keys to enhancing the durability of monetary policy? I believe there are three points in this regard. Just like a distance runner, we need (1) a commitment to keep on running, (2) flexibility to adapt to changes in conditions, and (3) a running economy to maintain good performance.

1. Commitment to keep on running

The first point -- the commitment to keep on running -- refers to the Bank's clarification of its future policy stance, so as to secure and maintain public confidence in its policy actions. In July 2018, the Bank introduced forward guidance in which it made clear that it would "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." By doing so, the Bank has been working to strengthen its commitment to achieving the price stability target (Chart 12).

2. Flexibility to adapt to changes in conditions

On the second point, the flexibility, it is important -- much like an athlete preparing to perform by stretching, so as to mitigate risk of injury -- to have a certain degree of flexibility in the monetary policy conduct. In this regard, the Bank implemented measures to enhance the durability of QQE with Yield Curve Control in July 2018. Specifically, upon maintaining the target level of 10-year JGB yields at around zero percent, the Bank made it clear that they "may move upward and downward to some extent mainly depending on developments in economic activity and prices" (Chart 12). Given that interest rate formation became somewhat rigid since the introduction of yield curve control, the Bank has taken this new measure -- through the flexible JGB purchases -- in further consideration of the impact on the JGB market functioning. Let me note that the Bank does not intend to raise

the level of yields at present; it will purchase JGBs promptly and appropriately in the event of a rapid increase in the yields. In addition to this measure, the Bank has allowed flexibility in purchasing exchange-traded funds (ETFs) and Japan real estate investment trusts (J-REITs) so that their amounts outstanding will increase at annual paces of about 6 trillion yen and about 90 billion yen, respectively. Specifically, the Bank decided that it "may increase or decrease the amount of purchases depending on market conditions" with a view to lowering risk premiums of asset prices in an appropriate manner. In these ways, the Bank has worked to enhance the flexibility and sustainability of the current monetary policy framework.

3. Running economy to maintain good performance

The third point is the running economy, which means the efficient use of energy when running long distance. In a similar way, it is important to maintain the optimal conduct of monetary policy while weighing its positive effects against the accompanying costs and the side effects. The framework of yield curve control has the function of efficiently reducing short- and long-term interest rates to extremely low levels, through the large stock effect of reducing interest rates reflecting the cumulative amount of the Bank's JGB holdings, and thereby leading to stimulating economic activity. On this point, let us focus on a more micro perspective of the structure of the JGB market. At present, a considerable amount of the newly issued 10-year JGBs are withdrawn from the market about six months after their issuance and are purchased by the Bank, and the amount outstanding of JGBs in the market continues to decline. Even in this situation, financial institutions need to hold a certain amount of JGBs under a low interest rate environment for various purposes such as for funding; namely, collateral held at the Bank through market operations, that under derivative contracts, that for foreign currency funding, and that for repo transactions in Japanese yen. If the amount outstanding of JGBs in the market continues to decrease, it is likely that the amount outstanding of JGBs held by some financial institutions gradually will approach the minimum level needed. The Bank considers it important that, by carefully monitoring their demand, it will continue to appropriately adjust to the situation through, for example, changing the amount of JGB purchases at each auction.

C. Durability of Financial Institutions

It is essential for the Bank to not only enhance the durability of monetary policy but also pay due attention to the fact that the effects of monetary policy spread to the overall economy mainly through financial institutions. In that sense, the Bank should closely monitor the durability of financial institutions so as to ensure that they can continue to fully carry out their financial intermediation function.

Financial institutions have been underpinning their profits by realizing gains on the sales of securities and reversing allowance for doubtful accounts, as downward pressure on their profits has been increasing mainly against the background of the declines in the population and the number of firms across regions, in addition to the current low interest rate environment. Taking a look at their core profitability, average contract interest rates on new loans have been at extremely low levels with financial conditions remaining accommodative. The numerical value obtained by subtracting overhead cost ratios from said rates shows that the value for regional banks, for example, currently stands at around 10 basis points, which is significantly below the average credit cost ratio over the past 20 years. In addition, regional banks and *shinkin* banks have been registering higher growth in lending than major banks, and they have been extending loans such as to middle-risk firms with relatively high credit risk and to rental housing businesses.

Going forward, if the economy were to enter a recessionary phase, a worsening of financial conditions at such firms and businesses might materialize as credit risk. Moreover, if borrowing firms' default rates increase, it will be necessary for financial institutions to accumulate reserves for doubtful accounts across the entire range of loan portfolios, and attention is warranted on this point as it could be a factor triggering an acceleration of deterioration in such institutions' profits.

On this point, at least for now, I believe that financial institutions in Japan as a whole have strong resilience against stress in terms of both capital and liquidity, and stability in the financial system has been maintained. However, close attention should continue to be paid to developments in the risk-taking stance and financial soundness of financial institutions,

including regional ones, from the perspective of monitoring those effects on the financial system and the functioning of financial intermediation.

As the Bank resolutely continues with the current monetary easing policy, it will conduct monetary policy, while examining all relevant risks, in an appropriate manner so that the momentum toward achieving the price stability target will be maintained.



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Hitoshi Suzuki
Bank of Japan

Global Economy

IMF Projections (as of January 2019)

real GDP growth rate, y/y % chg.

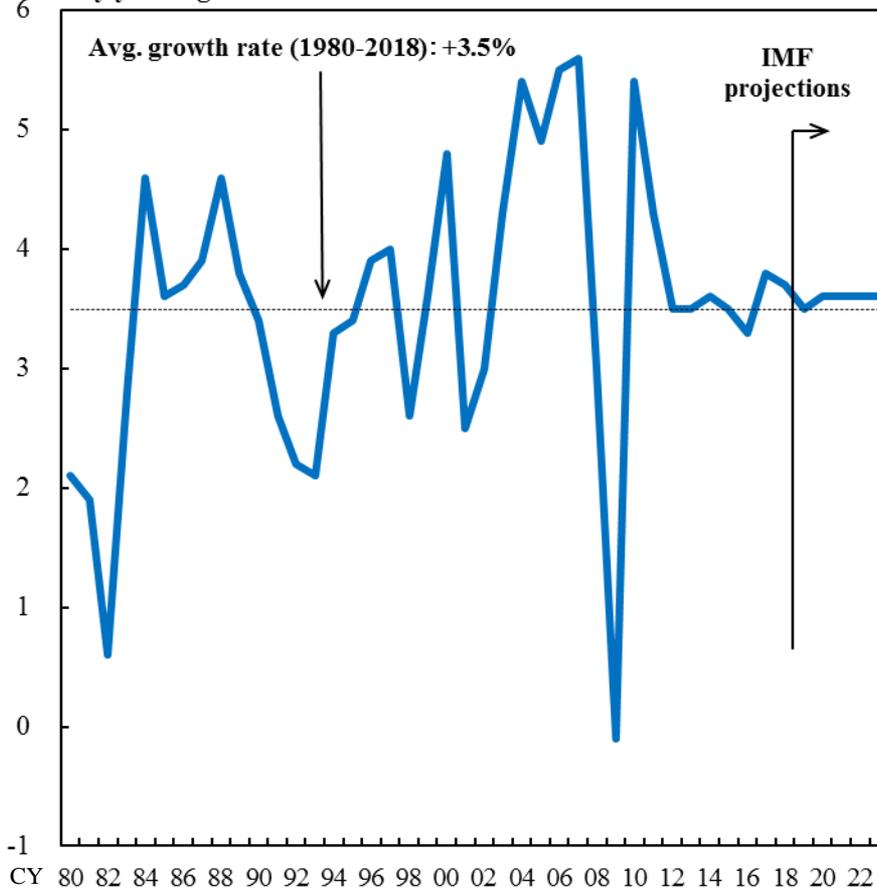
CY	2017	2018	2019 projection	2020 projection
World	3.8	3.7	3.5 (-0.2)	3.6 (-0.1)
Advanced economies	2.4	2.3	2.0 (-0.1)	1.7 (0.0)
United States	2.2	2.9	2.5 (0.0)	1.8 (0.0)
Euro area	2.4	1.8	1.6 (-0.3)	1.7 (0.0)
United Kingdom	1.8	1.4	1.5 (0.0)	1.6 (+0.1)
Japan	1.9	0.9	1.1 (+0.2)	0.5 (+0.2)
Emerging market and developing economies	4.7	4.6	4.5 (-0.2)	4.9 (0.0)
Emerging and developing Asia	6.5	6.5	6.3 (0.0)	6.4 (0.0)
China	6.9	6.6	6.2 (0.0)	6.2 (0.0)
ASEAN	5.3	5.2	5.1 (-0.1)	5.2 0.0
Russia	1.5	1.7	1.6 (-0.2)	1.7 (-0.1)
Latin America and the Caribbean	1.3	1.1	2.0 (-0.2)	2.5 (-0.2)

Source: *World Economic Outlook Update*, International Monetary Fund (IMF).

Note: Figures in parentheses are the difference from the October 2018 projections.

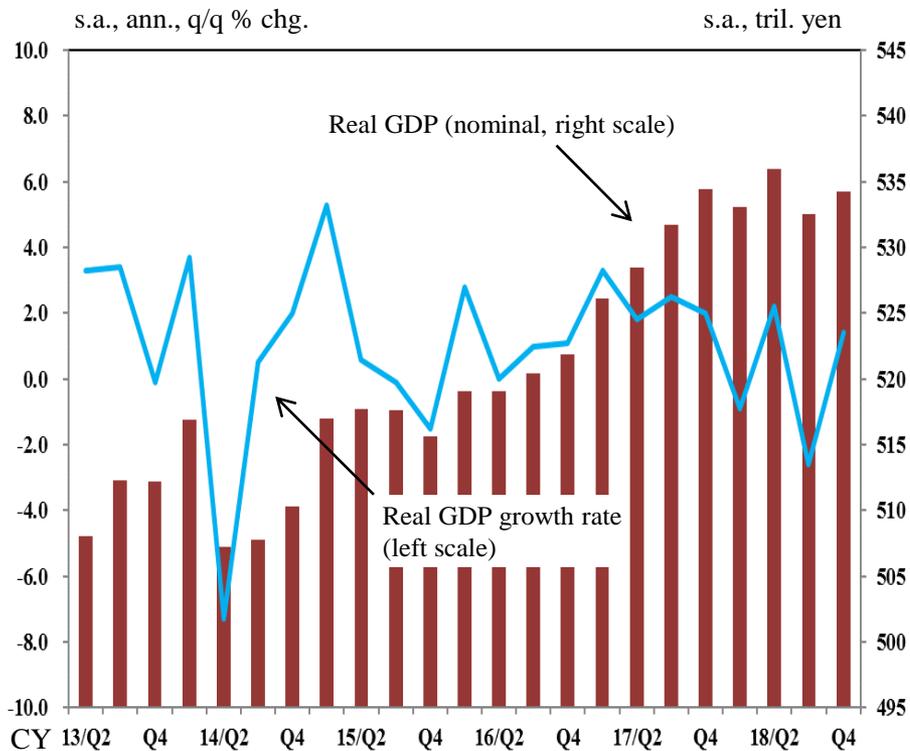
Real GDP Growth Rate

y/y % chg.



Source: IMF.

Japan's Real GDP



Source: Cabinet Office.

s.a., q/q % chg.

	2017	2018			
	Q4	Q1	Q2	Q3	Q4
Real GDP	0.5	-0.2	0.6	-0.7	0.3
[ann., q/q]	[2.0]	[-0.9]	[2.2]	[-2.6]	[1.4]
Private consumption	0.5	-0.2	0.6	-0.2	0.6
Private non-resi. investment	0.8	1.0	2.5	-2.7	2.4
Private residential investment	-3.2	-2.0	-2.0	0.5	1.1
Public demand	-0.0	0.0	-0.1	-0.3	0.4
Exports of goods & services	2.2	0.4	0.4	-1.4	0.9

Source: Cabinet Office.

Regional Economic Assessments

Chart 3

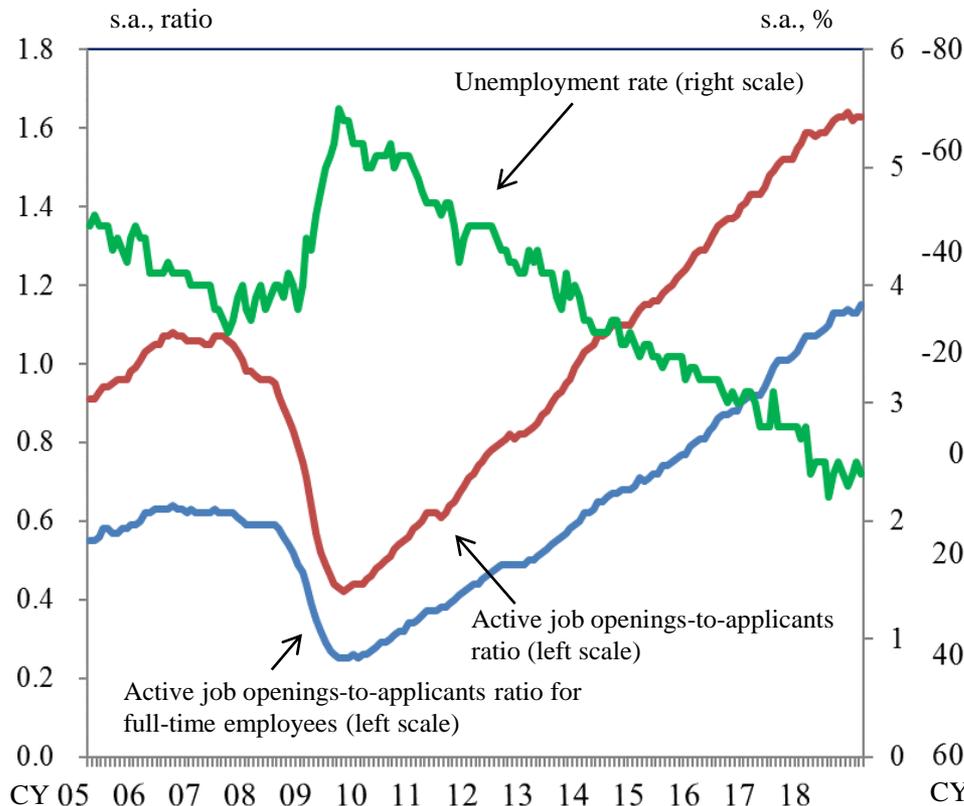
Comparison of Previous and Current Assessments by Region

Region	Assessment in October 2018	Changes from the previous assessment	Assessment in January 2019
Hokkaido	The economy has been recovering moderately as a trend, although downward pressure due to the effects of the 2018 Hokkaido Eastern Iburi Earthquake is being observed.		The economy has been recovering moderately as a trend, and downward pressure due to the effects of the 2018 Hokkaido Eastern Iburi Earthquake has continued to ease.
Tohoku	The economy has continued to recover moderately.		The economy has continued to recover moderately.
Hokuriku	The economy has been expanding.		The economy has been expanding.
Kanto-Koshinetsu	The economy has been expanding moderately.		The economy has been expanding moderately.
Tokai	The economy has been expanding.		The economy has been expanding.
Kinki	The economy has been expanding moderately, although effects of Typhoon No. 21 are being observed in economic activity.		The economy has continued to expand moderately.
Chugoku	Although the economy was damaged by the heavy rain in July 2018, it has been expanding moderately as a trend, amid the effects of the heavy rain waning, mainly reflecting the restoration of social infrastructure.		The economy has been expanding moderately.
Shikoku	The economy has been recovering.		The economy has been recovering.
Kyushu-Okinawa	The economy has been expanding moderately, with its growth gaining a more solid footing.		The economy has been expanding moderately, with its growth gaining a more solid footing.

Source: January 2019 *Regional Economic Report*, Bank of Japan.

Labor Market Conditions

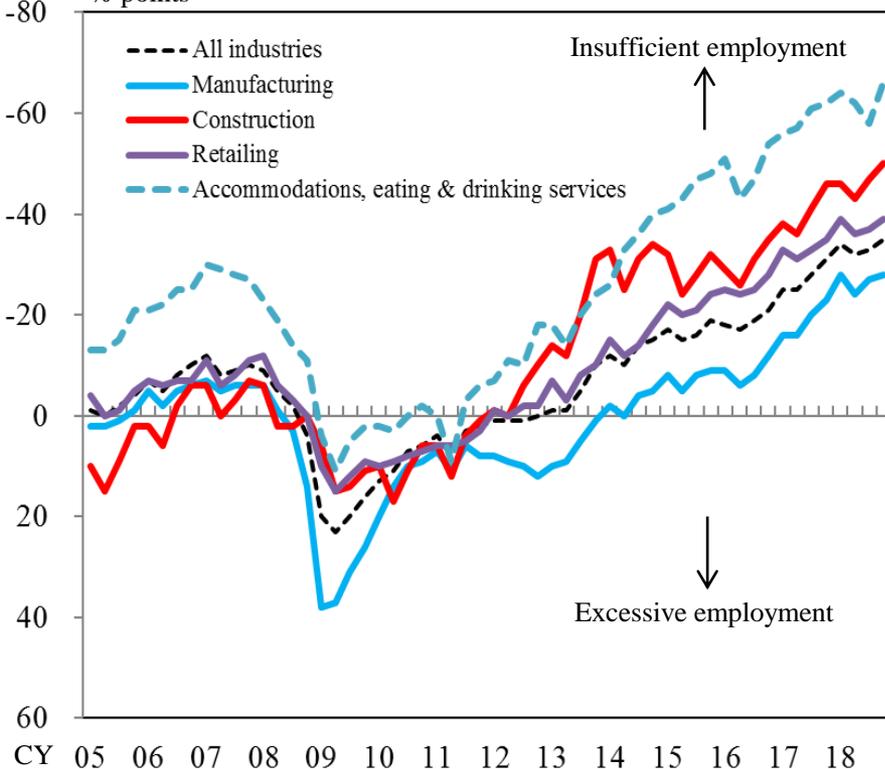
Unemployment Rate and Active Job Openings-to-Applicants Ratio



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

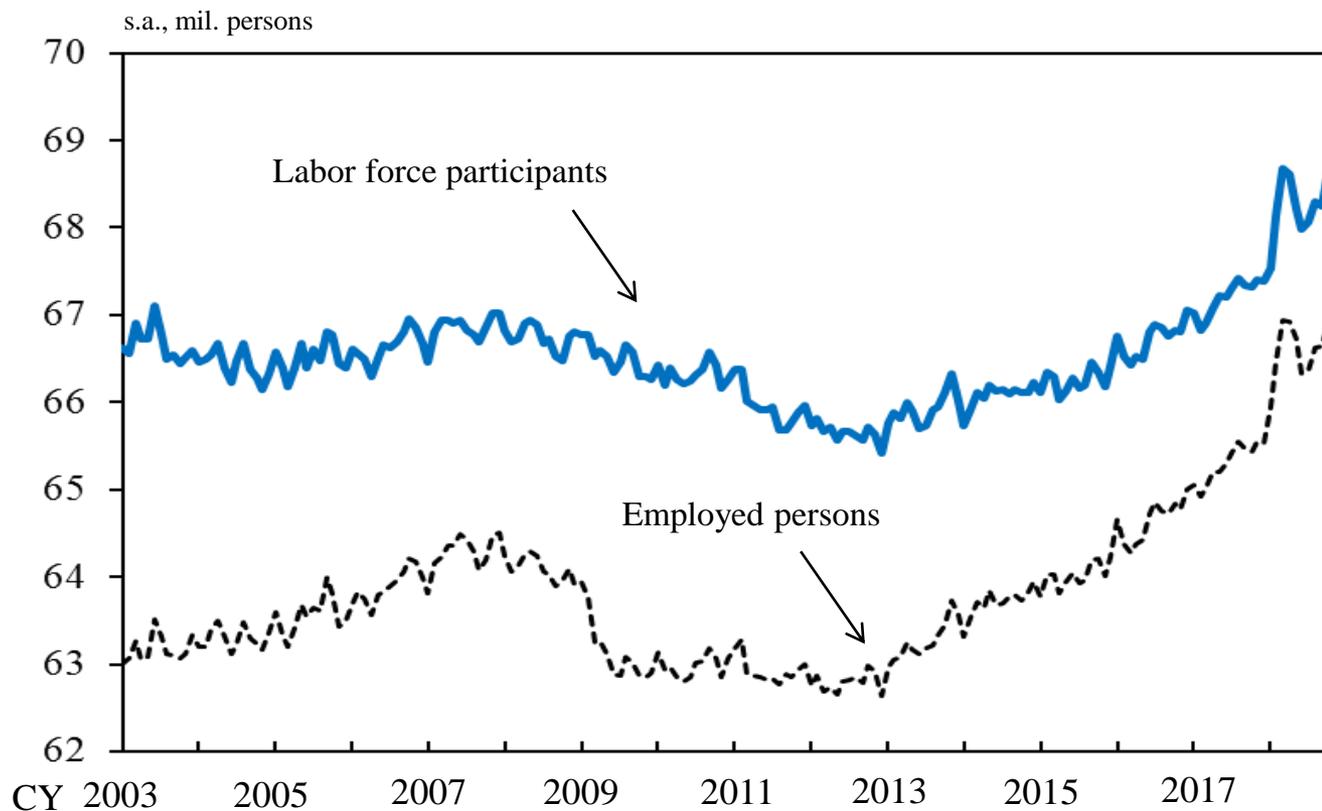
Diffusion Index (DI) for Employment Conditions

reversed, DI ("excessive employment" minus "insufficient employment"), % points



Source: *Tankan* (Short-Term Economic Survey of Enterprises in Japan), Bank of Japan.

Labor Force Participation and Employment



Source: Ministry of Internal Affairs and Communications.

Outlook for Economic Activity and Prices as of January 2019

Forecasts of the Majority of Policy Board Members

y/y % chg.

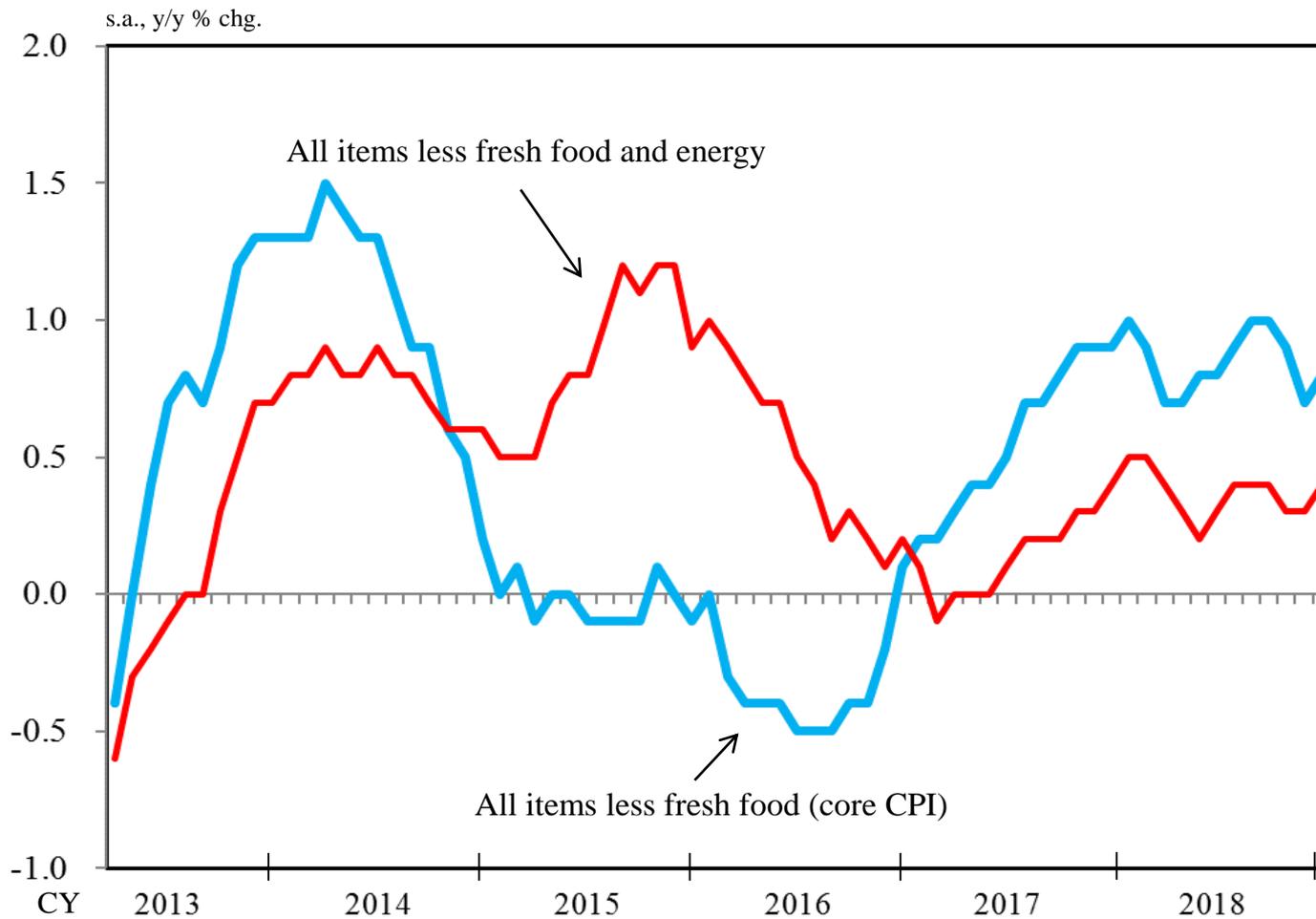
	Real GDP	CPI (all items less fresh food)
Fiscal 2018	+0.9 to +1.0 [+0.9]	+0.8 to +0.9 [+0.8]
Forecasts made in October 2018	+1.3 to +1.5 [+1.4]	+0.9 to +1.0 [+0.9]
Fiscal 2019	+0.7 to +1.0 [+0.9]	+1.0 to +1.3 [+1.1]
Forecasts made in October 2018	+0.8 to +0.9 [+0.8]	+1.5 to +1.7 [+1.6]
Fiscal 2020	+0.7 to +1.0 [+1.0]	+1.3 to +1.5 [+1.5]
Forecasts made in October 2018	+0.6 to +0.9 [+0.8]	+1.5 to +1.7 [+1.6]

Source: January 2019 *Outlook for Economic Activity and Prices*, Bank of Japan.

Notes: 1. Figures in brackets indicate the medians of the Policy Board members' forecasts (point estimates).

2. The forecasts assume the following: (1) the consumption tax will be raised to 10 percent in October 2019 and a reduced tax rate will be applied to food and beverages -- excluding alcohol and dining out -- and newspapers, and (2) with regard to policies concerning the provision of free education, free early childhood education and such measures as free higher education will be introduced in October 2019 and April 2020, respectively.

CPI



Source: Ministry of Internal Affairs and Communications.

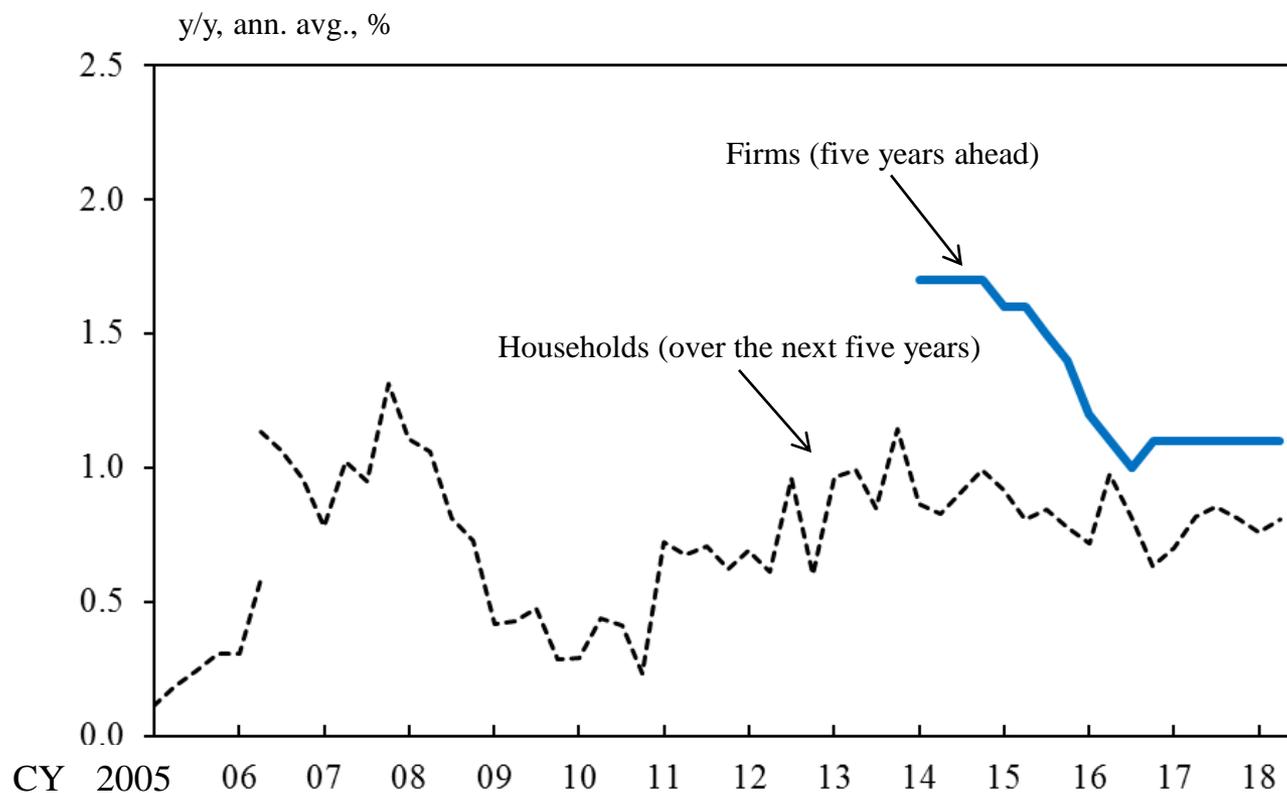
Note: Figures are adjusted for the effects of consumption tax hikes.

Output Gap



Source: Bank of Japan.
 Note: Based on staff estimations.

Inflation Expectations

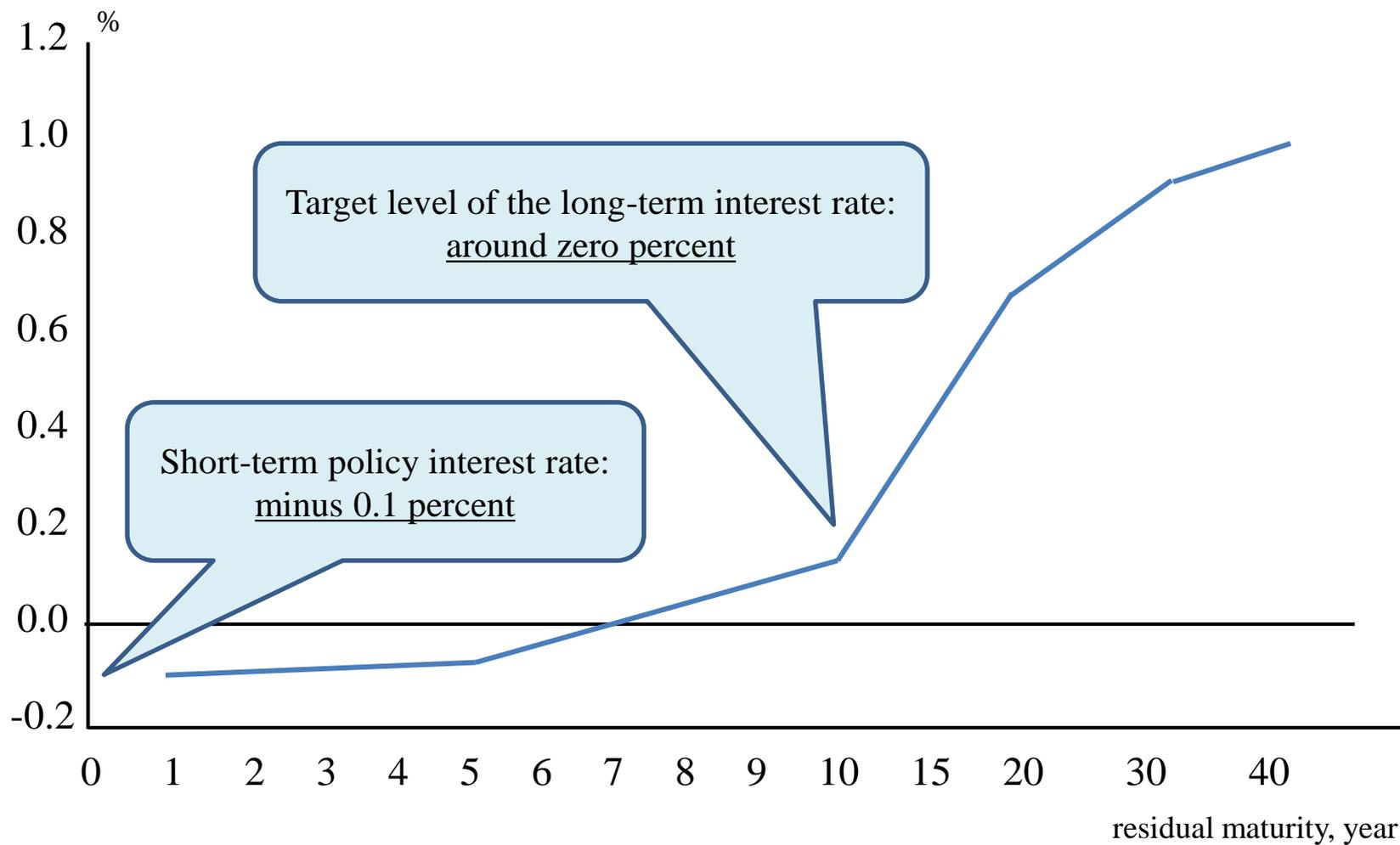


Source: Bank of Japan.

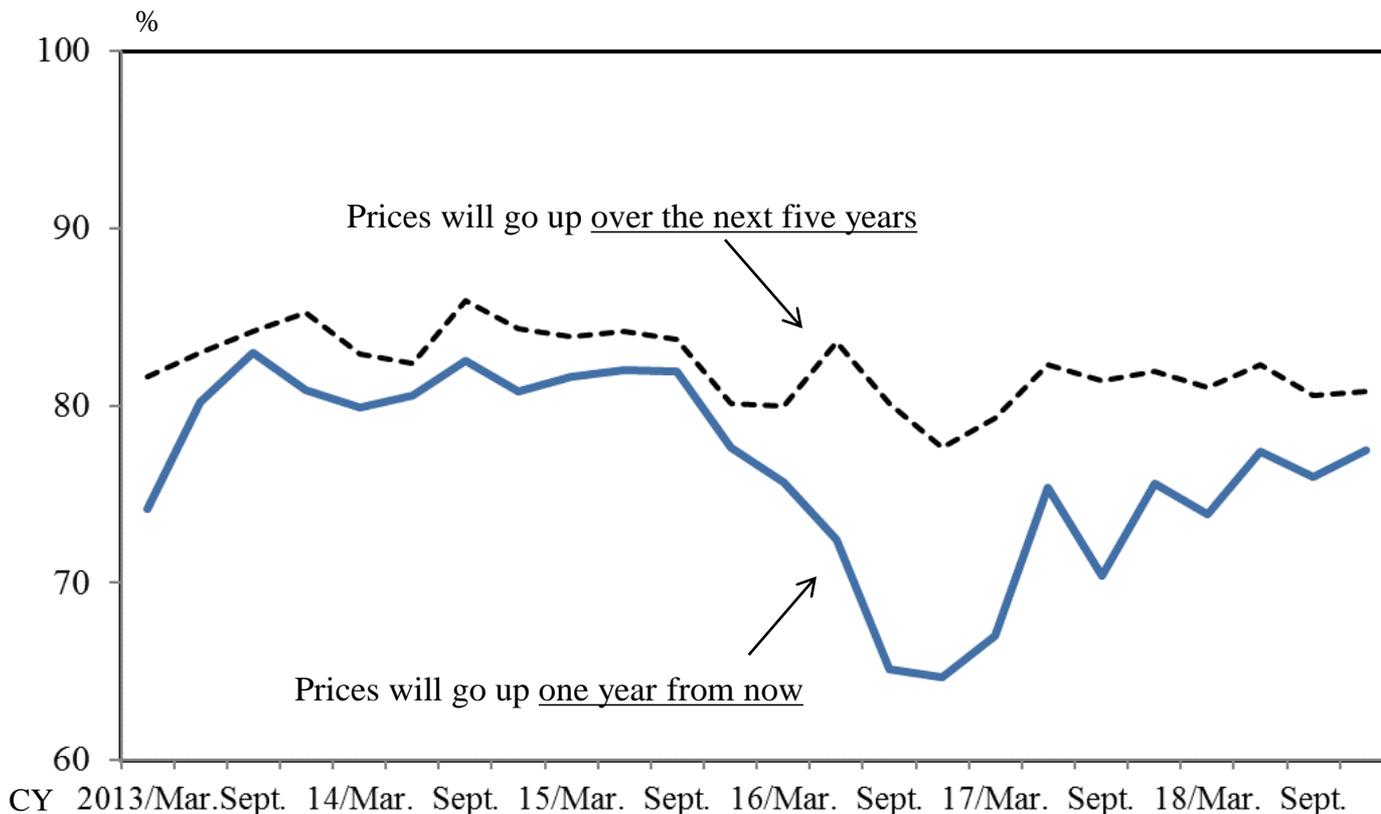
Notes: 1. Figures for households are from the *Opinion Survey on the General Public's Views and Behavior* (Opinion Survey), estimated using the modified Carlson-Parkin method.

2. Figures for firms are those for the "outlook for general prices (all industries and enterprises, average)" in the *Tankan*.

Yield Curve Control



Perception of Future Prices



Source: December 2018 Opinion Survey, Bank of Japan.

Notes: 1. Disregarding the effects of consumption tax hikes.

2. Figures for both one year from now and over the next five years comprise the choices "will go up significantly" and "will go up slightly" that are found in the questionnaire.

Strengthening the Framework for Continuous Powerful Monetary Easing

Likely to take more time than expected to achieve the price stability target of 2%

Appropriate to maintain the output gap within positive territory for as long as possible

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."

Yield curve control and ETF purchases

The long-term interest rate: The Bank will purchase JGBs so that 10-year JGB yields will remain at 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.

ETF purchases: The Bank will purchase ETFs so that their amount outstanding will increase at an annual pace of about 6 trillion yen. The Bank may increase or decrease the amount of purchases depending on market conditions.

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