

January 31, 2018

Bank of Japan

## Japan's Economy and Monetary Policy

Speech at a Meeting with Business Leaders in Oita

Kikuo Iwata

Deputy Governor of the Bank of Japan

(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 Oita Prefecture. 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 Oita Branch.

At the Monetary Policy Meeting (MPM) held last week, the Bank updated its projections for Japan's economic activity and prices through fiscal 2019 and released them in the January 2018 *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. The Current Situation of Economic Activity and Its Outlook

Let me start by talking about economic developments. Japan's economy is expanding moderately, with a virtuous cycle from income to spending operating. The real GDP growth rate for the July-September quarter of 2017 was 2.5 percent on an annualized basis, representing positive growth for seven consecutive quarters (Chart 1). The benefits of the economic improvement have been spreading to a wide range of economic entities, and according to the Bank's *Tankan* (Short-Term Economic Survey of Enterprises in Japan) released in December 2017, the diffusion indexes (DIs) for business conditions have continued to be positive, not only for large enterprises and manufacturers but also for small enterprises and nonmanufacturers. By region, in the Bank's January 2018 *Regional Economic Report*, all nine regions across the country, including the Kyushu region, showed positive economic assessments, using phrases such as moderate recovery and expansion. In what follows, I would like to talk about the current situation of Japan's economic activity and its outlook in more detail.

#### **Overseas Economies**

I would first like to touch upon developments in overseas economies. Looking back, overseas economies remained subdued following the global financial crisis in 2008. However, since around the second half of 2016, the positive effects of economic recovery in advanced economies have started to spread to emerging economies, and so-called

synchronous growth has been achieved recently, with advanced and emerging economies growing in tandem. In this situation, production and trade activity of the manufacturing sector have become active due to the completion of inventory adjustments and an increase in business fixed investment on a global basis. World trade volume last year registered high growth that reflected such developments, growing at a faster pace than the global economy for the first time in six years. The global economy is expected to continue growing firmly for the time being. According to the January 2018 *World Economic Outlook* (WEO) *Update* released by the International Monetary Fund (IMF), the global GDP growth rates for both 2018 and 2019 are expected to register relatively high growth of 3.9 percent, exceeding the long-term average since the 1990s (Chart 2).

#### Current Situation of Japan's Economic Activity

As I noted at the beginning, Japan's economy is expanding moderately, supported in part by such growth in overseas economies. With regard to the corporate sector, exports have shown high growth mainly for capital goods and IT-related goods. In particular, exports to China as well as the NIEs and the ASEAN economies have been rapidly increasing recently, and real exports for November 2017 reached record high levels, exceeding those seen before the global financial crisis. Production has also been on an uptrend on the back of a rise in demand both at home and abroad. Under these circumstances, the ratio of firms' current profits to sales has been at a record high level, and the DIs for business conditions for all industries and enterprises in the December 2017 Tankan suggest that business conditions have improved for six consecutive quarters, being at a favorable level seen for the first time in 26 years, since 1991. Business fixed investment has continued on an increasing trend in a wide range of industries, with corporate profits and business sentiment improving (Chart 3). Specifically, firms in the nonmanufacturing sector in industries such as restaurants, retailing, and construction have been significantly increasing their labor-saving and efficiency-improving investment (Chart 4). For instance, the introduction of online reservation systems and self-checkout machines across the country is no longer a new phenomenon. While the direct cause of such investment is acute labor shortage, it is also attributable to new technologies such as robots and artificial intelligence (AI) having become available for actual business activities as a result of technological innovation in recent years. For example, there have been various ideas recently related to making use of

the latest technologies, such as using robots for heavy labor at nursing care facilities and drones for delivery services. Such positive corporate activities also have been firmly supported by financial institutions' accommodative lending attitudes.

Turning to the household sector, as I mentioned earlier, labor market conditions have continued to tighten steadily amid economic expansion (Chart 5). The active job openings-to-applicants ratio for December 2017 improved to 1.59, a level seen for the first time in about 44 years, since 1974, and the unemployment rate has declined to a level seen for the first time in about 24 years. In this situation, wages have been rising moderately. Specifically, the year-on-year rate of increase in hourly wages of part-time employees, which are sensitive to economic activity, has marked relatively high growth of around 2 percent recently. Although the pace of wage increases for full-time employees has remained sluggish compared to that for part-time employees, the situation is gradually changing. Base pay rises returned in 2014, and moves to raise the starting salaries of full-time employees have been observed at many firms recently, aiming to secure the number of employees needed. Against the background of such improvement in the employment and income situation, private consumption has been increasing moderately, albeit with fluctuations (Chart 6). In detail, durable goods such as automobiles and household electrical appliances have been on a moderate increasing trend, due mainly to replacement demand, and nondurable goods such as clothes and food have been picking up recently. The favorable employment situation, together with the rise in stock prices, has led to an improvement in consumer sentiment, which also underpins consumption activities.

#### **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. Exports are expected to continue their moderate increasing trend on the back of the growth in overseas economies, and business fixed investment and private consumption are likely to follow an increasing trend on the back of highly accommodative financial conditions and underpinnings through the government's past stimulus measures. According to the January 2018 Outlook Report, the medians of the Policy Board members' forecasts of the real GDP growth rates for fiscal 2017 and 2018 are 1.9 percent and 1.4 percent, respectively (Chart 7). These figures are

above Japan's potential growth rate, which is estimated to be in the range of 0.5-1.0 percent. In fiscal 2019, business fixed investment is likely to decelerate, mainly reflecting Olympic Games-related demand peaking out, and household spending is likely to turn to a decline in the second half of the fiscal year due to the effects of the scheduled consumption tax hike. Although the growth pace is projected to decelerate, the economy is expected to continue expanding, with the projected real GDP growth rate at 0.7 percent for fiscal 2019, as an increase in exports on the back of the growth in overseas economies underpins the economy.

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. Uncertainty surrounding overseas economies seems to have abated compared to a while ago, as seen in economic recovery in emerging economies clearly taking hold and progress being made regarding the debt problem for the financial sector in Europe. However, the U.S. economic policies and negotiations on the United Kingdom's exit from the European Union (EU) continue to warrant attention. The Bank will continue to closely examine developments in overseas economies, including geopolitical risks.

#### **II. Price Developments and Their Outlook**

#### **Price Developments**

Now, I will move on to price developments. The year-on-year rate of change in the consumer price index (CPI) in Japan has been increasing gradually since around mid-2016, mainly on the back of a rise in energy prices (Chart 8). The rate of change in the CPI excluding fresh food registered 0.9 percent in November and December last year, which is the level last seen in October 2014. With actual inflation rising, people's inflation expectations shifted from the weakening phase and have been more or less unchanged recently.

However, excluding the effects of energy prices, the rate of change in the CPI has remained slightly positive, continuing to show relatively weak developments. While this reflects temporary factors such as a reduction in charges for mobile phone services, this is mainly attributable to the fact 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. As evidence of such mindset and behavior, firms have been limiting wage increases -- which correspond to the labor shortage -- mainly to part-time employees, and it is taking time for such increases to spread to full-time employees. In addition, a wide range of firms have been making efforts to absorb a rise in labor costs by increasing labor-saving investment and streamlining their business processes through such measures as discontinuing late-night services.

#### **Outlook for Prices**

As these developments show, prices are relatively weak. Going forward, however, they are expected to overcome this situation, and the year-on-year rate of change in the CPI is likely to increase toward the price stability target of 2 percent. 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, and the yen's depreciation to date is expected to push up prices of such items as durable goods. Second, as the output gap improves further, firms' stance is likely to gradually shift toward raising wages and prices, and the inflation rate is projected to rise in line with wage increases. Third, with these factors pushing up actual inflation, a virtuous cycle is expected to operate in which people's inflation expectations rise accordingly, leading to a further increase in actual inflation. Bearing this mechanism in mind, the January 2018 Outlook Report shows that the medians of the Policy Board members' forecasts of the year-on-year rate of change in the CPI excluding fresh food are 0.8 percent for fiscal 2017, 1.4 percent for fiscal 2018, and on a basis excluding the effects of the consumption tax hike, 1.8 percent for fiscal 2019 (Chart 7).

The key to realizing the inflation mechanism that I just outlined is firms' wage- and price-setting stance. With regard to the price-setting stance, there has been a gradually increasing number of cases recently where firms reflect in their sales prices the increased labor costs and input costs. Media reports on price rises seem to have increased substantially of late. As mentioned in the Bank's *Regional Economic Report*, many firms

reported that they have been reaching the limit to which they can undertake labor-saving investment in order to absorb increasing labor costs.

Regarding the wage-setting stance, in a situation where labor shortage is not showing signs of being relaxed, but rather is becoming even more acute, an increasing number of firms seem to be considering raising wages of not only part-time but also full-time employees. While such an increase in labor costs contributes to pushing up sales prices, if many firms increase wages, households' income situation will improve and more consumers consequently will come to accept price rises. If that happens, price rises will not result in losing customers, likely leading to an increase in sales. As this shows, wage increases by firms also benefit themselves.

In relation to wage increases, some argue that firms should allocate more of their cash on hand to their employees (Chart 9). While it is true that corporate savings have accumulated to a substantial degree lately, there are various backgrounds to this. For example, with memories of the severe funding conditions during the global financial crisis still fresh, some firms say that, for the time being, they prefer to accumulate earned cash on hand to be prepared for any future crisis. Others point to the fact that, even if they invest in capital and human resources, they cannot gain enough profits as Japan's expected growth rate is low. However, in a situation where Japan's economy has been improving steadily and is likely to continue expanding going forward, these do not seem to be the main reasons for the increase in corporate savings. Rather, it appears that the recent rapid increase in corporate profits was an unexpected windfall for firms. If that is the case, the savings are likely to be used for business fixed investment and wage increases with some time lag. While an increase in fixed investment is preceding so far, the increased savings are likely to lead to wage growth going forward, as real wages have not been rising in line with labor productivity.

#### III. The Bank's Conduct of Monetary Policy

Next, I will talk about the Bank's conduct of monetary policy. The Bank has been conducting monetary policy under "Quantitative and Qualitative Monetary Easing (QQE)

with Yield Curve Control" since September 2016. This framework consists of two components (Chart 10).

The first is an inflation-overshooting commitment. This is the Bank's strong commitment that it 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. With this in mind, the Bank, under the inflation-overshooting commitment, has committed itself to continuing with large-scale monetary easing until such situation is achieved.

The second component is yield curve control. The Bank facilitates the formation of the yield curve that is considered most appropriate for achieving the price stability target of 2 percent, taking account of developments in Japan's economic activity and prices as well as financial conditions. At present, it 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 zero percent, conducting JGB purchases so as to achieve this target level.

As I mentioned earlier, Japan's economy is expanding moderately but prices are relatively weak. Thus, there is still a long way to go to achieve the price stability target of 2 percent. In light of such recent developments in economic activity and prices as well as financial conditions, the Bank deems it important to continue to persistently pursue powerful monetary easing under the framework of "QQE with Yield Curve Control."

While the Bank believes it important to continue with the current monetary easing persistently, some argue that continuing with monetary easing for a long period entails risks. In what follows, I would like to express my views on the two risks that have been pointed out.

The first risk of continuing with the current monetary easing policy is that the efficiency of Japan's economy would be hampered, due to the continuation of firms' inefficient resource

allocation and to firms with low productivity remaining in place amid funding costs staying at significantly low levels. However, I instead think that it would be difficult to heighten the efficiency and dynamism of the economy and thereby raise productivity unless the economy is underpinned by an appropriate conduct of monetary easing. This is because, under deflation, strong resistance will arise against the pain -- such as an increase in unemployment -- that emerges in the course of raising productivity through firms' efforts. In Japan's economy today, monetary policy has exerted its intended effects, and supply-side constraints such as shortages of labor and capital have become evident amid an improvement in the output gap. Given this situation, now is the best opportunity for firms to promote investment in human resources and capital for the purpose of raising labor productivity. In the process of raising labor productivity, there usually is a concern of an increase in unemployment, which is one of the reasons why firms are reluctant to undertake fixed investment, including in software. Nevertheless, in the situation of the current labor shortage, there are good chances to change jobs -- enough to absorb the possible increase in unemployment. In this context, the Bank's current monetary policy can be considered as contributing to providing the conditions for raising labor productivity. In fact, as I mentioned earlier, a pronounced increase has been observed in investment aimed at saving labor and streamlining business processes in industries where labor shortage is acute.

Speaking of raising labor productivity, firms will be more strongly motivated to do so through creating a competitive environment by abolishing competition-restricting regulations, including those on market entry and on prices, than through support policies such as the provision of subsidies for firms. If the government promotes its initiatives toward enhancing competition, such as abolishment of the so-called bedrock regulations, many firms are expected to enter the market. In such situation, if more firms take advantage of accommodative financial conditions, capital investment will be reinforced and technological innovation will progress, leading the potential growth rate to rise and monetary easing effects to become larger. As a result, the price stability target of 2 percent can be achieved earlier than projected. Therefore, I expect that the government's regulatory and institutional reforms will be pushed forward strongly.

The second risk pointed out is that, if the current monetary easing measures will continue to be taken, fiscal discipline will loosen and fiscal sustainability will be lost because the government can issue debt at low interest rates under such circumstances. While fiscal management is conducted under the responsibility of the government and the Diet, it is important to secure the market's confidence in medium- to long-term fiscal soundness. In the joint statement by the government and the Bank of Japan in January 2013, it says that the government "will steadily promote measures aimed at establishing a sustainable fiscal structure."

That being said, a combination of accommodative financial conditions provided by the central bank and fiscal spending proactively carried out by the government is called a "policy mix," and it is well known as a standard macroeconomic policy that synergy effects from both sides can produce stronger economic stimulus effects. In Japan, under the Bank's QQE, the government is to conduct flexible fiscal policy as the second arrow of Abenomics. In my understanding, what is meant by flexible fiscal policy is that the government will formulate a supplementary budget beforehand when an economic downturn is expected, and thereby increase fiscal spending or implement tax reductions.

Then, the issue would be how to reconcile medium- to long-term fiscal soundness and flexible fiscal policy. In what follows, I would like to present my view on this.

Please take a look at the left-hand panel of Chart 11. This shows the year-on-year rates of change in the fiscal balance-to-GDP ratio and the primary balance-to-GDP ratio. The higher the blue and white column graphs go above zero, the larger the reduction in the fiscal deficit-to-GDP ratio and the primary deficit-to-GDP ratio, or in other words, the faster the pace of fiscal austerity. From fiscal 2010 to fiscal 2012, the pace of fiscal austerity was relatively moderate, and the degree of monetary accommodation was not enough.

On the other hand, from fiscal 2013 -- when QQE was introduced -- to fiscal 2015, the pace of fiscal austerity accelerated. In particular, it surged in fiscal 2014 because the consumption tax was raised from 5 percent to 8 percent. Even though the government formulated in that fiscal year economic measures of 5 trillion yen as part of flexible fiscal

policy, the real GDP growth rate declined to minus 0.3 percent.

The pace of fiscal austerity started to slow in fiscal 2015 and decelerated significantly in fiscal 2016. On the back of that decline, coupled with powerful monetary easing, the real GDP growth rate has been increasing since fiscal 2015, outpacing the potential growth rate -- which is estimated to be in the range of 0.5-1.0 percent -- by around 0.5 percentage point.

Please take a look at the right-hand panel of Chart 11. In this panel, the degree of fiscal soundness is shown by developments in the ratio of the amount outstanding of gross government debt to nominal GDP, and we can see that the ratio marked the highest figure in 2014 despite the consumption tax hike in April that year.

In order to properly gauge the fiscal conditions, the ratio of the amount outstanding of net government debt -- calculated by subtracting the amount outstanding of the government's holdings of financial assets from that of gross government debt -- to nominal GDP also should be taken into consideration. As with the case of the ratio of the amount outstanding of gross government debt to nominal GDP, this ratio also rose in 2014, when the consumption tax hike took place. However, given that it has been more or less flat since 2012, one cannot necessarily say that Japan's fiscal conditions are becoming worse.

In considering the combination of fiscal soundness and monetary easing measures, it would be effective to look at the experience of the euro area.

Please take a look at Chart 12. This shows the pace of fiscal austerity and economic growth in the euro area. The pace of fiscal austerity is shown by the annual changes in the following ratios: the fiscal balance-to-GDP ratio; the primary balance-to-GDP ratio; and the ratio of structural balance -- calculated by excluding the effects of economic fluctuations from the actual fiscal balance -- to GDP. As in Chart 11, the higher the column graphs go above zero, the faster the pace of fiscal austerity.

In the euro area, the economy was under strong downward pressure from 2010 to 2012, not only because the degree of monetary accommodation was not enough but also because the

pace of fiscal austerity was accelerating. Consequently, the economy experienced negative growth in 2012 and 2013, and the ratios of the amounts outstanding of both gross and net government debt to nominal GDP rose, even though the governments continued with fiscal austerity.

Through such experience, in 2013, the governments in the euro area started to shift their policy to where the pace of fiscal austerity was slowed. Against this background, monetary policy to increase the degree of monetary accommodation also was introduced successively, and quantitative easing (QE) was introduced in 2015. At one point, a concern arose that the euro area might fall into deflation, just as in the case of Japan. However, the combination of such fiscal and monetary policy worked well and, since 2014, the euro area economy has recovered and its growth rate has been on an uptrend. The ratios of the amounts outstanding of both gross and net government debt to nominal GDP have continued to decline, albeit moderately, even though the governments slowed the pace of fiscal austerity.

Although it is important to achieve fiscal soundness in the medium to long run, the pace of achievement -- or in other words, the pace of fiscal austerity -- affects the real economy largely. If the government rushes to achieve fiscal soundness and accelerates the pace of fiscal austerity, the growth rate will decline. If this happens, fiscal soundness will not be achieved, and achievement of the price stability target of 2 percent also will become difficult.

It has been nearly five years since the introduction of QQE in April 2013. In concluding my speech, let me express my view on economic and price developments, as well as policy effects over the past five years.

First, during the five years since the introduction of QQE, Japan's economic and price developments have improved significantly, and the economy is no longer in deflation, which is generally defined as a sustained decline in prices. Through the implementation of large-scale monetary easing under the strong and clear commitment toward achieving the price stability target of 2 percent, people's basic view on monetary policy has changed drastically, bringing about a rise in inflation expectations and a decline in nominal interest

rates across the entire yield curve. Triggered by the decline in real interest rates, excessive yen appreciation has been corrected and stock prices have risen significantly. On the real economy side, the output gap has improved and the employment situation has done so to a substantial degree.

Second, despite these improvements, we are only halfway to achieving the price stability target of 2 percent. I think the main reason for this is as follows: the observed inflation rates started to decline before inflation expectations anchored at 2 percent, due mainly to the consumption tax hike and the significant decline in crude oil prices, and this led inflation expectations, of which formation has been largely adaptive, to become relatively weak. In this situation, in order to achieve the price stability target of 2 percent, it is necessary to raise the observed inflation rates through an improvement in the output gap, which will be brought about by continuing with monetary easing persistently, and thereby lift inflation expectations. "QQE with Yield Curve Control" that the Bank currently adopts incorporates the mechanism in which the price stability target of 2 percent can be achieved through raising inflation expectations -- although it may take some time -- by maintaining nominal interest rates at low levels. This is the most appropriate monetary policy framework at present, in that it has the largest positive effects and the smallest side effects. The Bank must keep seeking whether there is more appropriate monetary policy, but unless the effectiveness of a new policy is assured, I think it should continue with the current monetary policy.

Third, in addition to an appropriate monetary easing policy, the government's initiatives are important in order to achieve sustainable economic growth under price stability. With a view to achieving further growth in Japan's economy, I strongly expect that the government will set an appropriate pace for fiscal austerity, as I described earlier, and that it will carry out growth strategy -- such as competition policy -- appropriately and powerfully. In addition, under the current economic situation where the increase in income is sluggish and consumption has not gained enough momentum, an income shift -- through an income reallocation policy -- to households with a high propensity to consume is also effective. On this point, the government set out measures to support child rearing and education including the provision of early childcare as well as higher education for free, as part of the "human

resources development revolution" in the New Economic Policy Package. This is an effective macroeconomic policy that can expand domestic demand led by consumption, through properly combining the tax system and fiscal spending and making sure the pace of fiscal austerity is appropriate.

With these initiatives becoming effective, I hope that Japan's economy will achieve higher growth in real terms in the near future under the stable inflation rate of around 2 percent.

#### Conclusion

Since 2016, several natural disasters -- the Kumamoto Earthquake, the torrential rain in Northern Kyushu, and the 18th typhoon in 2017 -- hit Oita Prefecture and caused damage to its tourism and agriculture. I would like to offer my heartfelt sympathies to those who suffered, and I deeply respect the efforts by people in the region who faced difficulties.

In Oita Prefecture, big events are scheduled to take place this year, such as the International ONSEN Summit and the "National Cultural Festival and the National Disabled Craft and Culture Festival." In addition, the Rugby World Cup is to be held next year. I would like to close my speech by expressing my sincere hope that, through these opportunities, the public and private sectors will work together on vitalizing the local economy in various fields, and that the local economy will be strongly revived after the massive disasters.

Thank you very much for your attention.

# Japan's Economy and Monetary Policy

Speech at a Meeting with Business Leaders in Oita

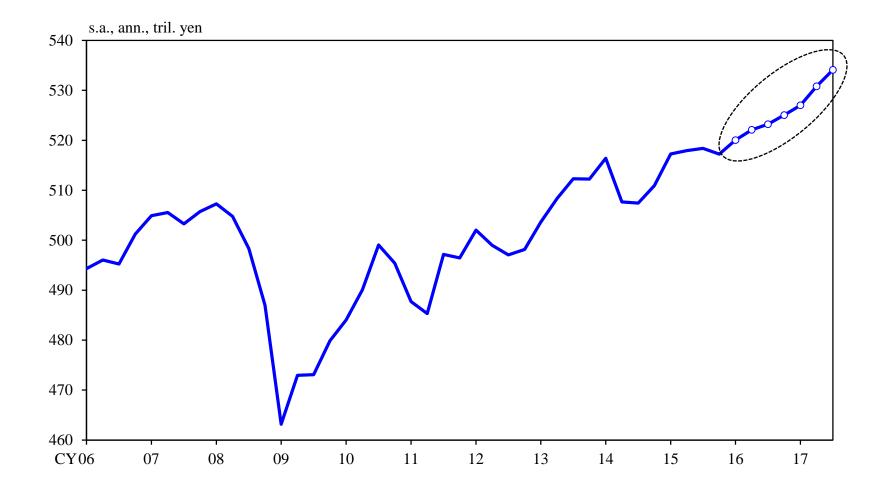
# January 31, 2018

# Kikuo Iwata Deputy Governor of the Bank of Japan

#### Chart 1

1

# Real GDP

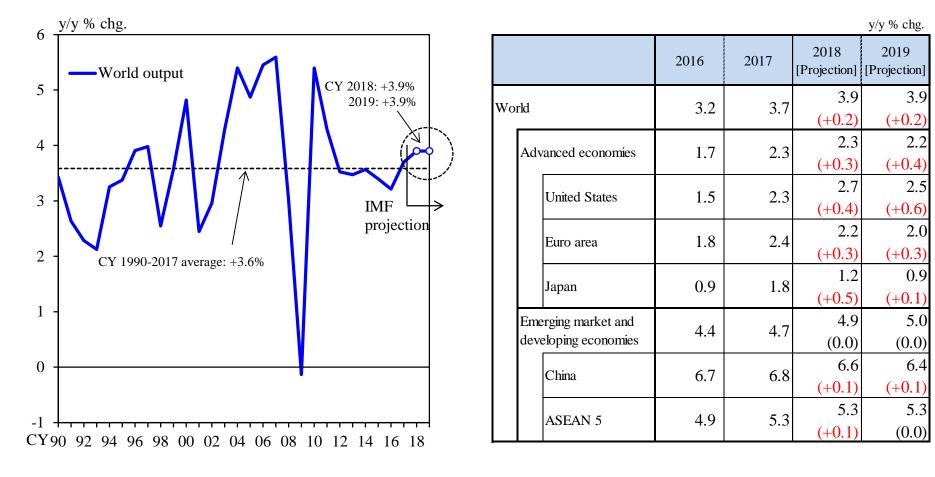


Source: Cabinet Office.

# **Global Economy**

#### Global Real GDP Growth

## Projections of Real GDP Growth by Major Economies (as of January 2018)

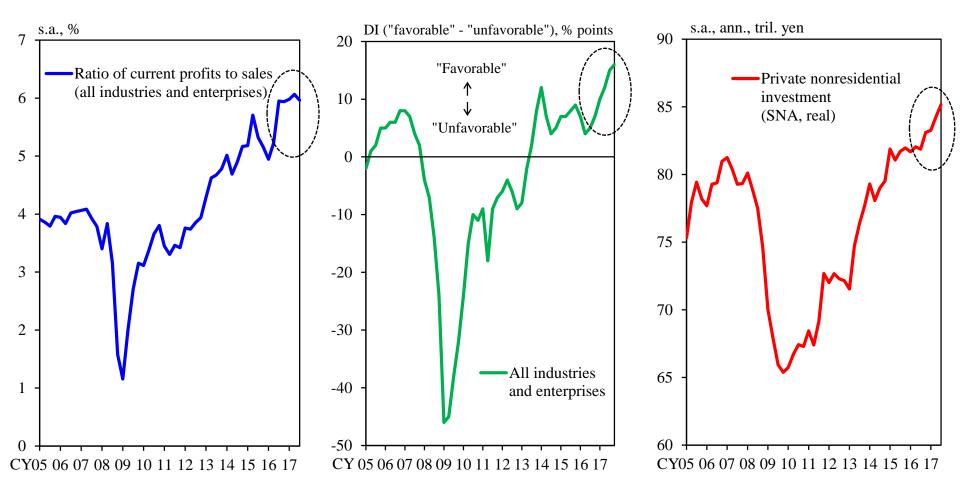


# Japan's Economy

Business Conditions DI (Tankan)

Corporate Profits

## Business Fixed Investment

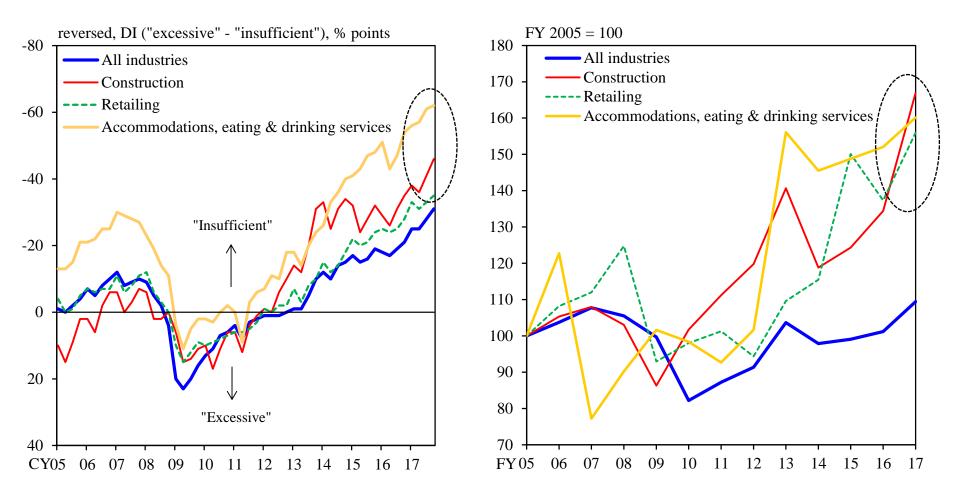


Note: Figures for corporate profits are based on the *Financial Statements Statistics of Corporations by Industry, Quarterly*. Excluding "finance and insurance." Sources: Ministry of Finance; Bank of Japan; Cabinet Office.

# Labor Market Conditions and Software Investment

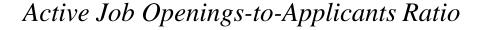
## Employment Conditions DI (Tankan)

Software Investment (Tankan)

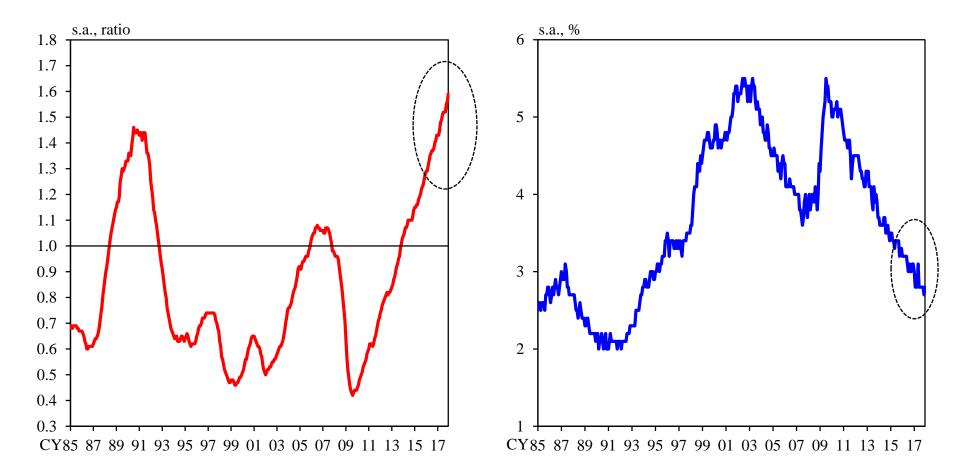


Note: Figures for the software investment plans for fiscal 2017 are forecasts from the December 2017 *Tankan* survey. Source: Bank of Japan.

# **Employment Situation**



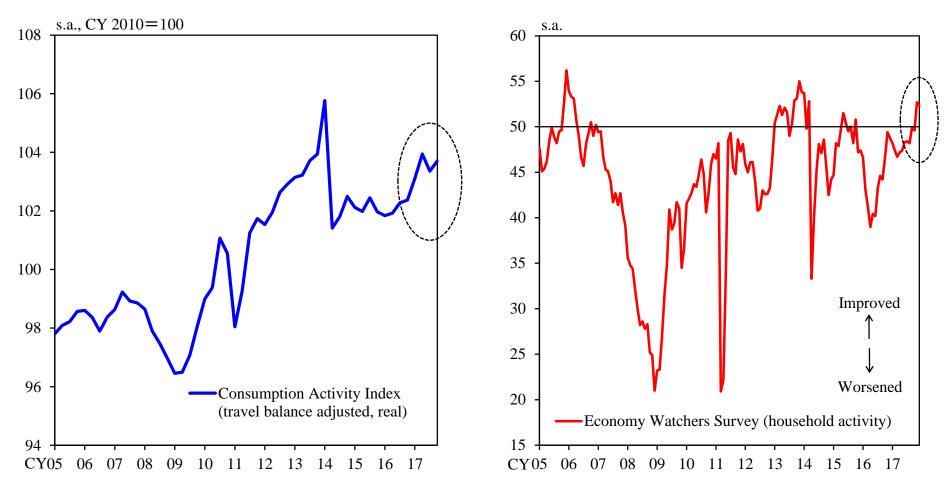
Unemployment Rate



# Private Consumption

Consumption Activity Index

Confidence Indicator Related to Private Consumption



Notes: 1. The Consumption Activity Index is based on BOJ staff calculations. Figures for the Consumption Activity Index (travel balance adjusted) exclude inbound tourism consumption and include outbound tourism consumption. The figure for 2017/Q4 is the October-November average.

2. Figures for the "Economy Watchers Survey" are those for the current economic conditions DI. Sources: Bank of Japan; Cabinet Office.

# Outlook for Economic Activity and Prices (as of January 2018)

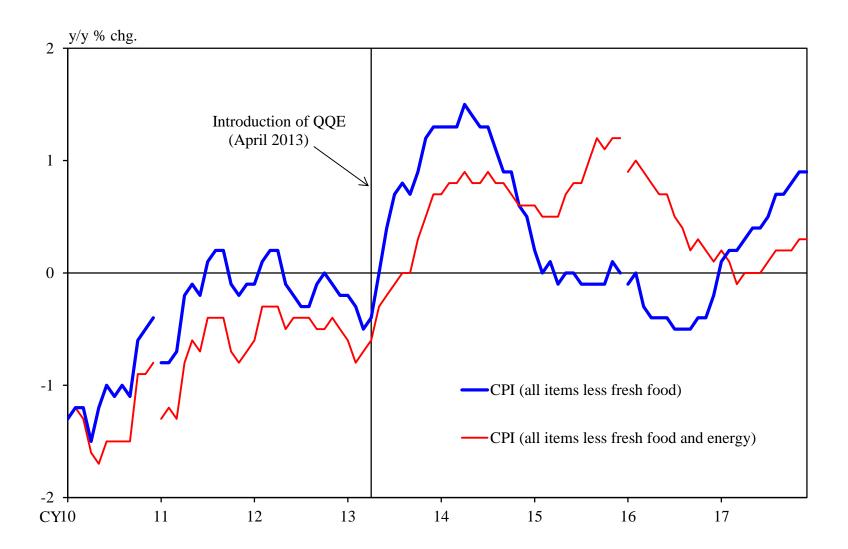
y/y % chg.

		Real GDP	CPI (all items less fresh food)
Fiscal 2017		+1.9	+0.8
	Forecasts made in October 2017	+1.9	+0.8
F	Fiscal 2018	+1.4	+1.4
	Forecasts made in October 2017	+1.4	+1.4
F	Fiscal 2019	+0.7	+1.8
	Forecasts made in October 2017	+0.7	+1.8

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 hike. Source: Bank of Japan.

#### Chart 8

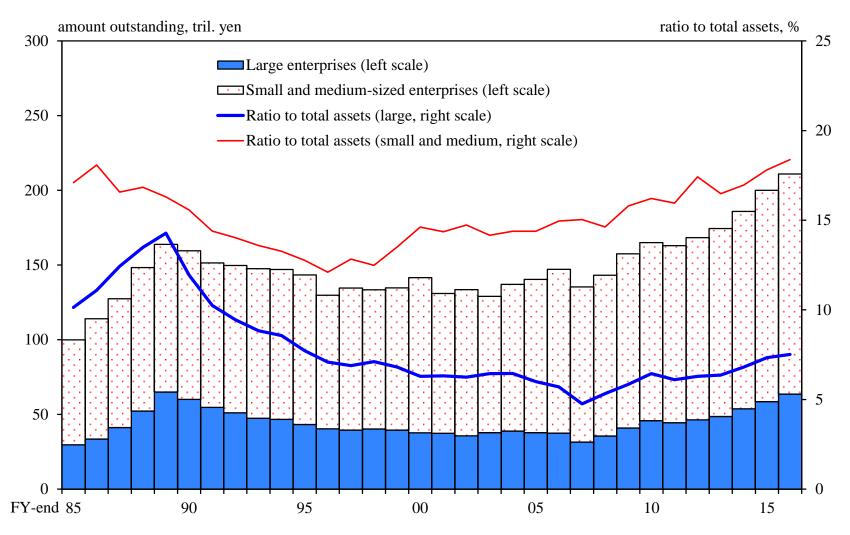
## **Consumer Prices**



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

# Corporate Savings

## Amount Outstanding of Cash and Deposits by Firm Size



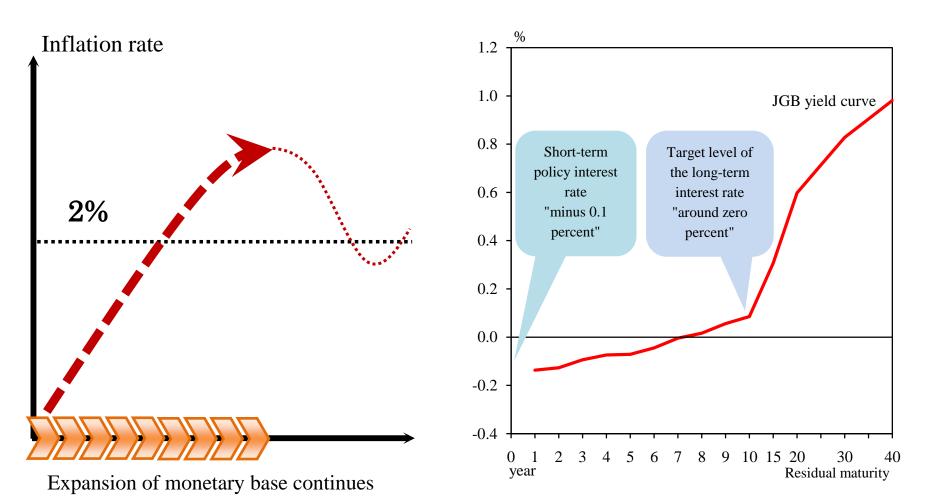
Note: Based on the *Financial Statements Statistics of Corporations by Industry, Annually*. Excluding "finance and insurance." Large enterprises are defined as enterprises with a capitalization of 1 billion yen or more, and small and medium-sized enterprises are defined as enterprises with a capitalization of less than 1 billion yen. Source: Ministry of Finance.

Chart 9

# QQE with Yield Curve Control

## Inflation-Overshooting Commitment

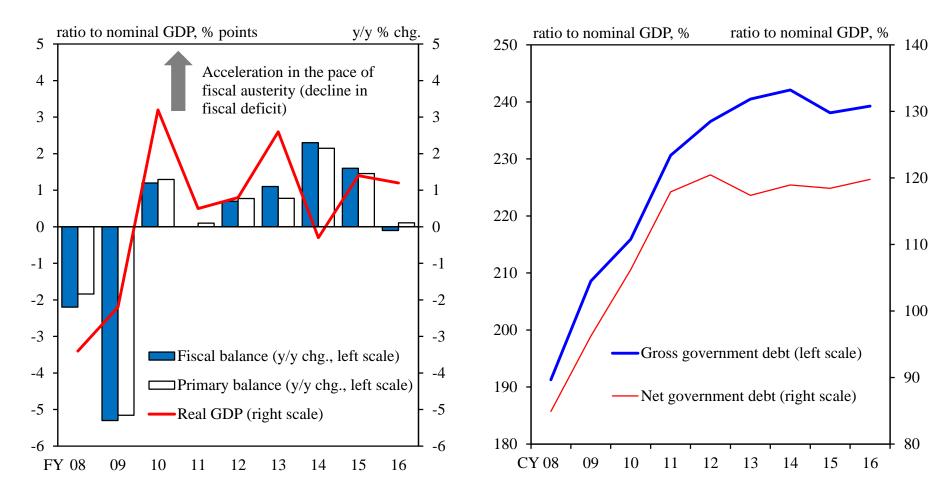
Yield Curve Control



# Fiscal Conditions in Japan

## Fiscal Balance and Primary Balance

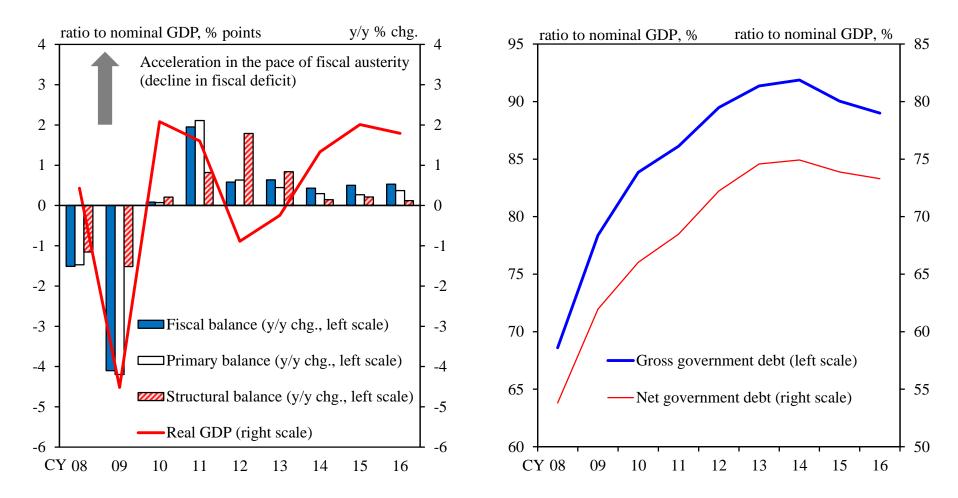
## Amount Outstanding of Government Debt



# Fiscal Conditions in the Euro Area

## Fiscal Balance, Primary Balance, and Structural Balance

## Amount Outstanding of Government Debt



Note: The structural balance is the year-on-year rate of change in the structural balance-to-potential GDP ratio. Source: IMF.