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Outlook for Economic Activity and Prices

April 2018



(English translation prepared by the Bank's staff based on the Japanese original)

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Outlook for Economic Activity and Prices (April 2018)

The Bank's View¹

Summary

- Japan's economy is likely to continue growing at a pace above its potential in fiscal 2018, mainly against the background of highly accommodative financial conditions and the underpinnings through government spending, with overseas economies continuing to grow firmly. From fiscal 2019 through fiscal 2020, the economy is expected to continue on an expanding trend supported by external demand, although the growth pace is projected to decelerate due to a cyclical slowdown in business fixed investment and the effects of the scheduled consumption tax hike.²
 - The year-on-year rate of change in the consumer price index (CPI, all items less fresh food) has continued to show relatively weak developments when excluding the effects of energy prices compared to the economic expansion and the labor market tightening, mainly against the background that firms' wage- and price-setting stance has remained cautious. Nonetheless, medium- to long-term inflation expectations are projected to rise as firms' stance gradually shifts toward raising wages and prices with an improvement in the output gap continuing. As a consequence, the year-on-year rate of change in the CPI is likely to continue on an uptrend and increase toward 2 percent.
 - Comparing the current projections through fiscal 2019 with the previous ones, the projected growth rates are somewhat higher and the projected rates of increase in the CPI are more or less unchanged.
 - With regard to the risk balance, upside and downside risks to economic activity are generally balanced in fiscal 2018, but risks are skewed to the downside for fiscal 2019 onward. Risks to prices are skewed to the downside. On the price front, the momentum toward achieving the price stability target of 2 percent is maintained as the output gap is expected to continue improving and medium- to long-term inflation expectations are projected to rise gradually; however, the momentum is not yet sufficiently firm, and thus developments in prices continue to warrant careful attention.
 - As for the conduct of monetary policy, the Bank will continue with "Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control," aiming to achieve the price stability target of 2 percent, as long as it is necessary for maintaining that target in a stable manner. It will continue expanding the monetary base until the year-on-year rate of increase in the observed CPI (all items less fresh food) exceeds 2 percent and stays above the target in a stable manner. The Bank will make policy adjustments as appropriate, taking account of developments in economic activity and prices as well as financial conditions, with a view to maintaining the momentum toward achieving the price stability target.
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¹ The text of "The Bank's View" -- the outlook for economic activity and prices as well as the Bank's thinking on the conduct of monetary policy, both of which are based on individual Policy Board members' views -- was decided by the Policy Board at the Monetary Policy Meeting held on April 26 and 27, 2018.

² The April 2018 *Outlook for Economic Activity and Prices* (Outlook Report) assumes that the consumption tax will be raised to 10 percent in October 2019 and that a reduced tax rate will be applied to food and beverages -- excluding alcohol and dining-out -- and newspapers. It also factors in policies concerning the provision of free education based on information available at this point.

I. The Current Situation of Economic Activity and Prices in Japan

Japan's economy is expanding moderately, with a virtuous cycle from income to spending operating. Overseas economies have continued to grow firmly on the whole. In this situation, exports have been on an increasing trend. On the domestic demand side, business fixed investment has continued on an increasing trend with corporate profits and business sentiment maintaining their improving trend. Private consumption has been increasing moderately, albeit with fluctuations, against the background of steady improvement in the employment and income situation. Housing investment has been weakening somewhat. Meanwhile, public investment has been more or less flat, remaining at a relatively high level. Reflecting these increases in demand both at home and abroad, industrial production has been on an increasing trend, and labor market conditions have continued to tighten steadily. Financial conditions are highly accommodative. On the price front, the year-on-year rate of change in the CPI (all items less fresh food, and the same hereafter) is around 1 percent. Inflation expectations have been more or less unchanged.

II. Baseline Scenario of the Outlook for Economic Activity and Prices in Japan

A. Baseline Scenario of the Outlook for Economic Activity

With regard to the outlook, Japan's economy is likely to continue its moderate expansion. In fiscal 2018, domestic demand is likely to follow an uptrend, with a virtuous cycle from income to spending being maintained in both the corporate and household sectors, mainly against the background of highly accommodative financial conditions and the underpinnings through government spending. Business fixed investment is likely to continue increasing amid accommodative financial conditions, led mainly by investment intended for domestic capacity expansion in line with the economic expansion, Olympic Games-related investment, and labor-saving investment to address the labor shortage. Private consumption is also expected to follow a moderate increasing trend as the employment and income situation continues to improve. Public investment is expected to remain at a relatively high level, mainly reflecting the supplementary budget for fiscal 2017 and Olympic Games-related demand, although the positive effects resulting from the government's past stimulus measures are likely to diminish moderately. Exports are expected to continue their moderate increasing trend on the back of the firm growth in overseas economies. On this basis, the economy is likely to continue growing at a pace

above its potential in fiscal 2018.³

In fiscal 2019 and fiscal 2020, Japan's economy is expected to continue on an expanding trend supported by external demand, although the growth pace is projected to decelerate, reflecting a slowdown in domestic demand. Specifically, the pace of increase in private consumption is projected to be moderate in fiscal 2019 and fiscal 2020, mainly because it is likely to temporarily turn to a decline due to the effects of the scheduled consumption tax hike in October 2019.⁴ On the other hand, exports are projected to maintain their increasing trend on the back of the firm growth in overseas economies. Meanwhile, the pace of increase in business fixed investment is likely to decelerate gradually through fiscal 2020, mainly reflecting cyclical adjustments in capital stock after the prolonged economic expansion, as well as Olympic Games-related demand peaking out; however, the deceleration is expected to be moderate, due partly to growing demand for fixed investment stemming from the increase in exports.

Comparing the current projections through fiscal 2019 with the previous ones, the projected growth rates are somewhat higher, mainly reflecting the firm growth in overseas economies.

Looking at the financial conditions on which the above outlook is based, short- and long-term real interest rates are assumed to be in negative territory throughout the projection period as the Bank pursues "QQE with Yield Curve Control."⁵ Financial institutions' proactive lending attitudes, as well as favorable conditions for corporate bonds and CP issuance, are both likely to be maintained and support firms' and households' activities from the financial side. Thus, financial conditions are likely to remain highly accommodative.

The potential growth rate is expected to follow a moderate uptrend throughout the projection period against the backdrop of the following: progress in implementation of the government's growth strategy, including regulatory and institutional reforms; an increase

³ Under a specific methodology, Japan's potential growth rate is estimated to be in the range of 0.5-1.0 percent. However, the estimate of the potential growth rate varies depending on the methodologies employed and could be revised as the sample period becomes longer over time. Thus, it should be regarded as being subject to a considerable margin of error.

⁴ The consumption tax hike scheduled to take place in October 2019 will affect the GDP growth rates through the following two channels: (1) the front-loaded increase and subsequent decline in demand prior to and after the consumption tax hike and (2) the effects of a decline in real income. Although it is subject to considerable uncertainties, the negative impact on the growth rates is expected to be smaller than that on the rate for fiscal 2014, when the last consumption tax hike took place.

⁵ Individual Policy Board members make their forecasts taking into account the effects of past policy decisions and with reference to views incorporated in financial markets regarding future policy. Specifically, each Policy Board member makes an assumption about the future path of short- and long-term interest rates based on their market rates, bearing in mind the difference in the outlook for prices between that presented in the Outlook Report and that of market participants.

in labor participation by women and seniors under such strategy; and firms' continued efforts toward improving productivity. Along with this, the natural rate of interest is projected to rise, thereby enhancing monetary easing effects.

B. Baseline Scenario of the Outlook for Prices

Although the year-on-year rate of increase in the CPI has been accelerating gradually, it has continued to show relatively weak developments compared to the economic expansion and the labor market tightening, remaining at around 0.5 percent excluding the effects of energy prices.

This is 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. Firms have been making efforts to absorb a rise in labor costs by increasing labor-saving investment and streamlining their business process, while limiting wage increases -- which correspond to the labor shortage -- mainly to part-time employees. As suggested by these developments, firms' wage- and price-setting stance has remained cautious despite the steady tightening of labor market conditions and the high levels of corporate profits. However, the upward pressure on prices stemming from the rise in firms' costs has been increasing, partly due to a continued clear uptrend in hourly scheduled cash earnings of part-time employees and a rise in input prices.

With regard to the outlook, the year-on-year rate of change in the CPI is likely to continue on an uptrend and increase toward 2 percent, mainly on the back of the improvement in the output gap and the rise in medium- to long-term inflation expectations.

Comparing the current projections through fiscal 2019 with the previous ones, the projected rates of increase in the CPI are more or less unchanged.⁶

The mechanism through which the year-on-year rate of change in the CPI increases toward 2 percent can be explained by the following factors that determine inflation rates. First, the output gap -- which shows the utilization of labor and capital -- has widened steadily within positive territory on the back of the steady tightening of labor market conditions and a rise in capital utilization rates. Going forward, as the economy continues its moderate expansion, the output gap is expected to widen further within positive territory in fiscal 2018 and remain substantially positive in fiscal 2019 and fiscal 2020.

⁶ Assuming that the rise in the consumption tax will be fully passed on to prices of taxable items, excluding those to which a reduced tax rate will be applied, the effect of the October 2019 consumption tax hike on the year-on-year rate of change in the CPI (all items less fresh food) for October 2019 onward is estimated to be 1.0 percentage point; the effect for fiscal 2019 and fiscal 2020 is estimated to be 0.5 percentage point for each year. It also is assumed that the effects of policies concerning the provision of free education will not be reflected in the CPI, as statistical treatment of these effects is not yet decided.

Second, medium- to long-term inflation expectations have been more or less unchanged recently, after having remained in a weakening phase since summer 2015. As for the outlook, such expectations are likely to follow an increasing trend and gradually converge to around 2 percent on the back of the following: (1) in terms of the adaptive component, with the improvement in the output gap, firms' stance is likely to gradually shift toward raising wages and prices and the observed inflation rate is expected to rise steadily, and (2) in terms of the forward-looking component, the Bank will pursue monetary easing through its strong commitment to achieving the price stability target.⁷

Regarding import prices, the past pick-up in crude oil prices has pushed up energy prices in the CPI, but this effect is likely to wane moderately.

III. Risks to Economic Activity and Prices

A. Risks to Economic Activity

The following four factors are upside and downside risks to the Bank's baseline scenario regarding the economy.

The first is developments in overseas economies. Specifically, the following are considered as risks: the U.S. economic policies and their impact on global financial markets; developments in emerging and commodity-exporting economies; negotiations on the United Kingdom's exit from the European Union (EU) and their effects; and geopolitical risks.

The second risk is the effects of the consumption tax hike scheduled to take place in October 2019. It is likely that the effects of the front-loaded increase and subsequent decline in demand prior to and after the consumption tax hike and of the decline in real income will depend on consumer sentiment, the employment and income situation, and developments in prices.

Third, firms' and households' medium- to long-term growth expectations may be either raised or lowered depending on the following: efforts to address medium- to long-term issues such as the aging population; developments in regulatory and institutional reforms, particularly in the labor market; innovation in the corporate sector; and the employment and income situation.

⁷ Medium- to long-term inflation expectations can be regarded as consisting of two components: a forward-looking component, in which inflation expectations converge to the price stability target set by the central bank, and a backward-looking, or adaptive, component that reflects the observed inflation rate. For details, see the Bank's *Comprehensive Assessment: Developments in Economic Activity and Prices as well as Policy Effects since the Introduction of Quantitative and Qualitative Monetary Easing (QQE)* released in September 2016.

Fourth, in the event that confidence in fiscal sustainability in the medium to long term declines, the economy may deviate downward from the baseline scenario through increasing concerns regarding the future and the rises in long-term interest rates associated with them. On the other hand, there is also a possibility that the economy will deviate upward from the baseline scenario if confidence in the path toward fiscal consolidation strengthens and concerns regarding the future are alleviated.

B. Risks to Prices

Other than risks to economic activity, the specific factors that could exert upside and downside risks to prices are as follows. The first factor is developments in firms' and households' medium- to long-term inflation expectations. Although inflation expectations are likely to follow an increasing trend, there is a risk that a rise in such expectations will lag behind if it takes time for firms' stance to shift toward raising wages and prices and inflation consequently remains relatively sluggish.

The second factor is the fact that there are items for which prices are not particularly responsive to the output gap. There is concern about the continued dull responses of administered prices, some services prices, and housing rent, which may continue to constrain the acceleration of CPI inflation. In addition, with regard to goods and services that are difficult to differentiate, their prices may also constrain the acceleration of CPI inflation if competition among firms intensifies further, due mainly to changes in the distribution system and deregulation.

Third, developments in foreign exchange rates and international commodity prices going forward, as well as the extent to which such developments will spread to import prices and domestic prices, may lead prices to deviate either upward or downward from the baseline scenario.

IV. Conduct of Monetary Policy

In the context of the price stability target, the Bank assesses the aforementioned economic and price situation from two perspectives and then outlines its thinking on the future conduct of monetary policy.⁸

The first perspective concerns an examination of the baseline scenario for the outlook. The year-on-year rate of change in the CPI is likely to increase toward 2 percent. Although it is necessary to carefully examine the fact that firms' wage- and price-setting stance has

⁸ As for the examination from two perspectives in the context of the price stability target, see the Bank's statement released on January 22, 2013, entitled "The 'Price Stability Target' under the Framework for the Conduct of Monetary Policy."

remained cautious, the momentum toward achieving the price stability target of 2 percent appears to be maintained. This is because (1) firms' stance is likely to gradually shift toward raising wages and prices with the steady improvement in the output gap, and (2) medium- to long-term inflation expectations have been more or less unchanged recently and such expectations are projected to rise steadily as further price rises come to be observed widely.

The second perspective involves an examination of the risks considered most relevant to the conduct of monetary policy. With regard to the outlook for economic activity, upside and downside risks are generally balanced in fiscal 2018, but risks are skewed to the downside for fiscal 2019 onward. Regarding the outlook for prices, risks are skewed to the downside, especially concerning developments in medium- to long-term inflation expectations. Examining financial imbalances from a longer-term perspective, there is no sign so far of excessively bullish expectations in asset markets or in the activities of financial institutions. Furthermore, prolonged downward pressure on financial institutions' profits under the continued low interest rate environment could create risks of a gradual pullback in financial intermediation and of destabilizing the financial system. However, at this point, these risks are judged as not significant, mainly because financial institutions have sufficient capital bases.⁹

As for the conduct of monetary policy, the Bank will continue with "QQE with Yield Curve Control," aiming to achieve the price stability target of 2 percent, as long as it is necessary for maintaining that target in a stable manner. It will continue expanding the monetary base until the year-on-year rate of increase in the observed CPI (all items less fresh food) exceeds 2 percent and stays above the target in a stable manner. The Bank will make policy adjustments as appropriate, taking account of developments in economic activity and prices as well as financial conditions, with a view to maintaining the momentum toward achieving the price stability target.

⁹ For details, see the Bank's *Financial System Report* (April 2018).

Forecasts of the Majority of Policy Board Members

y/y % chg.

	Real GDP	CPI (all items less fresh food)	Excluding the effects of the consumption tax hike
Fiscal 2017	+1.8 to +1.9 [+1.9]	+0.7	
Forecasts made in January 2018	+1.8 to +2.0 [+1.9]	+0.7 to +1.0 [+0.8]	
Fiscal 2018	+1.4 to +1.7 [+1.6]	+1.2 to +1.3 [+1.3]	
Forecasts made in January 2018	+1.3 to +1.5 [+1.4]	+1.3 to +1.6 [+1.4]	
Fiscal 2019	+0.7 to +0.9 [+0.8]	+2.0 to +2.3 [+2.3]	+1.5 to +1.8 [+1.8]
Forecasts made in January 2018	+0.7 to +0.9 [+0.7]	+2.0 to +2.5 [+2.3]	+1.5 to +2.0 [+1.8]
Fiscal 2020	+0.6 to +1.0 [+0.8]	+2.0 to +2.3 [+2.3]	+1.5 to +1.8 [+1.8]

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

2. The forecasts of the majority of the Policy Board members are constructed as follows: each Policy Board member's forecast takes the form of a point estimate -- namely, the figure to which he or she attaches the highest probability of realization. These forecasts are then shown as a range, with the highest figure and the lowest figure excluded. The range does not indicate the forecast errors.
3. Individual Policy Board members make their forecasts taking into account the effects of past policy decisions and with reference to views incorporated in financial markets regarding future policy. Specifically, each Policy Board member makes an assumption about the future path of short- and long-term interest rates based on their market rates, bearing in mind the difference in the outlook for prices between that presented in the Outlook Report and that of market participants.
4. The consumption tax hike scheduled to take place in October 2019 -- to 10 percent -- and the reduced tax rate to be applied to food and beverages -- excluding alcohol and dining-out -- and newspapers are incorporated in the forecasts, but individual Policy Board members make their forecasts of the CPI based on figures excluding the direct effects of the consumption tax hike. The forecasts for the CPI for fiscal 2019 and fiscal 2020 that incorporate the direct effects of the consumption tax hike are constructed as follows. First, the contribution to prices from the tax hike is mechanically computed on the assumption that the tax increase will be fully passed on for taxable items. The CPI will be pushed up by 0.5 percentage point for each year. Second, this figure is added to the forecasts made by the Policy Board members. While it is assumed that the effects of policies concerning the provision of free education will not be reflected in the CPI as statistical treatment of these effects is not yet decided, the effects of such policies are factored in by individual Policy Board members for their forecasts of the real GDP growth rates, based on information available at this point.
5. The CPI (all items less fresh food) for fiscal 2017 is an actual figure.

The Background¹⁰

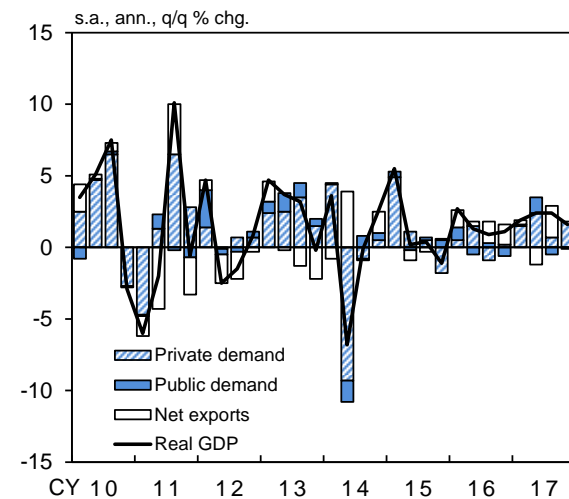
I. The Current Situation of Economic Activity and Its Outlook

A. Economic Developments

Looking back at Japan's economy since the January 2018 Outlook Report, the real GDP growth rate for the October-December quarter of 2017 was 0.4 percent on a quarter-on-quarter basis and its annualized rate was 1.6 percent, representing positive growth for eight consecutive quarters (Chart 1). While net exports were more or less flat, mainly because imports increased amid exports maintaining their pace of increase, with regard to domestic private demand, private consumption and business fixed investment increased firmly. Thus, the real GDP growth rate as a whole was above the potential growth rate, which is estimated to be in the range of 0.5-1.0 percent (Chart 2). Reflecting these increases in demand, labor market conditions have continued to tighten steadily (Chart 3). The output gap -- which captures the utilization of labor and capital -- has improved steadily of late and was around 1.5 percent for the October-December quarter (Chart 4). Monthly indicators since January suggest that the uptrend in the output gap is likely to continue. Therefore, Japan's economy has continued to expand moderately, with a virtuous cycle from income to spending operating.

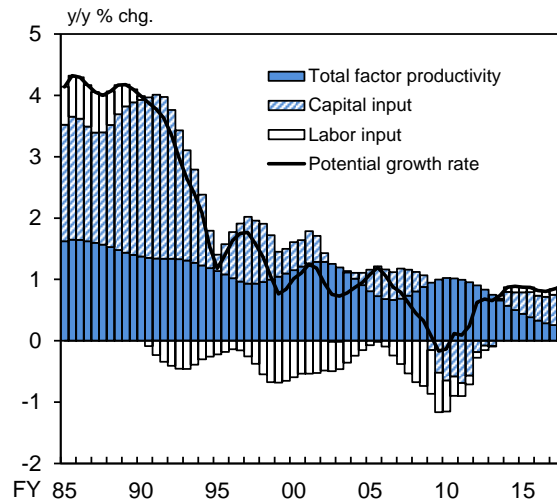
With regard to the outlook, Japan's economy is likely to continue growing at a pace clearly above its potential through fiscal 2018, mainly against

Chart 1: Real GDP



Source: Cabinet Office.

Chart 2: Potential Growth Rate



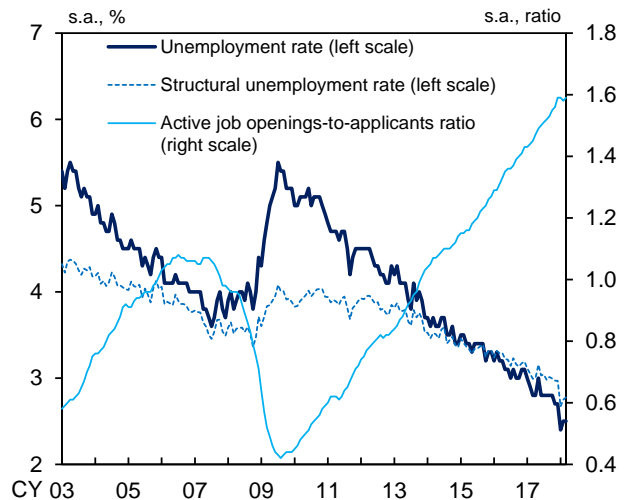
Source: Bank of Japan.

Note: Based on staff estimations. Figures for the second half of fiscal 2017 are those for 2017/Q4.

¹⁰ "The Background" provides explanations of "The Bank's View" decided by the Policy Board of the Bank of Japan at the Monetary Policy Meeting held on April 26 and 27, 2018.

the background of highly accommodative financial conditions and the underpinnings through government spending, with overseas economies continuing to grow firmly. From fiscal 2019 through fiscal 2020, the economy is expected to continue on an expanding trend supported by external demand, although the growth rate is projected to decelerate from fiscal 2018. This is likely to be attributable to (1) the deceleration in business fixed investment reflecting cyclical adjustments in capital stock as well as Olympic Games-related investment peaking out, combined with (2) a temporary decline in private consumption due to the scheduled consumption tax hike.^{11,12} Comparing the current projections through fiscal 2019 with those presented in the previous Outlook Report, the projected growth rates are somewhat higher, as the increase in

Chart 3: Labor Market Conditions



Sources: Ministry of Internal Affairs and Communications; Ministry of Health, Labour and Welfare.
 Note: The structural unemployment rate is based on staff estimations.

¹¹ The April 2018 Outlook Report assumes that the consumption tax will be raised to 10 percent in October 2019 and that a reduced tax rate will be applied to food and beverages -- excluding alcohol and dining-out -- and newspapers.

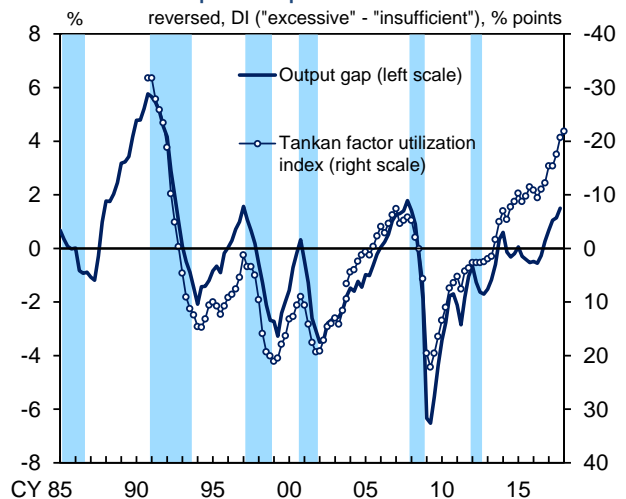
¹² The scheduled consumption tax hike in October 2019 will have some impact on the GDP growth rates, mainly due to changes in household spending, through the following two channels: (1) the front-loaded increase and subsequent decline in demand prior to and after the consumption tax hike and (2) the effects of the decline in real income. At present, the negative impact of the tax hike on the growth rates for fiscal 2019 and fiscal 2020 is expected to be smaller than that on the rate for fiscal 2014, when the last consumption tax hike took place. This is mainly due to the following: (1) there are technical factors that, as the consumption tax hike is scheduled to take place in the middle of fiscal 2019, the front-loaded increase and subsequent decline in demand prior to and after the hike will offset each other during that fiscal year -- although they will push down the growth rate for fiscal 2020 -- and that the effects of the decline in real income will be dispersed over fiscal 2019 and fiscal 2020; (2) the increase in the consumption tax rate is smaller than that of the previous tax hike and a reduced tax rate will be applied to some items; (3) the provision of free education as well as various measures to reduce the household burden of the tax hike will be implemented; and (4) before the previous tax hike, there likely was a front-loaded increase in demand in anticipation of the second round of the tax hike. For the increase in the net burden on households around the time of consumption tax hikes, see Box 1. It should be noted, however, that the impact of the consumption tax hike is uncertain and varies depending, for example, on developments in consumer sentiment.

exports and its spillover effects are expected be larger than in the previous projections, based on the outlook that overseas economies will continue to grow more firmly.

Details of the outlook for each fiscal year are as follows. In fiscal 2018, the economy is likely to maintain a moderate expansion with demand at home and abroad increasing in a well-balanced manner. Specifically, exports are projected to continue increasing moderately, reflecting the firm growth in overseas economies. Business fixed investment is also expected to continue to see a steady increase amid accommodative financial conditions, led mainly by investment intended for domestic capacity expansion in line with the economic expansion, Olympic Games-related investment, and labor-saving investment stemming from the labor shortage. Private consumption will likely maintain its momentum, supported by the rise in disposable income resulting from increases in base pay rises. Meanwhile, public investment is projected to remain at a high level, mainly underpinned by the supplementary budget for fiscal 2017 and Olympic Games-related demand, although the positive effects resulting from the past stimulus measures will diminish moderately. On this basis, the real GDP growth rate for fiscal 2018 is projected to exceed the potential and the output gap is likely to continue improving.

In fiscal 2019, the growth pace is projected to decelerate, mainly due to a slowdown in domestic demand. Private consumption is expected to increase its momentum in the first half of the fiscal year, reflecting the front-loaded increase in

Chart 4: Output Gap



Source: Bank of Japan.

Notes: 1. The output gap is based on staff estimations.

2. The Takan factor utilization index is calculated as the weighted average of the production capacity DI and the employment conditions DI for all enterprises. The capital and labor shares are used as weights. There is a discontinuity in the data in December 2003 due to a change in the survey framework.

3. Shaded areas indicate recession periods.

demand prior to the scheduled consumption tax hike, and then start declining in the second half of the fiscal year, pushed down by the subsequent decline in demand following the tax hike and the effects of the decline in real income. However, exports are projected to maintain their increasing trend on the back of the firm growth in overseas economies, and thereby underpin the economy. Meanwhile, business fixed investment is likely to decelerate gradually under cyclical downward pressure resulting from capital stock adjustments, combined with the effects of Olympic Games-related investment peaking out; however, the deceleration is expected to be moderate, due partly to growing demand for fixed investment stemming from the increase in exports. As a result of these developments, the economy is expected to continue on an expanding trend, although the growth rate for fiscal 2019 is projected to decelerate from the previous fiscal year.

In fiscal 2020, private consumption and housing investment are expected to gradually head toward a recovery after declining in the second half of fiscal 2019. Exports are likely to continue their increasing trend. On the other hand, business fixed investment will likely decelerate somewhat as pressure to adjust accumulated capital stock heightens, although the increase in exports is likely to continue stimulating investment demand. Meanwhile, expenditure accompanying the hosting of the Olympic Games, such as on temporary facilities, is expected to underpin the economy. Under such circumstances, the economy is expected to continue on an expanding trend in fiscal 2020.

The potential growth rate is expected to follow a moderate uptrend throughout the projection period against the backdrop of the following: progress in implementation of the government's growth strategy, including regulatory and institutional reforms; an increase in labor participation by women and seniors under such strategy; and firms' continued efforts toward improving productivity.

B. Developments in Major Expenditure Items and Their Background

Government Spending

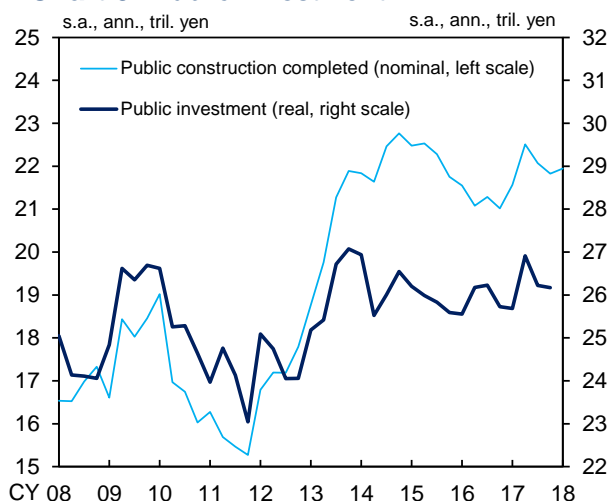
Public investment has been more or less flat, remaining at a relatively high level (Chart 5). As for the outlook, it is expected to decline as the positive effects resulting from the government's large-scale stimulus measures formulated in fiscal 2016 diminish, but remain at a relatively high level, mainly underpinned by the supplementary budget for fiscal 2017 and Olympic Games-related construction.¹³

Overseas Economies

Overseas economies have continued to grow firmly on the whole (Chart 6). The business sentiment of manufacturing firms on a global basis has maintained its improving trend, although it recently has declined somewhat, and the world trade volume has continued to recover (Charts 7 and 12). Looking at developments by major region, the U.S. economy has been expanding and the European economy has continued to recover firmly. The Chinese economy has continued to see stable growth on the whole. Other emerging economies and commodity-exporting economies have been recovering moderately on the whole, reflecting in particular an increase in exports and the effects of

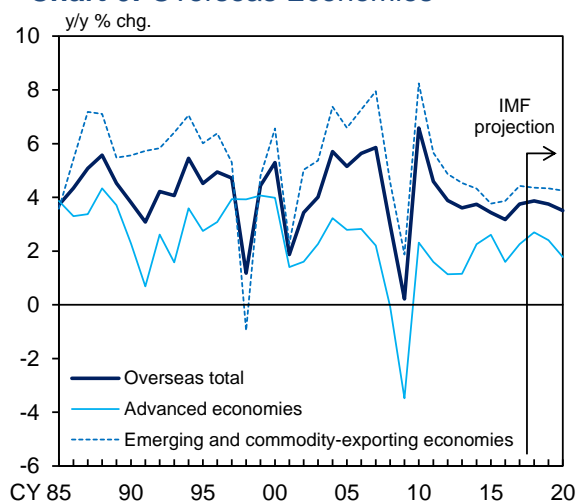
¹³ The supplementary budget for fiscal 2017 and the initial budget for fiscal 2018 were approved by the Diet. With regard to the budget related to public investment, 1.3 trillion yen was included in the supplementary budget for fiscal 2017 (2.0 trillion yen was included in the second supplementary budget for fiscal 2016), mainly for the purpose of funding the projects for disaster relief, disaster prevention, and disaster reduction, which are likely to be implemented mainly in fiscal 2018. In the initial budget for fiscal 2018, 6.0 trillion yen was included for the budget related to public works, which is about the same level as in the initial budget for fiscal 2017.

Chart 5: Public Investment



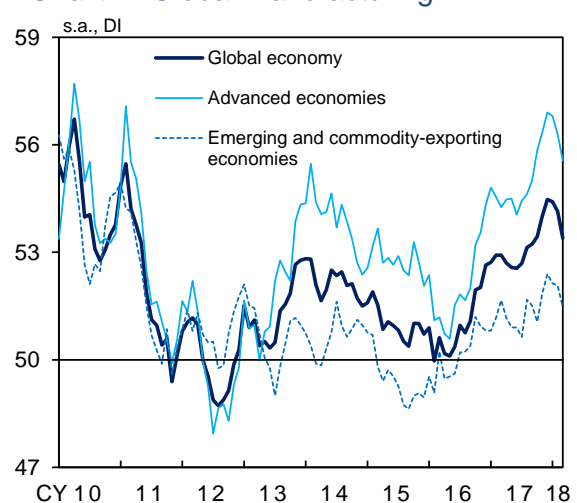
Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism.
Note: The figure for 2018/Q1 is the January-February average.

Chart 6: Overseas Economies



Sources: IMF; Ministry of Finance.
Note: Figures are the weighted averages of real GDP growth rates using countries' share in Japan's exports as weights. Annual GDP growth rates are from the "World Economic Outlook (WEO)" as of April 2018. Advanced economies consist of the United States, the euro area, and the United Kingdom. Emerging and commodity-exporting economies consist of the rest of the world economy.

Chart 7: Global Manufacturing PMI



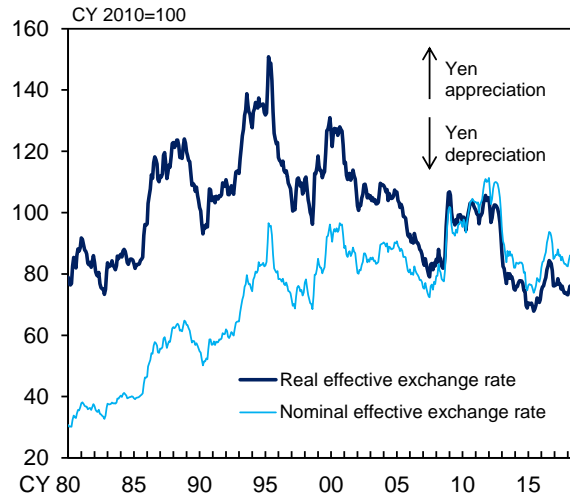
Sources: IHS Markit (© and database right IHS Markit Ltd 2018. All rights reserved.), etc.
Note: Figures for the global economy are the "J.P. Morgan Global Manufacturing PMI," etc. Figures for advanced economies as well as emerging and commodity-exporting economies are calculated as the weighted averages of the Manufacturing PMI using GDP shares of world total GDP from the IMF as weights. Advanced economies consist of the United States, the euro area, the United Kingdom, and Japan. Emerging and commodity-exporting economies consist of 17 countries and regions, such as China, South Korea, Taiwan, Russia, and Brazil.

those economies' stimulus measures.

In terms of the outlook, overseas economies are expected to continue growing firmly as global production and trade activity of the manufacturing sector are likely to be firm, and both the advanced and emerging economies are projected to grow in a well-balanced manner.

By major region, the U.S. economy is expected to keep expanding. The European economy is projected to continue recovering. The Chinese economy is likely to broadly follow a stable growth path as authorities conduct fiscal and monetary policy in a timely manner. Other emerging economies and commodity-exporting economies are likely to continue their moderate recovery on the whole.

Chart 8: Effective Exchange Rates



Sources: BIS; Bank of Japan.

Notes: 1. Figures are based on the broad index of the "BIS Effective Exchange Rate." Those prior to 1994 are calculated using the narrow index.

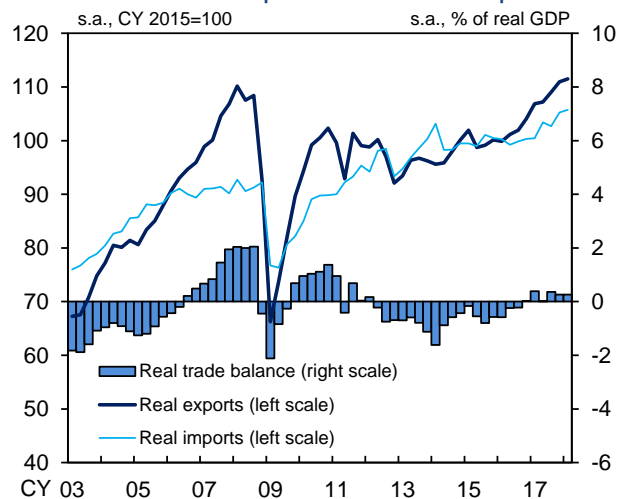
2. Figures for April 2018 have been calculated using the daily nominal effective exchange rate (the Yen Index) compiled by the Bank of Japan.

Exports and Imports

Exports have been on an increasing trend on the back of the firm growth in overseas economies (Chart 9). By region, exports to advanced economies have continued on their increasing trend when fluctuations are smoothed out. Exports to emerging economies have been picking up broadly, such as those of capital goods and intermediate goods -- including chemicals as well as iron and steel -- to Asia (Chart 10). By goods, automobile-related exports have continued to increase, due in part to the rising value-added of automobiles exported from Japan (Chart 11). IT-related exports have decreased recently, affected by production adjustments for smartphones, although electronic parts for data centers and motor vehicles have continued to see firm demand. Exports of a wide range of capital goods have been on an increasing trend, mainly led by semiconductor production equipment, industrial robots, as well as parts including bearings and metal valves.

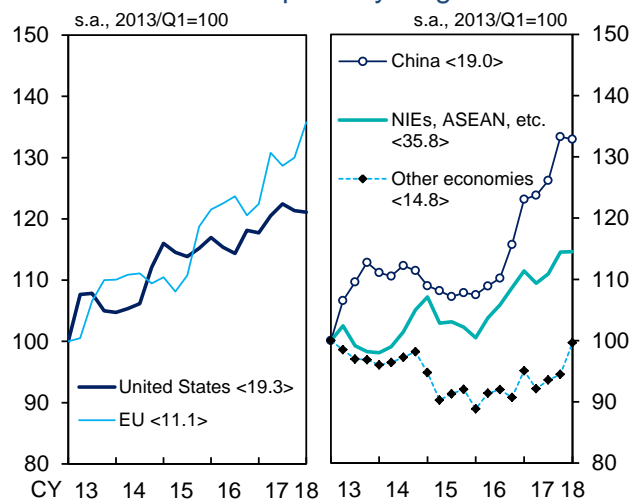
Exports will likely continue their increasing trend for the time being, as those of capital goods and IT-related goods -- in which Japan has a comparative advantage -- are likely to be firm with global production and trade activity of the manufacturing sector remaining at a favorable level. Thereafter, Japan's exports are expected to continue their moderate increasing trend as (1) the world trade volume is likely to continue its moderate increase with the growth in overseas economies and (2) Japan's share of exports is expected to follow a very moderate increasing trend, reflecting improvement in Japan's export

Chart 9: Real Exports and Real Imports



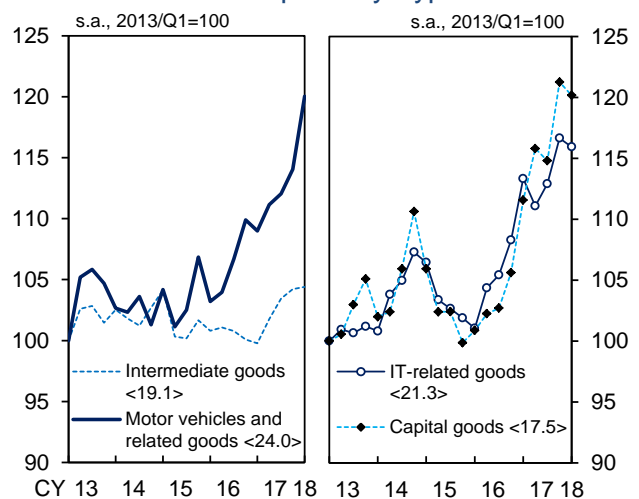
Sources: Bank of Japan; Ministry of Finance; Cabinet Office.
Note: Based on staff calculations.

Chart 10: Real Exports by Region



Sources: Bank of Japan; Ministry of Finance.
Note: Based on staff calculations. Figures in angular brackets show the share of each country or region in Japan's total exports in 2017.

Chart 11: Real Exports by Type of Goods



Sources: Bank of Japan; Ministry of Finance.
Note: Based on staff calculations. Figures in angular brackets show the share of each type of goods in Japan's total exports in 2017.

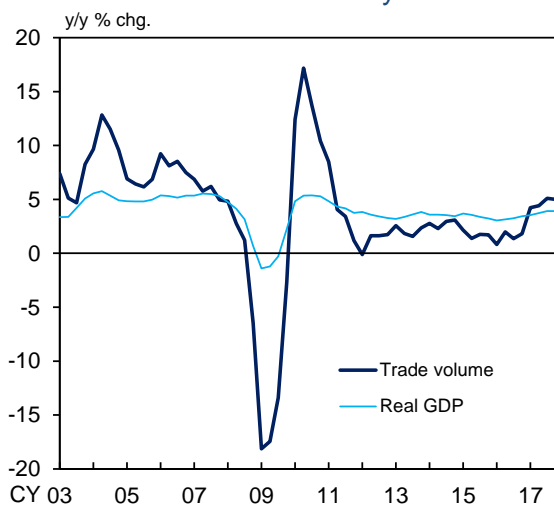
competitiveness (Charts 12 and 13).^{14,15}

Looking at this in detail, the world trade volume has accelerated its growth pace recently, mainly for Asia as well as the United States and Europe. Going forward, the pace of increase in the world trade volume is expected to be about the same as that in world economic growth, albeit with fluctuations -- that is, the world trade volume to GDP ratio is likely to be more or less unchanged -- as a global recovery in production and trade activity of the manufacturing sector is likely to continue.

Japan's share of exports in world trade has been on a rising trend, due in part to an increase in demand for capital goods and IT-related goods, in which Japan has a comparative advantage. It is expected to follow a very moderate rising trend, as an uptrend in exports of capital goods is likely to continue, supported by the recovery in demand for business fixed investment on a global basis.

Imports have been picking up (Chart 9). Going forward, they are expected to follow a moderate uptrend, reflecting an increase in domestic demand; however, the pace is projected to remain only moderate due to a downtrend in imports of raw materials, reflecting an improvement in energy efficiency.

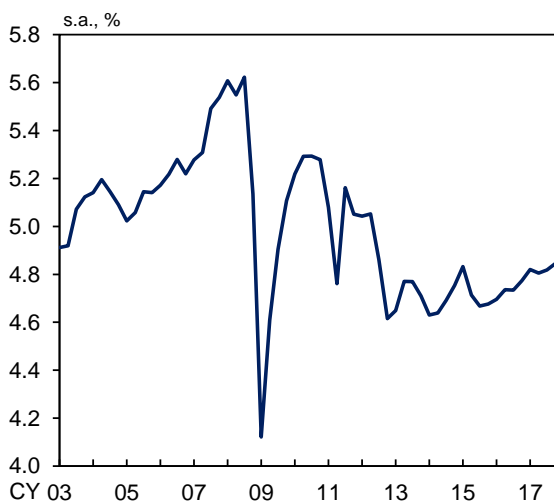
Chart 12: World Trade Volume and Real GDP of the World Economy



Sources: CPB Netherlands Bureau for Economic Policy Analysis; IMF, etc.
Notes: 1. Figures for the trade volume are those for real imports.
The figure for 2018/Q1 is the January-February average.

2. Real GDP of the world economy is based on staff calculations using GDP shares of world total GDP from the IMF as weights.

Chart 13: Japan's Share of Exports in World Trade



Source: CPB Netherlands Bureau for Economic Policy Analysis.

Note: Japan's share of exports in world trade is obtained by dividing Japan's real exports by world real imports (2010 prices). The figure for 2018/Q1 is the January-February average.

¹⁴ The world trade volume is calculated by adding up real imports in each country.

¹⁵ Box 2 shows the results of analysis suggesting that the structure of Japan's real exports has changed in recent years, becoming less affected by exchange rates.

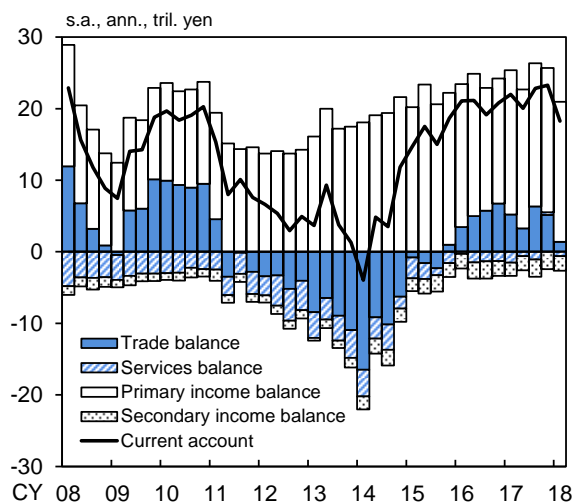
External Balance

The nominal current account surplus has been on an increasing trend, mainly backed by the primary income balance and the trade balance (Chart 14).

Going forward, the nominal current account surplus will likely increase moderately, mainly on the back of (1) an improving trend in the trade balance that reflects the aforementioned outlook for exports and imports, as well as (2) an improvement in the primary income balance brought about by the growth in overseas economies and (3) an increase in travel receipts underpinned by a rise in the number of inbound visitors.¹⁶

In terms of the saving-investment balance, the increase in the nominal current account surplus corresponds to that in excess saving as a whole. By sector, although excess saving in the household sector is expected to decline very moderately due to a rise in the propensity to consume, it is projected to be more or less flat thereafter, partly reflecting the effects of the scheduled consumption tax hike. Excess saving in the corporate sector is likely to decrease very moderately, although remain at a high level, as an improvement in profits is expected to contribute to an increase in fixed investment with some time lag.¹⁷ Meanwhile, excess investment in the general government is projected to decrease,

Chart 14: Current Account



Source: Ministry of Finance and Bank of Japan.
Note: Figures for 2018/Q1 are January-February averages.

¹⁶ An appreciation of the yen exerts downward pressure on corporate profits when dividend payments from abroad are converted into yen and also affects the income balance. Box 2 outlines this point.

¹⁷ With regard to the background to the increase in corporate savings and the impact on business fixed investment, see Box 3 in the January 2018 Outlook Report.

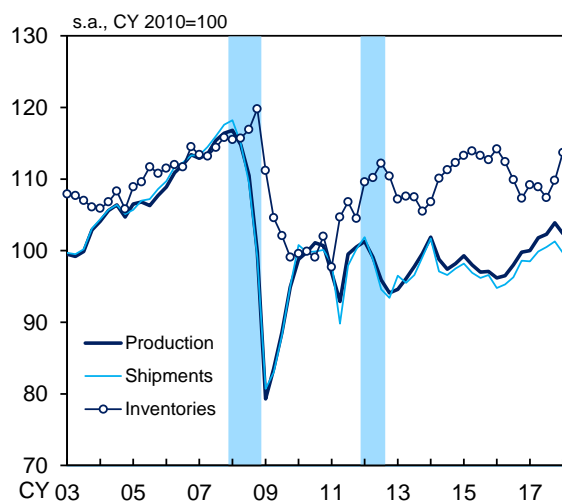
reflecting a dissipation of the effects resulting from the past stimulus measures and the scheduled consumption tax hike.

Industrial Production

Industrial production has been on an increasing trend on the back of the increase in demand at home and abroad (Chart 15). Transport equipment production has turned to a decline with replacement demand for automobiles after the hurricanes in the United States peaking out, coupled with the effects of production disruption caused by heavy snowfall in Japan. Excluding such temporary effects, however, transport equipment production appears to be maintaining its increasing trend, mainly against the background of a shift of production sites from overseas back to Japan. The production of electronic parts and devices has remained on an increasing trend on the back of the continued robust demand for parts for data centers and on-board equipment for motor vehicles, although demand for parts for smartphones has been decreasing recently. The production of machinery (i.e., "general-purpose, production and business oriented machinery" in the *Indices of Industrial Production*) has been on a moderate increasing trend, mainly driven by semiconductor production equipment and industrial robots. The production of chemicals has been increasing on average, mainly led by cosmetics, albeit with large fluctuations. Meanwhile, with regard to the shipments-inventories balance, the year-on-year rate of change in shipments and that in inventories have been more or less the same (Chart 16).

Industrial production will likely continue to increase firmly for the time being on the back of the increase in demand at home and abroad. Thereafter, it is projected to continue on a moderate increasing trend with the growth in

Chart 15: Production, Shipments, and Inventories

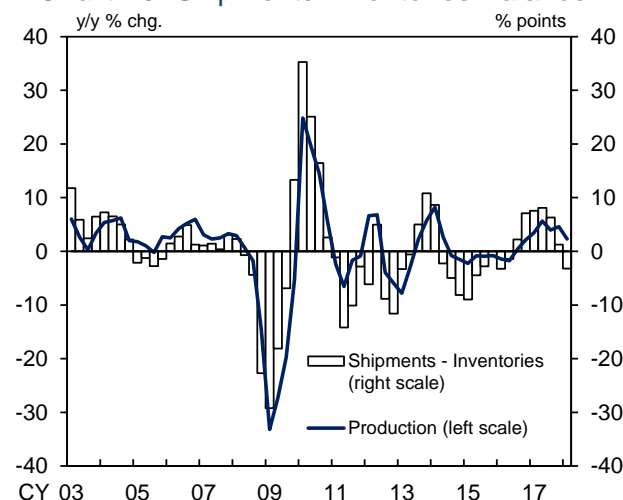


Source: Ministry of Economy, Trade and Industry (METI).

Notes: 1. Shaded areas indicate recession periods.

2. The production figure for 2018/Q2 is calculated based on METI projections for April and May 2018.

Chart 16: Shipments-Inventories Balance



Source: Ministry of Economy, Trade and Industry.

overseas economies.

Corporate Profits

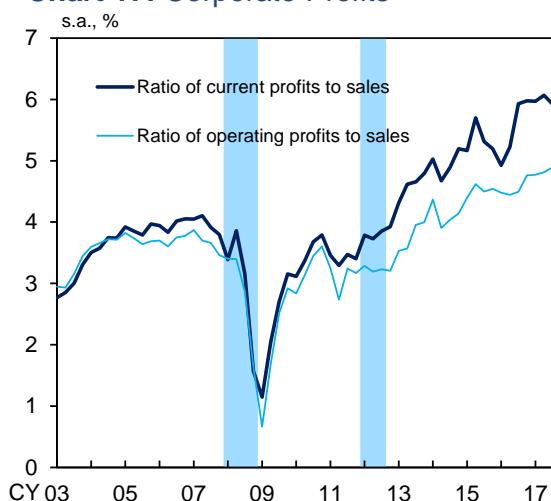
Corporate profits have maintained their improving trend. According to the *Financial Statements Statistics of Corporations by Industry, Quarterly* (FSSC), the ratio of current profits to sales for all industries and enterprises has been on an improving trend, supported by firm domestic demand and the growth in overseas economies (Chart 17). Under such circumstances, business sentiment also has maintained its improving trend (Chart 18). The diffusion index (DI) for business conditions for all industries and enterprises in the March 2018 *Tankan* (Short-Term Economic Survey of Enterprises in Japan) suggests that business conditions have improved for seven consecutive quarters, being at a favorable level last seen in the August 1991 survey.

Corporate profits are projected to continue improving steadily, on the back of the increase in demand at home and abroad. Nevertheless, through fiscal 2020, the rate of increase in corporate profits is likely to decelerate as the allocation to households increases further, such as in the form of a rise in personnel expenses, with Japan's economy shifting toward a decelerating trend due in part to the effects of the scheduled consumption tax hike.

Business Fixed Investment

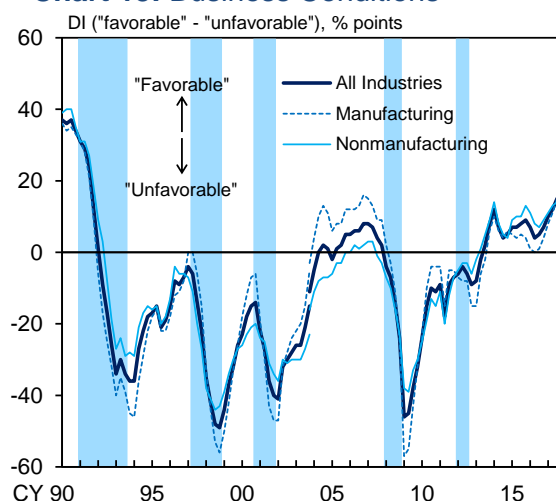
Business fixed investment has continued on an increasing trend with corporate profits and business sentiment maintaining their improving

Chart 17: Corporate Profits



Source: Ministry of Finance.
Notes: 1. Based on the "Financial Statements Statistics of Corporations by Industry, Quarterly." Excluding "finance and insurance."
2. Shaded areas indicate recession periods.

Chart 18: Business Conditions

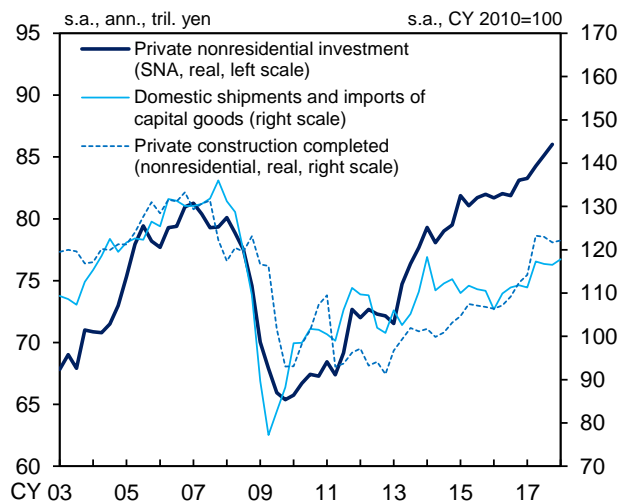


Source: Bank of Japan.
Notes: 1. Based on the *Tankan*. There is a discontinuity in the data in December 2003 due to a change in the survey framework.
2. Shaded areas indicate recession periods.

trend (Chart 19). The aggregate supply of capital goods and private construction completed (nonresidential) -- coincident indicators of machinery investment and construction investment, respectively -- have been increasing, albeit with fluctuations. According to the March *Tankan*, business fixed investment plans for fiscal 2017, especially those of large enterprises, are expected to see solid results; the plans for fiscal 2018, which were surveyed for the first time in the March *Tankan*, have turned out to be relatively high compared to the past as well. For example, business investment (on the basis close to GDP definition; business investment -- including software as well as research and development investment, but excluding land purchasing expenses -- in all industries including the financial industry) increased by 4.3 percent in fiscal 2017, and such investment plans for fiscal 2018 saw an increase of 2.0 percent (Chart 20). Reflecting firms' positive fixed investment stance, machinery orders and construction starts (in terms of planned expenses for private and nondwelling construction), as leading indicators, have continued on an increasing trend, albeit with large monthly fluctuations (Chart 21).

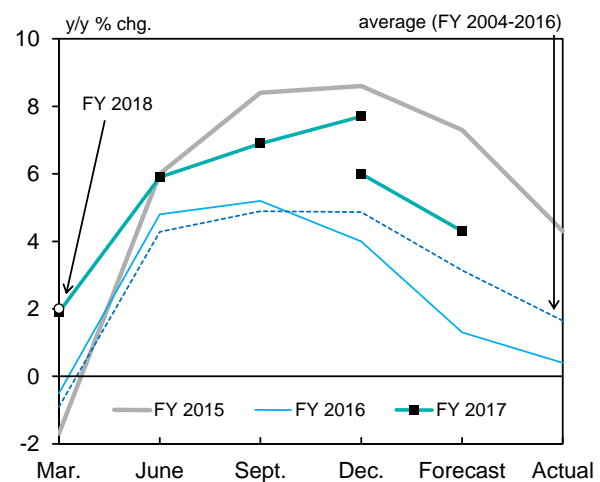
With regard to the outlook, business fixed investment is likely to continue increasing on the back of (1) an improvement in corporate profits, (2) extremely stimulative financial conditions, such as low interest rates and accommodative lending attitudes, (3) the materialization of the effects of projects conducted under the Fiscal Investment and Loan Program as well as the effects of investment-enhancing tax incentives, and (4) moderate improvement in growth expectations. Specifically, an increase is likely to

Chart 19: Coincident Indicators of Business Fixed Investment



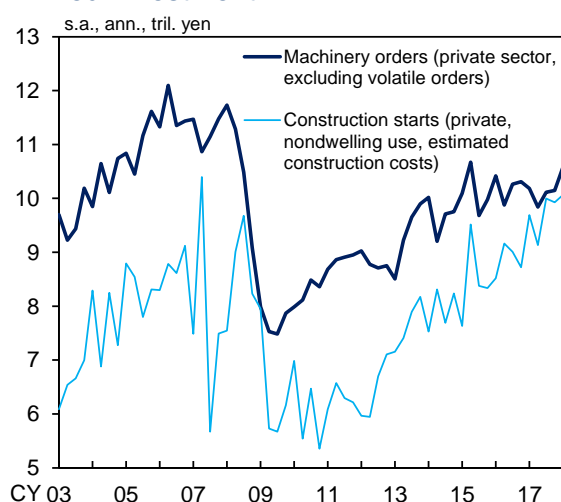
Sources: Cabinet Office; Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism.
 Notes: 1. Figures for 2018/Q1 are January-February averages.
 2. Real private construction completed is based on staff calculations using price indices in the "Construction Cost Deflators."

Chart 20: Developments in Business Fixed Investment Plans



Source: Bank of Japan.
 Notes: 1. Based on the *Tankan*. All Industries including financial institutions.
 2. Including software and R&D investment and excluding land purchasing expenses (R&D investment is not included until the December 2016 survey).
 3. There is a discontinuity in the data in December 2017 due to a change in the survey sample.

Chart 21: Leading Indicators of Business Fixed Investment



Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism.
 Notes: 1. Volatile orders: orders for ships and orders from electric power companies.
 2. Figures for 2018/Q1 are January-February averages.

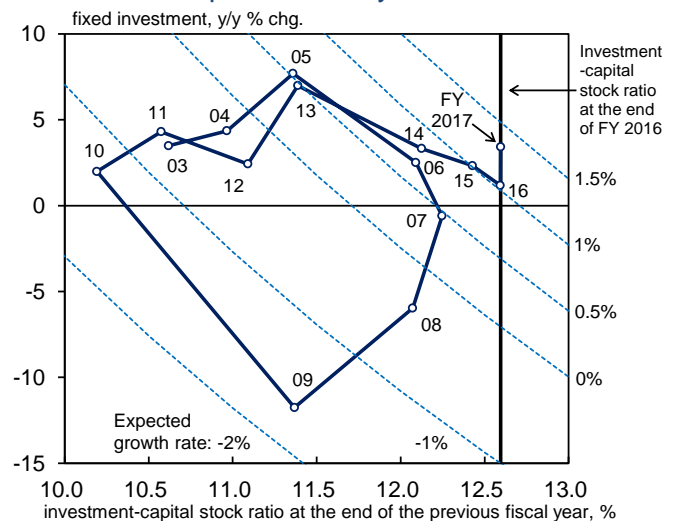
be seen in investment such as (1) that intended for domestic capacity expansion in line with the economic expansion, (2) that related to the Olympic Games and urban redevelopment projects, (3) that aiming at improving efficiency and saving labor in order to deal with the labor shortage, and (4) in research and development for growth areas.

The nominal investment-GDP ratio is expected to continue rising further on the basis of the aforementioned outlook for business fixed investment (Chart 23). The ratio has reached a level close to the peaks observed in the investment cycles after the burst of the bubble. Taking this into account, the pace of increase in business fixed investment is likely to decelerate gradually through the end of the projection period, as pressure to adjust accumulated capital stock heightens.

The Employment and Income Situation

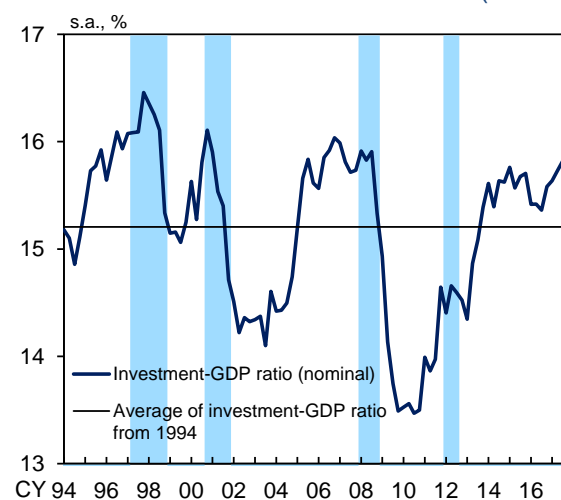
Supply-demand conditions in the labor market have continued to tighten steadily and employee income has increased moderately. The year-on-year rate of change in the *Labour Force Survey*-based number of employees has remained positive, at around 2 percent (Chart 24). Against this backdrop, the active job openings-to-applicants ratio has risen steadily, and a perception of labor shortage suggested by the employment conditions DI in the March *Tankan* has heightened (Chart 3). The unemployment rate has been around 2.5 percent recently, which is slightly below the structural

Chart 22: Capital Stock Cycles



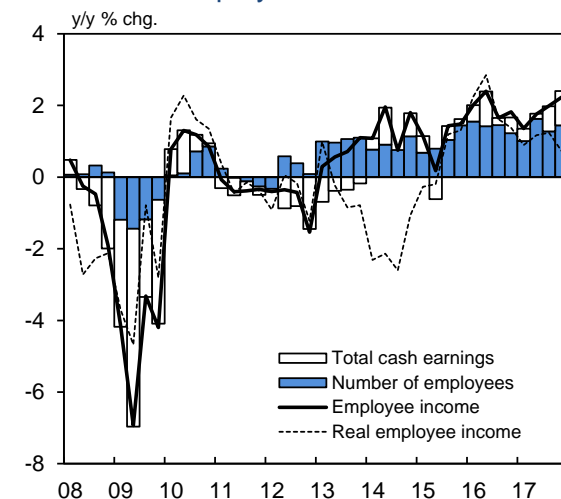
Source: Cabinet Office.
 Note: Each broken line represents the combination of the rate of change in fixed investment and the investment-capital stock ratio at a certain expected growth rate. The figure for fiscal 2017 is the 2017/Q2-Q4 average.

Chart 23: Investment-GDP Ratio (Nominal)



Source: Cabinet Office.
 Note: Shaded areas indicate recession periods.

Chart 24: Employee Income



Sources: Ministry of Health, Labour and Welfare; Ministry of Internal Affairs and Communications.
 Notes: 1. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.
 2. Employee income = total cash earnings ("Monthly Labour Survey") × number of employees ("Labour Force Survey")
 3. Real employee income is based on staff calculations using the CPI (less imputed rent).

unemployment rate.¹⁸ These indicators of supply-demand conditions in the labor market show that the degree of labor market tightness has been at around the level last seen in the first half of the 1990s or in the first half of the 1970s. Meanwhile, labor force participation rates -- especially those for women and seniors -- have remained on an uptrend after bottoming out around the end of 2012 (Chart 25).¹⁹ As Japan's economy is likely to continue on a growing trend at a pace above its potential, it is expected that the number of employees will keep increasing and that the supply-demand conditions in the labor market will continue to tighten steadily.

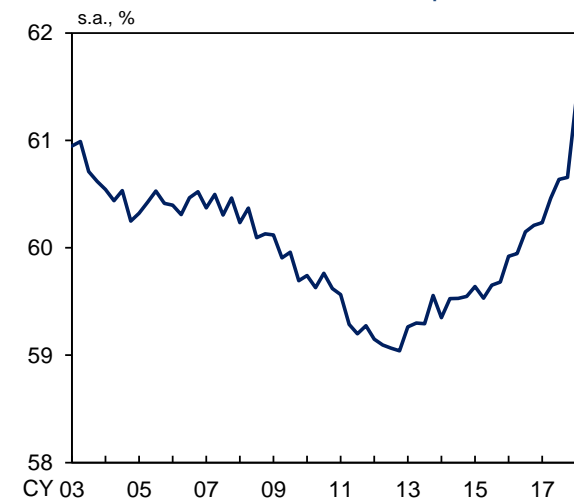
On the wage side, total cash earnings per employee have risen moderately, albeit with some fluctuations (Chart 26).²⁰ Specifically, scheduled cash earnings as a whole have continued to increase moderately, due in part to dissipation of downward pressure stemming from an increase in the ratio of part-time employees amid a rise in wages of both full-time and part-time employees (Chart 27). The year-on-year rate of increase in

¹⁸ The structural unemployment rate can be described in a variety of ways, but in Chart 3, it is defined, based on the idea of the so-called Beveridge Curve, as one where the unemployment rate and the vacancy rate are equal to each other (i.e., when the aggregate supply-demand conditions in the labor market -- excluding unemployment arising from the mismatch between job openings and job applicants -- are judged as being in equilibrium). Therefore, the structural unemployment rate defined here differs from the concept of the Non-Accelerating Inflation Rate of Unemployment (NAIRU), and does not show a direct relationship with prices or wages.

¹⁹ With regard to labor force participation of women and seniors, see Box 2 in the October 2017 Outlook Report.

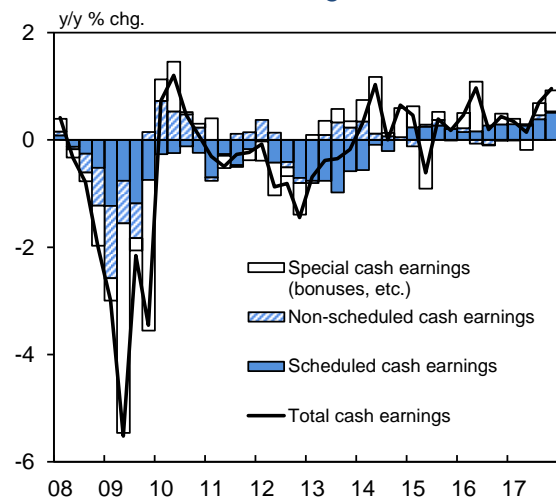
²⁰ In the *Monthly Labour Survey*, from the January 2018 final report, half of the samples for establishments with 30 or more employees were replaced, and the number of regular employees was retroactively revised reflecting data from the 2014 *Economic Census*. Thus, the weights of establishments with 5 to 29 employees and those with 30 or more employees, as well as the ratio of part-time employees have been changed.

Chart 25: Labor Force Participation Rate



Source: Ministry of Internal Affairs and Communications.

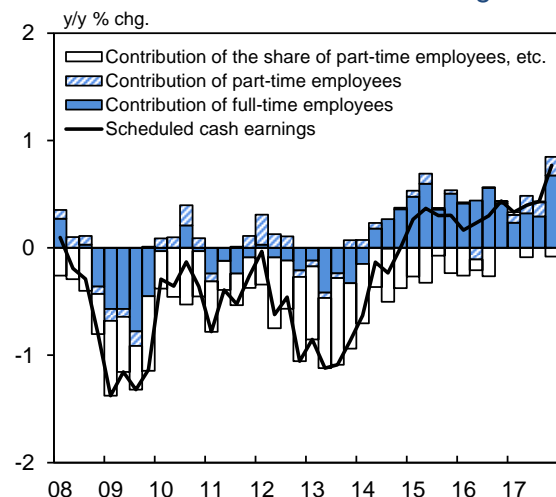
Chart 26: Nominal Wages



Source: Ministry of Health, Labour and Welfare.

Note: Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.

Chart 27: Scheduled Cash Earnings



Source: Ministry of Health, Labour and Welfare.

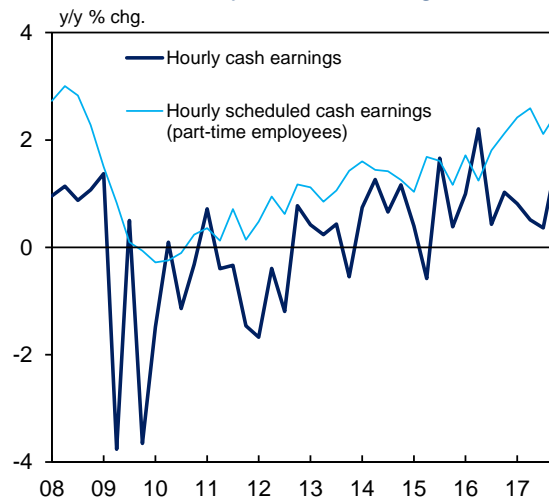
Note: Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.

hourly scheduled cash earnings of part-time employees, which are responsive to labor market conditions, recently registered relatively high growth of around 2.5 percent (Chart 28). Meanwhile, the year-on-year rate of change in real wages per employee has been slightly negative, affected by a rise in prices of fresh food and energy.

With regard to the outlook for wages, the pace of increase in scheduled cash earnings of full-time employees is expected to accelerate moderately as that in base pay accelerates with the inflation rate in the previous fiscal year rising and an improvement in labor productivity becoming more evident.²¹ The rate of increase in hourly scheduled cash earnings of part-time employees is also likely to accelerate steadily in response to further tightening of labor market conditions and an increase in minimum wages. Under this situation, overall employees' hourly cash earnings are projected to increase moderately at almost the same pace as labor productivity growth in nominal terms, and their rate of increase is expected to accelerate in the second half of the projection period.²²

In light of the aforementioned employment and wage conditions, employee income has been on a

Chart 28: Hourly Cash Earnings



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

²¹ With regard to the base pay increase for fiscal 2018, the rate of increase in wages was 0.53 percent according to the fourth aggregate results compiled by the Japanese Trade Union Confederation (Rengo), which is higher than the actual rate for fiscal 2017 (0.48 percent), but it has not reached the rate for fiscal 2015 (0.69 percent).

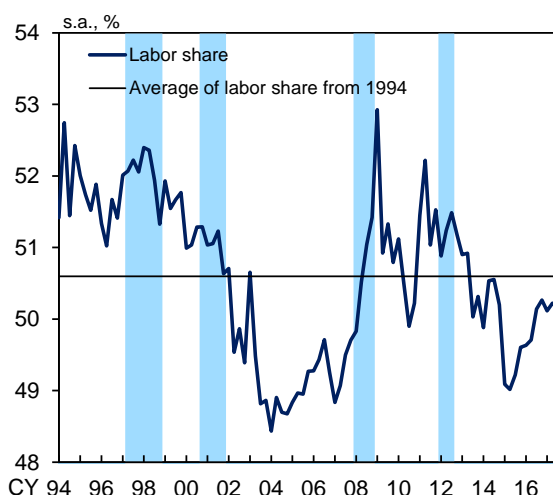
²² The tax reform in fiscal 2018 incorporates the enhanced tax system for promoting income expansion in which a certain share of the wage increases will be deducted from the corporate tax for firms that meet certain conditions.

moderate increasing trend (Chart 24). Going forward, it is likely to increase at a moderate pace, and the pace is expected to be slightly above the nominal GDP growth rate in the second half of the projection period. The labor share is likely to rise moderately, after remaining more or less unchanged at a level clearly below the long-term average (Chart 29).²³

Household Spending

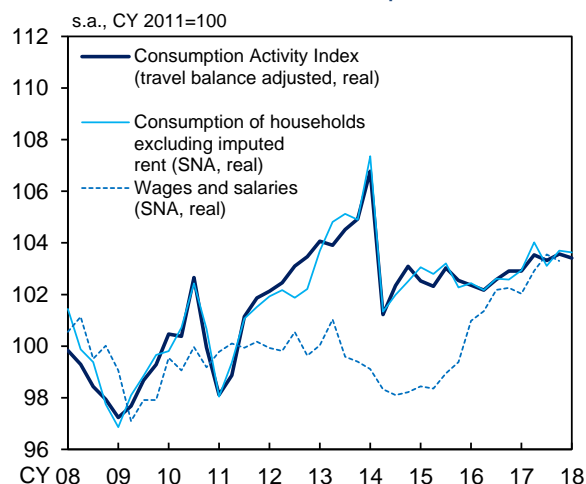
Private consumption has been increasing moderately, albeit with fluctuations, against the background of steady improvement in the employment and income situation. From the viewpoint of gauging consumption activity in a comprehensive manner, the Consumption Activity Index (CAI, travel balance adjusted) -- which is calculated by combining various sales and supply-side statistics -- has increased, albeit with fluctuations mainly stemming from weather conditions (Chart 30).²⁴ Looking at private consumption by type, durable goods have been on a moderate uptrend, mainly due to replacement demand for automobiles and household electrical appliances, although such goods recently have decreased somewhat, mainly against the backdrop of a decline in sales of imported automobiles. Nondurable goods had been more or less flat, but food and beverages have decreased recently, reflecting a rise in fresh food prices stemming from irregular weather. Meanwhile, services consumption has maintained its moderate increasing trend, albeit with

Chart 29: Labor Share



Source: Cabinet Office.
Notes: 1. Labor share = compensation of employees / nominal GDP × 100
2. Shaded areas indicate recession periods.

Chart 30: Private Consumption



Sources: Bank of Japan; Cabinet Office, etc.
Notes: 1. The Consumption Activity Index is based on staff calculations (as of April 20). Figures for the Consumption Activity Index (travel balance adjusted) exclude inbound tourism consumption and include outbound tourism consumption. The figure for 2018/Q1 is the January-February average.
2. The figure for consumption of households excluding imputed rent for 2018/Q1 is based on staff calculations using the "Synthetic Consumption Index (February)."
3. Figures for wages and salaries from 2017/Q2 are based on staff calculations using employee income (= total cash earnings × number of employees).

²³ Regarding the recent decline in the labor share, see Box 3 for a Japan-U.S. comparison.

²⁴ The Bank revised the compilation methodology of the CAI recently. For details, see the Bank's research paper "Revision of the Consumption Activity Index to Address the 2008 SNA and Improve Accuracy" published in April 2018.

fluctuations, reflecting a trend rise in communications charges as well as medical, health care, and welfare fees.

According to various sales statistics, retail sales value in real terms has remained on an increasing trend when fluctuations are smoothed out (Chart 31). Sales at department stores have picked up as a trend, mainly reflecting a pick-up in sales to the wealthy brought about by the past rise in stock prices and an increase in demand from foreign visitors to Japan. Sales at supermarkets have been on a moderate increasing trend, albeit with fluctuations mainly resulting from a rise in fresh food prices and weather conditions. Those at convenience stores have continued on a rising trend.

As for durable goods, sales of automobiles have started to pick up, after decreasing due to temporary supply-side problems of automakers (Chart 32). Sales of household electrical appliances have been on a moderate increasing trend due to resilient demand for white goods and replacement demand for such items as televisions.

With regard to services consumption, the pick-up in travel had temporarily paused, partly due to the effects of geopolitical risks, but has resumed recently; dining-out has increased (Chart 33).

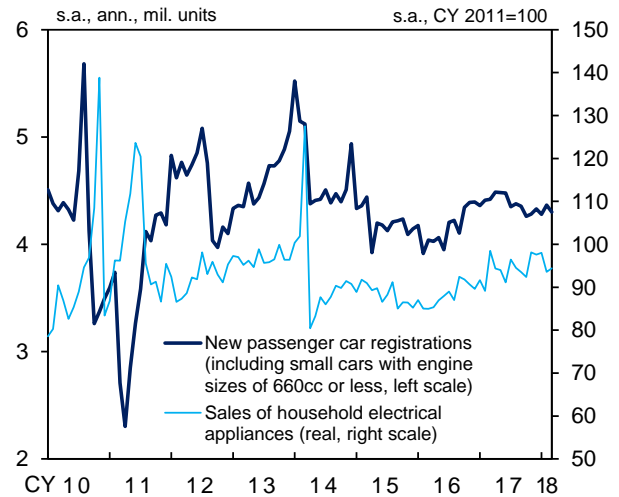
Looking at confidence indicators related to private consumption, the Consumer Confidence Index has been more or less flat due to the favorable

Chart 31: Consumption Indicators (Sales and Supply-side Statistics)

	s.a., q/q % chg.			
	17/Q2	17/Q3	17/Q4	18/Q1
Consumption Activity Index				
Real, travel balance adjusted	0.6	-0.2	0.2	-0.1
Real	0.7	-0.1	0.4	-0.2
Sales at retail stores				
Nominal	0.6	0.1	1.3	-0.6
Real	0.8	0.0	0.3	-1.8
Sales at department stores	0.3	0.4	-0.2	-0.2
Sales at supermarkets	0.3	-0.1	0.1	0.0
Sales at convenience stores	0.4	0.1	0.4	1.0

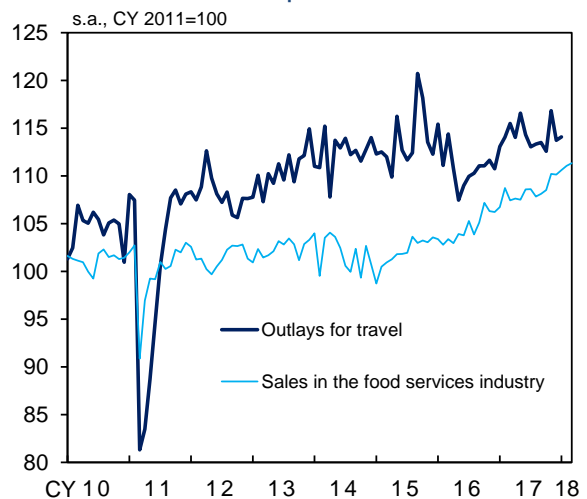
Sources: Bank of Japan; Ministry of Economy, Trade and Industry; Ministry of Internal Affairs and Communications.
 Notes: 1. The Consumption Activity Index is based on staff calculations (as of April 20).
 2. Real sales at retail stores are based on staff calculations using the CPI.
 3. Figures for sales at department stores and sales at supermarkets are adjusted for the number of stores.
 4. Figures for the Consumption Activity Index for 2018/Q1 are January-February averages.

Chart 32: Consumption of Durable Goods



Sources: Japan Automobile Dealers Association; Japan Light Motor Vehicle and Motorcycle Association; Ministry of Economy, Trade and Industry; Ministry of Internal Affairs and Communications.
 Note: Figures for real sales of household electrical appliances are based on staff calculations using the retail sales index of machinery and equipment in the "Current Survey of Commerce" and the price index of related items in the CPI.

Chart 33: Consumption of Services



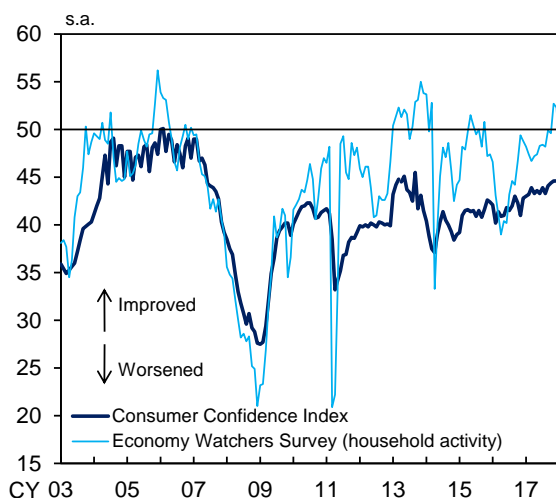
Sources: Japan Tourism Agency; Japan Food Service Association, "Market Trend Survey of the Food Services Industry."
 Note: Figures for the outlays for travel exclude those by foreign travelers.

employment situation, albeit with fluctuations that mainly resulted from a decline in stock prices and a surge in fresh food prices (Chart 34). The *Economy Watchers Survey* suggests that consumer confidence had continued to improve, but it has fallen recently, partly reflecting weather conditions and the decline in stock prices.

In the outlook, private consumption is expected to follow a moderate increasing trend, supported by an increase in employee income and by the wealth effects stemming from the rise in stock prices, as well as replacement demand for durable goods, although it is likely to temporarily turn to a decline in the second half of the projection period due to the scheduled consumption tax hike. Meanwhile, the propensity to consume -- which had declined somewhat considerably after the consumption tax hike in 2014 -- is expected to pick up very moderately, mainly reflecting the wealth effects and replacement demand for durable goods, although it is likely to level off temporarily after the scheduled consumption tax hike in 2019 (Chart 35).

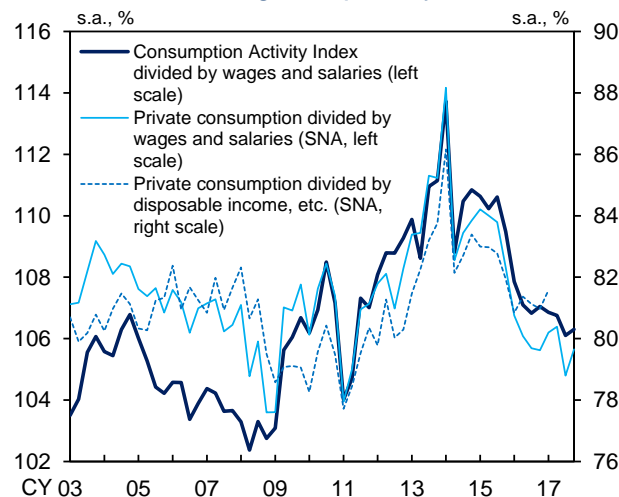
Housing investment has been weakening somewhat (Chart 36). Although an improvement in the employment and income situation and low housing loan rates are likely to underpin housing investment, it is expected to remain more or less flat when fluctuations due to the scheduled consumption tax hike are smoothed out, partly against the background of a peaking-out in demand for housing for rent that was motivated by inheritance tax savings.

Chart 34: Confidence Indicators Related to Private Consumption



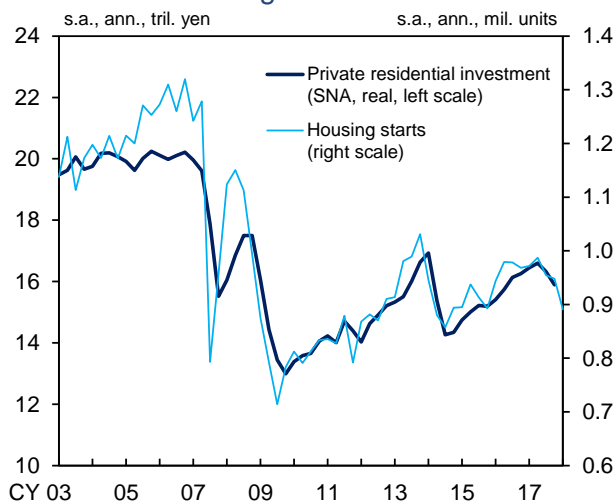
Source: Cabinet Office.
Note: Figures for the "Economy Watchers Survey" are those for the current economic conditions DI.

Chart 35: Average Propensity to Consume



Sources: Bank of Japan; Cabinet Office, etc.
Notes: 1. The Consumption Activity Index is based on staff calculations.
2. Figures for wages and salaries from 2017/Q2 are based on staff calculations using employee income (= total cash earnings × number of employees).
3. Private consumption is consumption of households excluding imputed rent.
4. "Disposable income, etc." consists of disposable income and "adjustment for the change in pension entitlements."

Chart 36: Housing Investment



Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism.
Note: The figure for 2018/Q1 is the January-February average.

II. The Current Situation of Prices and Their Outlook

Developments in Prices

The rate of increase in the producer price index (PPI, adjusted for the effects of seasonal changes in electricity rates) has been decelerating on a quarter-on-quarter basis, reflecting developments in international commodity prices and foreign exchange rates (Chart 37). The year-on-year rate of increase in the services producer price index (SPPI, excluding international transportation) has been at around 0.5 percent on the whole, with the rate of change in prices of items related to domestic transportation and fixed investment remaining positive (Chart 37).

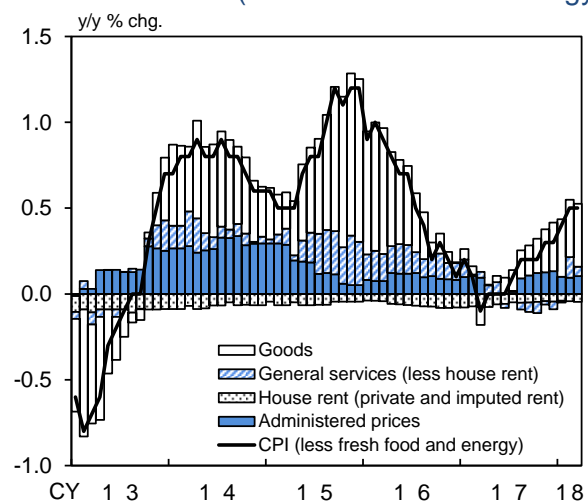
The year-on-year rate of change in the CPI (all items less fresh food and energy) has been at around 0.5 percent (Chart 38). While the fact that the pace of increase in the CPI has been moderate compared to the economic expansion and the labor market tightening is partly attributable to the sectoral shock of such factors as price declines at major supermarket chains mainly resulting from intensifying competition with other types of retail businesses, this reflects 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. Firms have been making efforts to absorb a rise in labor costs by increasing labor-saving investment and streamlining their business process, while limiting wage increases -- which correspond to the labor shortage -- mainly to part-time employees. As a result, the real wage gap, which is defined as the deviation of real wages from labor productivity,

Chart 37: Inflation Indicators

	y/y % chg.			
	17/Q2	17/Q3	17/Q4	18/Q1
Consumer Price Index (CPI)				
Less fresh food	0.4	0.6	0.9	0.9
Less fresh food and energy	0.0	0.1	0.3	0.5
Producer Price Index (q/q % chg.)	0.5	0.2	1.1	0.6
Services Producer Price Index	0.6	0.6	0.7	0.6
GDP deflator	-0.3	0.2	0.1	
Domestic demand deflator	0.4	0.5	0.6	

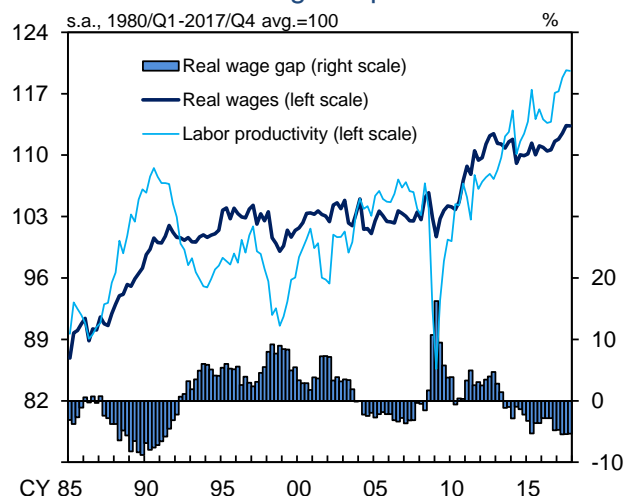
Sources: Ministry of Internal Affairs and Communications; Bank of Japan; Cabinet Office.
 Notes: 1. Figures for the Producer Price Index are adjusted to exclude the hike in electric power charges during the summer season.
 2. Figures for the Services Producer Price Index exclude international transportation.

Chart 38: CPI (less fresh food and energy)



Source: Ministry of Internal Affairs and Communications.
 Notes: 1. Administered prices (less energy) consist of "public services" and "water charges."
 2. The CPI figures are adjusted for changes in the consumption tax rate.

Chart 39: Real Wage Gap



Sources: Ministry of Finance; Cabinet Office.
 Notes: 1. The real wage gap is defined as the deviation of real wages from labor productivity.
 2. Real wages = personnel expenses / number of workers / GDP deflator
 3. Labor productivity = (operating profits + personnel expenses + depreciation expenses) / number of workers / GDP deflator
 4. Variables such as personnel expenses are based on the "Financial Statements Statistics of Corporations by Industry, Quarterly" and exclude "finance and insurance."

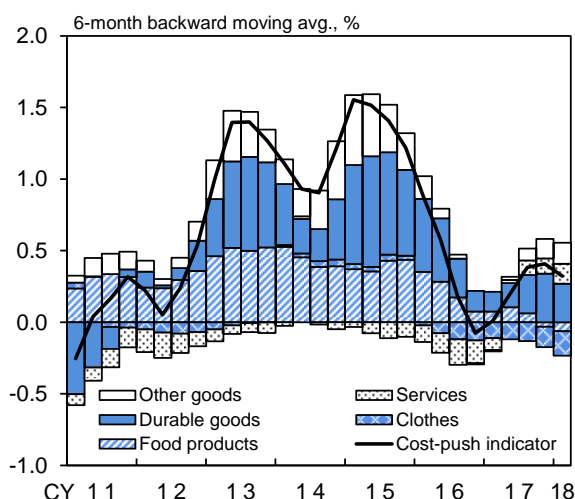
has remained at a low level, and this is contributing to pushing down prices (Chart 39).²⁵

However, the upward pressure on prices stemming from the rise in firms' costs has been increasing, partly due to a continued clear uptrend in hourly scheduled cash earnings of part-time employees and a rise in input prices. With regard to dining-out, for example, some franchises have passed on rises in personnel expenses and costs of ingredients to their prices. In reflection of such developments, the cost-push indicator -- which quantitatively measures the current upward pressure on prices stemming from a cost increase -- shows that such upward pressure has been increasing, mainly for durable goods (Chart 40).²⁶

The year-on-year rate of change in the CPI (all items less fresh food) is around 1 percent, reflecting a rise in energy prices, while the rate of change in the CPI excluding fresh food and energy has been at around 0.5 percent (Chart 41).

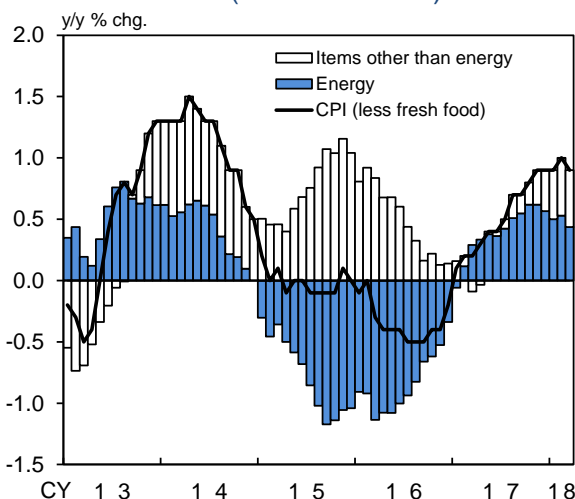
The recent developments in the indicators for capturing the underlying trend in the CPI are as follows (Chart 42). The rate of change in the trimmed mean has been in the range of 0.5-1.0

Chart 40: Cost-Push Indicator



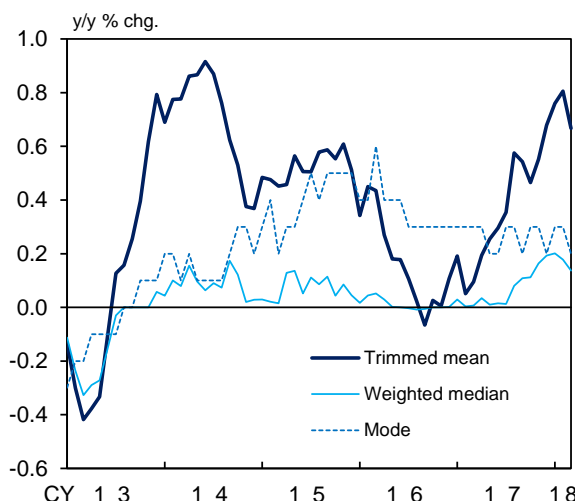
Sources: Ministry of Internal Affairs and Communications, etc.
 Notes: 1. The cost-push indicator is defined as the weighted average of the residuals obtained when regressing each CPI item on the corresponding cost indicator, such as the Producer Price Index. The weights are based on the CPI.
 2. Figures for 2018/Q1 are January-February averages.

Chart 41: CPI (less fresh food)



Source: Ministry of Internal Affairs and Communications.
 Notes: 1. Energy consists of petroleum products, electricity, and gas, manufactured & piped.
 2. The CPI figures are adjusted for changes in the consumption tax rate.

Chart 42: Various Measures of Core Inflation



Sources: Bank of Japan; Ministry of Internal Affairs and Communications.
 Note: Based on staff calculations using the CPI (consumption tax adjusted).

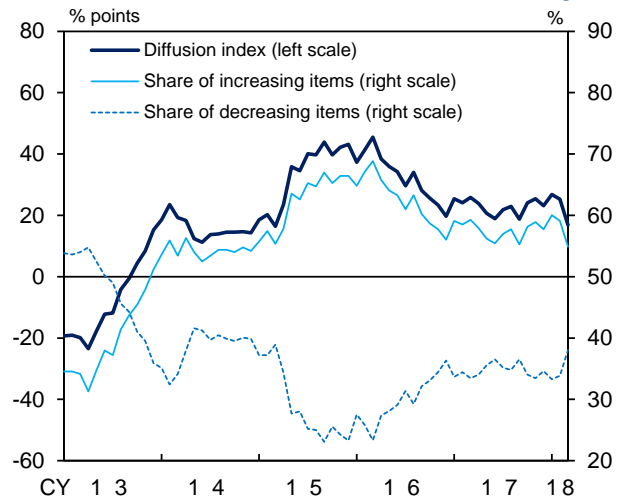
²⁵ Regarding the relationship between the real wage gap and prices, see Box 3 in the July 2017 Outlook Report.

²⁶ For details of the cost-push indicator, see Box 3 in the October 2017 Outlook Report.

percent.²⁷ The mode and the weighted median have been in the range of 0.0-0.5 percent of late.²⁸ Looking at annual price changes across all items (less fresh food), the share of price-increasing items minus the share of price-decreasing items has been on a moderate uptrend, albeit with fluctuations (Chart 43).

The year-on-year rate of change in the GDP deflator has been slightly positive on the whole, despite being negatively affected by the import deflator that reflects a pick-up in international commodity prices (Chart 37). The year-on-year rate of change in the domestic demand deflator has been at around 0.5 percent, mainly led by private consumption and business fixed investment.

Chart 43: Diffusion Index of Price Changes



Sources: Bank of Japan; Ministry of Internal Affairs and Communications.
 Note: The diffusion index is defined as the share of increasing items minus the share of decreasing items. The share of increasing/decreasing items is the share of items in the CPI (less fresh food, consumption tax adjusted) whose price indices increased/decreased from a year earlier. Based on staff calculations.

²⁷ The effects of large relative price fluctuations are eliminated by simply excluding items that belong to a certain percentage of the upper and lower tails of the price fluctuation distribution (10 percent of each tail in this report). The rate of change in the trimmed mean has been relatively higher than that in the CPI (all items less fresh food and energy) recently, mainly because charges for mobile phone services, which had contributed to pushing down the CPI, were excluded when calculating the trimmed mean.

²⁸ The mode is the inflation rate with the highest density in the distribution. The weighted median is the weighted average of the inflation rates of the items at around the 50 percentile point of the distribution.

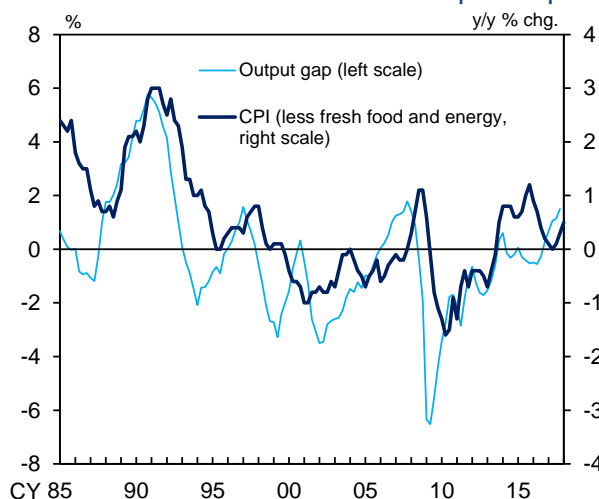
The Environment surrounding Prices

In the outlook for prices, the main factors that determine inflation rates are assessed as follows. First, the output gap has improved steadily; it was around 1.5 percent in the October-December quarter of 2017, and as suggested by improvement in the *Tankan* factor utilization index and in various monthly indexes that indicate the utilization of labor, it likely will have continued on an expanding trend within positive territory in the January-March quarter of 2018 (Charts 4 and 44).²⁹ With regard to the outlook, the output gap is projected to continue expanding moderately within positive territory in fiscal 2018, both on the capital and labor sides, reflecting the increase in demand at home and abroad. From fiscal 2019 onward, although such expansion is likely to pause, mainly due to the effects of the scheduled consumption tax hike, the output gap is expected to remain substantially positive.

Second, medium- to long-term inflation expectations have been more or less unchanged recently, after having remained in a weakening phase since summer 2015 (Charts 45 and 46). As for the outlook, such expectations are likely to follow an increasing trend and gradually converge to around 2 percent on the back of the following: (1) in terms of the adaptive component, with the improvement in the output gap, firms' stance is likely to gradually shift toward raising wages and prices and the observed inflation rate is expected to rise steadily, and (2) in terms of the forward-looking component, the Bank will pursue

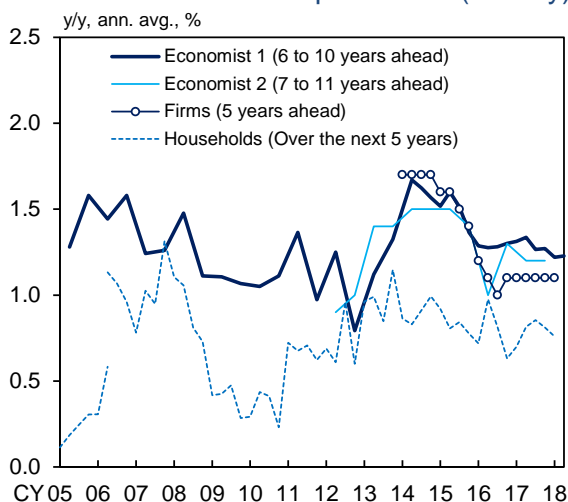
²⁹ In the meantime, the DI in the *Tankan* for domestic supply and demand conditions for products and services for large manufacturing enterprises was at a high level last seen in the August 1990 survey.

Chart 44: Inflation Rate and Output Gap



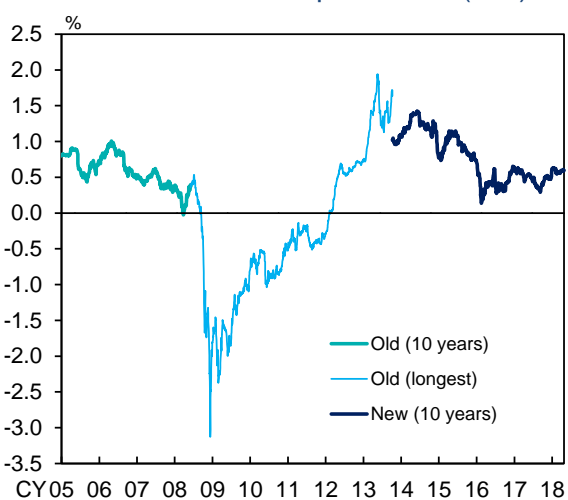
Sources: Ministry of Internal Affairs and Communications; Bank of Japan.
Notes: 1. The CPI figures are adjusted for changes in the consumption tax rate.
2. The output gap is based on staff estimations.

Chart 45: Inflation Expectations (Survey)



Sources: Bank of Japan; Consensus Economics Inc., "Consensus Forecasts"; JCER, "ESP Forecast."
Notes: 1. Figures for the economist 1 are from the "Consensus Forecasts." Figures for the economist 2 are from the "ESP Forecast."
2. Figures for households are from the "Opinion Survey on the General Public's Views and Behavior," estimated using the modified Carlson-Parkin method.
3. Figures for firms are "Outlook for General Prices (*Tankan*, all industries and enterprises, average)."

Chart 46: Inflation Expectations (BEI)



Source: Bloomberg.
Note: BEI (break-even inflation) rates are yield spreads between fixed-rate coupon-bearing JGBs and inflation-indexed JGBs. Inflation-indexed JGBs issued since October 2013 are designated as "new," while the rest are designated as "old." Figures for "old (longest)" are calculated using yield data for issue No. 16 of inflation-indexed JGBs, which matures in June 2018.

monetary easing through its strong commitment to achieving the price stability target.

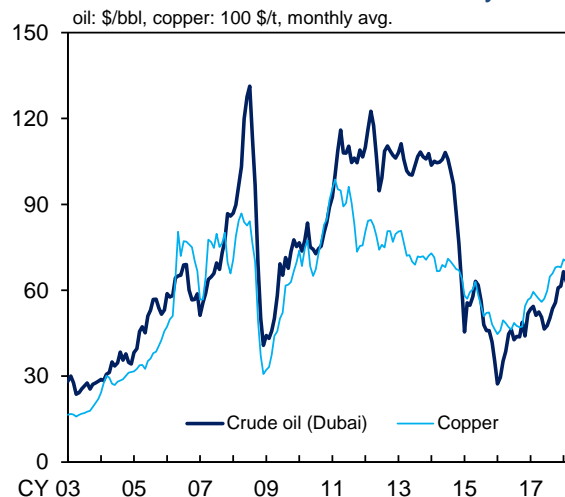
The third factor is developments in import prices (Chart 47). The past rise in crude oil prices pushed up energy prices in the CPI for the second half of fiscal 2017, but this effect is likely to wane moderately.

The Outlook for Prices

With regard to the outlook for prices, the year-on-year rate of increase in the CPI (all items less fresh food and energy) is likely to accelerate on the back of the following developments in the short run: (1) the rate of increase in prices of goods that are responsive to economic activity, including food products and goods related to daily necessities, is expected to accelerate gradually with a moderate increase in private consumption, and (2) moves to pass on the increase in personnel expenses to prices of general services, including dining-out and housework-related services, are likely to prevail, albeit at a very moderate pace. Thereafter, the year-on-year rate of change in the CPI is likely to increase toward 2 percent, as firms' stance gradually shifts toward raising wages and prices with the improvement in the output gap and as inflation expectations gradually rise.

The year-on-year rate of change in the CPI (all items less fresh food) is likely to increase toward 2 percent. This is because, although upward pressure of energy prices is likely to wane moderately, the CPI inflation excluding fresh food and energy is expected to accelerate.

Chart 47: International Commodity Prices



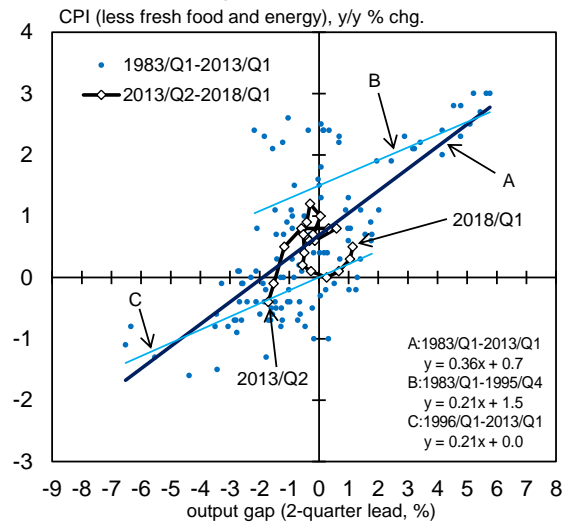
Sources: Nikkei Inc.; Bloomberg.

Such projections are made based on the same underlying scenario as before that the inflation rate will rise along the Phillips curve with the improvement in the output gap and that the Phillips curve will gradually shift upward as inflation expectations rise through both the forward-looking and adaptive expectation formation mechanisms (Chart 48).

Compared to the time when the January 2018 Outlook Report was published, the projected rates of increase in the CPI (all items less fresh food) are more or less unchanged.

In the long run, real wages -- which are determined by the balance between prices and nominal wages -- will be consistent with labor productivity (Chart 39). Under the baseline scenario, the rate of increase in real wages is expected to accelerate gradually, catching up with the improvement in labor productivity. That is, with corporate profits at record high levels, the rate of increase in nominal wages is projected to outpace that in the CPI, reflecting tight labor market conditions. Such a rise in real wages is likely to increase consumption through an improvement in household income, which will contribute to a rise in the CPI.

Chart 48: Phillips Curve



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

III. Financial Developments in Japan

Financial Conditions

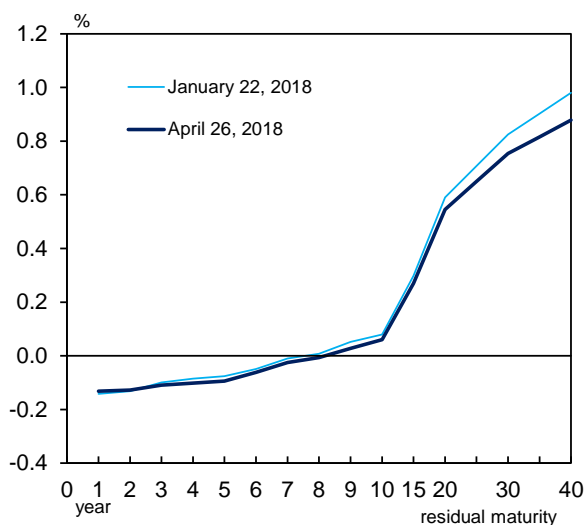
Financial conditions are highly accommodative.

Under "QQE with Yield Curve Control," the yield curve for Japanese government bonds (JGBs) has been in line with the current guideline for market operations, in which the short-term policy interest rate is set at minus 0.1 percent and the target level of 10-year JGB yields is around zero percent (Chart 49). That is, the yields for relatively short maturities have been stable in slightly negative territory; the 10-year JGB yields have generally been stable, at around 0 percent in positive territory. Meanwhile, the 20-year JGB yields also have generally been stable, at around 0.5 percent. The monetary base has been increasing at a high year-on-year growth rate of around 10 percent, and its amount outstanding as of end-March was 487 trillion yen, of which the ratio to nominal GDP was 88 percent.³⁰

With such long- and short-term JGB yields, firms' funding costs have been hovering at extremely low levels (Chart 50). Issuance rates for CP have remained at extremely low levels. Conditions for CP issuance have been favorable, as suggested by the DI in the *Tankan* having been at around the highest level since 2008, which is when it was introduced in the *Tankan*. Issuance rates for corporate bonds also have remained at extremely low levels. Meanwhile, lending rates (the average interest rates on new loans and discounts) have been around historical low levels.

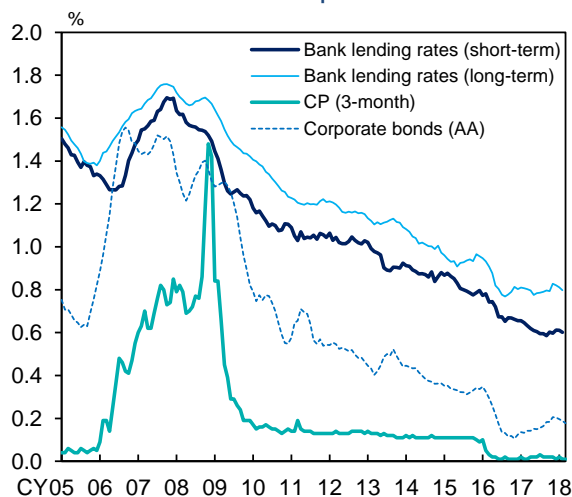
³⁰ It is assumed that the figure for nominal GDP is unchanged from the October-December quarter of 2017.

Chart 49: Yield Curves



Source: Bloomberg.

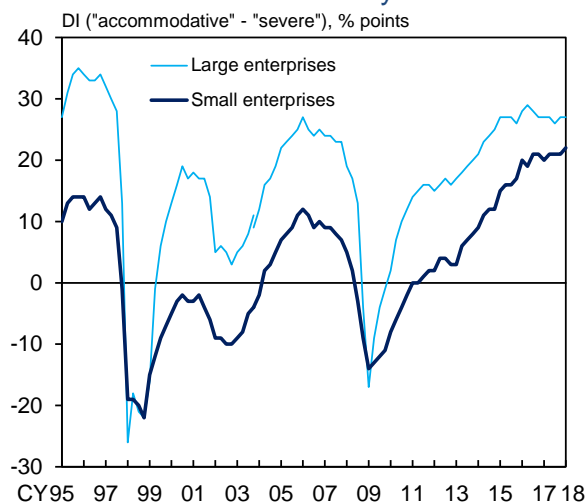
Chart 50: Bank Lending Rates and Issuance Yields for CP and Corporate Bonds



Sources: Bank of Japan; Japan Securities Depository Center; Capital Eye; I-N Information Systems; Bloomberg.

- Notes: 1. Figures for issuance yields for CP up to September 2009 are the averages for CP (3-month, rated a-1 or higher). Those from October 2009 are the averages for CP (3-month, rated a-1).
2. Figures for issuance yields for corporate bonds are the averages for domestically issued bonds launched on a particular date. Bonds issued by banks and securities companies, etc., are excluded.
3. Figures for bank lending rates and issuance yields for corporate bonds show 6-month backward moving averages.

Chart 51: Lending Attitude of Financial Institutions as Perceived by Firms

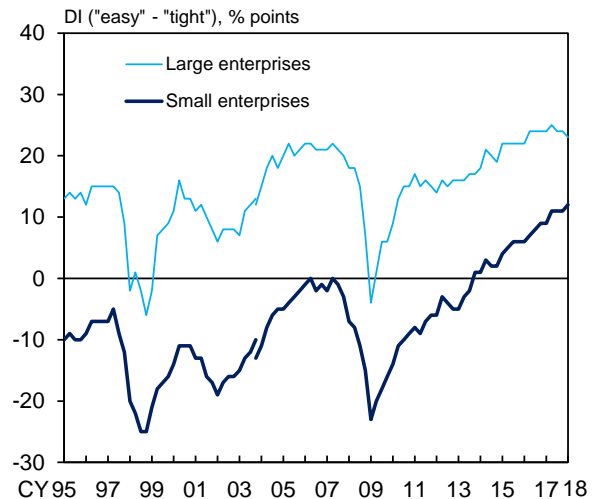


Source: Bank of Japan.

Note: Based on the *Tankan*. All industries. There is a discontinuity in the data in December 2003 due to a change in the survey framework.

With regard to the availability of funds for firms, the DI in the *Tankan* for financial institutions' lending attitudes as perceived by firms suggests that their lending attitudes have been highly accommodative; the DI for large firms has been at a high level of around the peak in the mid-2000s, and that for small firms has been at a high level last seen at the end of the 1980s (Chart 51). Firms' financial positions have been favorable, as suggested by the DIs for both large and small firms in the *Tankan* having been at high levels that are almost the same as those seen around 1990 (Chart 52).

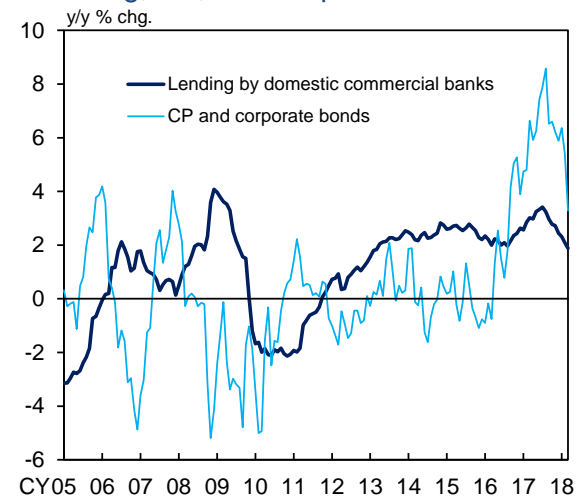
Chart 52: Financial Position



Source: Bank of Japan.
Note: Based on the *Tankan*. All industries. There is a discontinuity in the data in December 2003 due to a change in the survey framework.

Demand for funds such as for business fixed investment has been increasing, mainly for small and medium-sized firms. In these circumstances, the year-on-year rate of increase in the amount outstanding of bank lending has been at around 2 percent (Chart 53). That in the aggregate amount outstanding of CP and corporate bonds has been at a relatively high level.

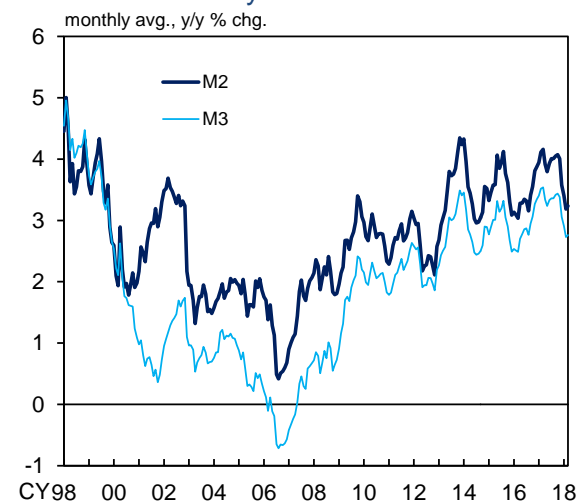
Chart 53: Amount Outstanding of Bank Lending, CP, and Corporate Bonds



Sources: Bank of Japan; Japan Securities Depository Center; Japan Securities Dealers Association; I-N Information Systems.
Note: Figures for lending by domestic commercial banks are monthly averages. Figures for CP and corporate bonds are those at the end of period.

The year-on-year rate of change in the money stock (M2) has been in the range of 3.0-3.5 percent, as bank lending has increased (Chart 54).

Chart 54: Money Stock



Source: Bank of Japan.

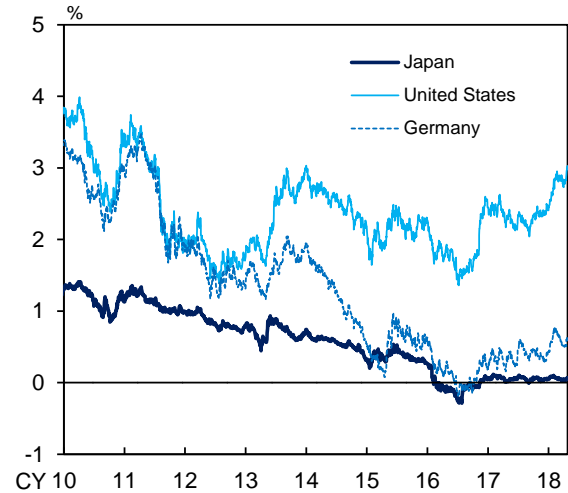
Developments in Financial Markets

With regard to developments in global financial markets, U.S. stock prices -- which had been marking historical highs -- declined, triggered by a rise in U.S. long-term interest rates at the beginning of February, and this led to a fall in stock prices in many countries through a heightening of investors' risk aversion. Thereafter, although stock prices have continued to see large fluctuations, there have been limited effects so far on other markets and the real economies.

Yields on 10-year government bonds in the United States have risen, mainly because wage and price indicators released at the beginning of February were stronger than market expectations and views that the pace of inflation will accelerate spread among market participants (Chart 55). In Germany, yields on 10-year government bonds have been more or less flat with fluctuations smoothed out, following a rise through February that mainly reflected solid economic indicators and the abatement of uncertainties regarding its political situation.

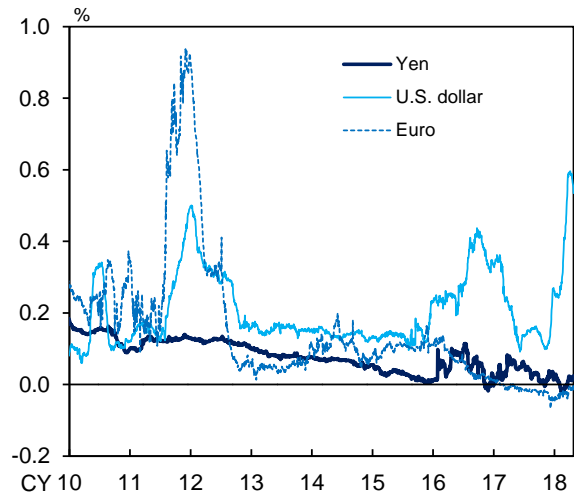
With regard to credit spreads on interbank transactions, the LIBOR-OIS spreads for major currencies show the following developments: those for the U.S. dollar have widened, mainly due to the effects of increased issuance of U.S. Treasury bills; those for the euro and the yen have remained at low levels (Chart 56). The rise in U.S. interest rates on term instruments, which includes the effects of the policy rate hikes by the Federal Reserve, has led to Japanese financial institutions' reduced appetite for U.S. dollar funding through a deterioration in profitability from

Chart 55: 10-Year Government Bond Yields in Selected Advanced Economies



Source: Bloomberg.

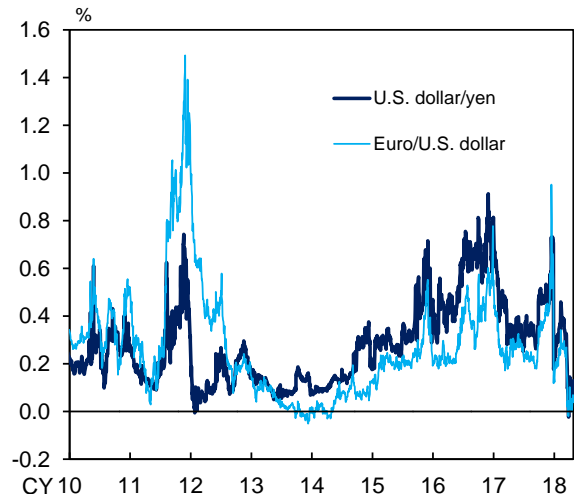
Chart 56: Credit Spreads for Term Instruments



Source: Bloomberg.

Note: The credit spreads for term instruments are LIBOR (3-month) minus yields on overnight index swaps (3-month).

Chart 57: Dollar Funding Premiums through Foreign Exchange Swaps



Source: Bloomberg.

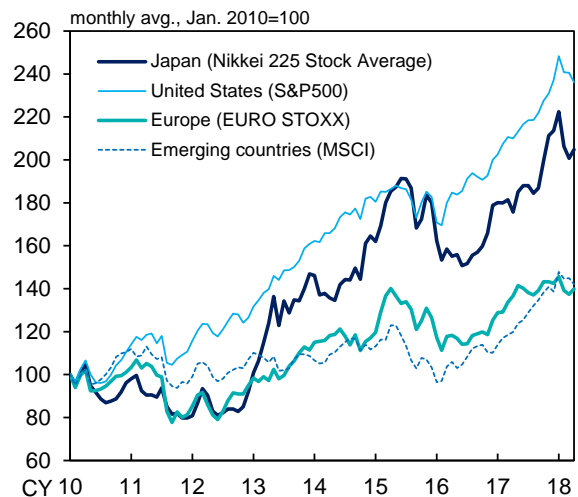
Note: U.S. dollar funding rate from yen or euro minus 3-month dollar LIBOR.

investments in U.S. government bonds. Thus, premiums for U.S. dollar funding through the dollar/yen foreign exchange swap market have declined recently (Chart 57).

Stock prices in the United States and Europe declined, triggered by a rise in U.S. long-term interest rates at the beginning of February; thereafter, they have continued to see large fluctuations amid uncertainties over the U.S. trade policy (Chart 58). Japanese stock prices had been at high levels seen for the first time in about 26 years in the second half of January, but have fallen since February, due partly to uncertainties over the U.S. trade policy, with stock prices in the United States and Europe also declining. In the Japan real estate investment trust (J-REIT) market, prices have declined somewhat (Chart 59).

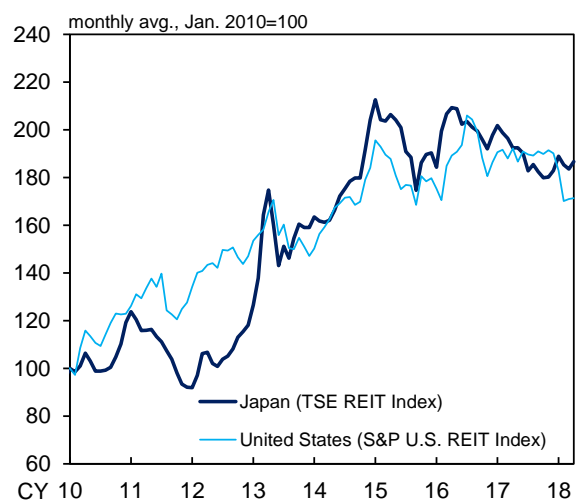
In foreign exchange markets, the yen appreciated against the U.S. dollar through March as investors' risk aversion heightened somewhat. Thereafter, the yen has reverted to depreciation as the yield differential between Japan and the United States has widened (Chart 60). The yen has been more or less flat against the euro, with fluctuations smoothed out.

Chart 58: Selected Stock Prices



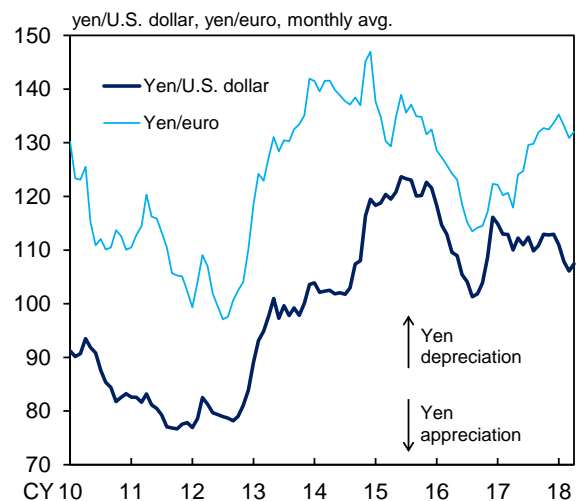
Source: Bloomberg.
Note: Figures for emerging countries are based on the MSCI Emerging Markets Index calculated in the local currencies.

Chart 59: Selected REIT Indexes



Source: Bloomberg.

Chart 60: Yen/U.S. Dollar and Yen/Euro

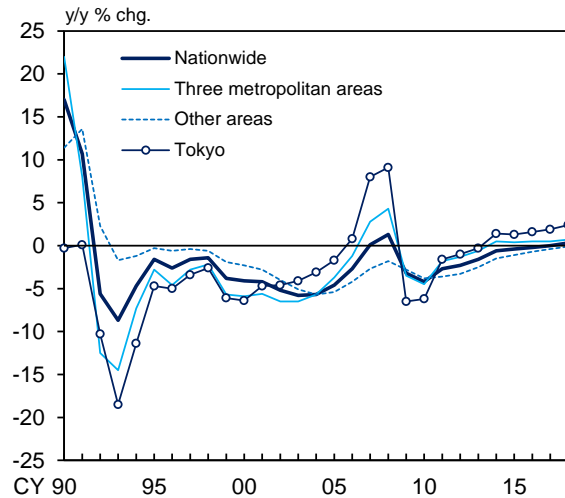


Source: Bloomberg.

Land Prices

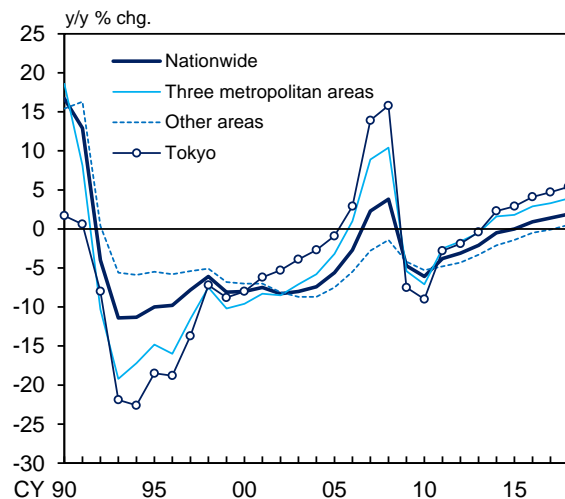
Land prices as a whole have almost stopped declining. According to the *Land Market Value Publication* for 2018 (as of January 1), the year-on-year rate of increase in commercial land prices has accelerated, and the rate of change in residential land prices has turned positive, albeit marginally, for the first time in 10 years (Charts 61 and 62). In the three major metropolitan areas (Tokyo, Osaka, and Nagoya), the year-on-year rate of increase in both commercial and residential land prices has accelerated. In nonmetropolitan areas, the year-on-year rate of change in commercial land prices has turned positive for the first time in 26 years, and the rate of decline in residential land prices has continued to decelerate.

Chart 61: Residential Land Prices



Source: Ministry of Land, Infrastructure, Transport and Tourism.
 Notes: 1. Based on the "Land Market Value Publication." Figures are as of January 1.
 2. Three metropolitan areas: the Tokyo area (Tokyo, Kanagawa, Saitama, Chiba, and Ibaraki prefectures), the Osaka area (Osaka, Hyogo, Kyoto, and Nara prefectures), and the Nagoya area (Aichi and Mie prefectures).
 Other areas: other than the three metropolitan areas.

Chart 62: Commercial Land Prices



Source: Ministry of Land, Infrastructure, Transport and Tourism.
 Notes: 1. Based on the "Land Market Value Publication." Figures are as of January 1.
 2. Three metropolitan areas: the Tokyo area (Tokyo, Kanagawa, Saitama, Chiba, and Ibaraki prefectures), the Osaka area (Osaka, Hyogo, Kyoto, and Nara prefectures), and the Nagoya area (Aichi and Mie prefectures).
 Other areas: other than the three metropolitan areas.

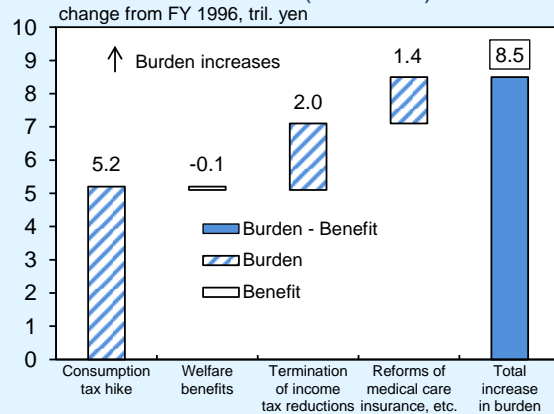
(Box 1) The Net Burden on Households around the Time of Consumption Tax Hikes

In order to consider changes in household consumption around the time of consumption tax hikes, it is necessary to take into account not only changes in the consumption tax rate but also in the household burden brought about by other factors.

A look at the increase in the net burden on households following the two previous consumption tax hikes shows that, in fiscal 1997, apart from the hike in the consumption tax rate by 2 percentage points (equivalent to a burden of 5.2 trillion yen), there were substantial additional increases in the household burden in the form of a termination of income tax reductions and an increase in medical costs resulting from reforms of medical care insurance (Chart B1-1). In fiscal 2014, the tax rate was raised by 3 percentage points, increasing the household burden by 8.2 trillion yen, and although measures to reduce the burden were taken, such as increases in welfare benefits, the effects were lessened by an increase in pension-related burdens (Chart B1-2). As a result, the increase in the net burden on households is estimated to have been about 8 trillion yen around the time of both of the previous tax hikes.

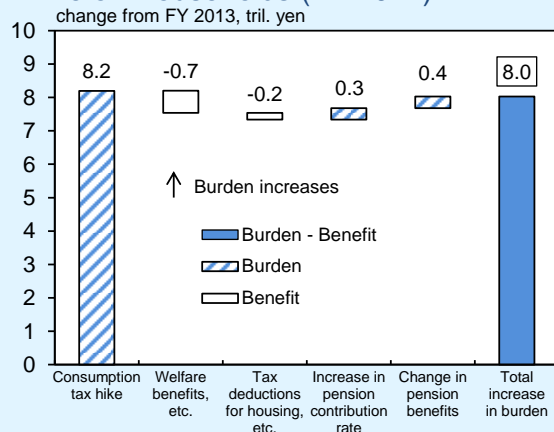
On the other hand, in fiscal 2019, even though the consumption tax is scheduled to be raised by 2 percentage points, a number of measures to mitigate the burden -- such as a reduced tax rate and an increase in welfare benefits for pensioners -- and the provision of free education are planned

Chart B1-1: Burden of Consumption Tax Hike on Households (FY 1997)



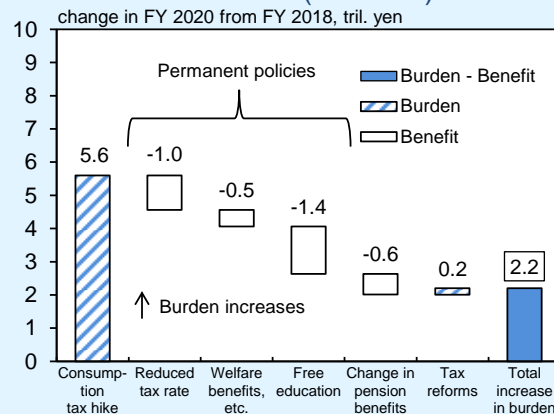
Sources: Cabinet Office; Ministry of Finance.
Note: Based on *Keizai no Kaiko* (Review of the Japanese Economy) 1997 published by the former Economic Planning Agency.

Chart B1-2: Burden of Consumption Tax Hike on Households (FY 2014)



Sources: Ministry of Finance; Ministry of Health, Labour and Welfare, etc.
Note: "Welfare benefits, etc." includes economic policies to mitigate the impact of the tax hike on households (Cabinet decision in October 2013).

Chart B1-3: Burden of Consumption Tax Hike on Households (FY 2019)



Sources: Ministry of Finance; Ministry of Health, Labour and Welfare; Consensus Economics Inc., "Consensus Forecast," etc.
Notes: 1. The figure for "change in pension benefits" is based on staff calculations under the following assumptions: (i) the wage growth-slide adjustment rate is equal to the price growth-slide adjustment rate; (ii) the slide adjustment rate under the macroeconomic slide mechanism is -0.6% (including -0.3% carried over from fiscal 2018) in fiscal 2019 and -0.3% in fiscal 2020. Inflation rates are from the "Consensus Forecast."
2. The figure for "free education" is based on staff calculations.

to be implemented (Chart B1-3).^{31,32,33} As a result, the net burden on households is expected to be only about 2 trillion yen. In addition, the fact that many burden mitigation measures are permanent is expected to increase their effects.

Thus, in terms of the net burden on households, the impact of the scheduled consumption tax hike in fiscal 2019 is expected to be smaller than that of past tax hikes. Nevertheless, the impact of the consumption tax hike is highly uncertain, partly because the effects on consumer sentiment can differ substantially, depending on economic conditions at the time of the tax hike.

³¹ The increase in welfare benefits, etc., shown in Chart B1-3 is obtained by calculating the net impact, including of welfare benefits for pensioners and the reduction in nursing care insurance premiums for low-income households, as well as of the increased burden through the end of the reduction in employment insurance premiums, which is a measure limited to three years.

³² The impact of the provision of free education has been calculated based on information such as from media reports, making bold assumptions taking into account the government's financial resources as well as cases of the reductions in the burden of early childhood education by some municipalities.

³³ Unlike in fiscal 1997 and fiscal 2014, when the consumption tax hike was implemented at the beginning of the fiscal year in April, the fiscal 2019 tax hike is scheduled for October. For this reason, in order to make it possible to compare the three tax hikes, the impact of the October 2019 tax hike in Chart B1-3 is calculated as the increase in the burden in fiscal 2020 compared to fiscal 2018.

(Box 2) The Impact of Exchange Rates on Real Exports

With regard to the link between real exports and exchange rates, Japan's real exports -- after having followed an uptrend amid the depreciation of the yen from 2005 through 2007 -- fell sharply when the yen rapidly appreciated immediately after the global financial crisis in 2008 (Chart B2-1). Since then, however, the link between exports and exchange rates appears to have weakened.

To examine this issue quantitatively, we estimated a time-varying parameter vector auto-regression (VAR) model consisting of three variables: the growth rate of overseas economies, the real effective exchange rate, and real exports (all in terms of a quarter-on-quarter change) (Chart B2-2). The estimation results indicate that, while the sensitivity of exports to exchange rate shocks increased through the mid-2000s, it fell sharply after the global financial crisis, and in recent years, exports have been less affected by exchange rates (Chart B2-3).

One of the reasons why the exchange rate sensitivity of exports has declined is that the price-setting behavior of Japanese firms has changed. For instance, looking at trends among automakers, before the global financial crisis, they undertook a pricing strategy to fix export prices in yen (i.e., producer currency pricing), and lowered export prices in the contract currency to increase market share when the yen depreciated (Chart B2-4). On the other hand, in recent years, automakers increasingly have tended to fix export

Chart B2-1: Real Exports and Exchange Rate

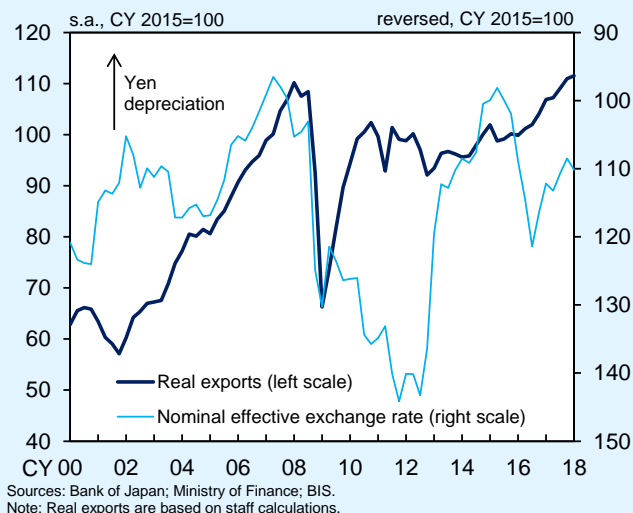


Chart B2-2: VAR Model Specifications

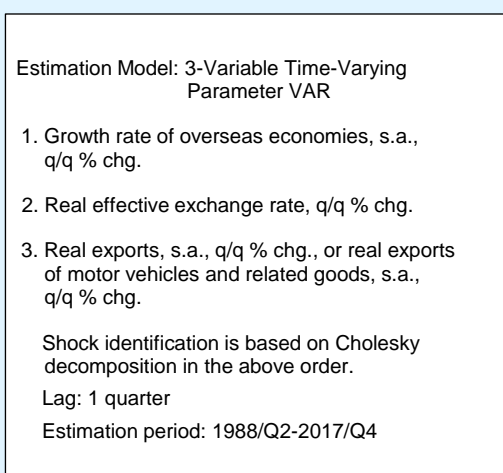
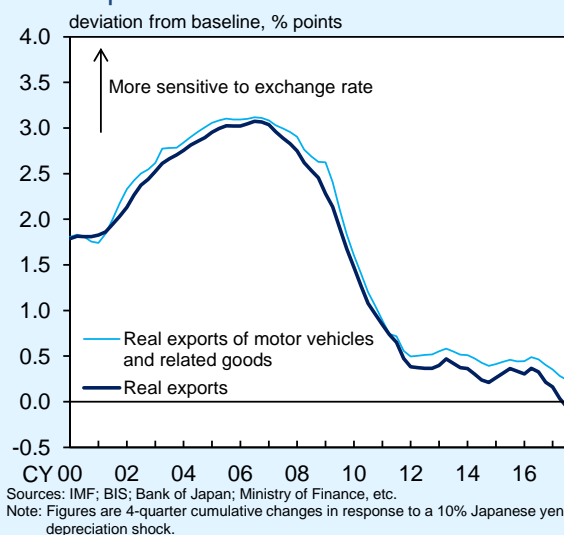


Chart B2-3: Exchange Rate Sensitivity of Exports



prices in the contract currency (i.e., local currency pricing), leading to a decline in the link with exchange rates. A reason for such changes is that exports of Japanese firms have shifted to higher value-added goods, and thus they are less likely to get involved in price competition to secure market share (Chart B2-5).

Meanwhile, an appreciation of the yen exerts downward pressure on corporate profits when sales denominated in foreign currencies and dividend payments from abroad are converted into yen. In fact, the primary income balance, which reflects such movements in profits, is closely linked to exchange rates (Chart B2-6). However, compared to fluctuations in profits due to changes in export quantities, those due to changes in the terms of trade are considered to have less effect on business fixed investment.³⁴

Chart B2-4: Export Prices of Motor Vehicles

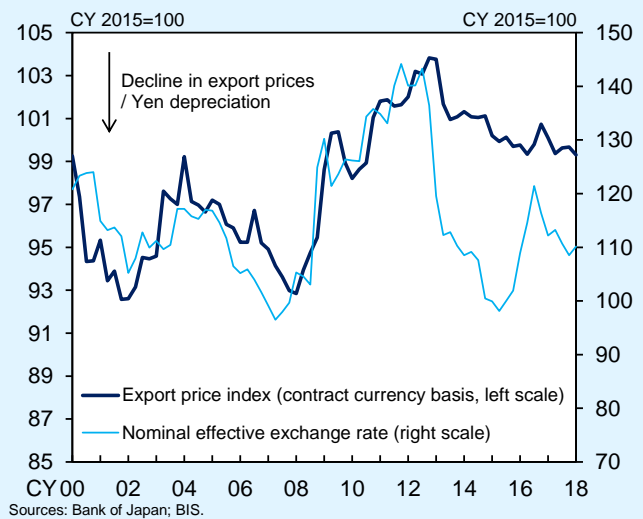


Chart B2-5: The Rising Value-Added of Motor Vehicle Exports

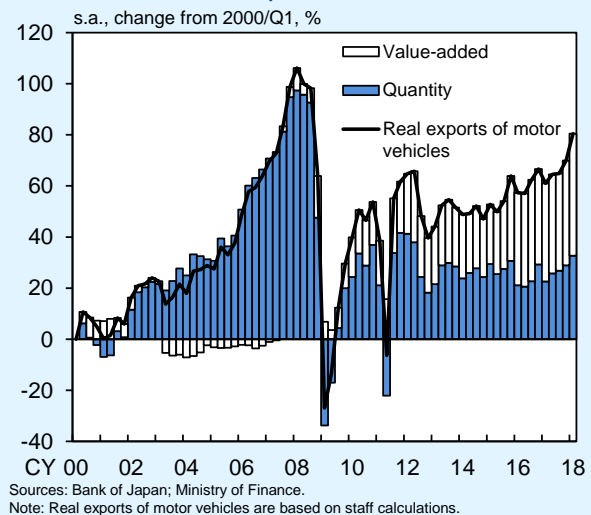
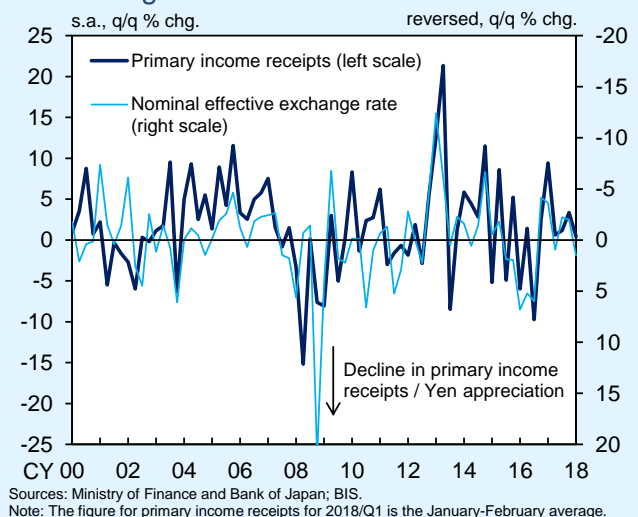


Chart B2-6: Income Balance and Exchange Rate



³⁴ For details, see "Corporate Profits and Business Fixed Investment: Why are Firms So Cautious about Investment?," Bank of Japan Review Series (2016-E-2).

(Box 3) The Background to Changes in the Labor Share

The labor share is on a downtrend in many countries. While there are many hypotheses to explain the decline, this box follows the approach of Autor et al. (2017), which presents the "superstar firm hypothesis," to examine recent labor share trends in Japan.³⁵

The "superstar firm hypothesis" suggests that the decline in the labor share at the macro-level is due to the increased market share of some top firms with a relatively low labor share, referred to as "superstar firms." To examine changes in the labor share, these are decomposed into three components: (1) the "within-firm effect," reflecting changes in the labor share within individual firms; (2) the "between-firm effect," reflecting changes in the market share of incumbent firms; and (3) "other," which includes firm entry and exit effects (Chart B3-1).

The results presented by Autor et al. for the United States indicate that the "between-firm effect" is the main cause for the decline in the labor share (Chart B3-2). This suggests that the labor share at the macro-level decreases as the market share of "superstar firms" with a low labor share increases, such as Apple and Amazon.

On the other hand, different results were obtained for Japan, although it should be noted that this

Chart B3-1: Decomposition of Labor Share

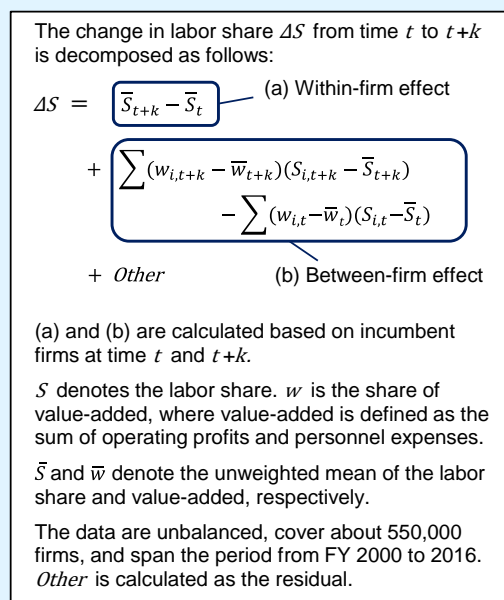
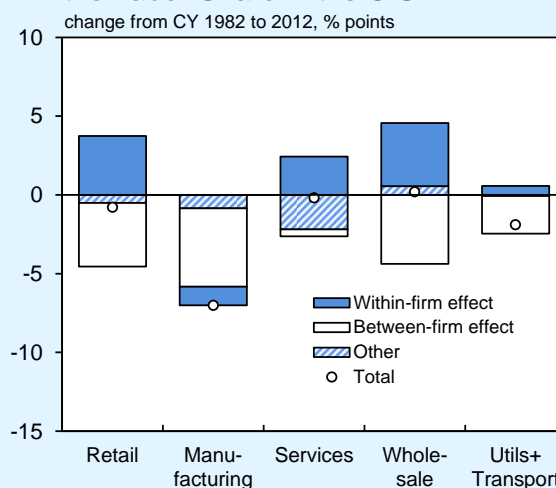


Chart B3-2: Decomposition of the Change in the Labor Share in the U.S.



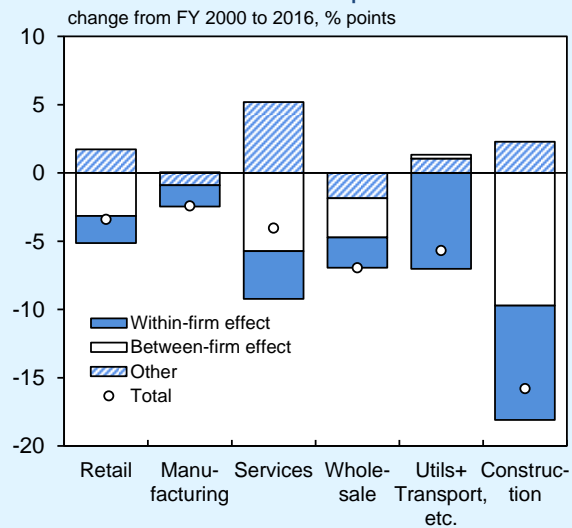
Source: Autor, D., D. Dorn, L. Katz, C. Patterson, and J. Van Reenen (2017), "The Fall of the Labor Share and the Rise of Superstar Firms," MIT Working Paper.
 Notes: 1. "Other" consists of firm entry and exit effects, etc.
 2. The decomposition for "Utils + Transport" is for the period from CY 1992 to 2007.

³⁵ Autor, D., D. Dorn, L. Katz, C. Patterson, and J. Van Reenen (2017), "The Fall of the Labor Share and the Rise of Superstar Firms," MIT Working Paper.

could be partly due to differences such as in the observation period. Specifically, the results show that not only the "between-firm effect" but also the "within-firm effect" have made a substantial contribution to the decline in the labor share (Chart B3-3).

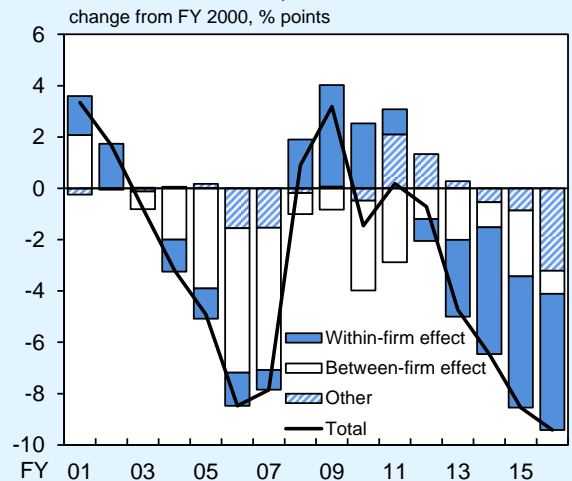
Looking at the decomposition of the change in the labor share for all industries in Japan over time, a notable feature in recent years is that the "within-firm effect" has been lowering the labor share (Chart B3-4). This likely reflects the current situation in which individual firms have been raising productivity against the backdrop of labor shortage while real wage growth has been relatively restrained (Chart 39).³⁶

Chart B3-3: Decomposition of the Change in the Labor Share in Japan



Source: Teikoku Databank.
 Notes: 1. Value-added = operating profits + personnel expenses, labor share = personnel expenses / value-added. Observations with negative value-added and a firm-level labor share at the 95th percentile or above were excluded as outliers.
 2. "Other" consists of firm entry and exit effects, etc.

Chart B3-4: Decomposition of the Change in the Labor Share, FY 2001 to 2016



Source: Teikoku Databank.
 Notes: 1. Value-added = operating profits + personnel expenses, labor share = personnel expenses / value-added. Observations with negative value-added and a firm-level labor share at the 95th percentile or above were excluded as outliers.
 2. "Other" consists of firm entry and exit effects, etc.

³⁶ See Box 3 in the July 2017 Outlook Report.

