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# *Outlook for Economic Activity and Prices*

*July 2019*



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

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# Outlook for Economic Activity and Prices (July 2019)

## The Bank's View<sup>1</sup>

### Summary

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- Japan's economy is likely to continue on an expanding trend throughout the projection period -- that is, through fiscal 2021 -- despite being affected by the slowdown in overseas economies for the time being.<sup>2</sup> Although exports are projected to show some weakness for the time being, they are expected to be on a moderate increasing trend, with overseas economies growing moderately on the whole. Domestic demand also is likely to follow an uptrend, mainly against the background of highly accommodative financial conditions and the underpinnings through government spending, despite being affected by such factors as the scheduled consumption tax hike.
  - The year-on-year rate of change in the consumer price index (CPI, all items less fresh food) has been positive but has continued to show relatively weak developments compared to the economic expansion and tight labor market conditions. Medium- to long-term inflation expectations have been more or less unchanged. Nonetheless, with the output gap remaining positive, firms' stance gradually will shift toward further raising wages and prices, and households' tolerance of price rises will increase. In this situation, further price rises are likely to be observed widely and then medium- to long-term inflation expectations are projected to rise gradually. As a consequence, the year-on-year rate of change in the CPI is likely to increase gradually toward 2 percent.
  - Comparing the current projections with the previous ones, both the projected growth rates and the projected rates of increase in the CPI are more or less unchanged.
  - With regard to the risk balance, risks to economic activity are skewed to the downside, particularly regarding developments in overseas economies. Risks to prices are skewed to the downside, mainly due to the downside risks to economic activity and uncertainties over developments in medium- to long-term inflation expectations. The momentum toward achieving the price stability target of 2 percent is maintained but is not yet sufficiently firm, and thus developments in prices continue to warrant careful attention.
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<sup>1</sup> 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 July 29 and 30, 2019.

<sup>2</sup> The July 2019 *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.

## **I. Current Situation of Economic Activity and Prices in Japan**

Japan's economy has been on a moderate expanding trend, with a virtuous cycle from income to spending operating, although exports, production, and business sentiment have been affected by the slowdown in overseas economies. Overseas economies have been growing moderately on the whole, although slowdowns have been observed. In this situation, exports have shown some weakness. On the other hand, with corporate profits staying at high levels on the whole, business fixed investment has continued on an increasing trend. Private consumption has been increasing moderately against the background of steady improvement in the employment and income situation, and an increase in demand prior to the scheduled consumption tax hike has started to be seen in part, albeit to a marginal extent compared with that of the previous tax hike. Housing investment and public investment have been more or less flat. Although exports have shown some weakness, industrial production also has been more or less flat, reflecting the increase in domestic demand, and labor market conditions have remained tight. 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 at around 0.5 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 on an expanding trend throughout the projection period -- that is, through fiscal 2021 -- despite being affected by the slowdown in overseas economies for the time being.

Specifically, as for the outlook for Japan's economy for the time being, exports are projected to show some weakness and business fixed investment also is likely to decelerate somewhat, both reflecting the effects of the slowdown in overseas economies. However, private consumption is expected to continue increasing as the employment and income situation continues to improve, and also partly because of the increase in demand prior to the scheduled consumption tax hike in October 2019. Public investment also is likely to increase, reflecting Olympic Games-related demand, the implementation of the supplementary budgets in response to natural disasters, and expansion in expenditure such as for national resilience.

Thereafter, overseas economies are expected to grow moderately on the whole with the growth rates rising somewhat, partly backed by the materialization of the effects of stimulus measures, such as in China, and the progress in global adjustments in IT-related goods. Under these circumstances, Japan's exports are projected to return to their moderate increasing trend. 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, despite being affected by such factors as the scheduled consumption tax hike. Business fixed investment -- such as that intended for domestic capacity expansion in line with the economic expansion, that related to urban redevelopment projects, and labor-saving investment to address labor shortage -- is likely to increase moderately amid accommodative financial conditions, despite downward pressure resulting mainly from cyclical adjustments in capital stock accompanying the prolonged economic expansion. Private consumption also is expected to follow a moderate increasing trend as the employment and income situation continues to improve and the government implements countermeasures for the scheduled consumption tax hike, although it is likely to be pushed down for some time due to the effects of the hike.<sup>3</sup> Meanwhile, public investment is expected to continue increasing through fiscal 2020 and thereafter maintain a relatively high level in fiscal 2021.

On this basis, Japan's economy is likely to continue growing at about the same pace as its potential on average.<sup>4</sup> Comparing the current projections with the previous ones, the projected growth rates are more or less unchanged.

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 "Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control."<sup>5</sup> Financial institutions' active lending attitudes, as well as favorable conditions for corporate bond and CP issuance, are likely to be maintained and support firms' and households' activities from the financial side. Thus, financial conditions are likely to remain highly accommodative.

Meanwhile, 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. In addition, as the natural rate of interest

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<sup>3</sup> 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) a decline in real income. Although it is subject to uncertainties, the negative impact on the growth rates is expected to be smaller than that of the previous tax hike in fiscal 2014.

<sup>4</sup> Under a specific methodology, Japan's potential growth rate is estimated to be in the range of 0.5-1.0 percent recently. 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.

<sup>5</sup> 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.

increases together with the rise in the growth potential of Japan's economy, monetary easing effects are likely to be enhanced.

## **B. Baseline Scenario of the Outlook for Prices**

The year-on-year rate of change in the CPI has been positive but has continued to show relatively weak developments compared to the economic expansion and tight labor market conditions.

This is basically because firms' cautious wage- and price-setting stance, as well as households' cautiousness toward price rises, have not yet clearly changed in a situation where the mindset and behavior based on the assumption that wages and prices will not increase easily have been deeply entrenched. Firms' efforts to absorb upward pressure of costs on prices by raising productivity, the technological progress in recent years, and the high wage elasticity of labor supply also are contributing factors. In addition, the continued lackluster developments in administered prices and housing rent are likely to have affected the sluggishness in prices. It has been taking time to resolve these factors that have been delaying price rises, and the situation likely has continued in which the responsiveness of prices to the output gap, as well as inflation expectations that are strongly affected by the adaptive formation mechanism, do not rise easily.

With regard to the outlook, the year-on-year rate of change in the CPI is likely to increase gradually toward 2 percent, mainly on the back of the output gap remaining positive and medium- to long-term inflation expectations rising. Comparing the current projections with the previous ones, the projected rates of increase in the CPI are more or less unchanged.<sup>6</sup>

The mechanism through which the year-on-year rate of change in the CPI increases gradually toward 2 percent can be explained by the following factors that determine general price inflation. First, the output gap -- which shows the utilization of labor and capital -- has been substantially positive, reflecting tight labor market conditions and high levels of capital utilization rates, and is expected to remain so. Under such circumstances, further price rises are likely to be observed widely as households' tolerance of price rises increases, mainly reflecting a rise in wage growth rates, and firms' stance shifts toward further raising prices.

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<sup>6</sup> 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. In addition, based on a specific assumption using information available at this point, the effects of policies concerning the provision of free education on the year-on-year rate of change in the CPI (all items less fresh food) for fiscal 2019 and fiscal 2020 are estimated to be minus 0.3 percentage point and minus 0.4 percentage point, respectively.

Second, medium- to long-term inflation expectations have been more or less unchanged recently. As for the outlook, such expectations are likely to follow an increasing trend and gradually converge to 2 percent on the back of the following: (1) in terms of the adaptive component, a rise in the observed inflation rate is likely to push up inflation expectations, 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, which will be effective in pushing up inflation expectations.<sup>7</sup>

Third, regarding import prices, the past decline in crude oil prices is likely to exert downward pressure on the CPI through energy prices for the time being.

Meanwhile, the recent increase in labor participation by women and seniors, as well as firms' strengthening of efforts to absorb upward pressure of costs on prices by raising productivity, are expected to increase upward pressure on prices in the long term. Specifically, as the growth potential of the economy as a whole rises, reflecting such moves, firms' and households' spending behavior can be expected to become active.

### 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. macroeconomic policies and their impact on global financial markets; the consequences of protectionist moves and their effects; developments in emerging and commodity-exporting economies such as China, including the effects of the two aforementioned factors; developments in global adjustments in IT-related goods; negotiations on the United Kingdom's exit from the European Union (EU) and their effects; and geopolitical risks. Downside risks concerning overseas economies are likely to remain significant, and uncertainties regarding the effects of protectionist moves in particular have been heightening. It also is necessary to pay close attention to the impact of such downside risks on firms' and households' sentiment in Japan.

The second risk is the effects of the consumption tax hike scheduled to take place in October 2019. These are likely to depend on consumer sentiment, the employment and income situation, and developments in prices.

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<sup>7</sup> 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.

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 declining birthrate and aging population; developments in regulatory and institutional reforms, particularly in the labor market; innovation in the corporate sector; and the employment and income situation.

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 also is 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**

As mentioned above, with regard to risks to economic activity, the downside risks concerning overseas economies in particular are significant. If these risks materialize, there is a possibility that prices also will be affected to some extent. In addition, the specific factors that could exert upside and downside risks to prices are as follows. The first 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 be delayed through the adaptive formation mechanism if it takes longer than projected for firms' stance to shift toward further raising wages and prices and actual inflation consequently remains relatively sluggish.

The second factor is the responsiveness of prices to the output gap. If firms' efforts to absorb upward pressure of costs on prices by raising productivity continue for a long time, or competition among firms intensifies further, due partly to the technological progress in recent years and changes in the distribution system, downward pressure on prices stemming from these factors may last longer than expected. In addition, the lackluster developments in administered prices and housing rent also may continue to constrain the rise in CPI inflation for a long period.

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.<sup>8</sup>

The first perspective involves an examination of the baseline scenario for the outlook. The year-on-year rate of change in the CPI is likely to increase gradually toward 2 percent. Although it is necessary to carefully examine the risks to economic activity and prices, the momentum toward achieving the price stability target of 2 percent appears to be maintained. This is because (1) firms' stance is expected to gradually shift toward further raising wages and prices with the output gap remaining positive, and (2) medium- to long-term inflation expectations have been more or less unchanged and are projected to rise gradually 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, risks are skewed to the downside, particularly regarding developments in overseas economies. Regarding the outlook for prices, risks are skewed to the downside, mainly due to the downside risks to economic activity and uncertainties over 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. However, prolonged downward pressure on financial institutions' profits, with the low interest rate environment and severe competition among financial institutions continuing, could create risks of a gradual pullback in financial intermediation and of destabilizing the financial system. Although these risks are judged as not significant at this point, mainly because financial institutions have sufficient capital bases, it is necessary to pay close attention to future developments.

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. As for policy rates, the Bank intends to maintain the current extremely low levels of short- and long-term interest rates for an extended period of time, at least through around spring 2020, taking into account uncertainties regarding economic activity and prices including developments in overseas economies and the effects of the scheduled consumption tax hike. It will examine the risks considered most relevant to the conduct of monetary policy and make

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<sup>8</sup> 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."

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. In particular, in a situation where downside risks to economic activity and prices, mainly regarding developments in overseas economies, are significant, the Bank will not hesitate to take additional easing measures if there is a greater possibility that the momentum toward achieving the price stability target will be lost.

## Forecasts of the Majority of Policy Board Members

y/y % chg.

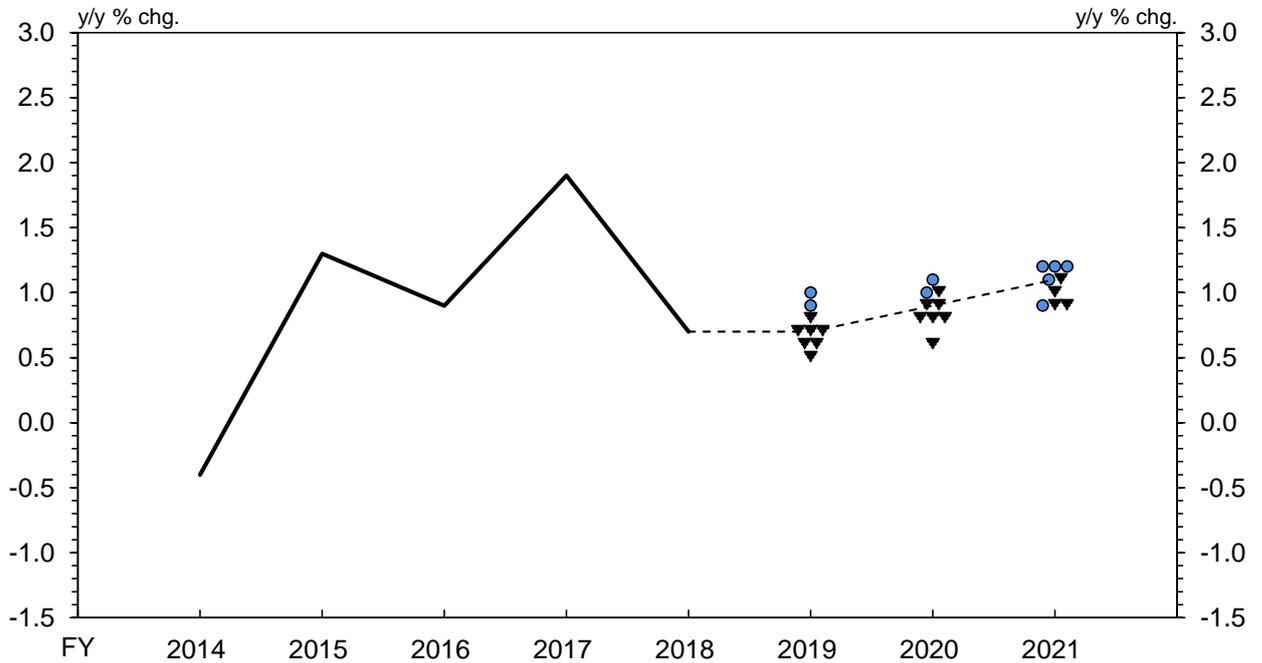
	Real GDP	CPI (all items less fresh food)	(Reference) Excluding the effects of the consumption tax hike and policies concerning the provision of free education
Fiscal 2019	+0.6 to +0.9 [+0.7]	+0.8 to +1.1 [+1.0]	+0.6 to +0.9 [+0.8]
Forecasts made in April 2019	+0.7 to +0.9 [+0.8]	+0.9 to +1.2 [+1.1]	+0.7 to +1.0 [+0.9]
Fiscal 2020	+0.8 to +1.0 [+0.9]	+1.1 to +1.4 [+1.3]	+1.0 to +1.3 [+1.2]
Forecasts made in April 2019	+0.8 to +1.1 [+0.9]	+1.2 to +1.5 [+1.4]	+1.1 to +1.4 [+1.3]
Fiscal 2021	+0.9 to +1.2 [+1.1]	+1.3 to +1.7 [+1.6]	
Forecasts made in April 2019	+0.9 to +1.2 [+1.2]	+1.4 to +1.7 [+1.6]	

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

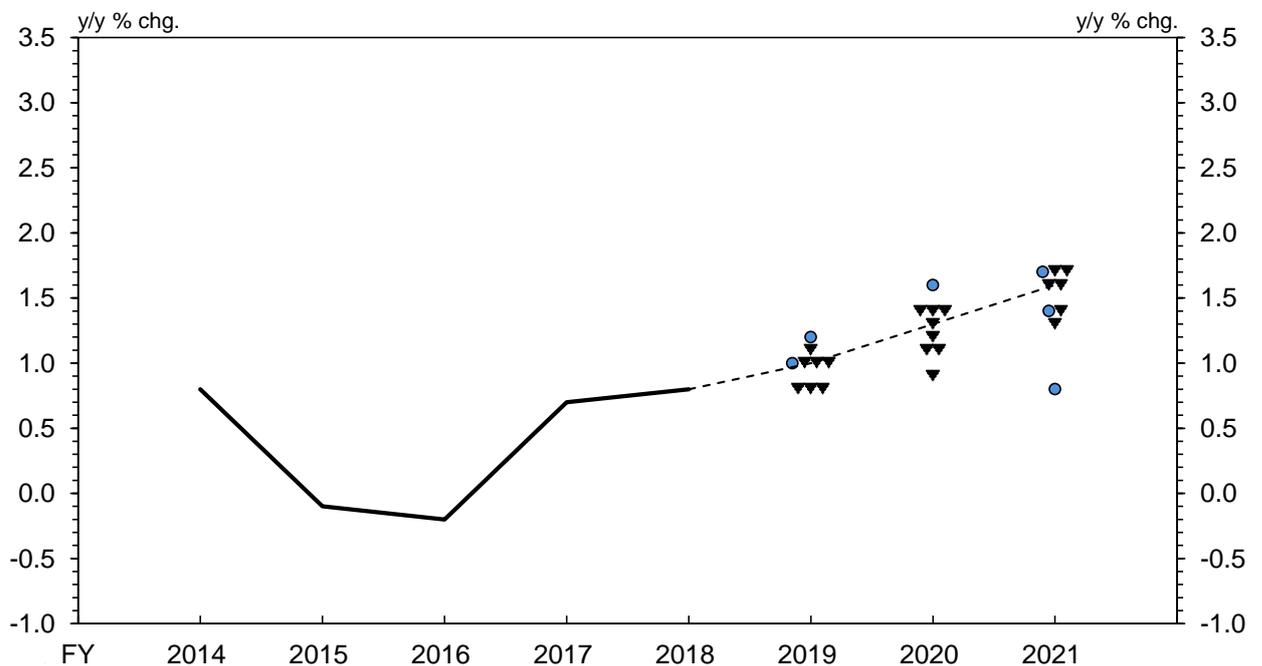
2. The forecasts of the majority of the Policy Board members are constructed as follows: each Policy Board member's forecast takes the form of a point estimate -- namely, the figure to which he or she attaches the highest probability of realization. These forecasts are then shown as a range, with the 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.
4. The forecasts assume the following: (1) the consumption tax will be raised to 10 percent in October 2019 and a reduced tax rate will be applied to food and beverages -- excluding alcohol and dining out -- and newspapers, and (2) with regard to policies concerning the provision of free education, free early childhood education and such measures as free higher education will be introduced in October 2019 and April 2020, respectively. Assuming that the rise in the consumption tax will be fully passed on to prices of taxable items, the direct effect of the tax hike on the CPI for fiscal 2019 and fiscal 2020 is estimated to be 0.5 percentage point for each year. In addition, based on a specific assumption using information available at this point, the direct effects of policies concerning the provision of free education on the CPI for fiscal 2019 and fiscal 2020 are estimated to be minus 0.3 percentage point and minus 0.4 percentage point, respectively.

## Policy Board Members' Forecasts and Risk Assessments

### (1) Real GDP



### (2) CPI (All Items Less Fresh Food)



Notes: 1. Solid lines show actual figures, while dotted lines show the medians of the Policy Board members' forecasts (point estimates).

2. The locations of ●, △, and ▼ in the charts indicate the figures for each Policy Board member's forecasts to which he or she attaches the highest probability. The risk balance assessed by each Policy Board member is shown by the following shapes: ● indicates that a member assesses "upside and downside risks as being generally balanced," △ indicates that a member assesses "risks are skewed to the upside," and ▼ indicates that a member assesses "risks are skewed to the downside."

3. The CPI figures for fiscal 2014 and fiscal 2015 exclude the direct effects of the consumption tax hike in April 2014.

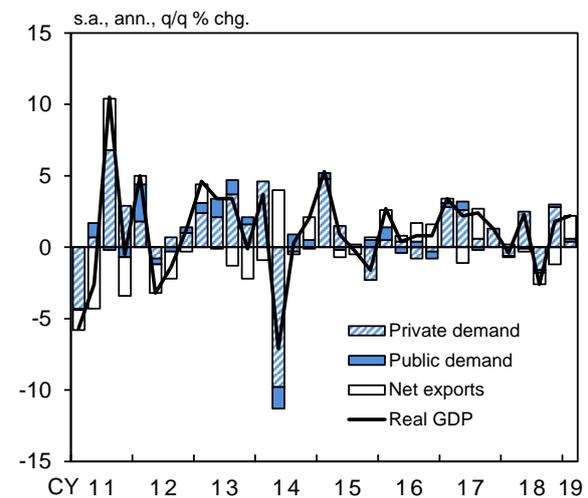
## The Background<sup>9</sup>

### I. Current Situation of Economic Activity and Its Outlook

#### A. Economic Developments

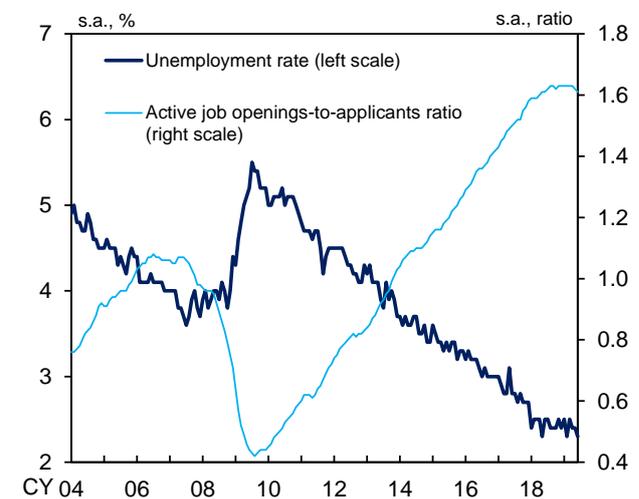
Looking back at Japan's economy since the April 2019 Outlook Report, the real GDP growth rate for the January-March quarter of 2019 registered an increase of 0.6 percent on a quarter-on-quarter basis and its annualized rate was 2.2 percent (Chart 1). A large contributing factor to this increase is the substantial decline in imports, which are deducted from GDP. While exports declined due to the slowdown in overseas economies, domestic demand continued to increase, albeit marginally, mainly led by business fixed investment. Amid these developments in demand both at home and abroad, the number of employed persons has maintained an uptrend and labor market conditions have remained tight (Charts 2 and 3). The output gap -- which captures the utilization of labor and capital -- for the January-March quarter has narrowed, reflecting some weakness in exports and industrial production, but has been substantially positive (Chart 4). Indicators since April suggest that domestic demand, such as business fixed investment and private consumption, has maintained an uptrend, although exports, production, and business sentiment have continued to be affected by the slowdown in overseas economies. Thus, Japan's economy is judged as having been on a moderate expanding trend with a virtuous cycle from income to spending being maintained.

Chart 1: Real GDP



Source: Cabinet Office.

Chart 2: Labor Market Conditions



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

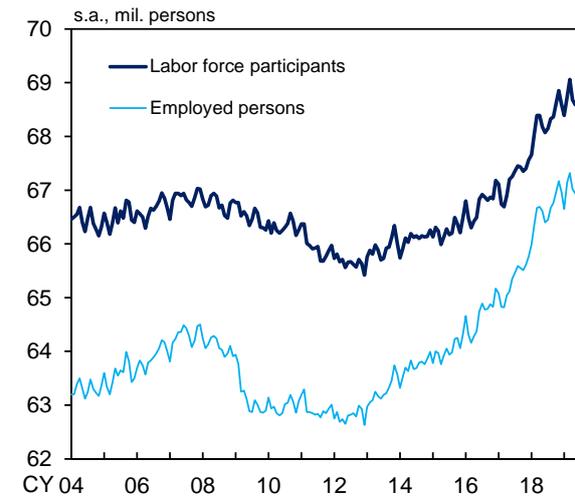
<sup>9</sup> "The Background" provides explanations of "The Bank's View" decided by the Policy Board of the Bank of Japan at the Monetary Policy Meeting held on July 29 and 30, 2019.

With regard to the outlook, Japan's economy is likely to maintain an expanding trend, despite being affected by the slowdown in overseas economies and the scheduled consumption tax hike for the time being. Exports will likely show some weakness as they are expected to be affected by the slowdown in overseas economies for the time being. Thereafter, however, they are projected to return to their moderate increasing trend, with the growth rates of overseas economies rising gradually. Business fixed investment is likely to continue increasing moderately amid accommodative financial conditions, although its pace of increase is projected to decelerate, reflecting cyclical downward pressure resulting from capital stock adjustments. Private consumption is expected to maintain a moderate increasing trend as the employment and income situation continues to improve and the government implements countermeasures for the scheduled consumption tax hike, although it is likely to be pushed down for some time due to the hike.<sup>10,11</sup> Meanwhile,

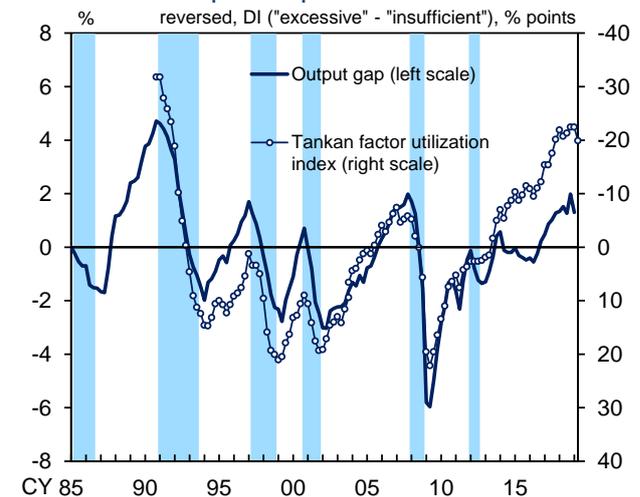
<sup>10</sup> The July 2019 Outlook Report assumes that the consumption tax will be raised to 10 percent in October 2019 and that a reduced tax rate will be applied to food and beverages -- excluding alcohol and dining-out -- and newspapers.

<sup>11</sup> 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 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 of the previous tax hike in fiscal 2014. 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) free education will be introduced and various measures to reduce the household burden of the tax hike as well as support measures to

**Chart 3: Labor Force Participation and Employment**



**Chart 4: Output Gap**



Source: Bank of Japan.

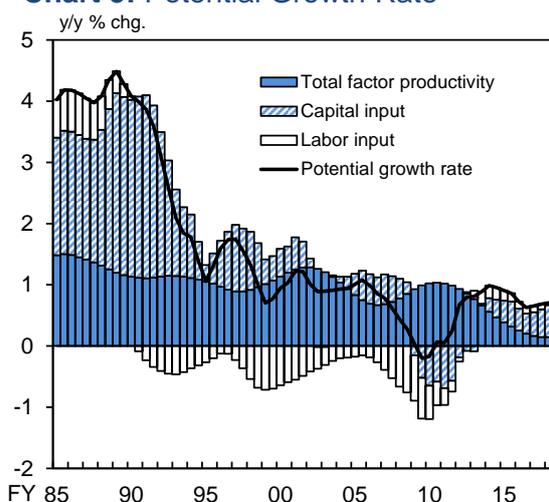
Notes: 1. The output gap is based on staff estimations.

2. The Tankan 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.

with regard to government spending, such factors as Olympic Games-related demand and policy measures for national resilience are expected to push up economic activity through fiscal 2020. Reflecting these developments in demand both at home and abroad, Japan's economy is likely to continue growing at about the same pace as its potential on average (Chart 5). Comparing the current projections through fiscal 2021 with the previous ones, the projected growth rates are more or less unchanged. However, downside risks to the growth rates are significant, particularly regarding developments in overseas economies.

**Chart 5: Potential Growth Rate**



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

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.

Details of the outlook for each fiscal year are as follows. In fiscal 2019, Japan's economy is likely to grow at about the same pace as its potential,

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smooth out demand prior to and after the tax hike will be implemented; and (4) before the previous tax hike in April 2014, it was likely that a front-loaded increase in demand was seen not only in view of that hike but also in anticipation of the second round of the tax hike, which was supposed to take place in October 2015. 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. In addition, with respect to the guideline released by the government that allows firms to flexibly pass on the rise in the consumption tax to sales prices, it is difficult at this point to project its effects on factors such as firms' stance on how to deal with it.

underpinned for the time being by the increase in domestic demand and thereafter by a rise in external demand that reflects a pick-up in overseas economies. Specifically, for the time being, reflecting the effects of the slowdown in overseas economies, exports are projected to continue showing some weakness and the pace of increase in business fixed investment is likely to decelerate temporarily, mainly for manufacturing. On the other hand, private consumption will likely increase clearly as the employment and income situation continues to improve, and also partly because of the increase in demand prior to the scheduled consumption tax hike. In addition, public investment is likely to increase, due mainly to the implementation of the supplementary budgets for disaster-related restoration and reconstruction, as well as policy measures for national resilience. Thereafter, exports are projected to return to their moderate increasing trend, with the growth rates of overseas economies rising gradually. As for domestic demand, private consumption and housing investment are likely to be pushed down for some time due to the effects of the scheduled consumption tax hike. However, the rate of increase in business fixed investment is expected to rise somewhat, due in part to increases in investment related to urban redevelopment projects as well as labor-saving investment, and public investment also is likely to continue increasing.

In fiscal 2020, the economy is likely to continue growing at about the same pace as its potential. The pace of increase in exports is expected to accelerate, with the growth rates of overseas economies rising. Business fixed investment is

likely to maintain a moderate uptrend, continuously supported by investment related to urban redevelopment projects and labor-saving investment, despite being under pressure stemming from cyclical adjustments in capital stock. Private consumption and housing investment are expected to head gradually toward a recovery from a decline in the second half of fiscal 2019 after the scheduled consumption tax hike. Meanwhile, government spending is expected to underpin the economy on the back of an increase in public investment reflecting policy measures for national resilience and of expenditure primarily on temporary facilities accompanying the hosting of the Olympic Games.

In fiscal 2021, the economic growth rate is likely to rise somewhat from the previous fiscal year, as the effects of the scheduled consumption tax hike are expected to dissipate. Government spending is likely to maintain a relatively high level, mainly led by infrastructure-related construction, although it is expected to decelerate as Olympic Games-related expenditure will have been completed. Household spending, such as private consumption and housing investment, is projected to increase clearly, partly because the effects of the reactionary decline to the scheduled consumption tax hike are likely to dissipate. Meanwhile, exports are projected to continue their moderate increasing trend and business fixed investment also is likely to maintain its moderate uptrend, due in part to a rise in the potential growth rate.

## B. Developments in Major Expenditure Items and Their Background

### Government Spending

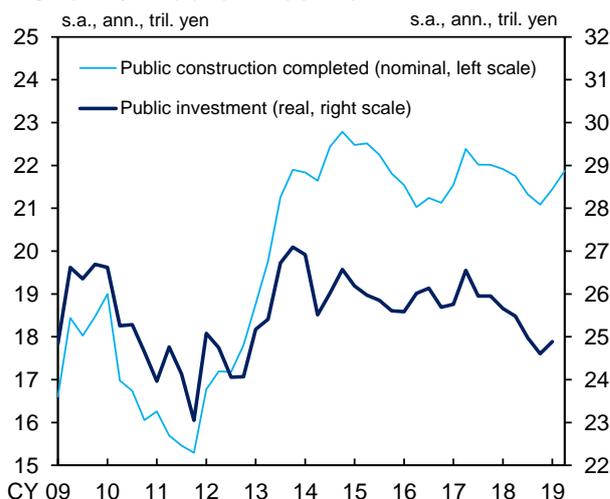
Public investment has been more or less flat (Chart 6). The value of public works contracted, as well as orders received for public construction, both of which are leading indicators, have been increasing recently. As for the outlook, public investment is expected to continue increasing through fiscal 2020, mainly reflecting Olympic Games-related construction as well as the implementation of the supplementary budget for fiscal 2018 and policy measures for national resilience, and thereafter maintain a relatively high level in fiscal 2021.<sup>12</sup>

### Overseas Economies

Overseas economies have been growing moderately on the whole, although slowdowns have been observed (Chart 7). The business sentiment of manufacturing firms on a global basis has deteriorated, mainly reflecting the effects of the trade friction between the United States and China as well as adjustments in IT-related goods (Chart 8). The manufacturing sector's production and trade activity also has shown some weakness recently. Meanwhile, private consumption on a global basis has been firm on the whole, mainly due to the favorable employment and income situation as well as

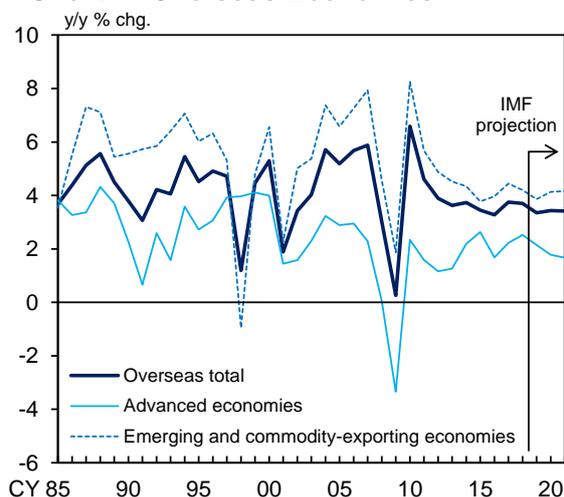
<sup>12</sup> The three-year emergency response plan for disaster prevention, disaster mitigation, and building national resilience -- with a total project size of around 7 trillion yen -- was decided by the Cabinet on December 14, 2018. In view of this plan, the second supplementary budget for fiscal 2018 and the initial budget for fiscal 2019 were approved by the Diet. Measures to maintain functions, such as of important infrastructure, are scheduled to be implemented intensively over three years from fiscal 2018 through fiscal 2020.

Chart 6: Public Investment



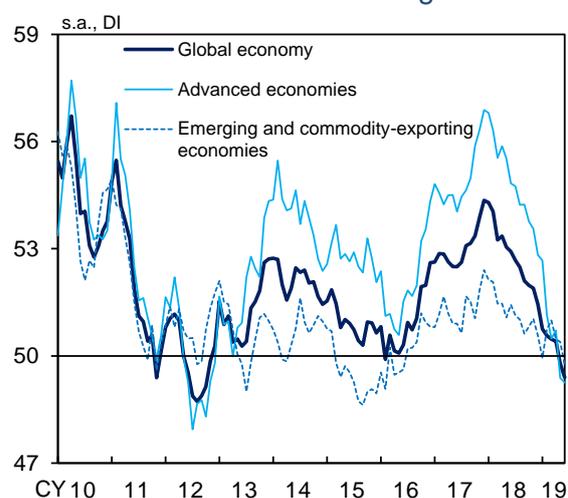
Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism.  
Note: The figure for 2019/Q2 is the April-May average.

Chart 7: 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 2019 and the "WEO update" as of July 2019. 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 8: Global Manufacturing PMI



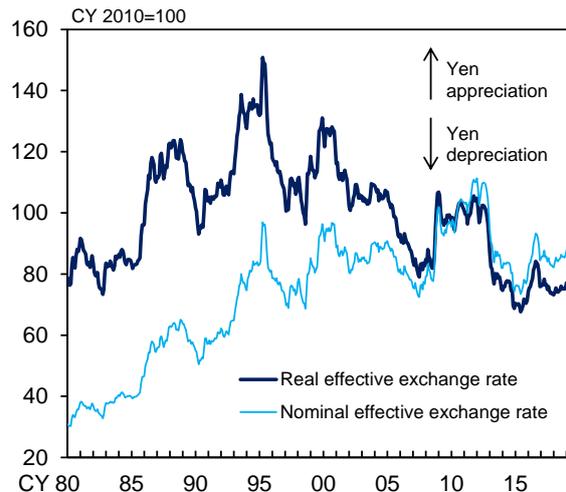
Sources: IHS Markit (© and database right IHS Markit Ltd 2019. All rights reserved.), etc.  
Note: Figures for the global economy are the "J.P. Morgan Global Manufacturing PMI." Figures for advanced economies as well as emerging and commodity-exporting economies are calculated as the weighted averages of the Manufacturing PMI using 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.

positive consumer sentiment. Looking at developments by major region, while the U.S. economy has been expanding moderately, the growth pace of the European economy has decelerated. The Chinese economy has continued to see stable growth on the whole, but weakness has been observed in the manufacturing sector. Other emerging and commodity-exporting economies have been recovering moderately on the whole, but adjustments in IT-related goods have been exerting downward pressure, such as on the NIEs and the ASEAN economies.<sup>13</sup>

In terms of the outlook for overseas economies, slowdowns are likely to continue for the time being; thereafter, however, such economies are expected to grow moderately on the whole with the growth rates rising somewhat, partly due to the materialization of the effects of stimulus measures, such as in China, and the progress in global adjustments in IT-related goods. Nevertheless, the downside risks concerning overseas economies are significant, and it is necessary to carefully monitor the timing and the pace of their pick-up.

By major region, the U.S. economy is expected to maintain its moderate expansion. The European economy is projected to gradually move out of its deceleration phase, reflecting progress in adjustments in the manufacturing sector, where relatively weak developments have been observed. The Chinese economy is likely to broadly follow a stable growth path as authorities

**Chart 9: 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 July 2019 have been calculated using the daily nominal effective exchange rate (the Yen Index) compiled by the Bank of Japan.

<sup>13</sup> For developments in the global cycle for IT-related goods, see Box 4 in the April 2019 Outlook Report.

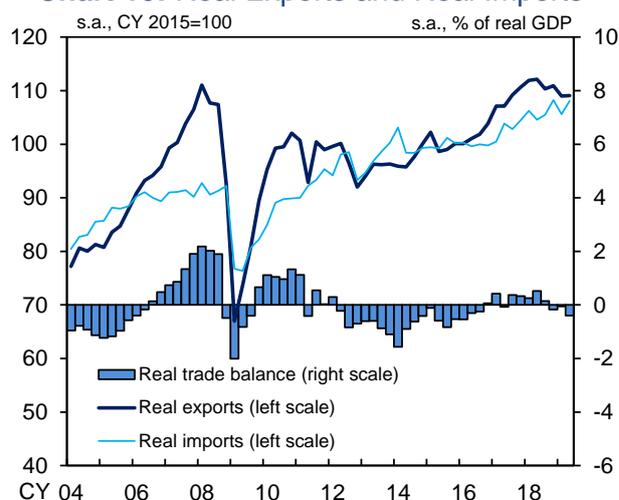
conduct fiscal and monetary policies in a timely manner, although it is expected to be affected to some extent by the trade friction between the United States and China as well as measures to push forward with deleveraging. Other emerging and commodity-exporting economies are likely to continue their moderate recovery on the whole, mainly reflecting the effects of those economies' stimulus measures, but the NIEs and the ASEAN economies, for example, are expected to be affected by adjustments in IT-related goods for the time being.

## Exports and Imports

Exports have shown some weakness (Chart 10).<sup>14</sup> By region, although exports to advanced economies have continued on their increasing trend, those to emerging economies have shown some weakness (Chart 11). By goods, while exports of IT-related goods, mainly parts for smartphones, have been on a decreasing trend, those of capital goods have shown some weakness, mainly for semiconductor production equipment (Chart 12). On the other hand, automobile-related exports have continued to increase, due in part to the rising value-added of automobiles exported from Japan and the effects of the introduction of new car models.

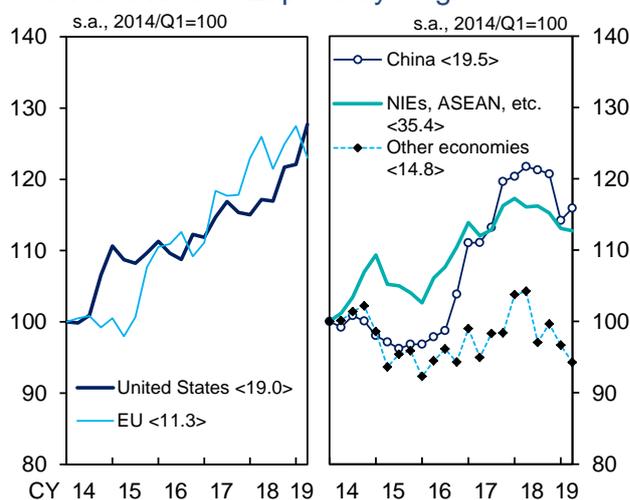
Exports are projected to show some weakness, mainly in IT-related goods and capital goods, as they are likely to be affected by the slowdown in overseas economies for the time being. Thereafter, exports are expected to return to their moderate increasing trend. This is based on the

**Chart 10: Real Exports and Real Imports**



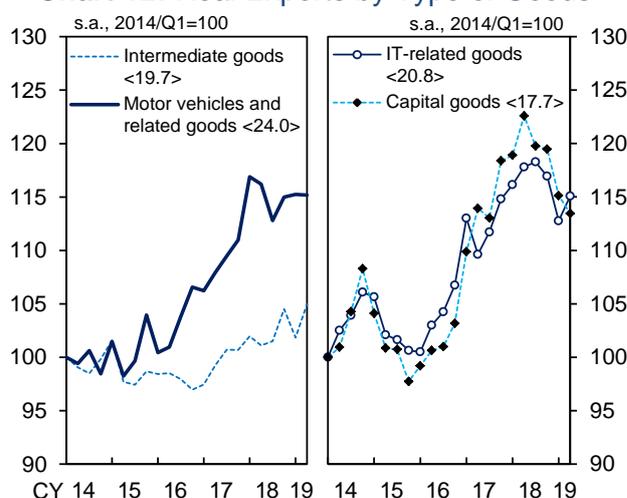
Sources: Bank of Japan; Ministry of Finance; Cabinet Office.  
Note: Based on staff calculations.

**Chart 11: 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 2018.

**Chart 12: 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 2018.

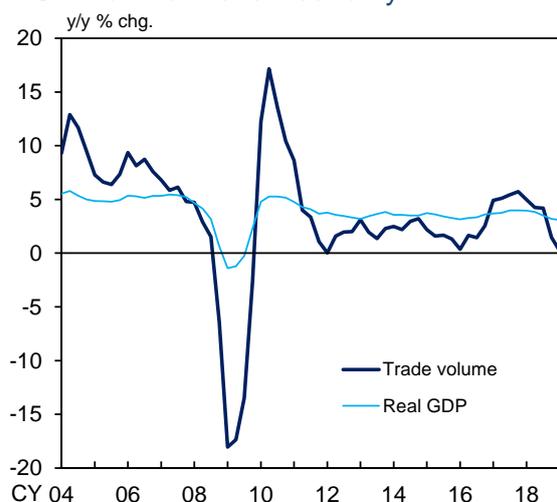
<sup>14</sup> Box 1 assesses recent developments using SCOPE that comprehensively monitors export conditions.

projection that, as the growth rates of overseas economies rise, (1) the world trade volume will increase moderately and (2) Japan's share of exports in world trade also will pick up, reflecting recovery in exports of capital goods and IT-related goods (Charts 13 and 14).<sup>15</sup>

The pace of increase in the world trade volume has been relatively weak, falling below world economic growth recently. Going forward, however, it is expected to recover to around the same level as that of world economic growth -- that is, the world trade volume to world GDP ratio is likely to bottom out and then be more or less unchanged. Meanwhile, Japan's share of exports in world trade has declined recently, largely affected by a decrease in global demand for capital goods and IT-related goods, in which Japan has a comparative advantage. However, it is expected to pick up gradually because demand for capital goods and IT-related goods is likely to recover, partly backed by the materialization of the effects of stimulus measures, such as in China, and cyclical improvement in IT-related goods.

Imports have been on a moderate uptrend on average, albeit with fluctuations (Chart 10). Going forward, they are expected to follow an uptrend, reflecting the increase in domestic demand, despite being affected by the scheduled consumption tax hike; however, the pace is projected to remain only moderate, mainly against the background of a decline in imports of raw materials that reflects an improvement in energy efficiency.

**Chart 13: 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 2019/Q2 is the April-May 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 14: 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 2019/Q2 is the April-May average.

<sup>15</sup> The world trade volume is calculated by adding up real imports in each country.

## External Balance

The nominal current account surplus has been more or less flat (Chart 15).

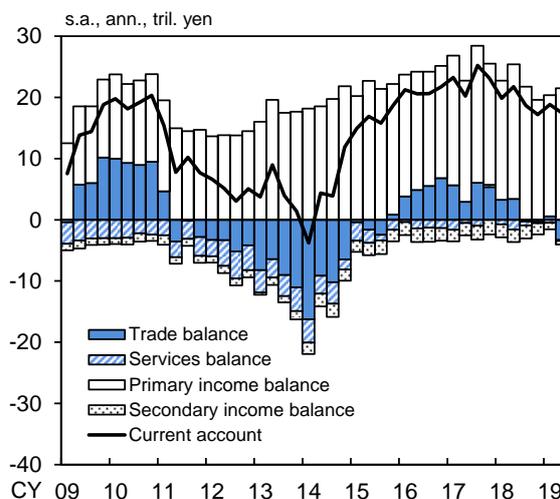
Going forward, the current account surplus will likely increase moderately, with overseas economies growing moderately on the whole, mainly on the back of (1) an improving trend in the trade balance, (2) an increase in the surplus of the primary income balance due to a rise in direct investment income, and (3) an increase in travel receipts underpinned by a rise in the number of inbound visitors.

In terms of the saving-investment balance, the increase in the current account surplus corresponds to that in excess saving as a whole, mainly due to a decline in the fiscal deficit. Excess investment in the general government is projected to decrease due to an increase in tax revenue, mainly from the consumption tax. While excess saving in the household sector is projected to be more or less flat, that in the corporate sector is likely to decline fairly moderately, as an increase in fixed investment is expected to somewhat exceed that in profits.

## Industrial Production

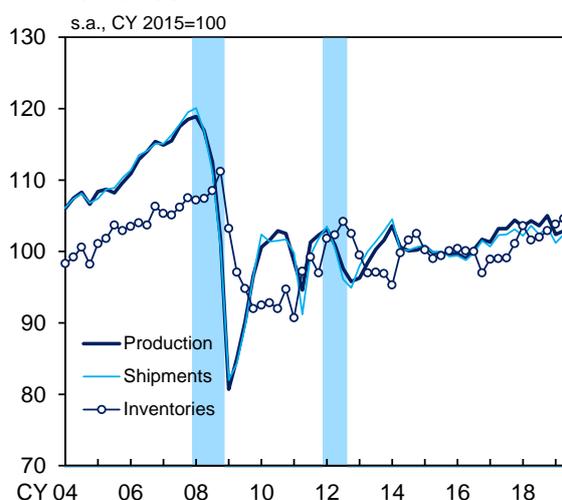
Although exports have shown some weakness, industrial production has been more or less flat, reflecting the increase in domestic demand (Chart 16). By major industry, transport equipment production has increased clearly due to a rise in its exports and the front-loaded increase in demand prior to the consumption tax hike seen in part. Against the background of pressure

**Chart 15: Current Account**



Source: Ministry of Finance and Bank of Japan.  
Note: Figures for 2019/Q2 are April-May averages.

**Chart 16: Production, Shipments, and Inventories**

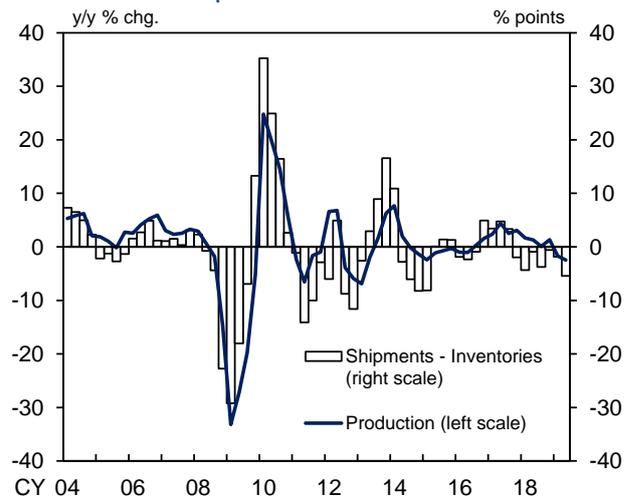


Source: Ministry of Economy, Trade and Industry (METI).  
Notes: 1. Shaded areas indicate recession periods.

2. The production figure for 2019/Q3 is calculated based on METI projections for July and August 2019.

stemming from global adjustments in IT-related goods, mainly parts for smartphones, the production of electronic parts and devices has decreased. The production of machinery (i.e., "general-purpose, production and business oriented machinery" in the *Indices of Industrial Production*) has decreased, mainly driven by goods for exports, such as industrial robots and semiconductor production equipment. Meanwhile, the shipments-inventories balance (i.e., the year-on-year rate of change in shipments minus that in inventories) has been slightly negative (Chart 17).

**Chart 17: Shipments-Inventories Balance**

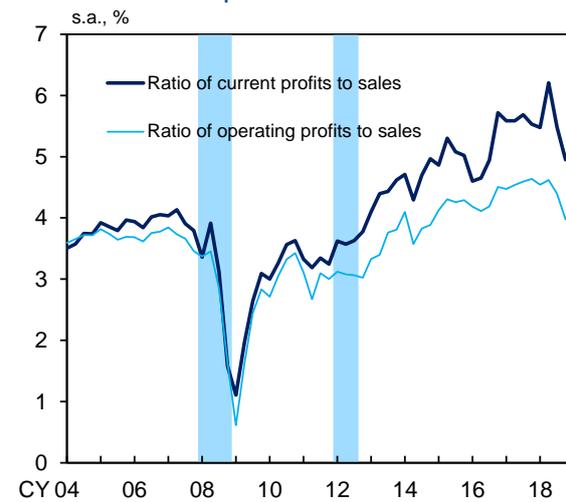


Industrial production will likely be more or less flat on the whole for the time being, with weakness in exports and the increase in domestic demand offsetting each other. Thereafter, it is projected to gradually turn to a moderate increase with the growth rates of overseas economies rising, despite being pushed down for some time due to the effects of the scheduled consumption tax hike.

### Corporate Profits

Corporate profits have been at high levels on the whole, albeit with some weakness observed in part. 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 remained at a high level on the whole, turning to an increase in the January-March quarter after having declined for two consecutive quarters (Chart 18).

**Chart 18: Corporate Profits**



Notes: 1. Based on the "Financial Statements Statistics of Corporations by Industry, Quarterly." Excluding "finance and insurance."  
 2. Figures from 2009/Q2 exclude "pure holding companies."  
 3. Shaded areas indicate recession periods.

Business sentiment has stayed at a favorable level from a relatively longer-term perspective, but recently has been weakening somewhat, mainly

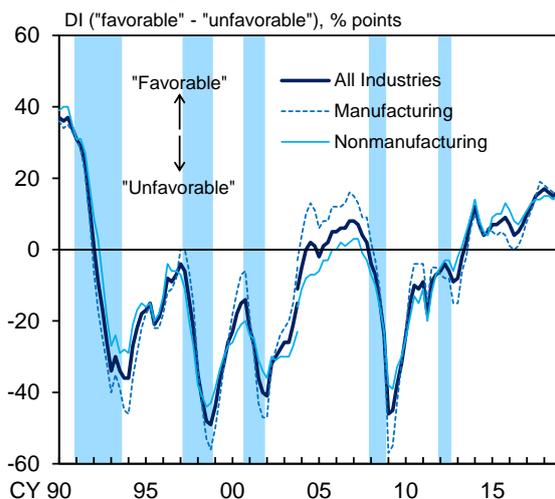
in the manufacturing sector. The diffusion index (DI) for business conditions for all industries and enterprises in the June 2019 *Tankan* (Short-Term Economic Survey of Enterprises in Japan) has remained at a favorable level on the whole, reflecting the increase in domestic demand. However, the DI for the manufacturing sector recently has worsened somewhat significantly, mainly for processing industries, due to the slowdown in overseas economies (Chart 19).

Corporate profits are projected to follow their improving trend, mainly due to a rise in the sales volume that reflects an increase in demand both at home and abroad, despite being affected by the front-loaded increase and subsequent decline in demand prior to and after the consumption tax hike.

### Business Fixed Investment

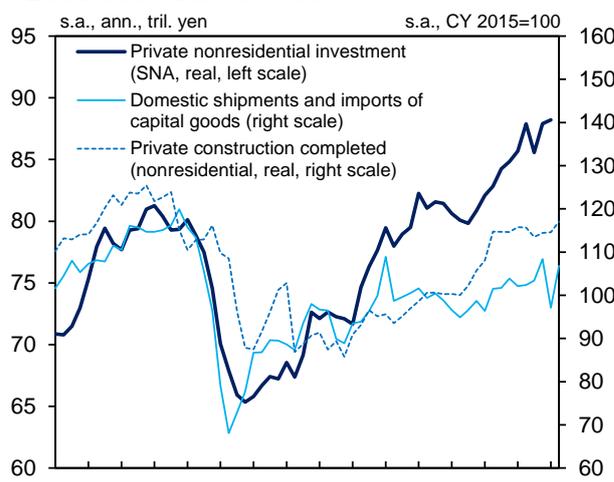
Business fixed investment has continued on an increasing trend (Chart 20). The aggregate supply of capital goods -- a coincident indicator of machinery investment -- declined somewhat significantly in the January-March quarter, but subsequently has picked up. Private construction completed (nonresidential) -- a coincident indicator of construction investment -- has continued on an uptrend on average. According to the June *Tankan*, the rates of increase in business fixed investment plans for fiscal 2018, mainly of large enterprises, significantly exceeded the past average (Chart 21). In fiscal 2019, business fixed investment also is expected to continue increasing firmly, compared to the past average as of the June survey. Business fixed investment (on the basis close to GDP definition;

**Chart 19: Business Conditions**



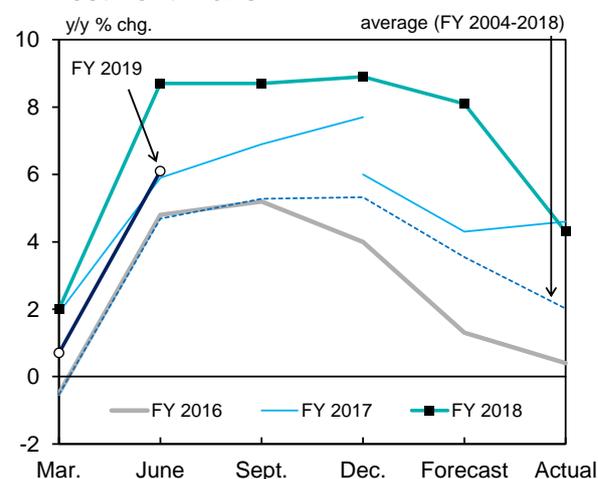
Source: Bank of Japan.  
Notes: 1. Based on the *Tankan*. There is a discontinuity in the data in December 2003 due to a change in the survey framework.  
2. Shaded areas indicate recession periods.

**Chart 20: 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 2019/Q2 are April-May averages.  
2. Real private construction completed is based on staff calculations using price indices in the "Construction Cost Deflators."

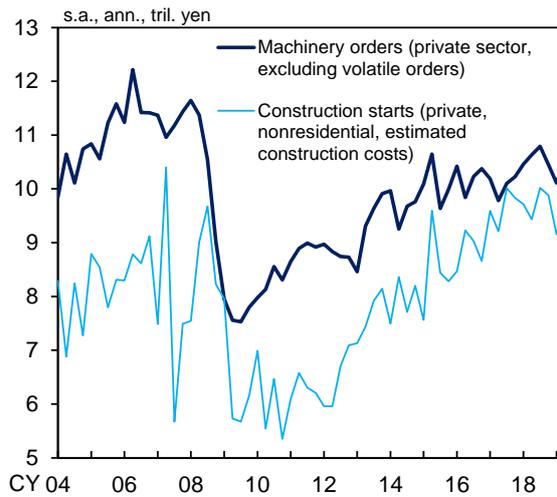
**Chart 21: Developments in Business Fixed Investment Plans**



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.

business fixed 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 2018 and is expected to register an increase of 6.1 percent in fiscal 2019. Reflecting firms' positive fixed investment stance, machinery orders and construction starts (in terms of planned expenses for private and nonresidential construction), as leading indicators, have continued on an increasing trend on average, albeit with large fluctuations (Chart 22).

**Chart 22: Leading Indicators of Business Fixed Investment**

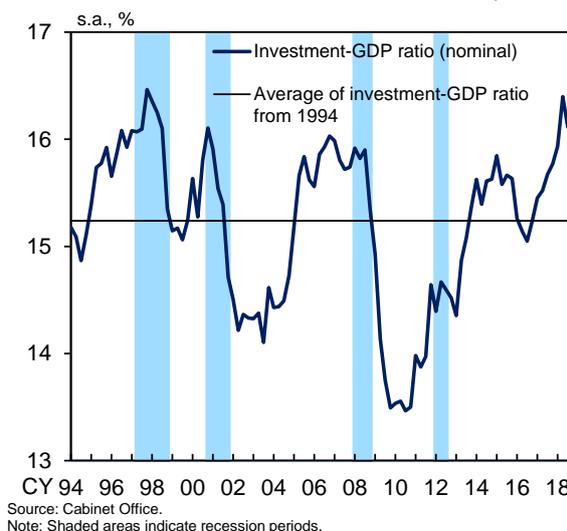


Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism.  
 Notes: 1. Volatile orders: orders for ships and orders from electric power companies.  
 2. Figures for 2019/Q2 are April-May averages.

With regard to the outlook, business fixed investment is likely to decelerate somewhat for the time being, mainly for the manufacturing sector, due to the slowdown in overseas economies. However, it is expected to increase moderately from a somewhat longer-term perspective, mainly on the back of (1) an improvement in corporate profits, (2) highly stimulative financial conditions, such as low interest rates and accommodative lending attitudes, (3) materialization of the effects of projects conducted under the Fiscal Investment and Loan Program, and (4) moderate improvement in growth expectations. Specifically, an increase is likely to continue to be seen in investment such as (1) that intended for domestic capacity expansion in anticipation of continuous economic expansion, (2) that related to urban redevelopment projects, (3) that aiming at improving efficiency and saving labor in order to deal with mainly labor shortage, and (4) that in research and development for growth areas.

The nominal investment-GDP ratio is expected to maintain its high level on the basis of the aforementioned outlook for business fixed investment (Chart 23). The ratio already has reached a level around the peaks observed in the investment cycles since the burst of the bubble. Taking this into account, pressure stemming from cyclical adjustments in capital stock is likely to bring about deceleration in business fixed investment. However, a moderate rise in the potential growth rate through the end of the projection period is expected to ease such pressure.<sup>16</sup>

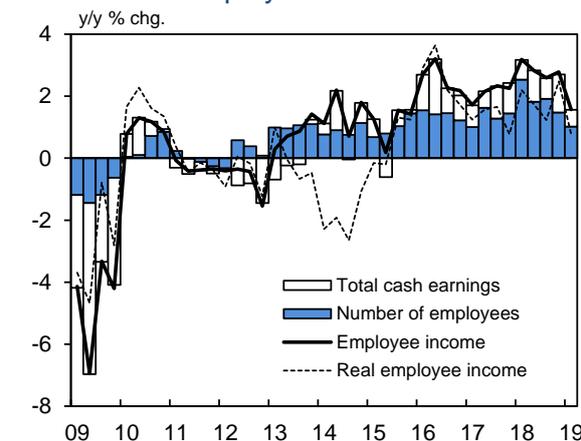
**Chart 23: Investment-GDP Ratio (Nominal)**



## Employment and Income Situation

Supply-demand conditions in the labor market have remained tight and employee income has been increasing.<sup>17</sup> On the employment side, the *Labour Force Survey*-based number of employees has continued to increase, albeit at a slower pace (Chart 24). Against this backdrop, the active job openings-to-applicants ratio has been at a high level that exceeds the peak marked during the bubble period, and the employment conditions DI in the *Tankan* also shows that a perception of labor shortage has remained quite strong (Chart 2). In addition, the unemployment rate has remained at a low level of around 2.5 percent. These indicators of supply-demand conditions in the labor market show that the degree of tightness has been at the level last seen in the first halves of the 1990s or the 1970s.

**Chart 24: Employee Income**



<sup>16</sup> For stock adjustment pressure, see Box 2 in the January 2019 Outlook Report.

<sup>17</sup> The Ministry of Health, Labour and Welfare released the corrected figures from 2012 onward for the *Monthly Labour Survey* on January 23, 2019. The charts in this Outlook Report that use the data from the survey are based on corrected figures where data are available; otherwise they are based on figures prior to the correction.

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). As the economy is likely to continue on an expanding trend, it is expected that the number of employees will keep increasing and that the supply-demand conditions in the labor market will remain tight.

On the wage side, total cash earnings per employee have risen moderately, albeit with fluctuations (Chart 26).<sup>18</sup> However, wage increases have remained relatively weak compared to tight labor market conditions, partly due to the experience of protracted employment adjustments in the past and the high wage elasticity of labor supply in recent years, mainly among women and seniors.<sup>19</sup>

Looking at developments in nominal wages in detail, scheduled cash earnings as a whole have continued to increase moderately, reflecting a rise in wages of both full-time and part-time employees (Chart 27). The year-on-year rate of increase in scheduled cash earnings of full-time employees has been in the range of 0.5-1.0 percent recently (Chart 28). That in hourly

<sup>18</sup> 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. The samples also were replaced in the same way in the January 2019 final report. In this Outlook Report, nominal wages are assessed on the basis of continuing observations, which are less affected by the sample revisions of the *Monthly Labour Survey*.

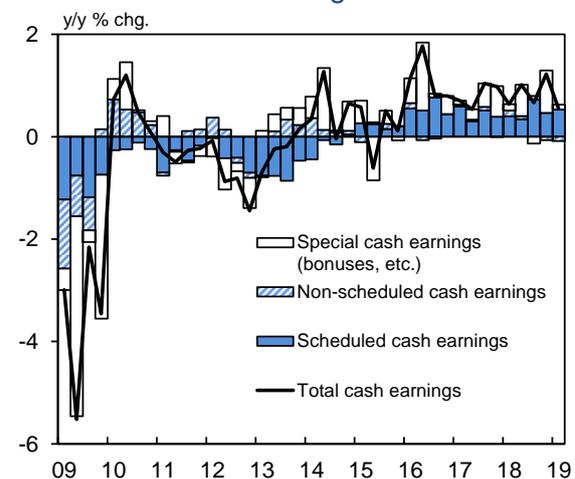
<sup>19</sup> With regard to the relationship between an increase in the labor supply of women and seniors and wage developments, see Box 1 in the July 2018 Outlook Report.

**Chart 25: Labor Force Participation Rate**



Source: Ministry of Internal Affairs and Communications.

**Chart 26: Nominal Wages**



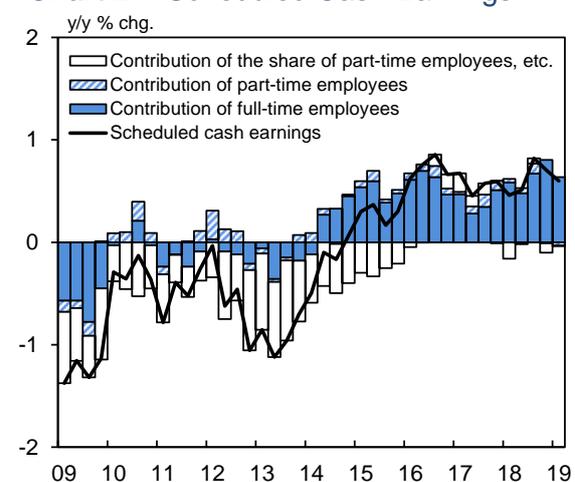
Source: Ministry of Health, Labour and Welfare.

Notes: 1. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.

2. Figures from 2013/Q1 are based on corrected figures adjusted for establishments in Tokyo with 500 or more employees.

3. Figures from 2016/Q1 are based on continuing observations following the sample revisions of the "Monthly Labour Survey."

**Chart 27: Scheduled Cash Earnings**



Source: Ministry of Health, Labour and Welfare.

Notes: 1. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.

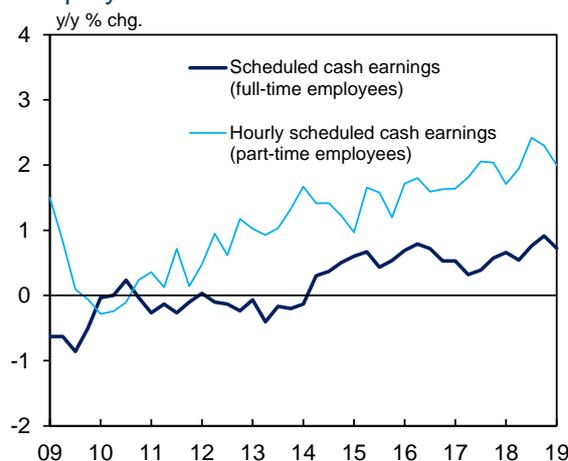
2. Figures from 2013/Q1 are based on corrected figures adjusted for establishments in Tokyo with 500 or more employees.

3. Figures from 2016/Q1 are based on continuing observations following the sample revisions of the "Monthly Labour Survey."

scheduled cash earnings of part-time employees -- which are responsive to labor market conditions -- has registered relatively high growth in the range of 2.0-2.5 percent. Meanwhile, the year-on-year rate of change in real wages per employee likely has been at around 0 percent recently when the effects of the sample revision are smoothed out, albeit with fluctuations resulting from changes in prices of fresh food and energy.<sup>20</sup>

With regard to the outlook for wages, the pace of increase in scheduled cash earnings of full-time employees is expected to accelerate moderately with the inflation rate in the previous fiscal year rising and an improvement in labor productivity becoming more evident.<sup>21</sup> The rate of increase in hourly scheduled cash earnings of part-time employees is also likely to accelerate steadily in response to tight 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.

**Chart 28: Wages of Full-Time and Part-Time Employees**



Source: Ministry of Health, Labour and Welfare.  
Notes: 1. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.  
2. Figures from 2013/Q1 are based on corrected figures adjusted for establishments in Tokyo with 500 or more employees.  
3. Figures from 2016/Q1 are based on continuing observations following the sample revisions of the "Monthly Labour Survey."

<sup>20</sup> While the year-on-year rate of change in real wages in the *Monthly Labour Survey* has been negative since January 2019, this is likely to be largely attributable to the effects of the sample revision mentioned in footnote 18. The year-on-year rate of change in real wages -- calculated by subtracting the rate of change in the CPI (less imputed rent) from that in nominal wages on the basis of continuing observations -- has been at around 0 percent.

<sup>21</sup> According to the final aggregate results of the base pay rise compiled by the Japanese Trade Union Confederation (Rengo), the rate of increase in wages for fiscal 2019 is 0.56 percent, which is around the same as the actual rate for fiscal 2018 (0.54 percent). In addition, when including the regular wage increase, the rate for fiscal 2019 is 2.07 percent, which is the same as the actual rate for fiscal 2018 (2.07 percent).

In light of the aforementioned employment and wage conditions, employee income is likely to increase steadily, and the pace is expected to be about the same as the nominal GDP growth rate.

## Household Spending

Private consumption has been increasing moderately against the background of steady improvement in the employment and income situation. In addition, the increase in demand prior to the scheduled consumption tax hike has started to be seen in part, albeit to a marginal extent compared with that of the previous hike.<sup>22</sup>

The rate of increase in the Consumption Activity Index (CAI, travel balance adjusted) -- which is calculated by combining various sales and supply-side statistics from the viewpoint of gauging Japan's consumption activity in a comprehensive manner -- has accelerated somewhat of late (Chart 30).<sup>23,24,25</sup> Looking at private consumption by type, the pace of increase in durable goods recently has accelerated somewhat, mainly led by automobiles and white goods. This seems to be partly attributable to the front-loaded increase in demand prior to the consumption tax hike. Nondurable goods have remained on a downtrend, mainly due to a decline

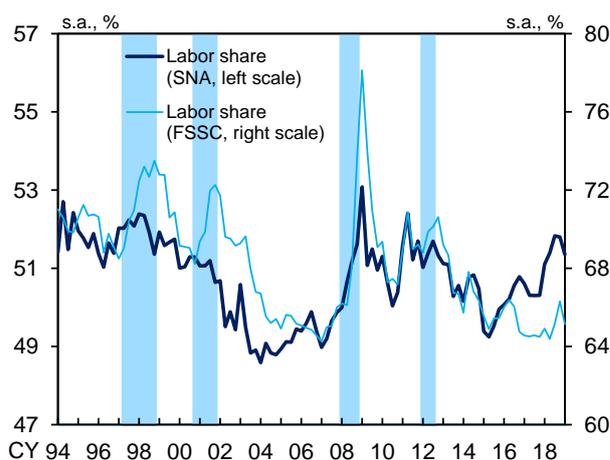
<sup>22</sup> Box 2 examines developments in household spending prior to the consumption tax hikes.

<sup>23</sup> Regarding the CAI, see the Bank's research paper "Revision of the Consumption Activity Index to Address the 2008 SNA and Improve Accuracy" published in April 2018.

<sup>24</sup> As the Life Insurance Institutions Index -- which is part of the *Indices of Tertiary Industry Activity* and used as the source data for "life insurance" included in services consumption in the CAI -- was revised downward, the CAI for March and April 2019 has been revised significantly downward from the time of its release at the beginning of July. Excluding this one-off factor, the rate of increase in the CAI has been accelerating recently.

<sup>25</sup> Regarding the estimates of disposable income, etc., used in Charts 30 and 35, see Box 2 in the October 2018 Outlook Report.

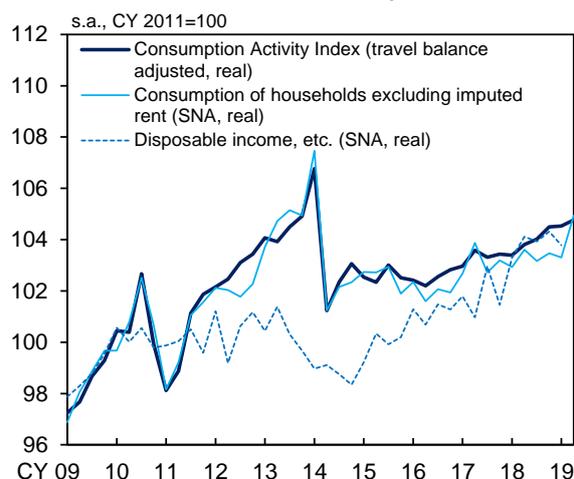
Chart 29: Labor Share



Sources: Cabinet Office; Ministry of Finance.

- Notes: 1. Labor share (SNA) = compensation of employees / nominal GDP × 100  
 2. The labor share (FSSC) is based on the "Financial Statements Statistics of Corporations by Industry, Quarterly (FSSC)" and excludes "finance and insurance." Figures from 2009/Q2 exclude "pure holding companies."  
 3. Labor share (FSSC) = personnel expenses / (operating profits + personnel expenses + depreciation expenses) × 100  
 4. Shaded areas indicate recession periods.

Chart 30: Private Consumption



Sources: Bank of Japan; Cabinet Office; Ministry of Health, Labour and Welfare, etc.

- Notes: 1. The Consumption Activity Index is based on staff calculations (as of July 12). Figures for the Consumption Activity Index (travel balance adjusted) exclude inbound tourism consumption and include outbound tourism consumption. The figure for 2019/Q2 is the April-May average.  
 2. The figure for consumption of households excluding imputed rent for 2019/Q2 is based on staff calculations using the "Synthetic Consumption Index (May)."  
 3. "Disposable income, etc." consists of disposable income and "adjustment for the change in pension entitlements." Figures from 2018/Q2 are based on staff calculations using statistics such as the "Monthly Labour Survey" (based on continuing observations following the sample revisions).

in sales of tobacco. Meanwhile, services consumption has maintained its moderate increasing trend, reflecting a trend rise led by communications and medical care.

According to various sales statistics, retail sales value in nominal terms has remained on an increasing trend (Chart 31). Sales at department stores have been more or less flat from a somewhat longer-term perspective. Sales at supermarkets have shown some weakness, albeit with fluctuations that mainly result from changes in prices of food and beverages as well as from weather conditions. Sales at convenience stores have continued on a rising trend.

As for durable goods, sales of automobiles have risen, mainly reflecting the effects of the introduction of new car models (Chart 32). Sales of household electrical appliances have been on a moderate increasing trend, mainly due to steady sales of white goods. Although the front-loaded increase in demand prior to the consumption tax hike also has pushed up sales of these durable goods, the degree seems to be limited thus far compared with that of the previous tax hike.

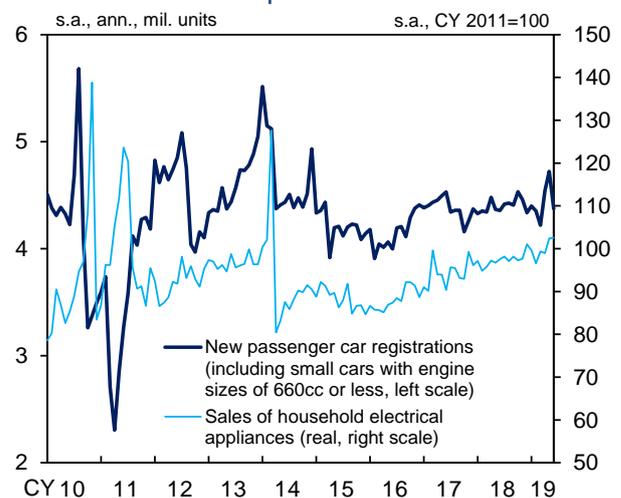
Regarding services consumption, travel has been on a moderate uptrend when fluctuations are smoothed out, and both domestic and overseas travel recently have been increasing significantly, owing to the long holiday period from end-April through early May (Chart 33). Dining-out has been on an uptrend, led mainly by fast food.

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

	s.a., q/q % chg.			
	18/Q3	18/Q4	19/Q1	19/Q2
<b>Consumption Activity Index</b>				
Real, travel balance adjusted	0.2	0.5	0.0	0.2
Real	0.1	0.7	-0.1	0.2
<b>Sales at retail stores (nominal)</b>				
Sales at department stores	-2.1	1.0	-1.1	0.7
Sales at supermarkets	1.2	-1.5	-0.6	0.3
Sales at convenience stores	1.2	-0.6	1.7	0.1

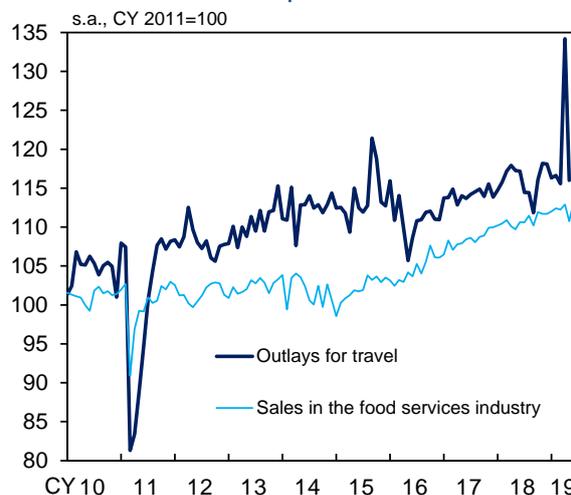
Sources: Bank of Japan; Ministry of Economy, Trade and Industry.  
 Notes: 1. The Consumption Activity Index is based on staff calculations (as of July 12).  
 2. Figures for sales at department stores and sales at supermarkets are adjusted for the number of stores.  
 3. Figures for the Consumption Activity Index for 2019/Q2 are April-May 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**



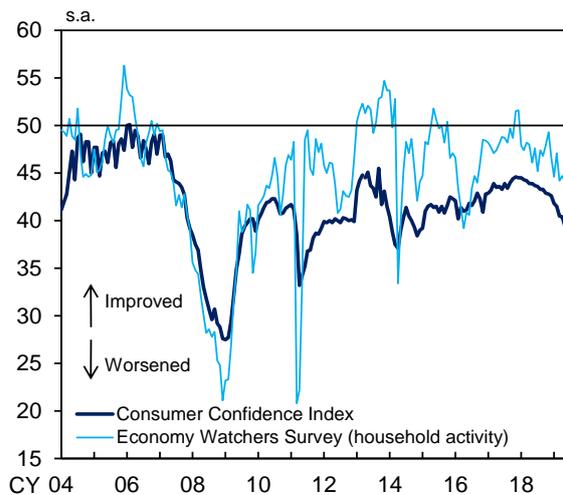
Sources: Japan Tourism Agency; Japan Foodservice Association, "Market Trend Survey of the Food Services Industry."  
 Note: Figures for the outlays for travel exclude those by foreign travelers.

Looking at confidence indicators related to private consumption, the Consumer Confidence Index has been weakening, mainly due to heightening concern over price rises, including those for food products of late and the scheduled consumption tax hike, and to uncertainties over the outlook for economic activity (Chart 34). The *Economy Watchers Survey* also suggests that consumer confidence has been weakening, albeit with fluctuations, reflecting cautious views regarding the economic outlook.

In the outlook, private consumption is expected to continue on a moderate increasing trend, supported by the increase in employee income and by the wealth effects stemming from a rise in stock prices, although it is likely to be pushed down for some time due to the effects of the scheduled consumption tax hike. With regard to the propensity to consume, this has been on a moderate declining trend in recent years, reflecting an increase in dual-income households and an expansion in the employment of seniors, and such trend is expected to continue for a while, albeit with fluctuations resulting from the scheduled consumption tax hike (Chart 35).<sup>26</sup>

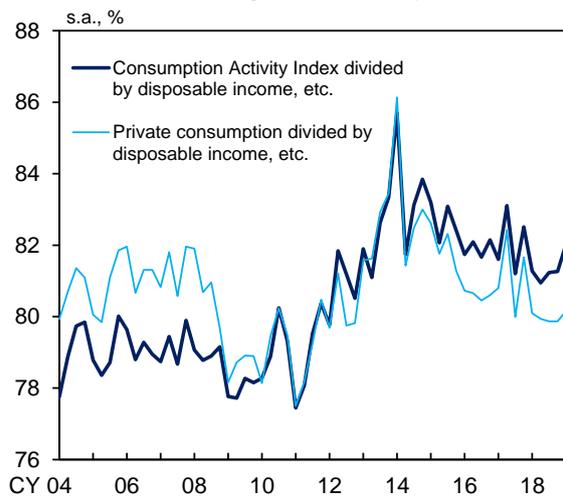
Housing investment has been more or less flat (Chart 36). Housing starts -- a leading indicator of housing investment -- are more or less unchanged on the whole; while the numbers of owned houses and detached houses built for sale have increased, due mainly to the front-loaded increase in demand prior to the consumption tax

**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**



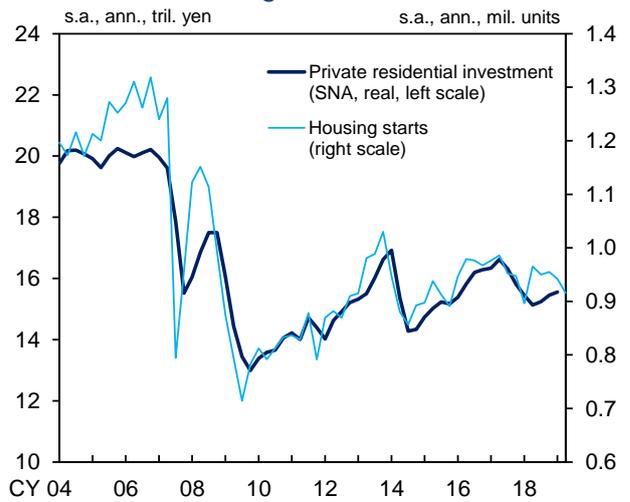
Sources: Bank of Japan; Cabinet Office; Ministry of Health, Labour and Welfare, etc.  
Notes: 1. The Consumption Activity Index is based on staff calculations.  
2. Private consumption is consumption of households excluding imputed rent.  
3. "Disposable income, etc." consists of disposable income and "adjustment for the change in pension entitlements." Figures from 2018/Q2 are based on staff calculations using statistics such as the "Monthly Labour Survey" (based on continuing observations following the sample revisions).

<sup>26</sup> Box 3 examines the relationship between the expansion in the labor force participation of women and seniors and the decline in the propensity to consume.

hike, that of housing for rent has decreased, mainly against the background of waning demand for tax saving and asset management.

As for the outlook, although housing investment is projected to be pushed down for some time due to the effects of the scheduled consumption tax hike, it is expected to remain more or less flat when fluctuations are smoothed out, underpinned by an improvement in the employment and income situation, low housing loan rates, and various support measures to be taken after the hike.

**Chart 36: Housing Investment**



Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism.  
 Note: The figure for 2019/Q2 is the April-May average.

## II. Current Situation of Prices and Their Outlook

### Developments in Prices

The rate of change in the producer price index (PPI, adjusted for the effects of seasonal changes in electricity rates) has increased 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 in the range of 0.5-1.0 percent, reflecting rises in personnel expenses and distribution costs (Chart 37).<sup>27</sup>

The year-on-year rates of change in the CPI (all items less fresh food and energy) and the CPI (all items less fresh food) are both at around 0.5 percent (Charts 39 and 40). The developments in the indicators for capturing the underlying trend in the CPI are as follows (Chart 41). The rate of change in the trimmed mean has been at around 0.5 percent recently.<sup>28</sup> The mode and the weighted median have been in the range of 0.0-0.5 percent of late.<sup>29</sup>

Compared to the economic expansion and tight labor market conditions, the trend inflationary

<sup>27</sup> Under these circumstances, the net "rise" for both the input prices DI and the output prices DI in the *Tankan* has continued (Chart 38).

<sup>28</sup> The effects of large relative price fluctuations are eliminated by 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).

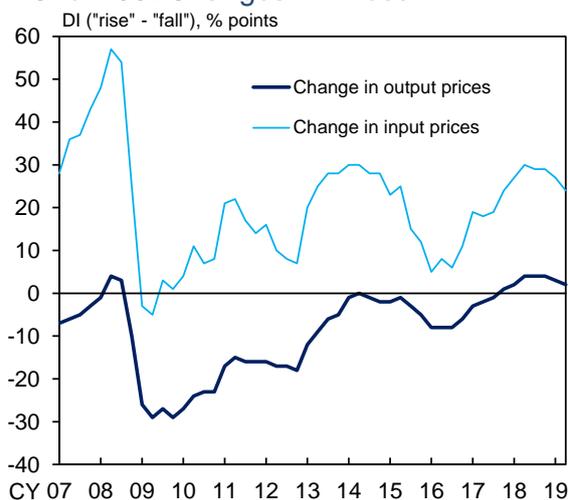
<sup>29</sup> The mode is the inflation rate with the highest density in the price fluctuation distribution. The weighted median is the average of the inflation rates of the items at around the 50 percentile point of the cumulative distribution in terms of weight.

Chart 37: Inflation Indicators

	y/y % chg.			
	18/Q3	18/Q4	19/Q1	19/Q2
Consumer Price Index (CPI)				
Less fresh food	0.9	0.9	0.8	0.8
Less fresh food and energy	0.3	0.3	0.4	0.5
Producer Price Index (q/q % chg.)	0.6	0.4	-0.8	0.4
Services Producer Price Index	1.3	1.3	1.0	0.8
GDP deflator	-0.4	-0.3	0.1	
Domestic demand deflator	0.6	0.5	0.3	

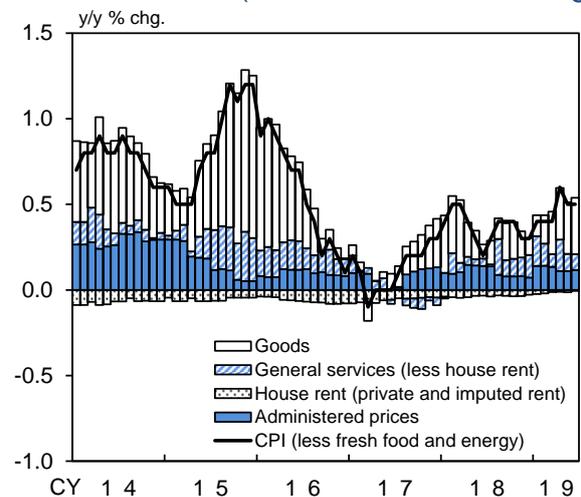
Sources: Ministry of Internal Affairs and Communications; Bank of Japan; Cabinet Office.  
Notes: 1. Figures for the Producer Price Index are adjusted to exclude the hike in electric power charges during the summer season.  
2. Figures for the Services Producer Price Index exclude international transportation.

Chart 38: Changes in Prices



Source: Bank of Japan.  
Note: Based on the *Tankan*. All enterprises.

Chart 39: CPI (less fresh food and energy)



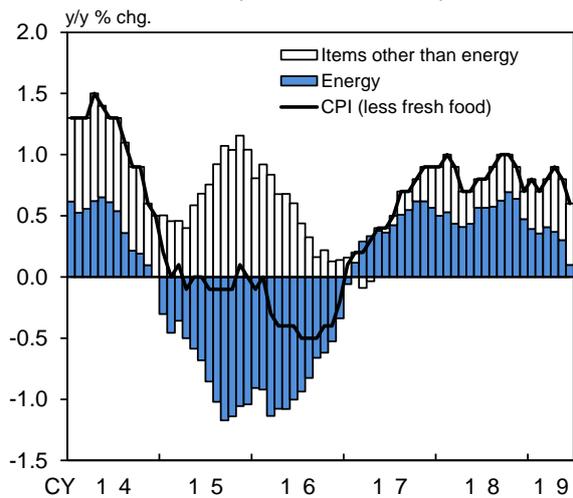
Source: Ministry of Internal Affairs and Communications.  
Notes: 1. Administered prices (less energy) consist of "public services" and "water charges."  
2. The CPI figures are adjusted for changes in the consumption tax rate.

pressure on the CPI has remained relatively weak. This basically has continued to be affected partly by 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, due mainly to the experience of prolonged low growth and deflation.<sup>30</sup> Under these circumstances, firms' cautious wage- and price-setting stance, as well as households' cautiousness toward price rises, have not yet clearly changed. 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 labor shortage -- mainly to part-time employees.<sup>31</sup> As a result, the real wage gap, which is defined as the deviation of real wages from labor productivity, recently has been negative and has continued to contribute to pushing down price rises (Chart 42). In addition, the following factors have been constraining overall inflation: sectoral shocks such as declines in (1) prices at mainly supermarkets, resulting from intensifying competition with other types of retail businesses and (2) prices of some items, including mobile-phone related prices, that have a large weight in the CPI; and the continued lackluster

<sup>30</sup> At the 8th conference co-hosted by the Center for Advanced Research in Finance (CARF) of the University of Tokyo and the Research and Statistics Department of the Bank of Japan held on April 15, 2019, many participants expressed the view that Japan's experience of prolonged deflation amid hysteresis in forming inflation expectations explains why the price stability target of 2 percent has not yet achieved. For details, see the Bank's research paper "Report on the 8th Conference Co-Hosted by the Center for Advanced Research in Finance (CARF) of the University of Tokyo and the Research and Statistics Department of the Bank of Japan: Discussion over Inflation Dynamics in Recent Years Focusing on Japan's Experience" published in June 2019 (available only in Japanese).

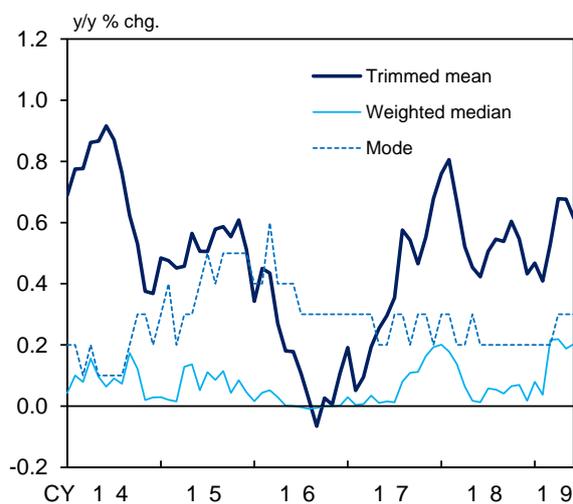
<sup>31</sup> As for firms' efforts to raise productivity, see Box 4 in the July 2018 Outlook Report.

**Chart 40: CPI (less fresh food)**



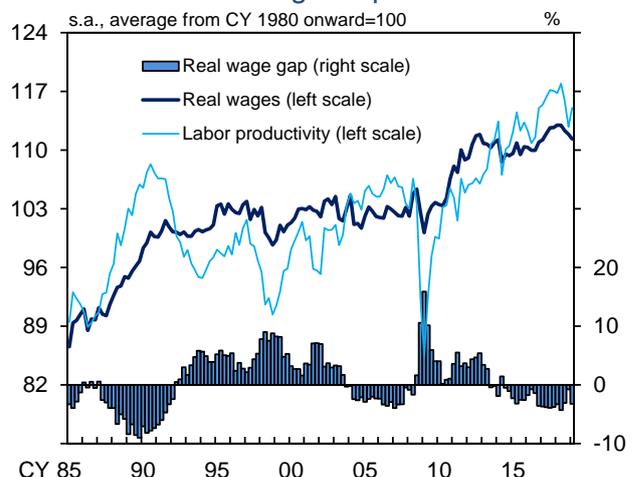
Source: Ministry of Internal Affairs and Communications.  
 Notes: 1. Energy consists of petroleum products, electricity, and gas, manufactured & piped.  
 2. The CPI figures are adjusted for changes in the consumption tax rate.

**Chart 41: 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).

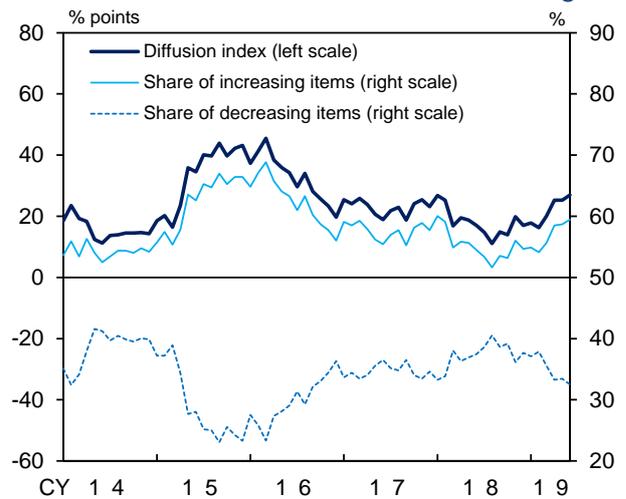
**Chart 42: Real Wage Gap**



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."  
 5. Figures from 2009/Q2 exclude "pure holding companies."

developments in administered prices and housing rent.<sup>32</sup> It has been taking time to resolve these factors that have been delaying price rises. Nonetheless, in the face of upward pressure on prices, such as of personnel expenses and distribution costs, firms' moves to raise their prices have been spreading of late, albeit at a gradual pace. In fact, looking at annual price changes across all CPI items (less fresh food), the share of price-increasing items minus the share of price-decreasing items recently has been increasing moderately (Chart 43).

**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.

The year-on-year rate of change in the GDP deflator has been marginally positive on the whole, due mainly to a rise in the domestic demand deflator (Chart 37). The year-on-year rate of change in the domestic demand deflator has been in the range of 0.0-0.5 percent, mainly led by the private consumption deflator and business fixed investment deflator.

<sup>32</sup> With regard to recent developments in the CPI mainly regarding mobile phone-related prices, see Box 4.

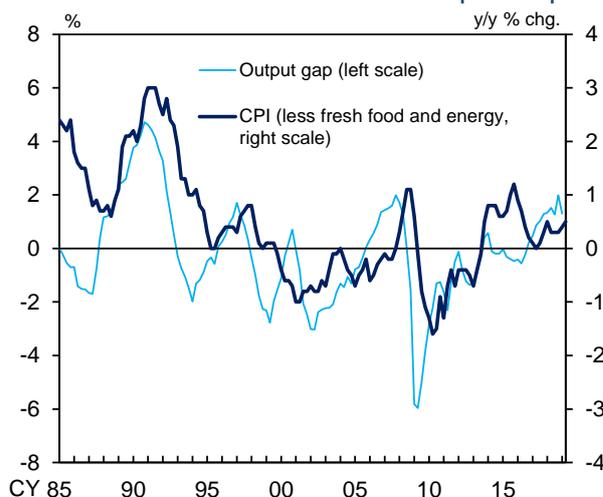
## Environment surrounding Prices

In the outlook for prices, the main factors that determine inflation rates are assessed as follows. First, the output gap for the January-March quarter has narrowed somewhat, mainly affected by the slowdown in overseas economies, but has been substantially positive, being in the range of 1.0-1.5 percent (Charts 4 and 44). With regard to the outlook, it is expected to remain substantially positive with the economy continuing to grow at about the same pace as its potential, despite being affected by the slowdown in overseas economies and the scheduled consumption tax hike.

Second, medium- to long-term inflation expectations have been more or less unchanged recently (Charts 45 and 46). As for the outlook, such expectations are likely to follow an increasing trend and gradually converge to 2 percent on the back of the following: (1) in terms of the adaptive component, as further price rises come to be observed widely with the output gap remaining positive, inflation expectations are likely to be pushed up through a rise in the observed inflation rate, 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, which will be effective in pushing up inflation expectations toward 2 percent.

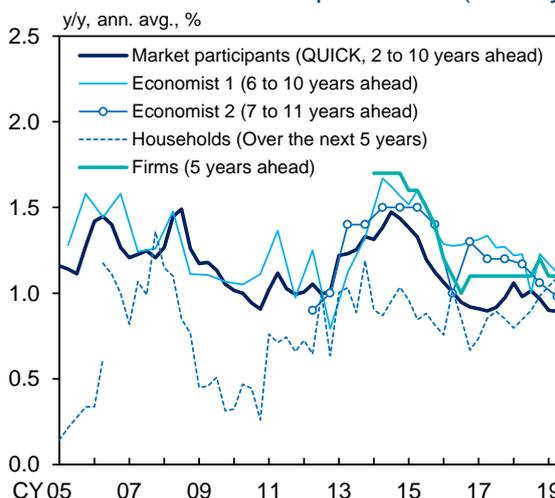
The third factor is developments in import prices. The past decline in crude oil prices is likely to exert downward pressure on the CPI through energy prices for the time being (Chart 47).

### 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; QUICK, "QUICK Monthly Market Survey (Bonds)"; JCER, "ESP Forecast"; Consensus Economics Inc., "Consensus Forecasts."  
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 matured in June 2018.

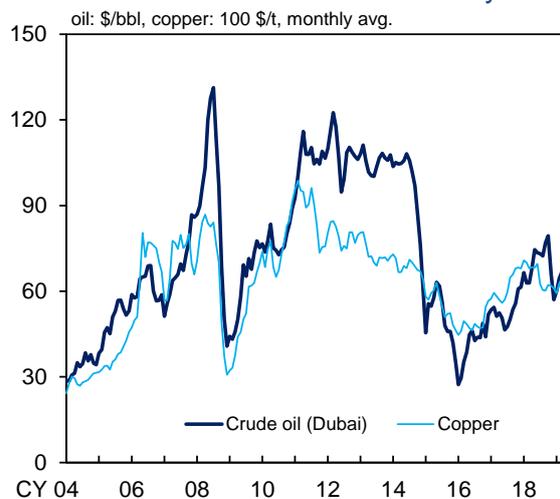
## Outlook for Prices

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, mainly 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, mainly dining-out and housework-related services, are likely to prevail. Thereafter, as firms' stance shifts toward further raising wages and prices and households' tolerance of price rises increases with the output gap remaining positive, inflation expectations are projected to rise gradually and the year-on-year rate of change in the CPI (all items less fresh food and energy) also is likely to increase gradually toward 2 percent.

The year-on-year rate of change in the CPI (all items less fresh food) is likely to remain positive at around the current level for the time being, while a decline in energy prices, such as of electricity, will contribute to exerting downward pressure. Thereafter, the rate of change is projected to increase gradually toward 2 percent as the CPI inflation excluding fresh food and energy is expected to accelerate.

Such projections are made based on the underlying scenario that, with the output gap remaining substantially positive, the Phillips curve gradually will shift upward as inflation expectations rise through both the forward-

**Chart 47: International Commodity Prices**

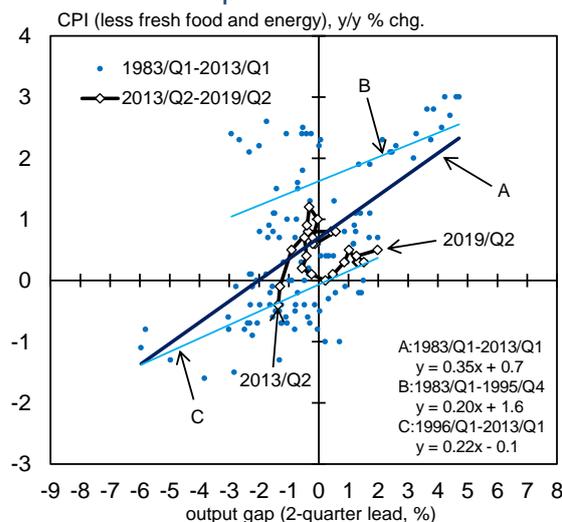


looking and adaptive expectation formation mechanisms (Chart 48).<sup>33</sup>

Comparing the current projections through fiscal 2021 with the previous ones, 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 42). Under the baseline scenario, the pace of increase in real wages is expected to accelerate gradually, catching up with the improvement in labor productivity. That is, with corporate profits at around historical 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 push up consumption through an improvement in household income and increase households' tolerance of price rises, thereby contributing 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.

<sup>33</sup> Regarding the adaptive formation mechanism of inflation expectations, see Box 7 in the July 2018 Outlook Report.

### III. Financial Developments in Japan

#### Financial Conditions

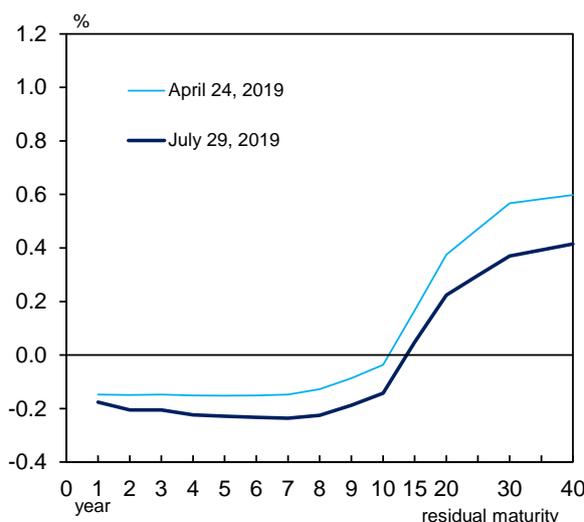
Financial conditions are highly accommodative.

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 in slightly negative territory. The 10-year JGB yields, while being at around 0 percent, have decreased moderately along with the declines in long-term interest rates in the United States and Europe that mainly reflected a heightening of investors' risk aversion and an increase in speculation over a policy rate cut in the United States. Meanwhile, the 20-year JGB yields, while being in the range of 0.0-0.5 percent, have declined moderately. With the Bank pursuing powerful monetary easing, the transaction volume for JGBs has remained at a relatively low level, but it has increased somewhat since end-July last year.<sup>34</sup>

Firms' funding costs have been hovering at extremely low levels (Chart 50). Issuance rates for CP have remained at extremely low levels, and indices such as the DI in the *Tankan* suggest that conditions for its issuance have been favorable. Issuance rates for corporate bonds also have remained at extremely low levels.

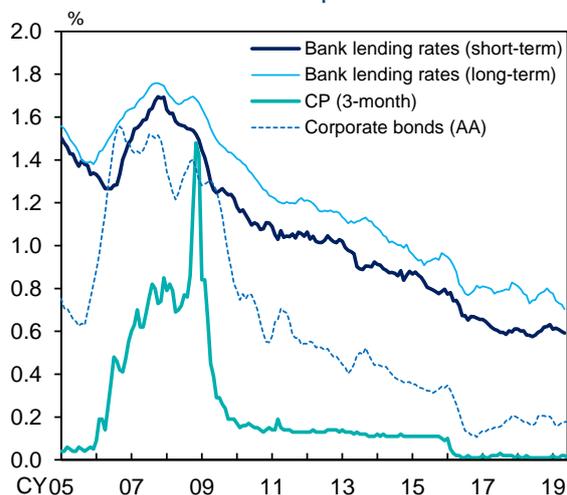
<sup>34</sup> With regard to liquidity in the JGB markets and the degree of bond market functioning from the market participants' viewpoints, see the Bank's releases *Liquidity Indicators in the JGB Markets* (June 2019) and *Bond Market Survey* (May 2019 survey).

Chart 49: Yield Curves



Source: Bloomberg.

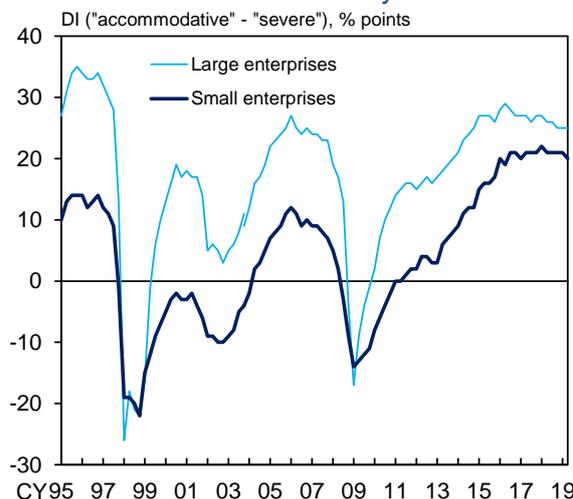
Chart 50: Bank Lending Rates and Issuance Yields for CP and Corporate Bonds



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.

Meanwhile, lending rates (the average interest rates on new loans and discounts) have been at around historical low levels.

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 DI for large firms in the *Tankan* having been at a high level of around the peak in the mid-2000s, and that for small firms having been at about the same high level seen around 1990 (Chart 52).

Demand for funds such as those for business fixed investment, as well as those related to mergers and acquisitions of firms, has been increasing. In these circumstances, the year-on-year rate of increase in the amount outstanding of bank lending has been at around 2.5 percent (Chart 53). That in the aggregate amount outstanding of CP and corporate bonds has been at a relatively high level.

The year-on-year rate of increase in the monetary base has been at around 3-4 percent, and its amount outstanding as of end-June was 523 trillion yen, of which the ratio to nominal GDP was 94 percent.<sup>35</sup> The year-on-year rate of increase in the money stock (M2) has been in the range of

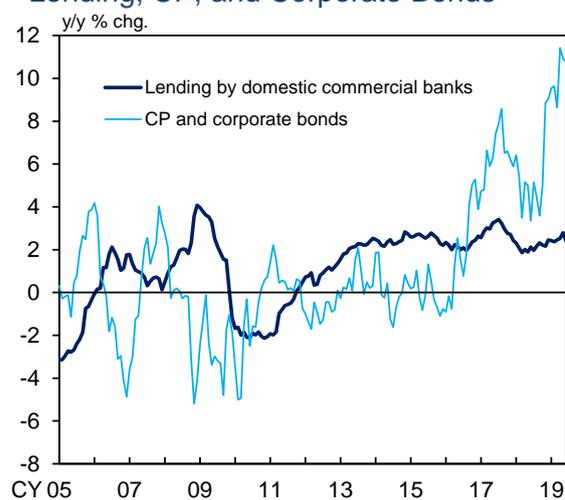
<sup>35</sup> It is assumed that the figure for nominal GDP is unchanged from the January-March quarter of 2019.

**Chart 52: Financial Position**



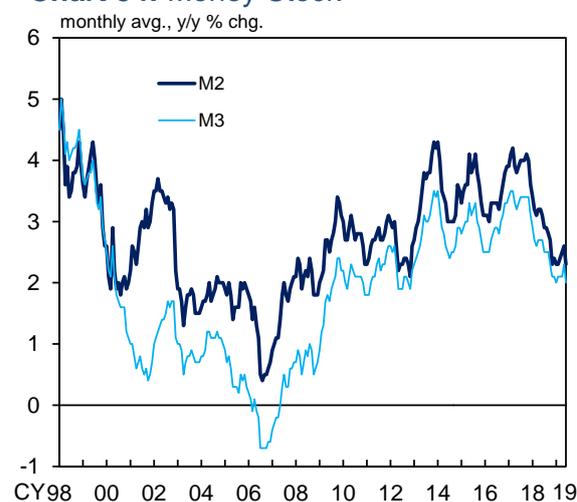
Source: Bank of Japan.  
Note: Based on the *Tankan*. All industries. There is a discontinuity in the data in December 2003 due to a change in the survey framework.

**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.

**Chart 54: Money Stock**



Source: Bank of Japan.

2.0-2.5 percent, partly reflecting an increase in bank lending (Chart 54).

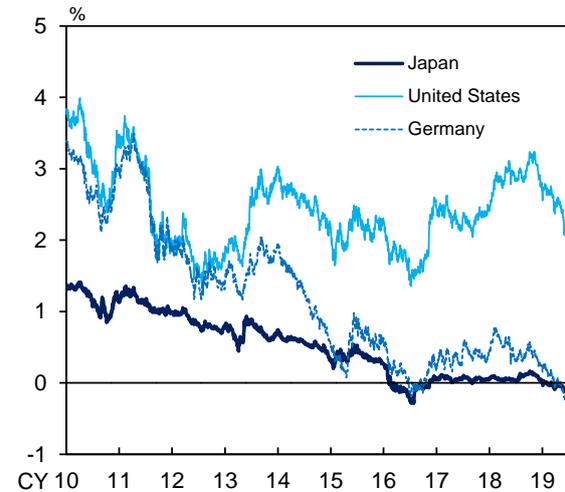
## Developments in Financial Markets

Global financial markets have shown large fluctuations. Through early June, long-term interest rates declined and stock prices fell temporarily in many economies against the background of heightening uncertainties regarding the global economy. Subsequently, while long-term interest rates have declined further, mainly reflecting the increase in speculation over additional monetary easing in the United States and Europe, stock prices have started to rise.

Yields on 10-year government bonds in the United States have declined, due mainly to the heightening of investors' risk aversion that reflected growing uncertainties over the U.S. trade policy through early June and to the following increase in speculation over a policy rate cut by the Federal Reserve (Chart 55). Yields on 10-year government bonds in Germany also have declined and stayed at record low levels, due to the effects of the decline in U.S. interest rates and speculation over additional monetary easing by the European Central Bank (ECB).

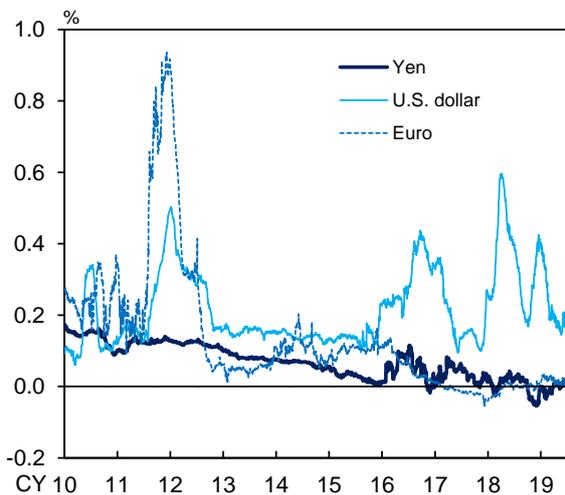
With regard to the LIBOR-OIS spreads for major currencies, those for the U.S. dollar have been more or less flat, while those for the euro and the yen have remained at low levels (Chart 56). Premiums for U.S. dollar funding through the dollar/yen foreign exchange swap market generally have been flat (Chart 57).

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



Source: Bloomberg.

**Chart 56: LIBOR-OIS Spreads**



Source: Bloomberg.

Note: LIBOR-OIS spreads are LIBOR (3-month) minus yields on overnight index swaps (3-month).

**Chart 57: Dollar Funding Premiums through Foreign Exchange Swaps**

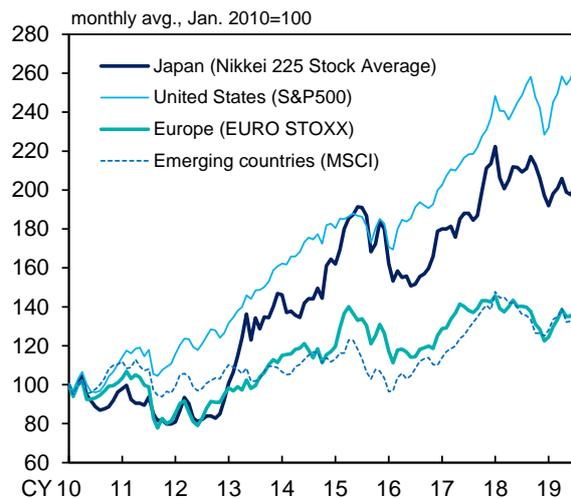


Source: Bloomberg.

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

Regarding the stock market, stock prices in the United States fell temporarily through early June, due mainly to heightening uncertainties over the U.S. trade policy. Subsequently, they have started to rise, marking historical highs, mainly against the background of the increase in speculation over a policy rate cut by the Federal Reserve and expectations for progress in U.S.-China trade negotiations as a result of the summit meeting between those countries (Chart 58). Stock prices in Europe and Japan fell and subsequently have started to rise, along with those in the United States.

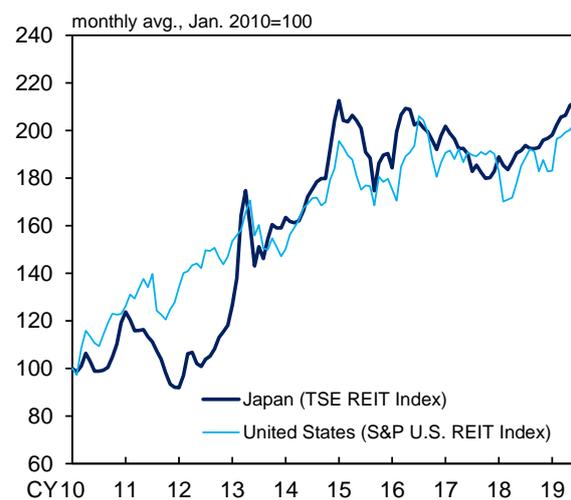
**Chart 58: Selected Stock Prices**



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

In the Japan real estate investment trust (J-REIT) market, prices have risen, mainly in reflection of the decline in long-term interest rates (Chart 59).

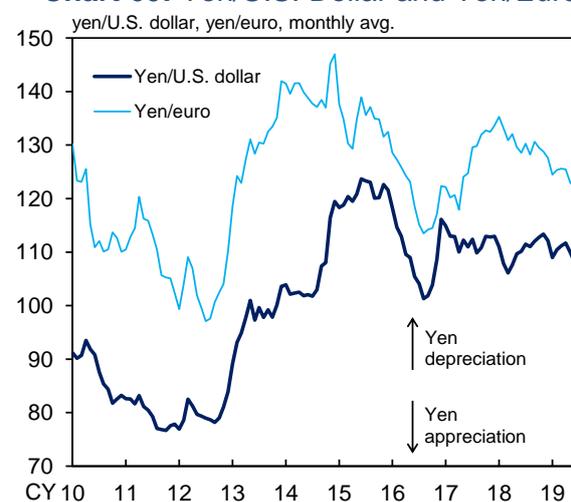
**Chart 59: Selected REIT Indices**



Source: Bloomberg.

In foreign exchange markets, the yen has appreciated somewhat against the U.S. dollar and the euro, mainly against the background of the heightening of investors' risk aversion that reflected heightening uncertainties over the U.S. trade policy (Chart 60).

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



Source: Bloomberg.

## (Box 1) Environment Surrounding Japan's Exports

The baseline scenario of the July 2019 Outlook Report is that, despite being affected by the slowdown in overseas economies for the time being, Japan's exports will move out of the relatively weak phase and gradually return to their moderate increasing trend, with the growth rates of overseas economies rising. However, uncertainties concerning this scenario remain considerably high, mainly regarding the consequences of U.S.-China trade negotiations, the materialization of the effects of stimulus measures, such as in China, and the progress in global adjustments in IT-related goods. The Bank has constructed SCOPE (Surveillance Indices for Critical Overseas Perils to Exports) as an early warning indicator to detect any risk that Japan's exports could fall substantially, triggered by a slowdown in overseas economies. This box examines export conditions to date in Japan by using SCOPE (Chart B1-1).<sup>36</sup>

Looking at the 18 indicators employed in SCOPE, the number of indicators signaling a significant deterioration in export conditions increased to five through March this year, temporarily dropped to three in April, and then increased again to five in June (Chart B1-2). Specifically, the following indicators for business sentiment in the global manufacturing sector and capital goods-related indicators signaled a significant deterioration: (1) the New Export Orders Index of the Global Manufacturing PMI, (2) the OECD business confidence index, (3) world vehicle sales, (4) the

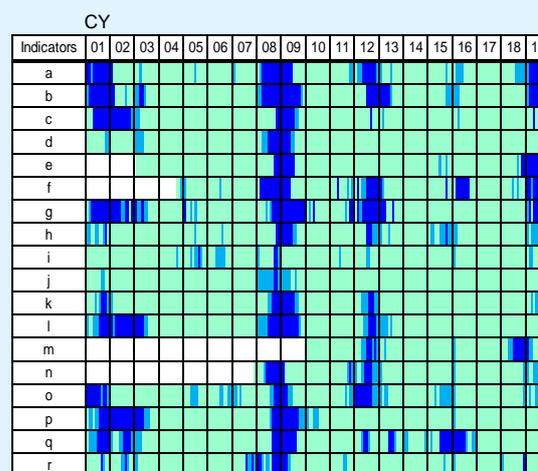
<sup>36</sup> For details of SCOPE, see Box 1 in the January 2019 Outlook Report.

### Chart B1-1: Monitoring Indicators

Indicators		
World		
Corporate	a	Global Manufacturing PMI: New Export Orders Index
	b	OECD business confidence index
	c	WSTS world semiconductor shipments
Household	d	OECD consumer confidence index
	e	World vehicle sales
Japan		
Corporate	f	Jibun Bank Japan Manufacturing PMI: New Export Orders Index
	g	Machinery orders (from overseas): Electronic and communication equipment
U.S.		
Corporate	h	ISM Manufacturing Index: New Export Orders Index
	i	Philadelphia Fed Manufacturing Business Outlook Survey: Future shipments
Household	j	University of Michigan Surveys of Consumers: Current Economic Conditions
Euro Area		
Corporate	k	Business Climate Indicator: Industry, production expectations
	l	Business Climate Indicator: Services sector, demand expectations
Asia		
Corporate	m	Output of metal shaping machinery in China
	n	China Manufacturing PMI
Overall	o	Taiwan National Development Council's Monitoring Indicators: Total score
Financial Markets	p	MSCI World Index
	q	MSCI Emerging Markets Index
	r	VIX Index

Note: The Global Manufacturing PMI is the "J.P. Morgan Global Manufacturing PMI."

### Chart B1-2: SCOPE



Sources: Haver; Bloomberg; Cabinet Office; WSTS Inc.; Wards Intelligence; IHS Markit (© and database right IHS Markit Ltd 2019. All rights reserved.)

Notes: 1. This chart visualizes the possibility of a significant decrease in real exports by depicting indicator values relative to their respective threshold values. Based on staff calculations.

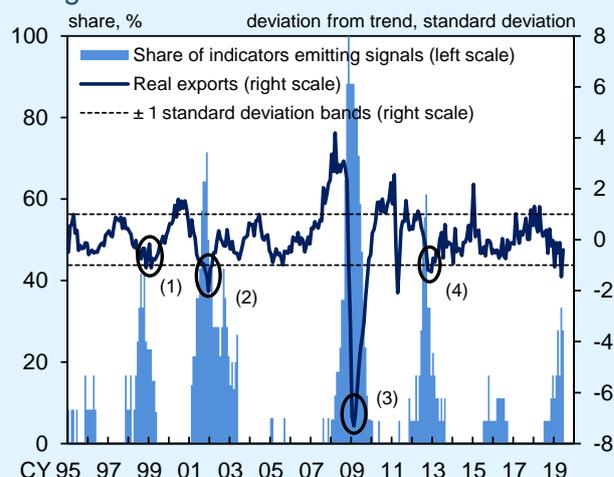
2. Shaded areas in the chart represent the following for an indicator relative to the threshold set for the indicator: (1) areas shaded in dark blue indicate that the indicator is above the threshold value; (2) areas in light blue indicate that the indicator lies between the threshold value and half of the threshold value; (3) areas in green indicate that the indicator lies below half of the threshold value; and (4) areas in white indicate that no data are available.

New Export Orders Index of the Jibun Bank Japan Manufacturing PMI, and (5) machinery orders (from overseas) for electronic and communication equipment. On the other hand, the WSTS world semiconductor shipments, which in May signaled a significant deterioration, no longer did so in June, suggesting that the global cycle for IT-related goods has not continued to deteriorate.

Thus, the number of indicators signaling a deterioration in export conditions remains small compared to the past four periods when exports decreased substantially -- that is, the phases in which real exports showed a decline of more than one standard deviation from their trend over a certain period at the time of (1) the Asian financial crisis, (2) the collapse of the dot-com bubble, (3) the global financial crisis, and (4) the European debt crisis (Chart B1-3). However, over the past few months, the number of indicators signaling a deterioration has continued to exceed that during the period from the second half of 2015 through the first half of 2016, when emerging economies, particularly China, decelerated. Meanwhile, for the first time since January 2019, real exports for May dropped by more than one standard deviation from their trend.

According to interviews conducted by the Bank's Head Office, branches, and local offices, an increasing number of firms are concerned about the impact of the prolonged trade friction between the United States and China (Chart B1-4). In particular, a growing number of respondents, mainly manufacturers of capital goods and electronic parts, have pointed to the risk that

**Chart B1-3: Share of Indicators Emitting Signals**



Sources: Bank of Japan; Ministry of Finance.  
 Note: (1) to (4) indicate periods in which real exports deviated downward from their trend by more than one standard deviation for two months or more in a four-month period.

moves to postpone business fixed investment will spread on a global basis with uncertainties over the trade policy increasing, and that the decline in orders for capital goods and electronic parts consequently will be protracted. Capital goods and IT-related goods, in which Japan has an advantage, comprise a large share of exports. Thus, the risk that some weakness in exports will last longer than expected and thereby lead to a decline in the growth rate of Japan's economy is judged as still significant.

**Chart B1-4: Interview Responses by Firms**  
(The Bank's *Regional Economic Report*)

- Orders for semiconductor-related goods have been falling since last summer and have dropped further since May, when it started looking like the trade friction between the United States and China would drag on for a while (a production machinery company; Matsue).
- In response to a sharp decline in orders from overseas, we switched from day-and-night two-shift production to daytime-only production in March and have also reduced operating hours. Moreover, since May, we have stopped operating on Fridays to further cut production (a general-purpose machinery company; Matsumoto).
- In April, it looked like orders for household electrical appliances and on-board equipment for motor vehicles would recover in the second half of fiscal 2019, but since May, in the wake of announcements by the United States that it would impose additional tariffs on imports from China, it has become more likely that the recovery will take more time (an electronic parts and devices company; Sendai).
- In order to avoid the impact of additional U.S. tariffs on imports from China, we have moved production to Japan for some products that were manufactured in China and shipped to the United States (a plastic products company; Okayama).
- Orders have continued to decline, partly due to the slowdown in the Chinese economy. Moreover, as uncertainties regarding overseas economies recently have increased further, it is becoming difficult to predict when orders will recover. Therefore, we have reduced investment intended for capacity expansion from the level initially planned (a production machinery company; Kanazawa).
- At the beginning of this fiscal year, our plans for fixed investment for fiscal 2019 were around the previous year's level, which was high, since we expected a recovery in demand for semiconductor parts in the period ahead. However, given the unpredictability of developments in the trade friction between the United States and China, we have decided to reduce our investment by about 20 percent from the initial plan (an electrical machinery company; Kofu).

Source: Bank of Japan.

Notes: 1. Extracted from the July 2019 *Regional Economic Report*.

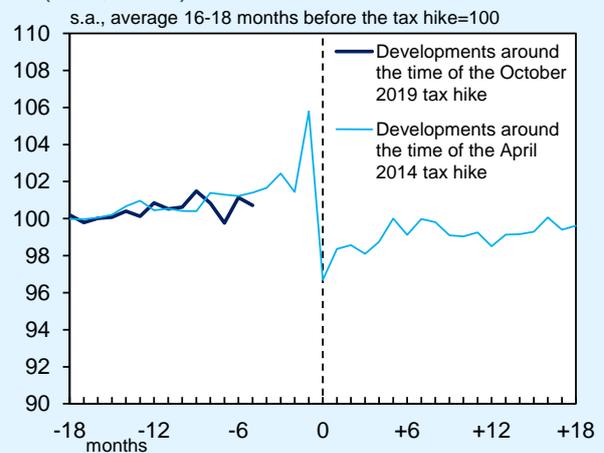
2. The industry of the interviewee and the Bank's branch that conducted the interview are shown in parentheses.

## (Box 2) Developments in Household Spending prior to the Consumption Tax Hikes

While Japan's economic growth rate is expected to be pushed up before the scheduled consumption tax hike in October 2019 through the front-loaded increase in demand led mainly by household spending, it is then likely to be pushed down after the tax hike as a result of the subsequent decline in demand and a decrease in households' real disposable income due to price rises.<sup>37</sup> The negative impact of the scheduled tax hike on the growth rates is expected to be smaller than that of the previous tax hike in fiscal 2014, partly because the increase in the consumption tax rate is smaller and the government will take support measures. However, there are some uncertainties. With regard to the front-loaded increase in demand prior to the tax hike scheduled in October 2019, this box examines recent developments in indicators related to household spending by comparing them with developments seen before the previous tax hike in April 2014.

Starting with the Consumption Activity Index (CAI, travel balance adjusted), which comprehensively captures developments in private consumption in Japan, this has been increasing at around the

**Chart B2-1: Consumption Activity Index (CAI, Real)**



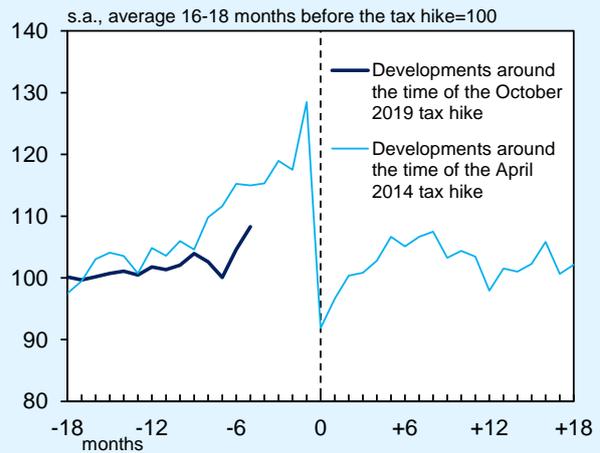
Source: Bank of Japan.

Notes: 1. Month 0 is the month in which the consumption tax rate was or is scheduled to be raised -- namely, April 2014 or October 2019. Regarding developments around the time of the October 2019 tax hike, the latest figure is for May 2019. The CAI is based on staff calculations (as of July 12).  
2. Figures exclude inbound tourism consumption and include outbound tourism consumption.

<sup>37</sup> While the front-loaded increase and subsequent decline in demand prior to and after the consumption tax hike occur mainly in household spending, they also can take place in part in business fixed investment among those eligible for the simplified tax system or the tax exemption (primarily family-owned firms and small firms). Meanwhile, when there is a front-loaded increase in demand, inventories are drawn down, and thus inventory adjustments push down GDP. In addition, part of the front-loaded increase in demand brings about a rise in imports, which are deducted from GDP, and this consequently pushes down GDP. These developments in inventories and imports are expected to reduce the fluctuations in overall GDP brought about by the tax hike.

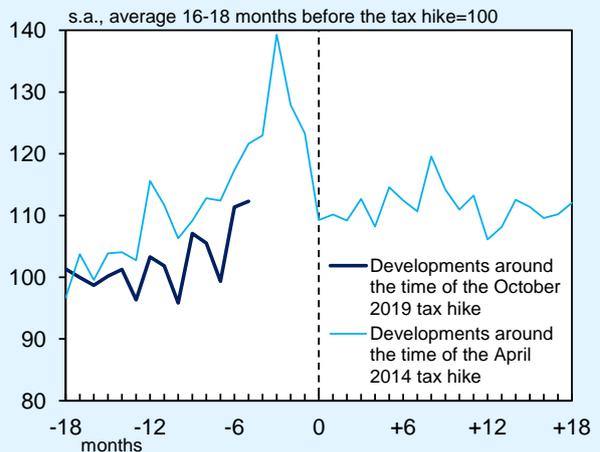
same pace as that prior to the previous tax hike, albeit with fluctuations (Chart B2-1). However, this increase is attributable to some extent to an increase in services consumption reflecting a rise in travel demand associated with the long holiday period from end-April through early May, and therefore is not only due to the front-loaded increase in demand. Looking at developments by type of consumption and focusing on durable goods, which are more susceptible to the front-loaded increase in demand, such increase in demand can be observed in some items, but the overall degree of the increase is limited compared with that of the tax hike in April 2014 (Chart B2-2). Taking a more detailed look, while sales of automobiles have been increasingly volatile recently, partly due to supply constraints, the pace of increase currently is accelerating somewhat. Although the degree may not be as much as that before the tax hike in April 2014, this seems to be due partly to the effects of the front-loaded increase in demand, which has been supported by the introduction of new car models as well (Chart B2-3). In addition, the front-loading of demand is gradually starting to materialize, as seen in favorable sales of air conditioners that partly reflect the stimulative effects brought about by the front-loading of demand for housing, which will be discussed later, as well as in an increase in replacement demand for personal computers that partly are due to the expiration of support for certain software products (Chart B2-4). On the other hand, with regard to nondurable goods, there has been essentially no front-loading of demand at the moment, as indicated by sales at department stores, supermarkets, and convenience stores (Chart 31). This is because nondurable goods are unlikely to experience the front-loaded increase in demand until immediately

**Chart B2-2: Durable Goods (CAI, Real)**



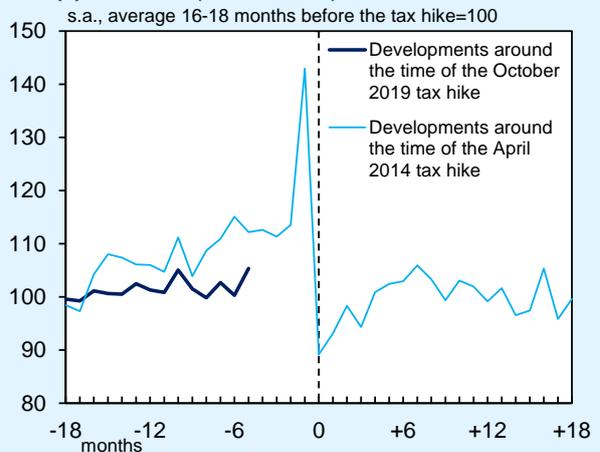
Source: Bank of Japan.  
Note: Month 0 is the month in which the consumption tax rate was or is scheduled to be raised -- namely, April 2014 or October 2019. Regarding developments around the time of the October 2019 tax hike, the latest figure is for May 2019. The CAI is based on staff calculations (as of July 12).

**Chart B2-3: Automobiles (CAI, Real)**



Source: Bank of Japan.  
Note: Month 0 is the month in which the consumption tax rate was or is scheduled to be raised -- namely, April 2014 or October 2019. Regarding developments around the time of the October 2019 tax hike, the latest figure is for May 2019. The CAI is based on staff calculations (as of July 12).

**Chart B2-4: Household Electrical Appliances (CAI, Real)**



Source: Bank of Japan.  
Note: Month 0 is the month in which the consumption tax rate was or is scheduled to be raised -- namely, April 2014 or October 2019. Regarding developments around the time of the October 2019 tax hike, the latest figure is for May 2019. The CAI is based on staff calculations (as of July 12).

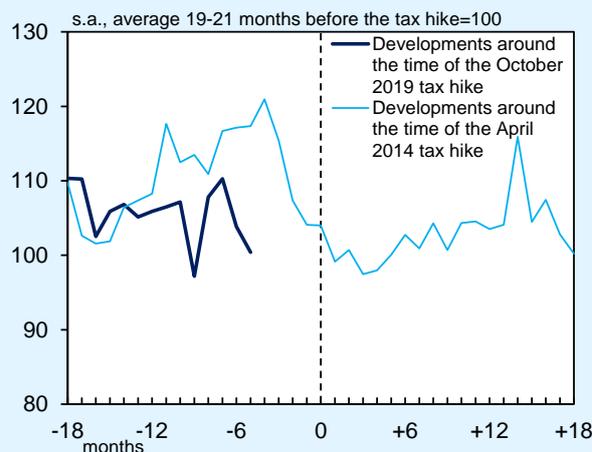
before the consumption tax hike.

Next, looking at housing starts, which is a leading indicator of housing investment, hardly any increase prior to the scheduled tax hike can be observed, unlike before the previous tax hike in 2014 (Chart B2-5[1]). However, looking at the breakdown, there has been a clear increase recently in housing starts of owned houses and detached houses built for sale, although this is not as pronounced as before the previous tax hike (Chart B2-5[2]). The likely reason for this clear increase is that there was a rush to make contracts before March 2019, to which the current tax rate was applied even if the handover of the property is after the October 2019 tax hike, and houses under these contracts have entered the construction stage. On the other hand, while there was a substantial increase in housing starts of housing for rent prior to the previous tax hike, they instead have been decreasing this time, reflecting waning demand for tax saving and asset management as well as somewhat cautious lending attitudes of financial institutions compared to a while ago.

In sum, while some types of household spending, such as durable goods consumption and housing starts of owned houses and detached houses built for sale, seem to be experiencing the front-loaded increase in demand, the degree is likely to be limited compared with that of the previous consumption tax hike.<sup>38</sup> However, it should be noted that, (1) with regard to the observed increase in demand, it is difficult to

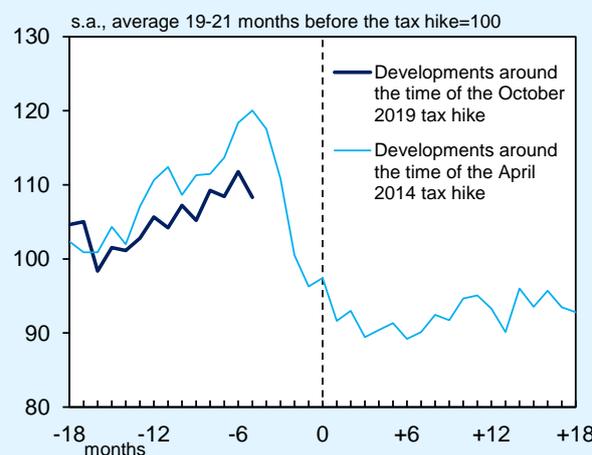
**Chart B2-5: Housing Starts**

**1. Overall**



Source: Ministry of Land, Infrastructure, Transport and Tourism.  
 Note: Month 0 is the month in which the consumption tax rate was or is scheduled to be raised -- namely, April 2014 or October 2019. Regarding developments around the time of the October 2019 tax hike, the latest figure is for May 2019.

**2. Owned Houses + Detached Houses Built for Sale**



Source: Ministry of Land, Infrastructure, Transport and Tourism.  
 Notes: 1. Month 0 is the month in which the consumption tax rate was or is scheduled to be raised -- namely, April 2014 or October 2019. Regarding developments around the time of the October 2019 tax hike, the latest figure is for May 2019.  
 2. Figures for detached houses built for sale are based on staff calculations.

<sup>38</sup> This assessment is in line with the majority view of firms, which is summarized in the July 2019 *Regional Economic Report*.

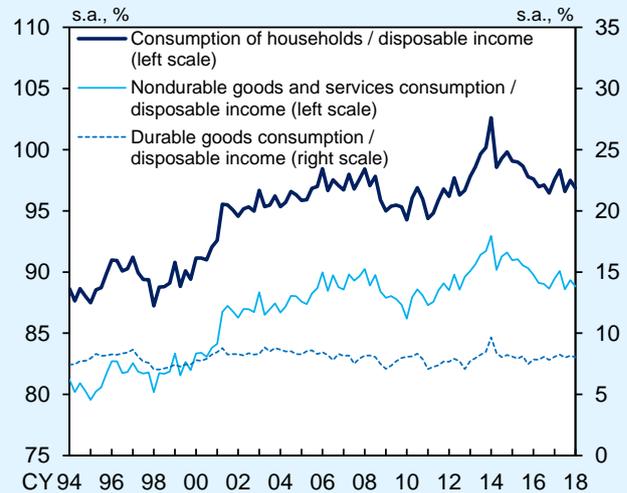
distinguish the front-loading of demand from the underlying trends in real time, (2) the degree of the front-loaded increase in demand is easily affected by household sentiment and retailers' stance on sales promotions at the time, and (3) this time, new measures will be implemented, such as a reduced tax rate, a point reward program when using cashless payments, and flexibly passing on the rise in the consumption tax to sales prices. Taking these factors into consideration, as there are uncertainties regarding the impact of the scheduled consumption tax hike, this continues to warrant close examination.

### (Box 3) The Relationship between the Expansion in the Labor Force Participation of Women and Seniors and the Decline in the Propensity to Consume

From a somewhat longer-term perspective, the macroeconomic propensity to consume followed a moderate uptrend until around 2014 -- albeit with some fluctuations that mainly reflected the consumption tax hike -- but started to decline in the past few years (Chart B3-1). By type of consumption, whereas the propensity to consume durable goods basically is more or less unchanged at a certain level, the propensity to consume nondurable goods and services started to decline from around 2014. This suggests that the latter determines developments in the overall propensity to consume. Against this background, this box examines the possibility that the expansion in the labor force participation of women and seniors in recent years has played a role in these developments. Specifically, it highlights the possibility that the macroeconomic propensity to consume may have been pushed down by (1) the fact that the number of dual-income households, which have a relatively low propensity to consume, has been increasing due to the growing employment of women, and (2) the fact that the number of senior households with a working head, which have a relatively low propensity to consume, has been increasing due to the growing employment of seniors.

Taking the labor force participation rates by gender and age as given, the overall labor force participation rate should have continued to show a trend decline due to demographic changes in recent years. In reality, however, it bottomed out around end-2012 and has continued on an

**Chart B3-1: Developments in the Propensity to Consume by Type of Consumption**



Source: Cabinet Office.  
 Note: Figures for nondurable goods and services consumption are calculated by subtracting figures for durable goods consumption from those for consumption of households.

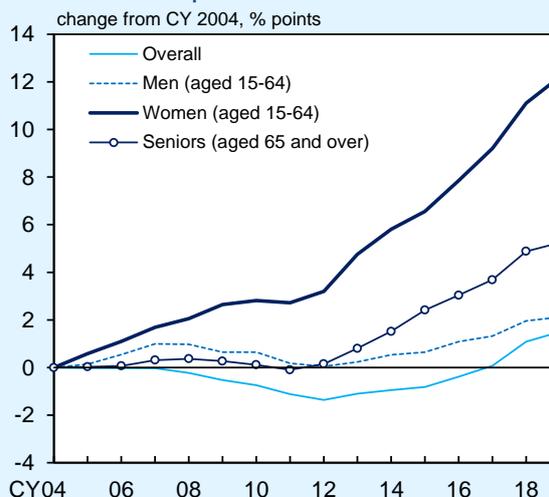
uptrend since then (Chart B3-2). While the demand-side factors, such as the increase in labor demand as a result of the economic expansion since 2013, have played a part, the supply-side factors in a broader sense, including various legal reforms and institutional changes, as well as efforts by the government and firms to promote employment, also seem to have played a major role. More specifically, the supply-side factors are as follows: (1) employment support for women of child-rearing age, such as the provision of nursery facilities within the place of business, has increased women's desire to join the labor force, and (2) the government's measures to encourage firms to retain workers by raising the age at which pensions start to be paid and extending the retirement age have expanded the employment of seniors.<sup>39</sup>

These structural changes in labor supply likely have had a non-negligible impact on the macroeconomic propensity to consume. That is, (1) since the propensity to consume of dual-income households is relatively lower than that of single-income households, an increase in the number of dual-income households has exerted downward pressure on the macroeconomic propensity to consume (Chart B3-3).<sup>40</sup> Moreover, (2) since the propensity to consume of senior households with a working head also is relatively lower than that of senior

<sup>39</sup> For details on the expansion in the labor force participation of women and seniors in recent years, see Box 2 in the October 2017 Outlook Report.

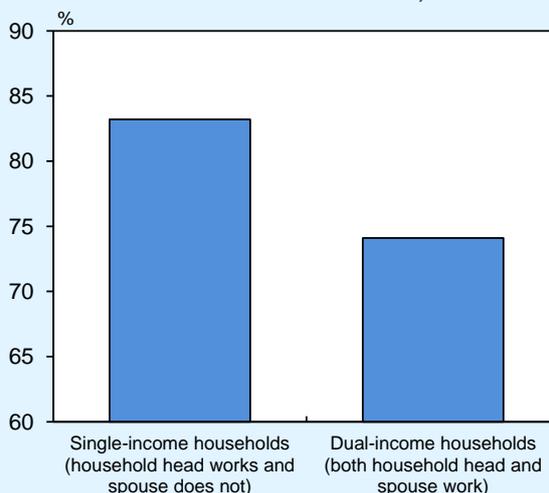
<sup>40</sup> For a more detailed analysis on the factors behind the increase in the employment of women since 2012 in particular, including the government's measures to improve the work environment, see "The Recent Increase in Dual-Income Households and Its Impact on Consumption Expenditure," *Bank of Japan Review Series*, no.17-E-7.

**Chart B3-2: Developments in the Labor Force Participation Rate**



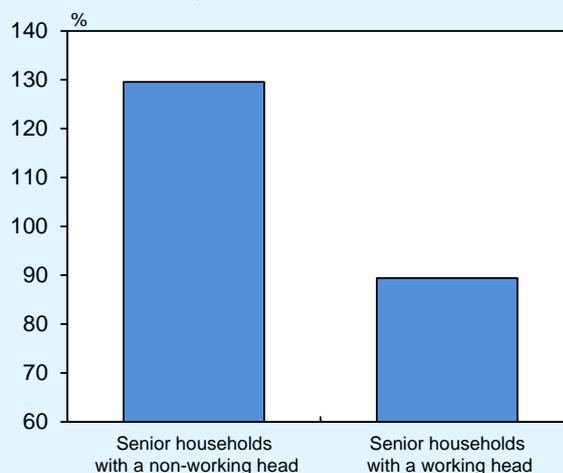
Source: Ministry of Internal Affairs and Communications.  
Note: Figures for 2019 are January-June averages on a seasonally adjusted basis.

**Chart B3-3: Propensity to Consume (Single- and Dual-Income Households)**



Source: Ministry of Internal Affairs and Communications.  
Note: Propensity to consume = consumption / disposable income. Figures are for workers' households with at least two members in the "National Survey of Family Income and Expenditure" conducted in 2014.

**Chart B3-4: Propensity to Consume (Senior Households)**



Source: Ministry of Internal Affairs and Communications.  
Note: Propensity to consume = consumption / disposable income. Senior households are households with a head aged 60 or older. Figures are for households with at least two members in the "Family Income and Expenditure Survey," and are averages for the period from 2000 through 2017.

households with a non-working head relying on pension income, an increase in the employment of seniors also has led to a decline in the overall propensity to consume (Chart B3-4).

In order to quantitatively examine the impact of such changes in labor supply on the macroeconomic propensity to consume, this box estimates a propensity-to-consume function that explicitly incorporates the labor force participation rate as an explanatory variable. The estimation results for the long-run relation to the propensity to consume nondurable goods and services, which determines the macroeconomic propensity to consume, suggest that a higher labor force participation rate shows a statistically significant lower propensity to consume (Chart B3-5). Thus, the decline in the propensity to consume in recent years mostly can be explained by explicitly taking into account the labor force participation rate as a determinant of changes in the propensity to consume (Chart B3-6).

The above analysis suggests that the decline in the propensity to consume in recent years is not necessarily a "reactive" phenomenon that reflects a rise in households' preference to cut back on spending but also has a "proactive" aspect. In other words, although the propensity to consume has declined, employee income newly generated by the increase in the employment of women and seniors likely has led to the recent increase in private consumption (relative to a scenario with no such increase in employment).

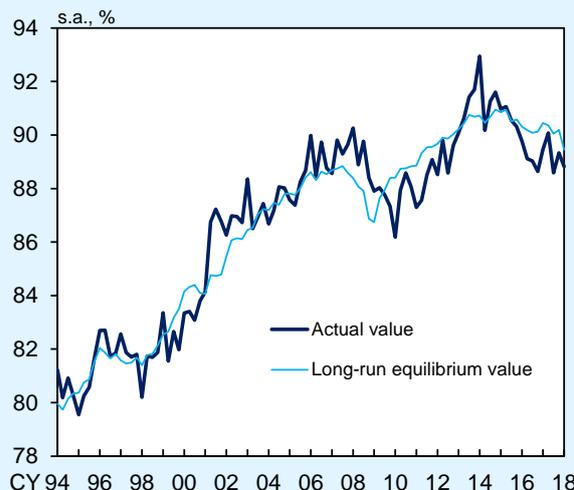
**Chart B3-5: Estimation Results (Long-Run Equilibrium)**

Dependent variable: $\ln(\text{nondurable goods and services consumption} / \text{disposable income})$	
$\ln(\text{household financial assets} / \text{disposable income})$	0.181 ***
Real interest rate gap	-0.181 **
$\ln(\text{labor force participation rate})$	-0.724 ***
S.E. of regression	0.010
Estimation period	1994/Q1-2018/Q1

Sources: Cabinet Office; Ministry of Internal Affairs and Communications; Consensus Economics Inc., "Consensus Forecasts"; Bank of Japan; Hirakata et al., "The Quarterly Japanese Economic Model (Q-JEM): 2019 Version," *Bank of Japan Working Paper Series*, No.19-E-7, etc.

Notes: 1. \*\*\* and \*\* denote statistical significance at the 1% and 5% levels, respectively.  
 2. The real interest rate gap is obtained by subtracting medium- to long-term inflation expectations and the natural rate of interest from long-term interest rates. The natural rate of interest is estimated based on the method of Hirakata et al. (2019).

**Chart B3-6: Propensity to Consume Nondurable Goods and Services**



Sources: Cabinet Office; Bank of Japan; Consensus Economics Inc., "Consensus Forecasts," etc.

Note: The propensity to consume nondurable goods and services is obtained by dividing nondurable goods and services consumption by disposable income.

## (Box 4) Recent Developments in the CPI mainly regarding Mobile Phone-Related Prices

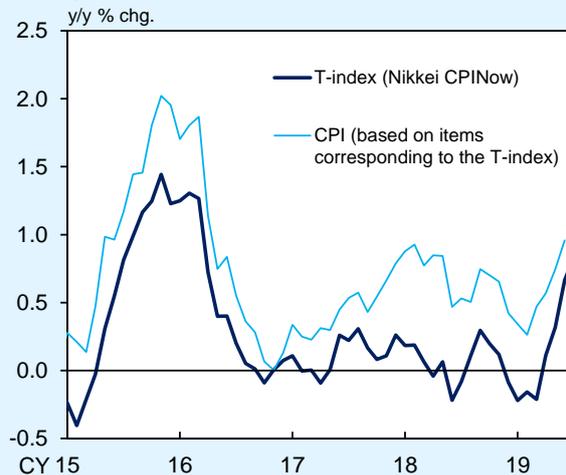
This box examines recent developments in the CPI, elaborating on key characteristics by category with a focus on mobile phone-related prices, on which downward pressure has intensified of late.

Looking at price-setting trends at retailers since April this year, prices of nondurable goods, in particular food products, have been rising for a wide range of items. In fact, sales price indicators that aggregate retailers' point-of-sales (POS) data, such as the Nikkei CPINow, show that the year-on-year rate of increase clearly has been accelerating since April (Chart B4-1).

In addition, developments in prices of durable goods also have been relatively firm. Specifically, with regard to durable goods other than mobile phones, price rises have been seen for a wide range of household electrical appliances, in particular room air conditioners, for which the front-loaded increase in demand prior to the consumption tax hike has begun to materialize (Chart B4-2). On the other hand, the year-on-year rate of decline in mobile phone prices has been accelerating of late, partly due to price reductions on older models prior to the launch of new ones.

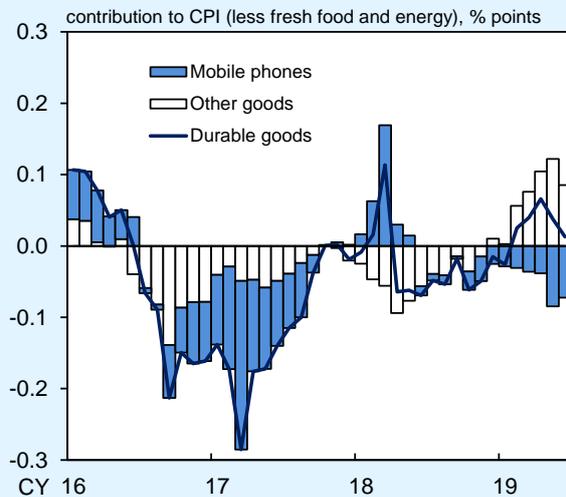
With regard to services prices, an uptrend in the year-on-year rate of increase has taken hold, particularly in dining-out and housework-related services, where a rise in personnel expenses is

**Chart B4-1: Sales Price Changes in Supermarkets**



Source: NOWCAST, Inc.  
Note: Figures are adjusted for changes in the consumption tax rate.

**Chart B4-2: Durable Goods**

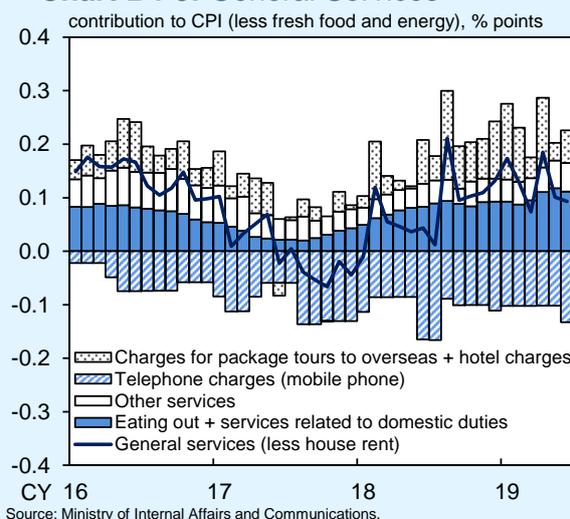


Source: Ministry of Internal Affairs and Communications.

being passed on. Charges for package tours to overseas and for hotels, which fluctuate considerably from month to month, have continued on their uptrend on the back of solid demand for travel and an increase in the number of inbound tourists. However, mobile phone charges have continued to decline as a result of intensifying competition among carriers in the mobile phone market. In June, when some carriers reduced their charges, mobile phone charges pushed down the year-on-year rate of change in the CPI (all items less fresh food and energy) by slightly more than 0.1 percentage point (Chart B4-3).

Thus, while further price rises have come to be observed widely and gradually among both goods and services, mobile phone-related prices (i.e., prices of and charges for mobile phones), in contrast with other items, are pushing down the overall prices to a certain degree. Therefore, a simple quantitative analysis has been used to determine whether the successive declines in mobile phone charges, which have a relatively large weight in the CPI, are affecting the formation of people's inflation expectations and whether this consequently may affect general prices overall. Specifically, this box estimates a vector auto-regression (VAR) model consisting of the following three variables: (1) the CPI for telephone charges (mobile phone), (2) the CPI for all items less fresh food, energy, and telephone charges (mobile phone), and (3) medium- to long-term inflation expectations. This model determines the extent to which an additional decline in mobile phone charges affects the CPI (Chart B4-4[1]).

**Chart B4-3: General Services**



**Chart B4-4: Impact of Reductions in Mobile Phone Charges**

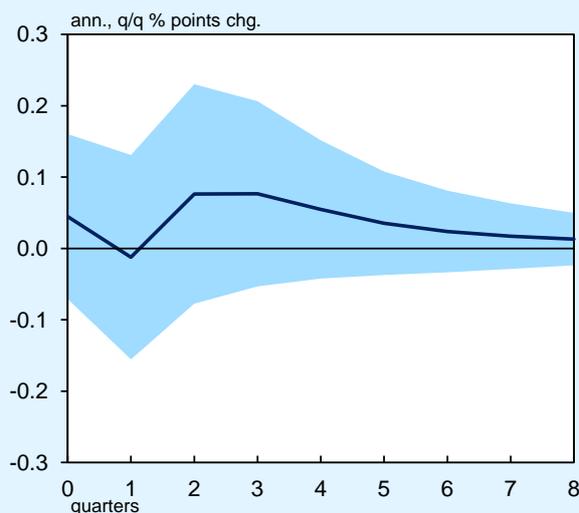
**1. VAR Model Specifications**

Estimation model: 3-variable VAR

- (a) CPI for telephone charges (mobile phone), ann., q/q % chg.
- (b) CPI for all items less fresh food, energy, and telephone charges (mobile phone), ann., q/q % chg.
- (c) Medium- to long-term inflation expectations (6 to 10 years ahead)

Shocks are identified by Cholesky decomposition in the above order.  
Lags: 2 quarters  
Estimation period: 2000/Q2-2019/Q1

**2. Response of the CPI to a -1σ (-3.3 Percentage Point) Shock to Mobile Phone Charges**



Sources: Ministry of Internal Affairs and Communications; Consensus Economics Inc., "Consensus Forecasts."  
Notes: 1. The CPI figures are adjusted for changes in the consumption tax rate.  
2. Figures for inflation expectations are from the "Consensus Forecasts."  
3. The shaded area indicates the 90 percentile band.

The results suggest that the spillover effects on the CPI for all items excluding fresh food, energy, and telephone charges (mobile phone) are small and do not show a statistically significant deviation from zero (Chart B4-4[2]). Thus, the recent declines in mobile phone charges should be regarded as a sectoral shock that is specific to a certain sector, and they are unlikely to spread to general prices overall through, for example, adaptive inflation expectation formation. Nonetheless, this is based on a simple time-series analysis and the estimation results should be interpreted with a certain latitude.

