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Outlook for Economic Activity and Prices

April 2024



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

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Outlook for Economic Activity and Prices (April 2024)

The Bank's View¹

Summary

- Japan's economy is likely to keep growing at a pace above its potential growth rate, with overseas economies growing moderately and as a virtuous cycle from income to spending gradually intensifies against the background of factors such as accommodative financial conditions.
 - The year-on-year rate of increase in the consumer price index (CPI, all items less fresh food) is likely to be in the range of 2.5-3.0 percent for fiscal 2024 and then be at around 2 percent for fiscal 2025 and 2026. While the effects of a pass-through to consumer prices of cost increases led by the past rise in import prices are expected to wane, the rate of increase is projected to be pushed up through fiscal 2025 by the effects of the recent rise in crude oil prices and a waning of the effects of the government's economic measures pushing down CPI inflation. Meanwhile, underlying CPI inflation is expected to increase gradually, since it is projected that the output gap will improve and that medium- to long-term inflation expectations will rise with a virtuous cycle between wages and prices continuing to intensify. In the second half of the projection period, it is likely to be at a level that is generally consistent with the price stability target.
 - Comparing the projections through fiscal 2025 with those presented in the previous *Outlook for Economic Activity and Prices* (Outlook Report), the projected real GDP growth rates for fiscal 2023 and 2024 are lower, mainly reflecting lower private consumption, but the projected growth rate for fiscal 2025 is more or less unchanged. The projected year-on-year rate of increase in the CPI (all items less fresh food) for fiscal 2024 is higher, but that for fiscal 2025 is more or less unchanged.
 - Concerning risks to the outlook, there remain high uncertainties surrounding Japan's economic activity and prices, including developments in overseas economic activity and prices, developments in commodity prices, and domestic firms' wage- and price-setting behavior. Under these circumstances, it is necessary to pay due attention to developments in financial and foreign exchange markets and their impact on Japan's economic activity and prices.
 - With regard to the risk balance, risks to economic activity are generally balanced for fiscal 2024 onward. Risks to prices are skewed to the upside for fiscal 2024 but are generally balanced thereafter.
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¹ "The Bank's View" was decided by the Policy Board at the Monetary Policy Meeting held on April 25 and 26, 2024.

I. Current Situation of Economic Activity and Prices in Japan

Japan's economy has recovered moderately, although some weakness has been seen in part. The pace of recovery in overseas economies has slowed. Although exports have been affected by the developments in overseas economies, they have been more or less flat. Industrial production has been more or less flat as a trend, but it has declined recently, partly due to the effects of a suspension of production and shipment at some automakers. Corporate profits have improved and business sentiment has stayed at a favorable level. In this situation, business fixed investment has been on a moderate increasing trend. The employment and income situation has improved moderately. Private consumption has been resilient, although the impact of price rises and developments such as a decline in automobile sales due to the suspension of shipment at some automakers have been observed. Housing investment has been relatively weak. Public investment has been more or less flat. Financial conditions have been accommodative. On the price front, the year-on-year rate of increase in the CPI (all items less fresh food) has been at around 2.5 percent recently, as services prices have continued to rise moderately, reflecting factors such as wage increases, although the effects of a pass-through to consumer prices of cost increases led by the past rise in import prices have waned. Inflation expectations have risen moderately.

II. Baseline Scenario of the Outlook for Economic Activity and Prices in Japan²

A. Baseline Scenario of the Outlook for Economic Activity

Japan's economy is likely to keep growing at a pace above its potential growth rate, with overseas economies growing moderately and as a virtuous cycle from income to spending gradually intensifies against the background of factors such as accommodative financial conditions.

Comparing the projections through fiscal 2025 with those presented in the previous Outlook Report, the projected real GDP growth rate for fiscal 2023 is lower, mainly reflecting lower private consumption due in part to the effects of the suspension of production and shipment at some automakers. The projected growth rate for fiscal 2024 is somewhat lower, given that the GDP growth rate for the second half of fiscal 2023 is expected to be fairly lower than previously projected. The rate for fiscal 2025 is more or less unchanged.

In the household sector, employment is likely to continue rising, but the pace of increase is projected to moderate gradually. This is because it will become more difficult for labor supply to increase, with labor force participation of women and seniors having advanced

² Each Policy Board member makes their forecasts taking into account the effects of past policy decisions and with reference to views incorporated in financial markets regarding the future conduct of policy.

to a high degree thus far. That said, these developments will lead to an increased tightening of labor market conditions during the course of the economic recovery. In this situation, wage growth is expected to increase as a trend, partly reflecting price rises, and employee income is projected to continue increasing. Against this backdrop, for the time being, although private consumption is expected to be affected by the price rises, it is projected to increase moderately, mainly reflecting the rise in wage growth and improvement in consumer sentiment. Private consumption is also projected to be underpinned by the government's initiatives, such as the continuation of measures to reduce the household burden of higher gasoline prices and also cuts in income tax and inhabitant tax.

In the corporate sector, exports and production are likely to return to an uptrend, mainly due to a pick-up in global demand for IT-related goods, as overseas economies grow moderately. Meanwhile, inbound tourism demand, which is categorized under services exports, is expected to continue increasing. Corporate profits are likely to follow an improving trend with a moderate increase in domestic and external demand. In this situation, as accommodative financial conditions provide support, business fixed investment is likely to continue on an increasing trend, including investment to address labor shortages, digital-related investment, research and development (R&D) investment related to growth areas and decarbonization, and investment associated with strengthening supply chains.

Meanwhile, public investment is expected to be more or less flat. Government consumption is expected to increase moderately in reflection of an uptrend in healthcare and nursing care expenditures.

The potential growth rate is expected to rise moderately.³ This is mainly because productivity is likely to increase due to advances in digitalization and investment in human capital, and because capital stock growth is projected to accelerate due to a rise in business fixed investment. These developments are likely to be encouraged by the government's various measures and by accommodative financial conditions.

B. Baseline Scenario of the Outlook for Prices

The year-on-year rate of increase in the CPI (all items less fresh food) is likely to be in the range of 2.5-3.0 percent for fiscal 2024 and then be at around 2 percent for fiscal 2025 and 2026. While the effects of a pass-through to consumer prices of cost increases led by the past rise in import prices are expected to wane, the rate of increase is projected to be

³ Under a specific methodology, Japan's recent potential growth rate is estimated to be in the range of 0.5-1.0 percent. However, the rate should be interpreted with considerable latitude. This is because the estimate is subject to change depending on the methodologies employed and could be revised as the sample period becomes longer over time. In addition, there are particularly high uncertainties in the current phase over how COVID-19 will affect the trends in productivity or labor supply.

pushed up through fiscal 2025 by the effects of the recent rise in crude oil prices and a waning of the effects of the government's economic measures pushing down CPI inflation. Meanwhile, underlying CPI inflation is expected to increase gradually, since it is projected that the output gap will improve and that medium- to long-term inflation expectations will rise with a virtuous cycle between wages and prices continuing to intensify. In the second half of the projection period, it is likely to be at a level that is generally consistent with the price stability target.

Comparing the projections through fiscal 2025 with those presented in the previous Outlook Report, the projected year-on-year rate of increase in the CPI (all items less fresh food) for fiscal 2024 is higher, mainly due to the effects of the recent rise in crude oil prices, but that for fiscal 2025 is more or less unchanged.

The outlook for the CPI (all items less fresh food) depends on the assumptions regarding crude oil prices and the government's economic measures. Crude oil prices are assumed to decline moderately toward the end of the projection period with reference, for example, to developments in futures markets. The government's measures to reduce the household burden of higher gasoline prices, electricity charges, and gas charges had pushed down the year-on-year rates of change in the CPI (all items less fresh food) up through fiscal 2023. For fiscal 2024 and 2025, the phasing out of these measures is projected to push up the rates. Looking at the CPI (all items less fresh food and energy) -- which is not directly affected by fluctuations in energy prices -- the year-on-year rate of increase is likely to decelerate, due to a gradual waning of the effects of the pass-through to consumer prices of cost increases led by the past rise in import prices, and subsequently be at around 2 percent.

The main factors that determine underlying inflation are assessed as follows. The output gap, which captures the utilization of labor and capital, has followed an improving trend, albeit with fluctuations. Based on the aforementioned outlook for economic activity, the gap is likely to widen moderately within positive territory toward the end of the projection period. Meanwhile, labor market conditions are expected to tighten to a greater extent than can be explained by the changes in the output gap, partly due to a deceleration in the pace of increase in labor force participation of women and seniors, and upward pressure on wages is projected to intensify. This is likely to put upward pressure on personnel expenses on the cost side and contribute to an increase in households' purchasing power.

Medium- to long-term inflation expectations have risen moderately. The March 2024 *Tankan* (Short-Term Economic Survey of Enterprises in Japan) shows that figures for firms' inflation outlook for general prices have been at high levels. Given that the formation of inflation expectations in Japan is largely adaptive, the increase in inflation seen thus far has brought about a rise in households' and firms' medium- to long-term inflation expectations. Firms' behavior has shifted more toward raising wages and prices, and it is

highly likely that firm wage increases that are higher than those seen in the previous year will be achieved in this year's annual spring labor-management wage negotiations. In addition, moves to reflect wage increases in selling prices have been strengthening. Regarding the outlook, inflation expectations are expected to rise moderately, with continued improvement in the output gap and changes in firms' wage- and price-setting behavior. Under these circumstances, the virtuous cycle between wages and prices is projected to keep intensifying through achievement of wage increases that reflect price rises and through a pass-through of wage increases to selling prices.

Considering the above assessments, underlying CPI inflation is expected to increase gradually, mainly reflecting the improvement in the output gap and the rise in medium- to long-term inflation expectations; in the second half of the projection period, it is likely to be at a level that is generally consistent with the price stability target. That said, there remain uncertainties regarding this outlook, and it is necessary to carefully monitor factors such as firms' wage- and price-setting behavior.

III. Risks to Economic Activity and Prices

A. Risks to Economic Activity

Regarding the aforementioned baseline scenario of the outlook for economic activity, the main upside and downside risks that require attention are as follows.

The first is developments in overseas economic activity and prices and in global financial and capital markets. Inflation rates in the United States and Europe have followed a declining trend, albeit with fluctuations, and overseas central banks have apparently signaled future policy interest rate reductions. That said, inflationary pressure has remained on a global basis and, in the case where inflation rates stay elevated through wage increases and other factors, there is a risk of tight monetary policy being prolonged. Moreover, since the policy interest rate hikes by overseas central banks to date have been rapid, there are uncertainties over how these hikes will affect their real economies and financial systems with a time lag. Taking these risks into account, it is necessary to pay due attention to developments in financial and foreign exchange markets and their impact on Japan's economic activity and prices. Meanwhile, depending on factors such as the course of the situation surrounding Ukraine and the Middle East, downward pressure on overseas economies could heighten. In addition, regarding the Chinese economy, there are high uncertainties surrounding the future pace of pick-up, as adjustment pressure has remained in the labor and real estate markets, and it is necessary to pay attention to how inventory adjustment pressure on some goods will affect overseas economic activity and prices.

The second risk is developments in import prices, particularly those of commodities, including grains. Attention continues to be warranted on the risk that prices of grains and

other commodities will fluctuate significantly due to geopolitical factors, such as those concerning Ukraine and the Middle East. Furthermore, in the medium to long term, there are extremely high uncertainties surrounding, for example, efforts by countries around the world toward addressing climate change. Given that Japan is an importer of commodities such as energy and grains (e.g., wheat), a rise in these prices due to supply factors puts greater downward pressure on the economy through an increase in import costs, as this rise is not accompanied by an expansion in external demand or an increase in exports. If the terms of trade were to deteriorate again, this could squeeze corporate profits and households' real income, leading business fixed investment and private consumption to deviate downward from the baseline scenario through more cautious spending behavior of firms and households. Moreover, with progress in the pass-through of the rise in import prices to consumer prices, households' defensive attitudes toward spending could strengthen further, and this could push down the economy. On the other hand, if prices of commodities, including grains, decline, the economy could deviate upward.

The third risk considered from a somewhat long-term perspective is the impact of various changes in the environment surrounding Japan on firms' and households' medium- to long-term growth expectations and on Japan's potential growth rate. It is expected that factors such as the experience of COVID-19, intensifying labor shortages, and progress on efforts with a view to decarbonization and on labor market reform will change Japan's economic structure and people's working styles. Intensifying labor shortages -- which are partly due to demographic changes -- could accelerate labor-saving investment, such as for digitalization. On the other hand, if such a substitution of labor with capital does not sufficiently progress, there is a risk that supply-side constraints in some industries will push down the growth rate. Furthermore, the heightened geopolitical risks could change the trend of globalization, which has supported the growth of the global economy to date.

B. Risks to Prices

If the aforementioned risks to economic activity materialize, prices also are likely to be affected. In addition, it is necessary to pay attention to the following two risks that are specific to prices.

The first is high uncertainties over firms' wage- and price-setting behavior, which could exert either upward or downward pressure on prices. Relatively high wage increases are likely to be achieved in this year's annual spring labor-management wage negotiations, in view of factors such as the need to recruit and retain employees, with labor market conditions tightening. While moves to reflect price developments in wages have been strengthening, there remain uncertainties over the extent to which moves to reflect wage developments in selling prices will become widespread. It is expected in the baseline scenario that the virtuous cycle between wages and prices will continue to intensify. However, given that many firms, especially small and medium-sized firms, have reported

that it has been difficult to pass on their employees' higher wages to their selling prices, the rise in selling prices could be limited. Since the behavior and mindset based on the assumption that wages and prices will not increase easily have taken hold in Japanese society for a prolonged period, it is necessary to pay close attention to whether moves to pass on increases in wages and other costs to selling prices will weaken with the waning of the effects of the pass-through to consumer prices of cost increases led by the past rise in import prices. On the other hand, moves to reflect wages in selling prices could strengthen to a greater extent than expected, and upward pressure on wages could intensify with labor market conditions tightening. In this situation, there is also a possibility that both wages and prices will deviate upward from the baseline scenario, accompanied by a rise in medium- to long-term inflation expectations.

The second risk is future developments in foreign exchange rates and international commodity prices, as well as the extent to which such developments will spread to import prices and domestic prices. This risk may lead prices to deviate either upward or downward from the baseline scenario. There are high uncertainties over, for example, the outlook for the global economy, and this could lead to significant fluctuations in international commodity prices. Including future developments in global inflation rates and possible fluctuations in foreign exchange markets, how these factors will affect Japan's prices requires due attention.

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.⁴

The first perspective involves an examination of the baseline scenario of the outlook. The year-on-year rate of increase in the CPI is likely to be in the range of 2.5-3.0 percent for fiscal 2024 and then be at around 2 percent for fiscal 2025 and 2026. Meanwhile, underlying CPI inflation is expected to increase gradually, since it is projected that the output gap will improve and that medium- to long-term inflation expectations will rise with the virtuous cycle between wages and prices continuing to intensify. In the second half of the projection period, it is likely to be at a level that is generally consistent with the price stability target.

The second perspective involves an examination of the risks considered most relevant to the conduct of monetary policy. There remain high uncertainties, both upside and downside, surrounding Japan's economic activity and prices, and it is necessary to pay

⁴ 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."

due attention to developments in financial and foreign exchange markets and their impact on economic activity and prices. With regard to the risk balance, risks to economic activity are generally balanced for fiscal 2024 onward. Risks to prices are skewed to the upside for fiscal 2024 but are generally balanced thereafter.

Examining risks on the financial side, overheating has generally not been seen in asset markets and financial institutions' credit activities, although a somewhat rapid rise in stock prices was seen for a time and valuations of some properties seem to have been relatively high in the real estate market. Japan's financial system has maintained stability on the whole. In addition, even in the case of an adjustment in the real economy at home and abroad and in global financial markets, the financial system is likely to remain highly robust on the whole, mainly because Japanese financial institutions have sufficient capital bases. Moreover, financial institutions' resilience to rises in yen interest rates has headed toward improvement, mainly reflecting their portfolio rebalancing in securities investment. When examining financial imbalances from a longer-term perspective, if downward pressure on financial institutions' profits, such as from low interest rates, the declining population, and excess savings in the corporate sector, becomes prolonged, this could create a risk of a gradual pullback in financial intermediation. On the other hand, under these circumstances, the vulnerability of the financial system could increase, mainly due to the search for yield behavior. Although these risks are judged as not significant at this point, it is necessary to pay close attention to future developments.⁵

As for the conduct of monetary policy, it will depend on future developments in economic activity and prices as well as financial conditions. Uncertainties surrounding these economic and financial developments at home and abroad remain high. If the aforementioned outlook for economic activity and prices will be realized and underlying inflation will increase, the Bank will adjust the degree of monetary accommodation, while it anticipates that accommodative financial conditions will be maintained for the time being. With the price stability target of 2 percent, the Bank will conduct monetary policy as appropriate, in response to developments in economic activity and prices as well as financial conditions, from the perspective of sustainable and stable achievement of the target.

⁵ For details, see the Bank's *Financial System Report* (April 2024).

Forecasts of the Majority of the Policy Board Members

y/y % chg.

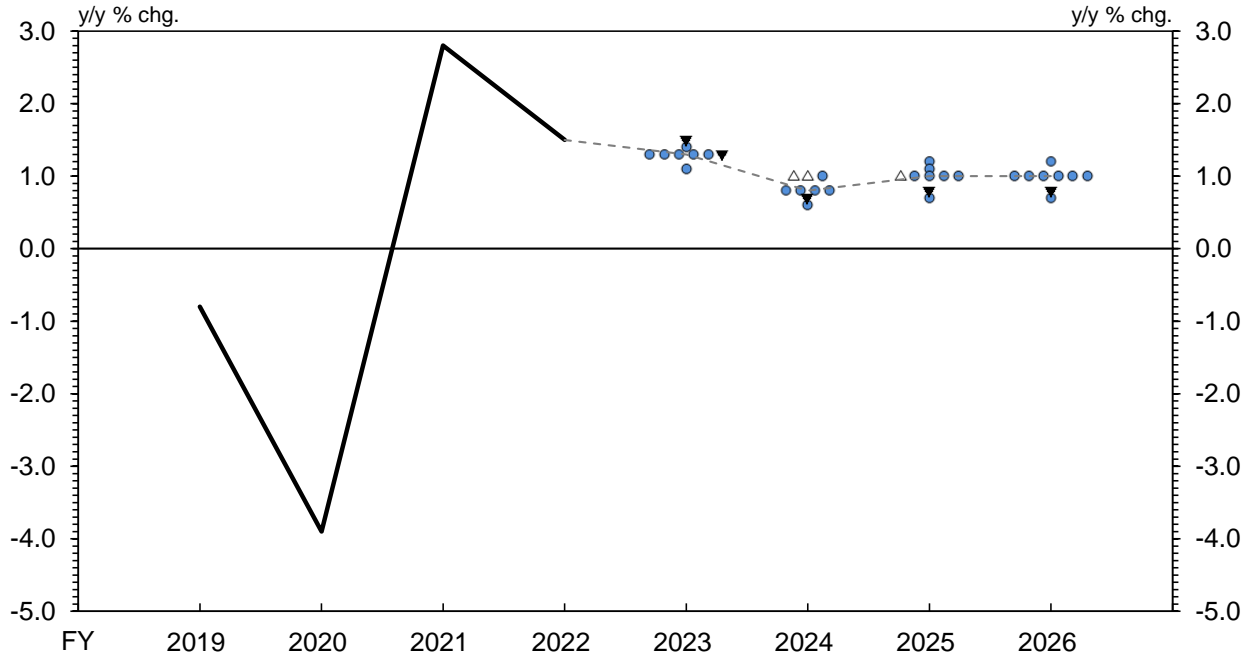
	Real GDP	CPI (all items less fresh food)	(Reference) CPI (all items less fresh food and energy)
Fiscal 2023	+1.3 to +1.4 [+1.3]	+2.8	+3.9
Forecasts made in January 2024	+1.6 to +1.9 [+1.8]	+2.8 to +2.9 [+2.8]	+3.7 to +3.9 [+3.8]
Fiscal 2024	+0.7 to +1.0 [+0.8]	+2.6 to +3.0 [+2.8]	+1.7 to +2.1 [+1.9]
Forecasts made in January 2024	+1.0 to +1.2 [+1.2]	+2.2 to +2.5 [+2.4]	+1.6 to +2.1 [+1.9]
Fiscal 2025	+0.8 to +1.1 [+1.0]	+1.7 to +2.1 [+1.9]	+1.8 to +2.0 [+1.9]
Forecasts made in January 2024	+1.0 to +1.2 [+1.0]	+1.6 to +1.9 [+1.8]	+1.8 to +2.0 [+1.9]
Fiscal 2026	+0.8 to +1.0 [+1.0]	+1.6 to +2.0 [+1.9]	+1.9 to +2.1 [+2.1]

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

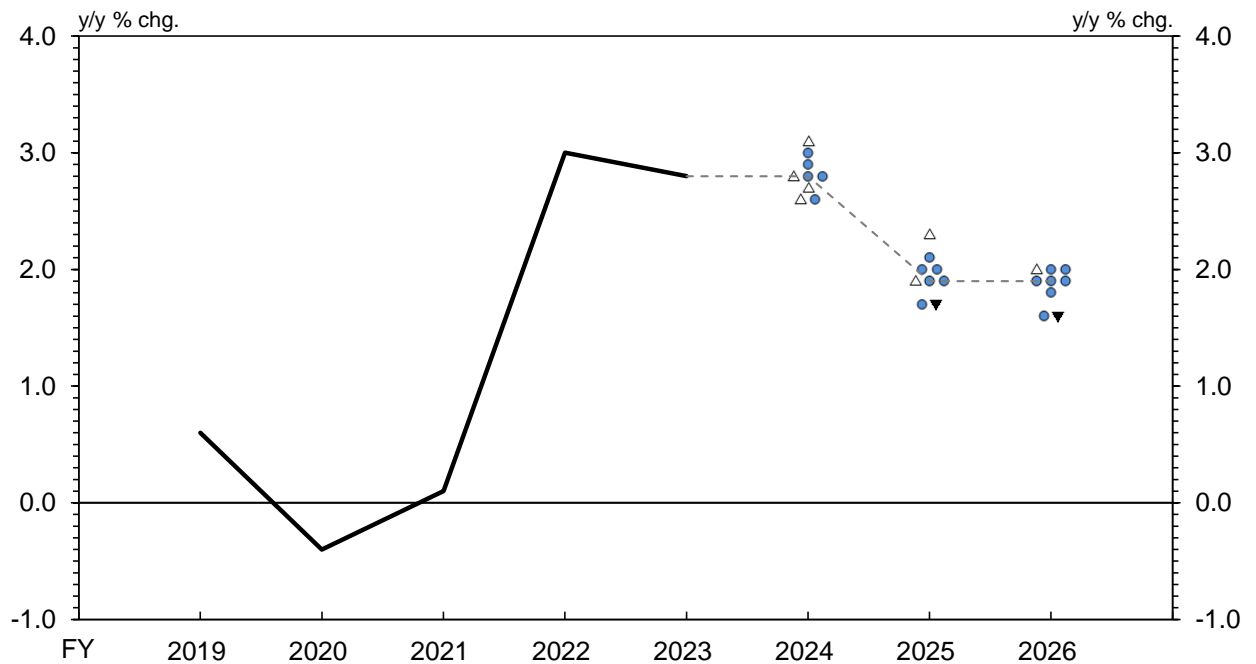
2. The forecasts of the majority of the Policy Board members are constructed as follows: each Policy Board member's forecast takes the form of a point estimate -- namely, the figure to which they attach the highest probability of realization. These forecasts are then shown as a range, with the highest figure and the lowest figure excluded. The range does not indicate the forecast errors.
3. Each Policy Board member makes their forecasts taking into account the effects of past policy decisions and with reference to views incorporated in financial markets regarding the future conduct of policy.
4. The CPI figures for fiscal 2023 are actual values.

Policy Board Members' Forecasts and Risk Assessments

(1) Real GDP



(2) CPI (All Items Less Fresh Food)



Notes: 1. The solid lines show actual figures, while the 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 they attach 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."

The Background⁶

I. Current Situation of Economic Activity and Its Outlook

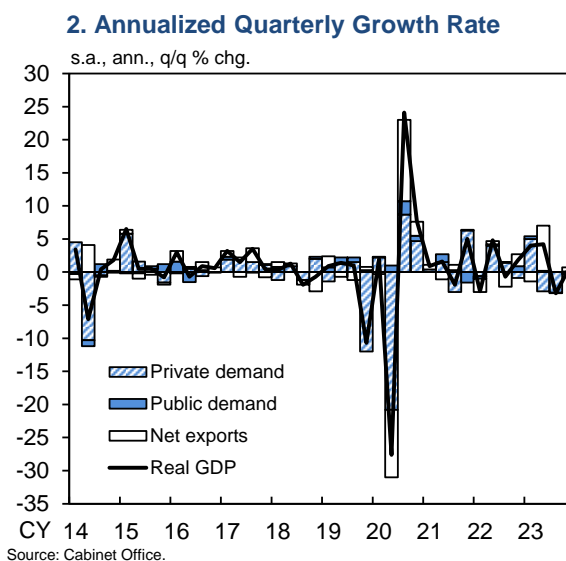
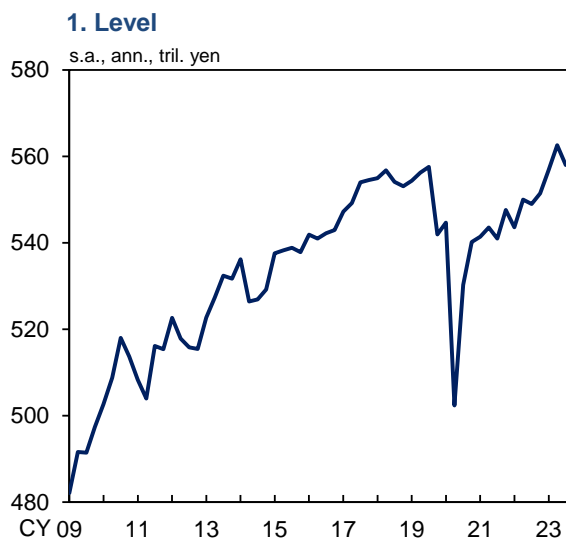
A. Economic Developments

Japan's economy has recovered moderately, although some weakness has been seen in part.

Real GDP decreased for the July-September quarter of 2023, registering minus 0.8 percent on a quarter-on-quarter basis and minus 3.2 percent on an annualized basis (Chart 1). It then registered 0.1 percent on a quarter-on-quarter basis and 0.4 percent on an annualized basis for the October-December quarter, resulting in positive growth for the first time in two quarters. Relative to the previous quarter, private consumption declined slightly while business fixed investment increased clearly. In addition, exports rose significantly, partly due to large-scale projects in services exports. The output gap -- which captures the utilization of labor and capital -- for the October-December quarter improved somewhat from the previous quarter, mainly due to a recovery in the capacity utilization rate for the manufacturing industry (Chart 2).

Monthly indicators and high-frequency data since then suggest that Japan's economy has continued on a recovery trend, although some weakness has been seen in part. In the corporate sector, although exports have been affected by a slowdown in the pace of recovery in overseas

Chart 1: Real GDP



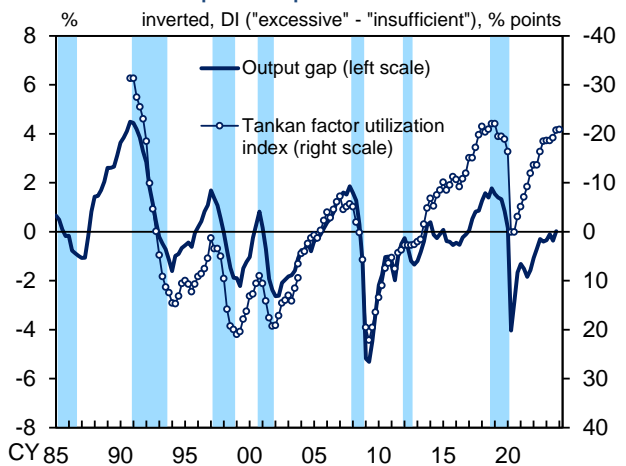
⁶ "The Background" provides explanations of "The Bank's View" decided by the Policy Board at the Monetary Policy Meeting held on April 25 and 26, 2024.

economies, they have been more or less flat. Production has been more or less flat as a trend, but it has declined recently, partly due to the effects of a suspension of production and shipment at some automakers. Corporate profits have improved and business sentiment has stayed at a favorable level. In this situation, business fixed investment has been on a moderate increasing trend. The business fixed investment plans in the March 2024 *Tankan* indicate that the year-on-year rate of change in investment for fiscal 2023 is expected to be clearly positive, at around 10 percent, and that the rate of change in planned investment for fiscal 2024 -- which was surveyed for the first time in this *Tankan* -- is firmly positive. In the household sector, the employment and income situation has improved moderately. Under these circumstances, private consumption has been resilient, although the impact of price rises and developments such as a decline in automobile sales due to the suspension of shipment at some automakers have been observed.

Japan's economy is likely to keep growing at a pace above its potential growth rate, with overseas economies growing moderately and as a virtuous cycle from income to spending gradually intensifies against the background of factors such as accommodative financial conditions.⁷ Comparing the projections with those presented in the previous Outlook Report, the projected real GDP growth rate for fiscal 2023 is

⁷ The government formulated additional measures toward overcoming price increases in March 2023 and the Comprehensive Economic Measures to Completely Break Free from Deflation in November. The implementation of the budget based on these measures is expected to mainly push up government consumption and private consumption, and thereby support economic activity.

Chart 2: Output Gap



Source: Bank of Japan.

Notes: 1. Figures for the output gap are staff estimates.

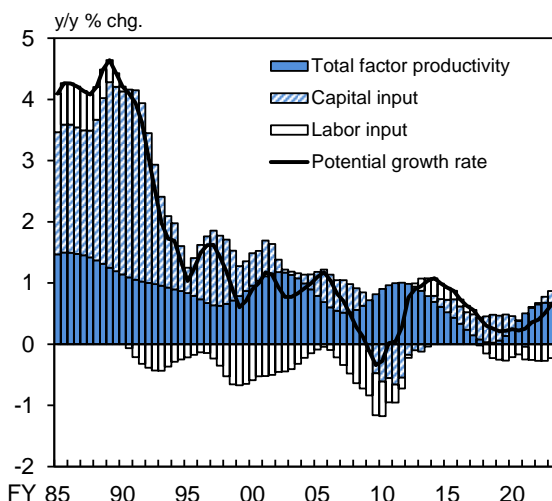
2. The *Tankan* factor utilization index is calculated as the weighted average of the production capacity DI and the employment conditions DI for all industries and enterprises. The capital and labor shares are used as weights. There is a discontinuity in the data for December 2003 due to a change in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

3. Shaded areas denote recession periods.

lower, mainly reflecting lower private consumption due in part to the effects of the suspension of production and shipment at some automakers. The projected growth rate for fiscal 2024 is somewhat lower, since it is expected that GDP growth for the second half of fiscal 2023 will be lower than previously projected and this will have a smaller carry-over effect on GDP growth for fiscal 2024. The rate for fiscal 2025 is more or less unchanged.

The potential growth rate seems to have been in the range of 0.5-1.0 percent recently, with a moderate increase in the growth rate of total factor productivity (TFP), although a downtrend in working hours reflecting working-style reforms, for example, has continued (Chart 3). As for the outlook, the potential growth rate is expected to rise moderately. This is based on the projection that, although there will be less room for the number of employed persons to increase, (1) TFP will continue to grow, mainly on the back of advances in digitalization and a resulting improvement in efficiency of resource allocation, as well as an expansion in investment in human capital, (2) the decline in working hours will come to a halt in reflection of the diminishing effects of working-style reforms, and (3) growth in capital stock will accelerate. These developments are likely to be encouraged by the government's

Chart 3: Potential Growth Rate



Source: Bank of Japan.
 Note: Figures are staff estimates. Figures for the second half of fiscal 2023 are those for 2023/Q4.

various measures and by accommodative financial conditions.⁸

Details of the outlook for each fiscal year are as follows. In fiscal 2024, Japan's economy is expected to continue recovering moderately, partly due to the effects of the government's economic measures, with overseas economies growing moderately and accommodative financial conditions being maintained. Goods exports are likely to see a moderate increase, as overseas economies grow moderately. Inbound tourism demand is projected to keep increasing. Business fixed investment is expected to continue on an increasing trend, mainly on the back of accommodative financial conditions. In the household sector, nominal employee income is likely to keep increasing. This is because employment is likely to rise on the back of an increase in domestic and external demand, and wage growth is expected to remain relatively high in reflection of the results of this year's annual spring labor-management wage negotiations. Moreover, the government's initiatives, such as the continuation of measures to reduce the household burden of higher gasoline prices and also cuts in income tax and inhabitant tax, are

⁸ However, the output gap and the potential growth rate, which are estimated based on a specific assumption regarding trends, should be interpreted with some latitude. For example, in terms of labor, it is highly uncertain what kind of working style will take hold going forward -- including among women and seniors -- given the experience of COVID-19, that of wage and price increases, and with demographic changes. In addition, in the corporate sector, it is expected that factors such as moves toward digitalization, which reflect the experience of COVID-19 and labor shortages, and progress on efforts with a view to decarbonization will change Japan's economic and industrial structures; however, there remain high uncertainties over the extent of advancement and sustainability of innovation and sectoral reallocation of production factors, both of which aim at adapting to changes in the economic and industrial structures.

projected to push up disposable income. In this situation, private consumption is expected to increase moderately, despite being affected by high prices.

In fiscal 2025 and 2026, Japan's economy is expected to keep growing at a pace above its potential growth rate, with domestic and external demand rising. Goods exports are likely to increase moderately, with overseas economies continuing to grow. Inbound tourism demand is projected to keep increasing. Business fixed investment is also expected to continue increasing, mainly for investment to address labor shortages, digital-related investment, investment related to growth areas and decarbonization, and investment associated with strengthening supply chains. However, the pace of increase is projected to slow somewhat, partly because it is likely to be pushed down by adjustment pressure on capital stock. In the household sector, nominal employee income is likely to keep rising steadily. This is because wage growth is expected to remain relatively high as the linkage between wages and prices strengthens further, although it will gradually become more difficult for labor supply to increase, with labor force participation of women and seniors having advanced to a high degree thus far. In this situation, private consumption is projected to continue increasing moderately.

B. Developments in Major Expenditure Items and Their Background

Government Spending

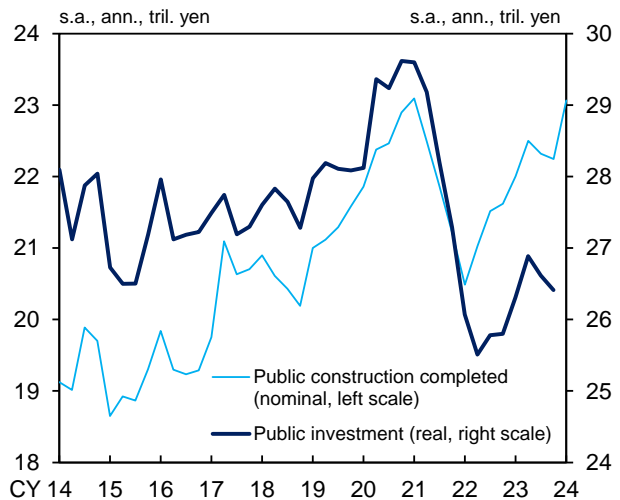
Public investment has been more or less flat (Chart 4). While construction based on the government's economic measures, including construction related to building national resilience, has progressed, the amount of public construction completed -- a coincident indicator of public investment -- has been more or less flat. The value of public works contracted and orders received for public construction -- both of which are leading indicators of public investment -- have been more or less flat, albeit with fluctuations.

As for the outlook, public investment is likely to be more or less flat.⁹ Government consumption is projected to continue increasing moderately, reflecting an uptrend in healthcare and nursing care expenditures.

Overseas Economies

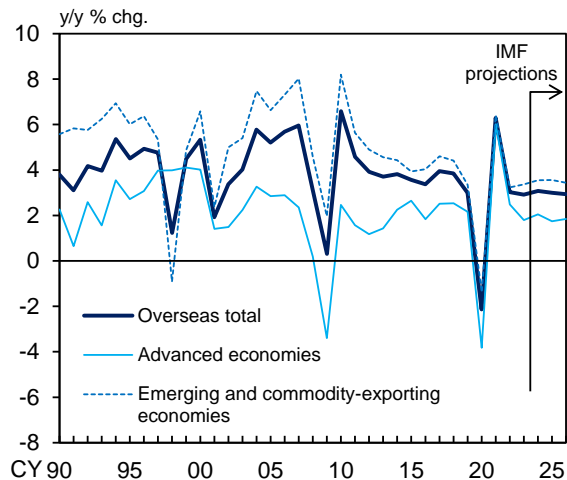
The pace of recovery in overseas economies has slowed (Chart 5). By region, the U.S. economy has been firm, mainly led by private consumption, although it has been affected by policy interest rate hikes. European economies have kept slowing moderately as they have continued to be affected by factors such as policy interest rate

Chart 4: Public Investment



Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism.
Note: The figure for 2024/Q1 is the January-February average.

Chart 5: 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. The real GDP growth rates are compiled by the IMF, and the rates from 2024 onward are its projections in the April 2024 *World Economic Outlook (WEO)*. Figures for advanced economies are those for the United States, the euro area, and the United Kingdom. Figures for emerging and commodity-exporting economies are those for the rest of the world.

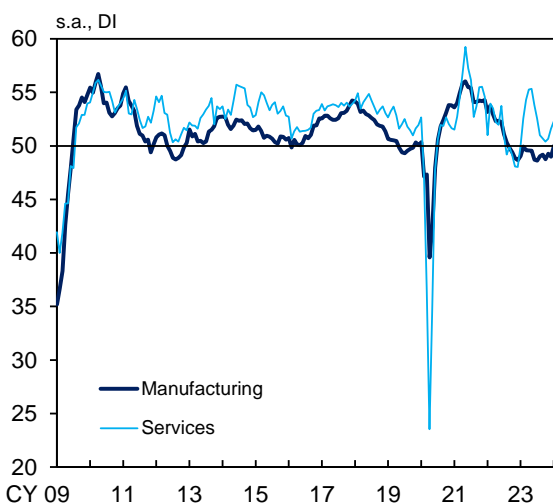
⁹ The five-year acceleration measures for building national resilience with a project size of about 15 trillion yen were decided by the Cabinet in December 2020. In these measures, public investment projects for disaster prevention, disaster mitigation, and building national resilience are to be implemented intensively over five years from fiscal 2021 through fiscal 2025. The government's economic measures decided by the Cabinet in November 2023 also include efforts to implement the acceleration measures.

hikes. The Chinese economy has remained on a moderate slowing trend, mainly affected by adjustments in the real estate market, but signs of a pick-up have been observed in some aspects, such as private consumption. Emerging and commodity-exporting economies other than China have improved moderately on the whole, as signs of a pick-up have been seen in exports. Among those in Asia, which are closely related to Japan's economy, the ASEAN economies have improved moderately, as domestic demand has continued to improve and exports have bottomed out. The NIEs economies also have improved moderately, on the back of a pick-up in exports, mainly led by IT-related goods, although the pace of improvement in domestic demand has decelerated.

Looking at the Global PMI to see the current situation for the global economy, figures for the services industry have clearly exceeded 50, the break-even point between improvement and deterioration in business conditions; figures for the manufacturing industry had been below 50, but they have improved recently somewhat to around 50 (Chart 6).

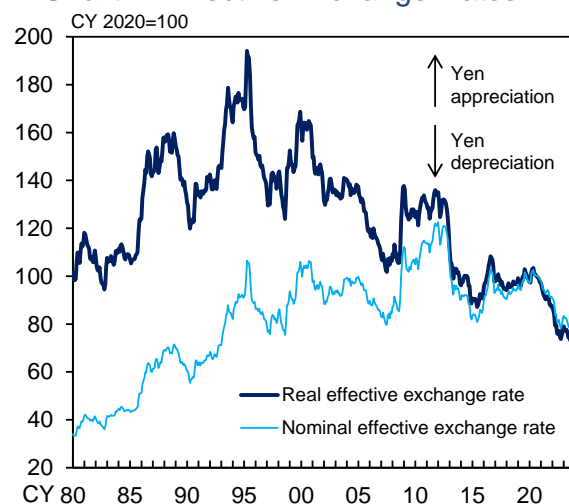
As for the outlook, overseas economies are projected to gradually move out of the phase of slow recovery and grow moderately. Looking at developments by region for the time being, the U.S. economy is likely to continue to be firm. The Chinese economy is projected to gradually move out of its slowing phase due to policy support. European economies are expected to remain on a slowing trend. Emerging and commodity-exporting economies other than China

Chart 6: Global PMI



Source: Copyright © 2024 by S&P Global Market Intelligence, a division of S&P Global Inc. All rights reserved.
 Note: Figures for manufacturing are the J.P.Morgan Global Manufacturing PMI. Figures for services are the J.P.Morgan Global Services Business Activity Index.

Chart 7: Effective Exchange Rates



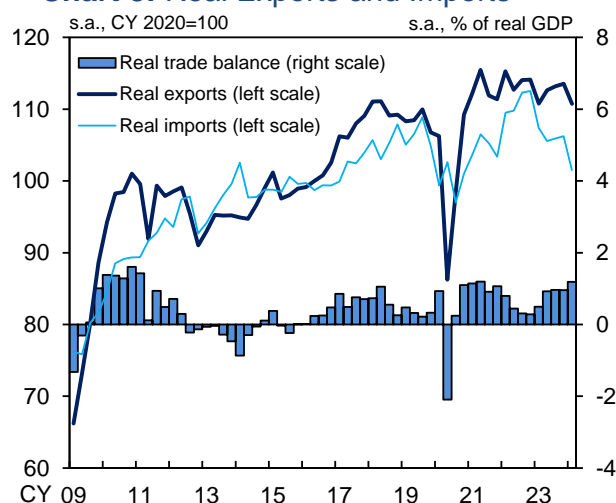
Source: BIS.
 Note: Figures are based on the broad effective exchange rate indices. Figures prior to 1994 are calculated using the narrow indices.

are likely to continue improving moderately with external demand picking up.

Exports and Imports

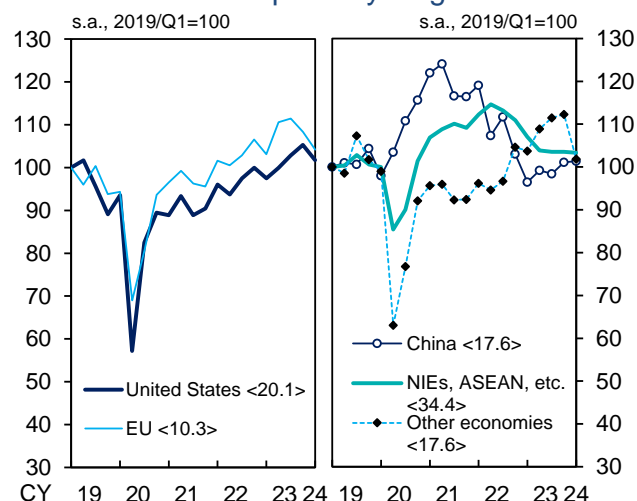
Although exports have been affected by the slowdown in the pace of recovery in overseas economies, they have been more or less flat (Chart 8). By region, exports to the U.S. and European economies have been at relatively high levels, albeit with fluctuations (Chart 9). Those to the Chinese economy have picked up moderately, with an increase in exports of semiconductor production equipment and other goods. Exports to the NIEs, the ASEAN economies, and some other Asian economies have started to bottom out against the background of progress in global adjustments for IT-related goods. By goods, exports of automobile-related goods have decreased recently, mainly due to the effects of the suspension of production and shipment at some automakers and the dissipation of the effects of the sales promotion measures in China (Chart 10). Exports of capital goods overall have been more or less flat, when fluctuations are smoothed out, mainly because exports of semiconductor production equipment -- particularly those to the Chinese economy -- have increased, while those of ships have declined. Exports of IT-related goods have started to bottom out against the background of the progress in global adjustments for IT-related goods, although exports of lithium-ion batteries used in automobiles have been relatively weak. Meanwhile, those of intermediate goods have been at relatively low levels, mainly reflecting weakness in the Chinese real estate market.

Chart 8: Real Exports and Imports



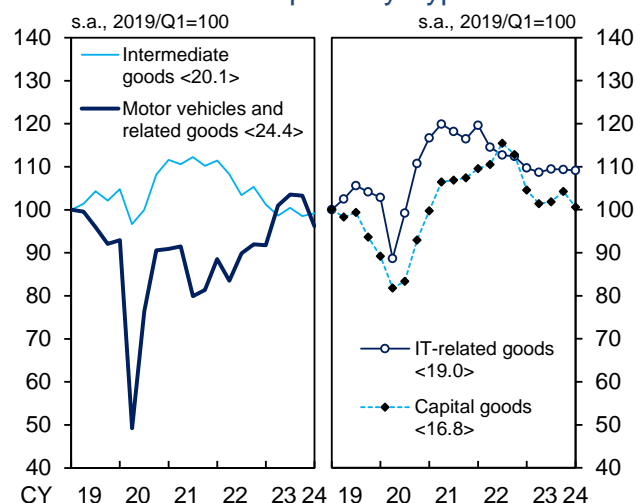
Sources: Bank of Japan; Ministry of Finance; Cabinet Office.
Note: Based on staff calculations.

Chart 9: Real Exports by Region



Sources: Bank of Japan; Ministry of Finance.
Notes: 1. Based on staff calculations. Figures in angular brackets show the share of each country or region in Japan's total exports in 2023.
2. Figures for the EU exclude those for the United Kingdom for the entire period.

Chart 10: 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 2023.

As overseas economies grow moderately, exports are projected to return to an uptrend, mainly due to a pick-up in global demand for IT-related goods.

Imports have decreased to a relatively large degree recently, mainly affected by shipping delays for imports from Europe that reflect increased tension over the situation in the Middle East (Chart 8).

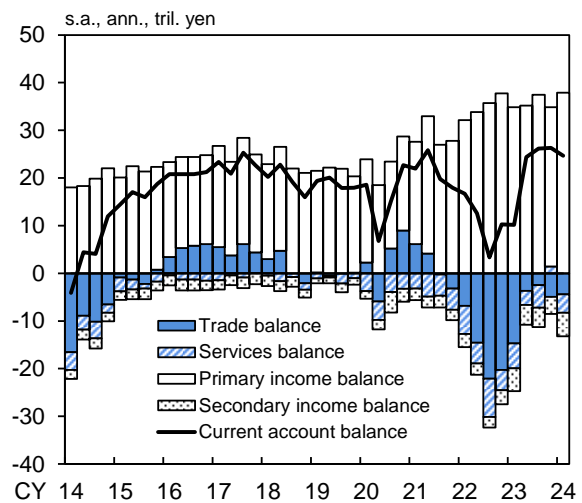
Imports are expected to follow a moderate uptrend on the back of developments in demand induced by increases in domestic demand and exports.

External Balance

The nominal current account surplus has been at a high level (Chart 11). The trade balance has been small, marking a clear decrease compared to a while ago. Despite a surplus in the travel balance, which reflects a recovery in inbound tourism demand (Chart 12), the services balance has remained on a slight deficit trend, as payments for digital-related services have been at high levels, albeit with fluctuations. Meanwhile, the primary income balance surplus has remained at a high level.

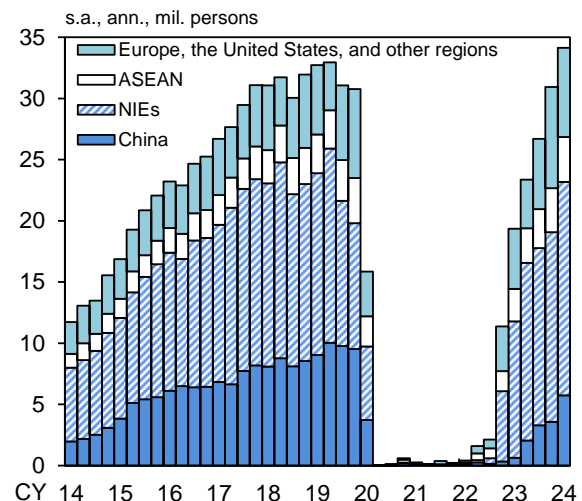
The nominal current account balance is likely to follow a moderate improving trend. This is based on the projection that (1) the primary income balance surplus will increase moderately, (2) the trade balance deficit will decline moderately due to factors such as an increase in goods exports,

Chart 11: Current Account



Source: Ministry of Finance and Bank of Japan.
Note: Figures for 2024/Q1 are January-February averages.

Chart 12: Number of Inbound Visitors



Source: Japan National Tourism Organization (JNTO).
Note: Figures for Europe, the United States, and other regions include seasonal adjustment errors.

and (3) the services balance deficit will decrease due to an increase in inbound tourism demand.

In terms of the savings-investment balance, overall excess savings in Japan's economy are projected to follow a moderate expanding trend, because the fiscal balance is likely to improve at a pace that somewhat exceeds the pace of decline in excess savings in the private sector (Chart 13).

Industrial Production

Industrial production has been more or less flat as a trend, but it has declined recently, partly due to the effects of the suspension of production and shipment at some automakers (Chart 14). By major industry, production of "transport equipment" has significantly declined recently, owing to the effects of the suspension of production and shipment at some automakers, although supply-side constraints for semiconductors used in automobiles have dissipated. Production of "general-purpose, production, and business-oriented machinery" has decreased recently. This is mainly due to a pause in demand for construction machinery and the impact of a production decline in automobiles, although production of semiconductor production equipment has shown signs of bottoming out. Production of "electrical machinery, and information and communication electronics equipment" has also decreased recently, due to relatively weak developments in production of lithium-ion batteries used in automobiles and to the effects of the production decline in automobiles. Production of "electronic parts and devices" has bottomed out with progress in inventory adjustments. Meanwhile, production of

Chart 13: Savings-Investment Balance

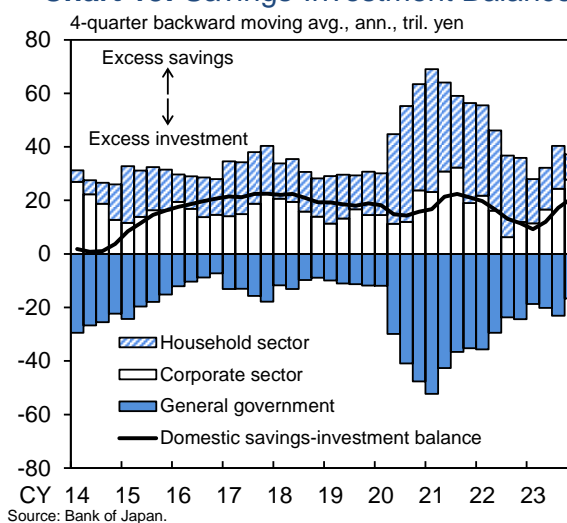
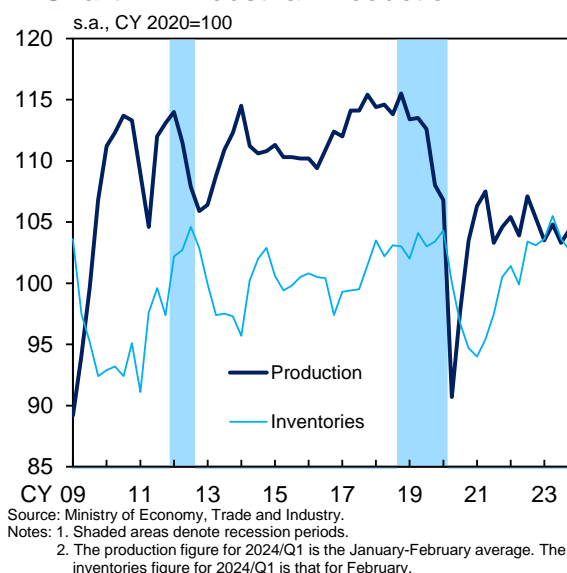


Chart 14: Industrial Production



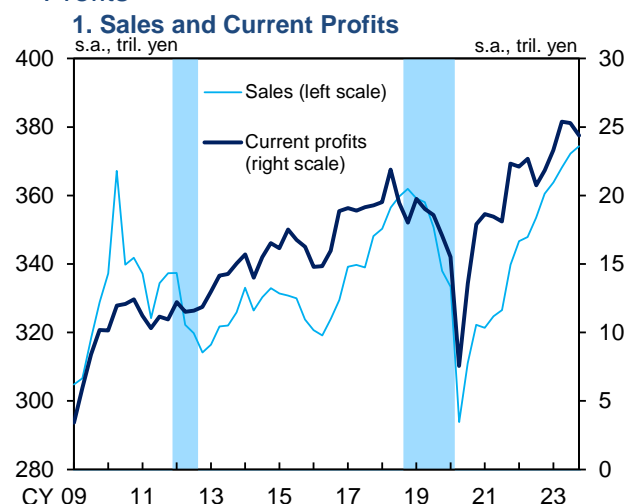
"chemicals (excluding medicine)" has been at a low level, mainly reflecting weakness in the Chinese real estate market and in cosmetics.

As overseas economies grow moderately, industrial production is projected to return to an uptrend, mainly due to a pick-up in global demand for IT-related goods.

Corporate Profits

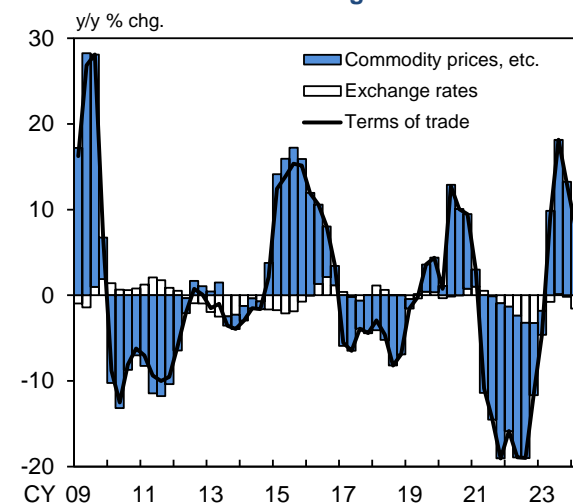
Corporate profits have improved. According to the *Financial Statements Statistics of Corporations by Industry, Quarterly*, current profits for all industries and enterprises for the October-December quarter of 2023 decreased slightly, mainly due to a decline in dividends from overseas subsidiaries of some firms, but continued on an improving trend (Chart 15). By industry and firm size, although operating profits of large manufacturers have increased slightly -- mainly due to progress in the pass-through of cost increases to selling prices -- their current profits have decreased, mainly reflecting the waning of the effects of major dividends from overseas subsidiaries of some firms that were paid in the previous quarter. Current profits of small and medium-sized manufacturers are more or less unchanged from the previous quarter. As for nonmanufacturers, operating profits of large firms have risen, mainly reflecting an increase in sales of digital-related items in the information and communications industry, but their current profits have decreased slightly, mainly because dividends from overseas subsidiaries of firms in shipping and other industries have declined due to lower freight rates. Current profits of small and medium-sized nonmanufacturers have decreased for industries

Chart 15: Indicators Related to Corporate Profits



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

2. Contribution to Changes in Terms of Trade

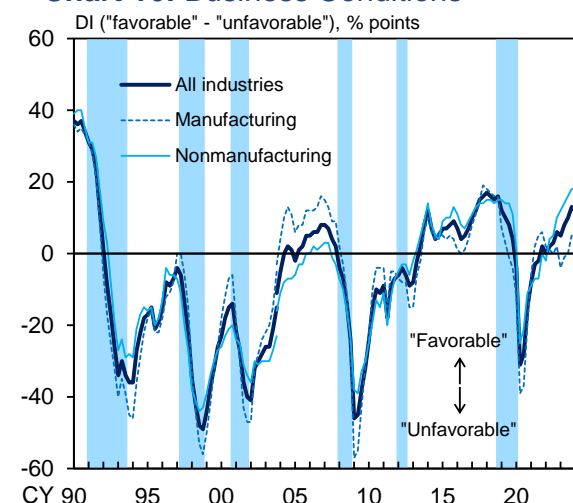


Source: Bank of Japan.
Notes: 1. The contribution of changes in commodity prices, etc. is calculated using changes in export/import price indexes on a contract currency basis. The contribution of changes in exchange rates is calculated using the difference between export/import price indexes on a yen basis and those on a contract currency basis.
2. Terms of trade = Export price index on a yen basis / Import price index on a yen basis

such as retail trade and services, in reflection of sluggish private consumption.

Business sentiment has stayed at a favorable level. According to the March *Tankan*, the DI for business conditions has remained at a favorable level on the whole, although it has weakened somewhat (Chart 16). By industry, the DI for manufacturing has weakened somewhat, mainly due to the effects of the suspension of production and shipment at some automakers. Looking at industries where the DIs have weakened, that for transportation machinery has done so due to the impact of the production decline in automobiles, and this has led to weakening in the DIs for relevant industries -- namely, iron and steel, as well as nonferrous metals. Turning to industries where the DIs have improved, those for the following industries have done so due to the progress in the pass-through of cost increases to selling prices: "food and beverages," "general-purpose machinery," and "ceramics, stone, and clay." In addition, the DI for chemicals has headed toward improvement due to the pick-up in global demand for IT-related goods. With regard to nonmanufacturing, the DIs have continued to improve for a wide range of industries, particularly those related to private consumption. This is due to the recovery in economic activity, an increase in inbound tourism demand, and the progress in the pass-through of cost increases to selling prices. On the other hand, a rise in personnel expenses and intensifying labor shortages have contributed to weakening in the DIs for goods rental and leasing, as well as for small firms engaged in services for businesses, while high costs have contributed to weakening in the DI for electric and gas utilities.

Chart 16: Business Conditions



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

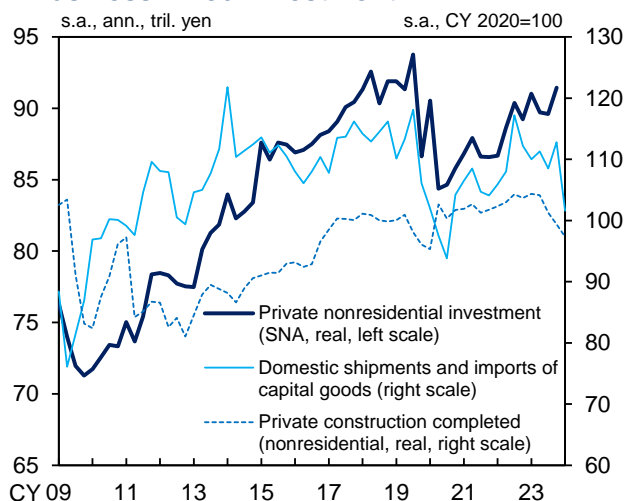
Regarding the outlook, with a moderate rise in domestic and external demand, corporate profits are likely to follow an improving trend, partly due to the progress in the pass-through of cost increases to selling prices.

Business Fixed Investment

Business fixed investment has been on a moderate increasing trend (Chart 17). The aggregate supply of capital goods -- a coincident indicator of machinery investment -- has significantly declined recently, mainly due to the effects of the suspension of production and shipment at some automakers, although demand for digital- and labor saving-related capital goods has been firm. Despite progress in, for example, construction of logistics facilities and urban redevelopment projects, private construction completed (nonresidential) -- a coincident indicator of construction investment -- has been relatively weak recently, partly due to dissipation of the effects of large-scale projects, with moves to postpone investment being observed against the background of factors such as high construction material prices.

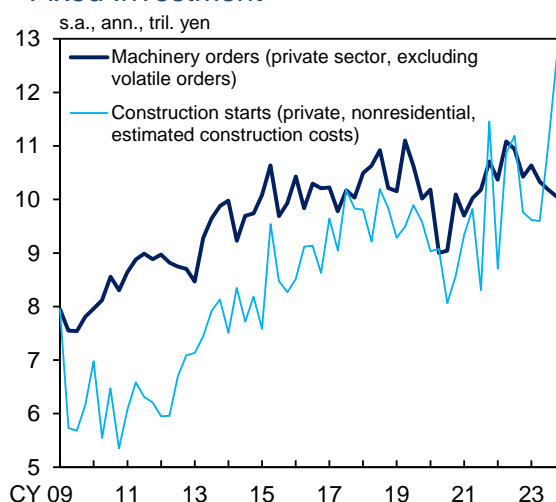
Machinery orders -- a leading indicator of machinery investment -- have remained at relatively high levels, although they have seen a lowering in their levels compared to a while ago (Chart 18). By industry, although orders by the manufacturing industry overall have been pushed down by dissipation of the effects of large-scale projects in some industries, orders by the "electrical machinery" and "information and communication electronics equipment" industries -- which remained relatively weak, partly due to

Chart 17: 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 2024/Q1 are January-February averages.
 2. Figures for real private construction completed are based on staff calculations using the construction cost deflators.

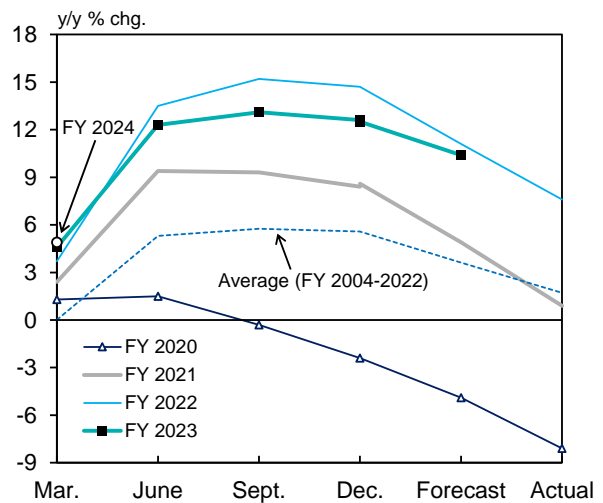
Chart 18: Leading Indicators of Business Fixed Investment



Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism.
 Notes: 1. Volatile orders are orders for ships and orders from electric power companies.
 2. Figures for 2024/Q1 are January-February averages.

the effects of the global adjustments for IT-related goods -- have started to bottom out. Orders by the nonmanufacturing industry have increased moderately, albeit with fluctuations stemming from large-scale projects, as digital- and labor saving-related investments have followed an uptrend. Construction starts (in terms of planned expenses for private and nonresidential construction) -- a leading indicator of construction investment -- have significantly increased recently, partly due to establishment of new factories and extension of existing ones, as construction of logistics and redevelopment projects have continued. Looking at the business fixed investment plans in the March *Tankan*, business fixed investment (on the basis close to GDP definition; business fixed investment -- including software and R&D investments but excluding land purchasing expenses -- for all industries and enterprises including financial institutions) shows a year-on-year rate of increase of 10.4 percent for fiscal 2023 (Chart 19). Although this is a downward revision from the previous survey conducted last December, the rate of change in investment for fiscal 2023 is expected to be significantly positive for both manufacturing and nonmanufacturing industries. In addition, the reported rate for fiscal 2024 of 4.9 percent indicates a relatively high increase compared with past March *Tankan* surveys.

Chart 19: Developments in Business Fixed Investment Plans

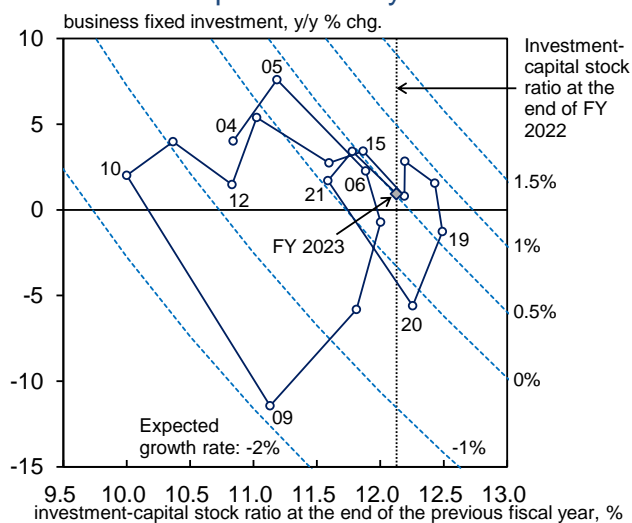


Source: Bank of Japan.
 Notes: 1. Based on the *Tankan*. All industries including financial institutions.
 2. Including software and R&D investments and excluding land purchasing expenses. R&D investment is not included before the March 2017 survey.
 3. There are discontinuities in the data for December 2021 and December 2023 due to changes in the survey sample.

Business fixed investment is expected to continue on an increasing trend, mainly on the back of accommodative financial conditions, as corporate profits follow an improving trend. Toward the end of the projection period, such investment is projected to continue increasing, partly due to a rise in investment that is not necessarily

responsive to the business cycle, although the pace of increase is likely to slow, reflecting cyclical adjustment pressure stemming from the accumulation of capital stock (Chart 20). Specifically, investment that is expected to be undertaken during the projection period includes (1) investment induced by the increase in domestic and external demand; (2) labor-saving and efficiency-improving investment to address labor shortages and IT-related investment to digitalize business activities; (3) construction investment in logistics facilities, resulting from expanding e-commerce, and in offices and commercial facilities due to redevelopment projects; (4) investment in growth areas and to address environmental issues, such as decarbonization; and (5) semiconductor-related investment that is mainly aimed at strengthening supply chains and that also reflects government support.

Chart 20: Capital Stock Cycles



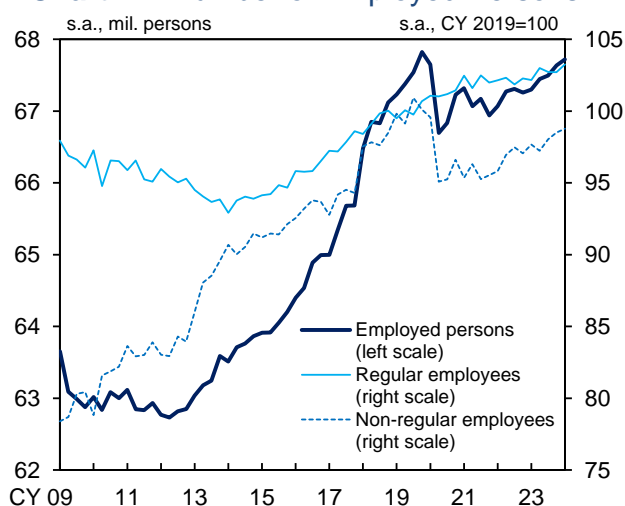
Source: Cabinet Office.
 Note: Each broken line represents the combination of the rate of change in business fixed investment and the investment-capital stock ratio at a certain expected growth rate. The figure for fiscal 2023 is the 2023/Q2-Q4 average.

Employment and Income Situation

The employment and income situation has improved moderately.

Regarding the number of employed persons, that of regular employees has been on a moderate uptrend, albeit with fluctuations, mainly in the information and communications industry, which has faced a severe labor shortage (Chart 21). The number of non-regular employees has also been on a moderate uptrend, albeit with fluctuations, mainly in the wholesale and retail trade as well as the face-to-face services industries. Total hours worked per employee have been more or less flat when fluctuations due to the number of weekdays are smoothed out. With regard to labor market

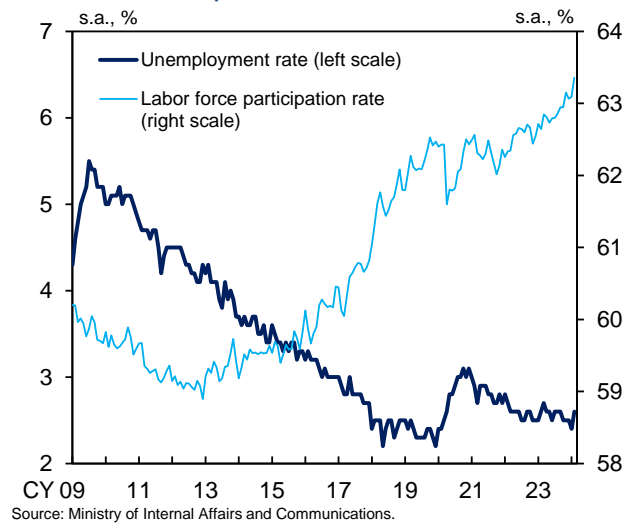
Chart 21: Number of Employed Persons



Source: Ministry of Internal Affairs and Communications.
 Note: Figures for regular employees and non-regular employees prior to 2013 are based on the "detailed tabulation" in the Labour Force Survey. Figures for 2024/Q1 are January-February averages.

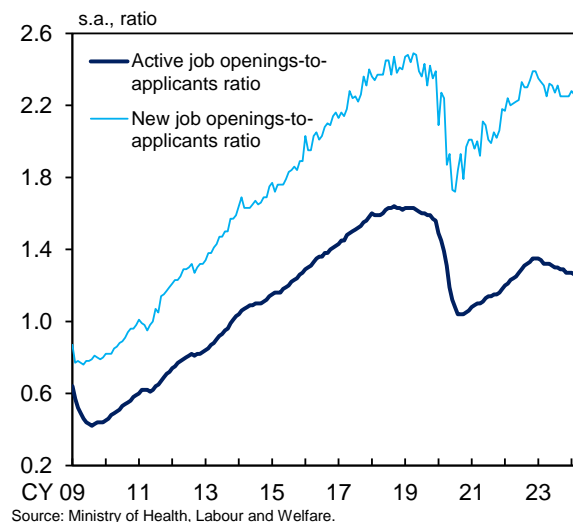
conditions, the unemployment rate has been at a low level (Chart 22). The active job openings-to-applicants ratio had remained somewhat weak, partly reflecting an increase in the number of job applicants -- including among seniors -- due to the normalization of economic activity and a decline in real income; however, the ratio has been more or less flat recently (Chart 23). Meanwhile, the labor force participation rate has been on a moderate uptrend, particularly for women, when fluctuations are smoothed out (Chart 22).

Chart 22: Unemployment Rate and Labor Force Participation Rate



With regard to the outlook for the number of employees, regular employees are likely to increase moderately, mainly in industries with labor shortages, such as the information and communications industry. Non-regular employees, mainly in the face-to-face services industry, are expected to keep increasing along with the rise in domestic and external demand. However, the pace of increase in the number of overall employees is projected to decelerate, partly because it will become more difficult for labor supply to increase, reflecting factors such as demographic changes, with labor force participation of women and seniors having advanced to a high degree thus far. Under these circumstances, the unemployment rate is expected to follow a moderate declining trend.

Chart 23: Job Openings-to-Applicants Ratio

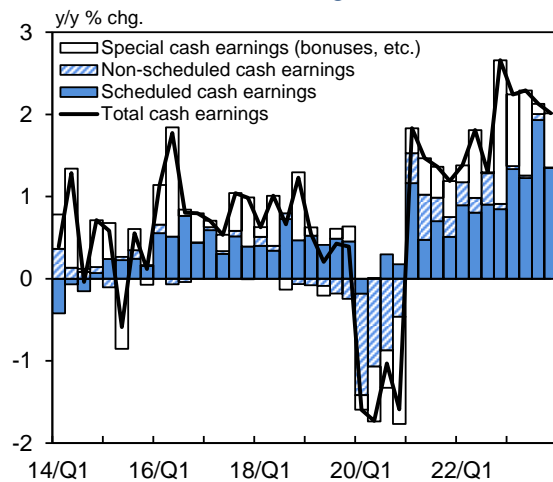


On the wage side, the year-on-year rate of change in nominal wages per employee has increased moderately, reflecting the recovery in economic activity and the results of last year's annual spring labor-management wage

negotiations (Chart 24).¹⁰ Looking at the breakdown, the rate of change in scheduled cash earnings has continued to increase moderately (Chart 25). Specifically, the rate of increase for full-time employees has remained at around 2 percent -- albeit with fluctuations that are due mainly to changes in working hours -- reflecting the results of last year's annual spring labor-management wage negotiations, which showed high wage growth. The year-on-year rate of increase in hourly scheduled cash earnings for part-time employees has continued to show high growth of around 3 percent recently, as labor market conditions have remained tight and minimum wages have been raised. Non-scheduled cash earnings have been more or less flat recently. The year-on-year rate of change in special cash earnings (bonuses) has risen clearly, even after the high growth in the previous year due to lump-sum payments by some firms in response to price rises, or "inflation allowances."

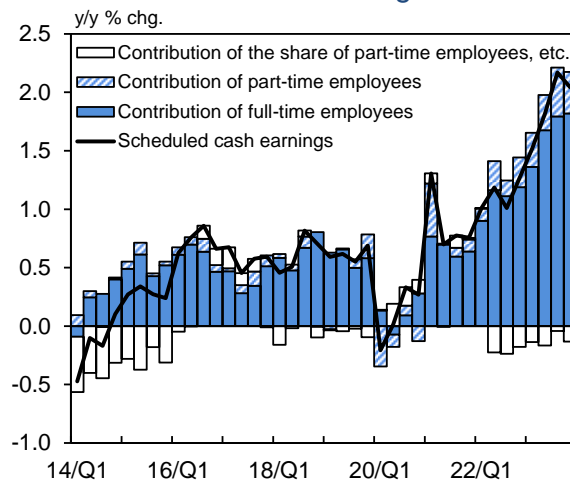
With regard to the outlook for wages, it is expected that the wage growth rate (base pay increase) that significantly exceeds last year's high rate will be achieved in this year's annual spring labor-management wage negotiations.¹¹ As a result, the rate of increase in scheduled cash earnings is likely to accelerate clearly through this summer. These earnings are projected to continue increasing firmly from fiscal 2025, in reflection of price rises and with labor market conditions continuing to be tight, due in part to a slowdown in the pace of increase in labor force

Chart 24: 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 2016/Q1 onward are based on continuing observations following the sample revisions.

Chart 25: Decomposition of Developments in 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 2016/Q1 onward are based on continuing observations following the sample revisions.

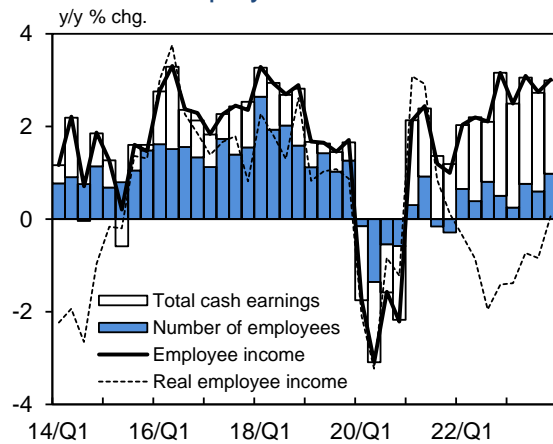
¹⁰ Wages in the *Monthly Labour Survey* are assessed on the basis of continuing observations, which are less susceptible to fluctuations due to sample revisions.

¹¹ Box 2 outlines developments in the annual spring labor-management wage negotiations this year.

participation of women and seniors. Non-scheduled cash earnings are expected to increase moderately, reflecting the rise in domestic and external demand. Special cash earnings (bonuses) are likely to keep rising with corporate profits following an improving trend. Taking all of these factors into account, the rate of change in nominal wages per employee is projected to continue increasing clearly.

In light of the aforementioned employment and wage conditions, employee income has improved in nominal terms (Chart 26). In real terms, the year-on-year rate of decline in employee income has remained on a slowing trend due to a combination of a decline in inflation and improvement in nominal income. With regard to the outlook, nominal employee income is likely to continue to see a clear increase in reflection of an acceleration in nominal wage growth. Under these circumstances, the year-on-year rate of change in real employee income is likely to gradually turn positive despite the effects of energy prices.

Chart 26: Employee Income



Sources: Ministry of Health, Labour and Welfare; Ministry of Internal Affairs and Communications.
 Notes: 1. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.
 2. Employee income = Total cash earnings (*Monthly Labour Survey*) × Number of employees (*Labour Force Survey*)
 3. Figures from 2016/Q1 onward are based on continuing observations following the sample revisions of the *Monthly Labour Survey*.
 4. Figures for real employee income are based on staff calculations using the CPI (less imputed rent).

Household Spending

Private consumption has been resilient, although the impact of price rises and developments such as a decline in automobile sales due to a suspension of shipment at some automakers have been observed.¹²

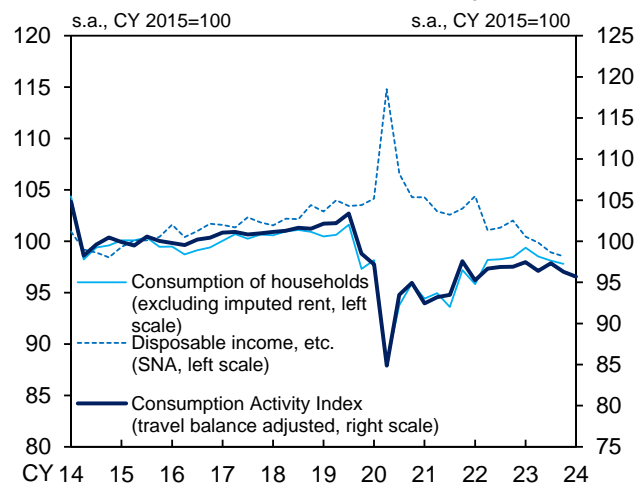
The Consumption Activity Index (CAI, travel balance-adjusted) -- which is calculated by

¹² Box 1 outlines the current situation and outlook for private consumption.

combining various sales and supply-side statistics from the viewpoint of gauging Japan's consumption activity in a comprehensive manner -- declined slightly on average for the January-February period of 2024 relative to the October-December quarter of 2023 (Charts 27 and 28).¹³ This is mainly because of lower spending -- such as on heating equipment, electricity, and fuel -- owing to mild winter weather and a considerable decline in the number of new passenger cars sold, due to the effects of the suspension of production and shipment at some automakers. Looking at subsequent developments in private consumption from various sources, such as high-frequency indicators, statistics published by industry organizations, and anecdotal information from firms, consumption seems to have been resilient despite being affected by price rises -- when excluding the aforementioned temporary factors that have pushed down consumption -- partly due to the improvement in the income situation (Chart 29).

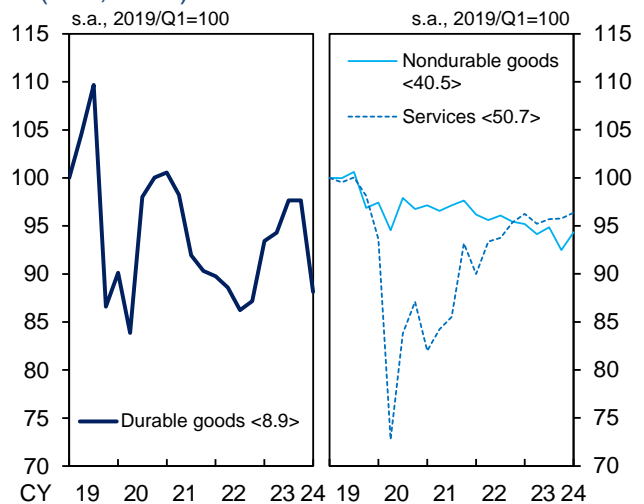
By type, consumption of durable goods had declined considerably, but it seems to have picked up somewhat recently (Chart 28). Specifically, the number of new passenger cars sold decreased significantly for the January-February period, mainly due to the effects of the suspension of production and shipment at some automakers, but it seems to have slightly rebounded recently. Sales of household electrical appliances have remained relatively weak, mainly reflecting sluggish sales of

Chart 27: Real Private Consumption



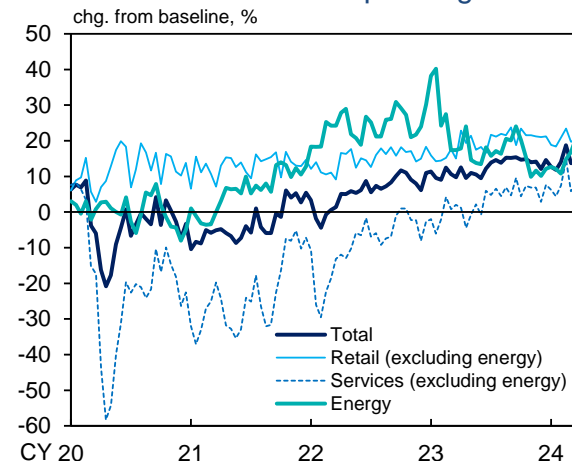
Sources: Bank of Japan; Cabinet Office, etc.
 Notes: 1. Figures for the Consumption Activity Index (CAI) are based on staff calculations. The CAI figures (travel balance adjusted) exclude inbound tourism consumption and include outbound tourism consumption. The figure for 2024/Q1 is the January-February average.
 2. "Disposable income, etc." consists of disposable income and adjustment for the change in pension entitlements, and real values are obtained using the deflator of consumption of households.

Chart 28: Consumption Activity Index (CAI, Real)



Sources: Bank of Japan, etc.
 Notes: 1. Based on staff calculations. Figures in angular brackets show the weights in the CAI. Figures for 2024/Q1 are January-February averages.
 2. Nondurable goods include goods classified as semi-durable goods in the SNA.

Chart 29: Consumption Developments Based on Credit Card Spending



Source: Nowcast Inc./ JCB, Co., Ltd., "JCB Consumption NOW."
 Notes: 1. Figures are from the reference series in JCB Consumption NOW, which take changes in the number of consumers into account. The baseline is the average for the corresponding half of the month for fiscal 2016 through fiscal 2018.
 2. Figures for the total and for services exclude telecommunications, and figures for energy consist of those for fuel, electricity, gas, heat supply, and water. Based on staff calculations.

¹³ Regarding the CAI, see the Bank's research paper "Revision of the Consumption Activity Index to Capture Recent Changes in Consumption Patterns" released in July 2021.

heating equipment -- such as air conditioners -- owing to mild winter weather, in addition to dissipation of the effects of the front-loaded increase in demand during the pandemic.

Nondurable goods (e.g., "beverages and food" and "clothes") have followed a decreasing trend, mainly owing to the impact of mild winter weather -- which has led to weakness in sales of winter clothes and in spending such as on electricity and fuel -- as well as to the impact of high prices. Recently, however, sales of clothes and other items seem to have shown signs of positive movements, mainly reflecting temperature rises, and consumption of high-end goods by the wealthy at department stores has been favorable, partly due to a rise in stock prices in the meantime.

Services consumption has increased moderately as a trend, although the pace of increase has slowed (Charts 28 and 29). Dining-out has also been on a moderate increasing trend, despite a slowdown in the pace of increase due to the impact of high prices, the effects of changes in consumers' lifestyles, and constraints on operating hours and the number of restaurants. Domestic travel has been at a relatively high level, reflecting a recovery in travel demand. Overseas travel has seen a pause in the recovery, with relatively high travel costs.

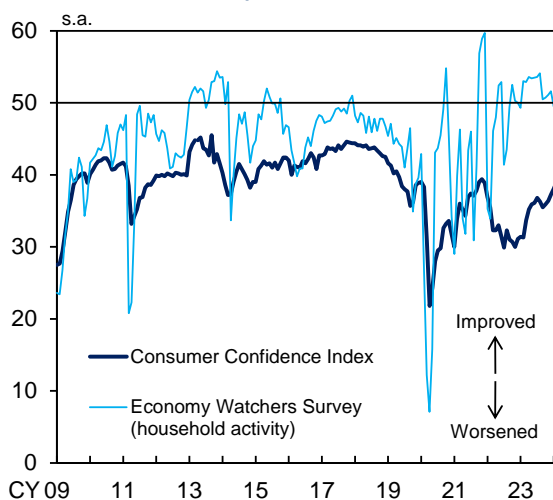
Looking at confidence indicators related to private consumption, the Consumer Confidence Index -- which asks consumers for their views on the outlook -- has continued to improve recently,

mainly reflecting the fact that the pace of price rises has moderated compared to a while ago and that there have been expectations for an increase in nominal income (Chart 30). The *Economy Watchers Survey* -- which asks firms for their views on the direction of the economy -- shows that the current economic conditions DI (household activity-related) has been at around the threshold value of 50 with private consumption being resilient.

Regarding the outlook, for the time being, although private consumption is expected to be affected by price rises, it is projected to increase moderately, partly due to the effects of the government's economic measures (e.g., cuts in income tax and inhabitant tax) and with nominal employee income continuing to improve. Thereafter, private consumption is projected to continue increasing moderately as employee income keeps improving. The propensity to consume is likely to gradually return to the average level seen before the pandemic, albeit with fluctuations due to the effects of the economic measures (Chart 31).

Housing investment has been relatively weak (Chart 32). The number of housing starts -- a leading indicator of housing investment -- has followed a downtrend that reflects a rise in housing prices. Housing investment is likely to follow a moderate declining trend in reflection of the rise in housing prices and demographic developments, although accommodative financial conditions are expected to provide support.

Chart 30: Confidence Indicators Related to Private Consumption



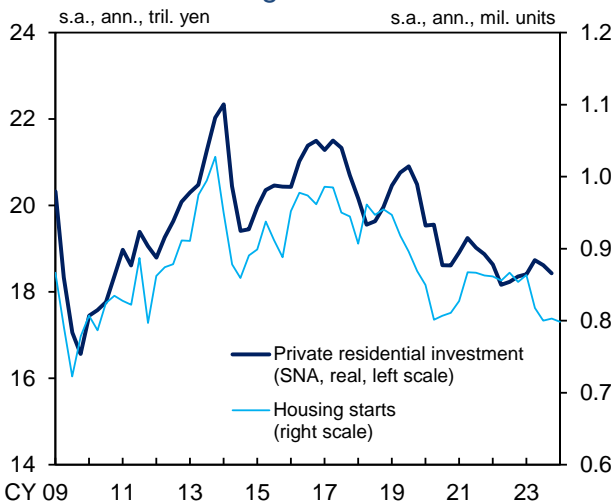
Source: Cabinet Office.
Note: Figures for the *Economy Watchers Survey* are those for the current economic conditions DI.

Chart 31: Average Propensity to Consume



Source: Cabinet Office.
Note: Average propensity to consume = Consumption of households / Disposable income, etc.
"Disposable income, etc." consists of disposable income and adjustment for the change in pension entitlements.

Chart 32: Housing Investment



Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism.
Note: The figure for 2024/Q1 is the January-February average.

II. Current Situation of Prices and Their Outlook

Developments in Prices

With the impact of past high commodity prices waning, the quarter-on-quarter rate of change in the producer price index (PPI, adjusted for the effects of seasonal changes in electricity rates) has been slightly positive recently (Chart 33). The year-on-year rate of increase in the services producer price index (SPPI, excluding international transportation) has remained at around 2 percent, mainly on the back of the recovery in economic activity and a rise in personnel expenses.

The year-on-year rate of increase in the CPI (all items less fresh food) has been at around 2.5 percent recently, as services prices have continued to rise moderately, reflecting factors such as wage increases, although the effects of the pass-through to consumer prices of cost increases led by the past rise in import prices have waned (Chart 34).

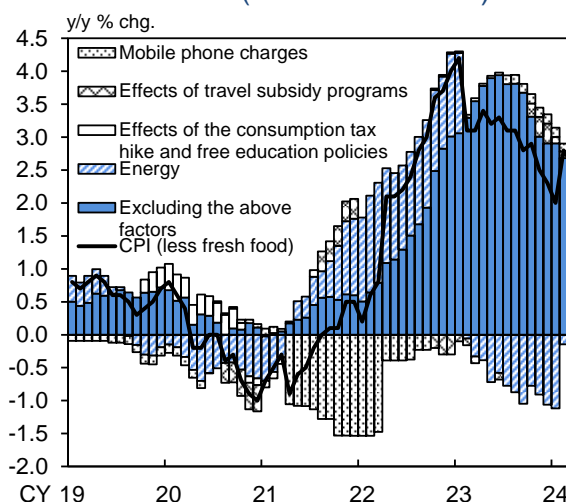
The rate of increase in the CPI (all items less fresh food and energy, excluding temporary factors such as the effects of the government's domestic travel discount program) has decelerated steadily, mainly because the impact of the previous year's price hikes has dissipated (Chart 35).¹⁴ Specifically, as for goods, the rates

Chart 33: Inflation Indicators

	y/y % chg.			
	23/Q2	23/Q3	23/Q4	24/Q1
Consumer Price Index (CPI)				
Less fresh food	3.3	3.0	2.5	2.5
Excluding temporary factors	3.3	2.9	2.1	2.3
Less fresh food and energy	4.2	4.3	3.8	3.2
Excluding temporary factors	4.3	4.2	3.4	3.0
Producer Price Index (q/q % chg.)	-0.2	-0.1	0.3	0.5
Services Producer Price Index	2.1	2.3	2.5	2.1
GDP Deflator	3.7	5.2	3.9	
Domestic demand deflator	2.7	2.5	2.1	

Sources: Ministry of Internal Affairs and Communications; Bank of Japan; Cabinet Office.
Notes: 1. Figures for the producer price index (PPI) are adjusted for the hike in electric power charges during the summer season. Figures for the services producer price index (SPPI) exclude international transportation.
2. The CPI figures excluding temporary factors are staff estimates and exclude mobile phone charges and the effects of travel subsidy programs.

Chart 34: CPI (Less Fresh Food)



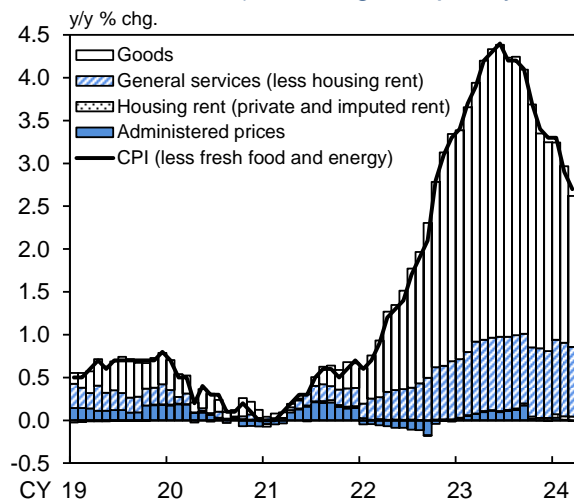
Source: Ministry of Internal Affairs and Communications.
Notes: 1. Figures for energy consist of those for petroleum products, electricity, and gas, manufactured & piped.
2. Figures for the "effects of the consumption tax hike and free education policies" from April 2020 onward are staff estimates and include the effects of measures such as free higher education introduced in April 2020.

¹⁴ The CPI figures excluding temporary factors are calculated by excluding (1) the effects of the consumption tax hike and policies concerning the provision of free education, (2) the effects of travel subsidy programs, and (3) mobile phone charges from the CPI (all items less fresh food) and the CPI (all items less fresh food and energy).

of increase in prices of a wide range of items have decelerated, as the impact of the previous year's price hikes has dissipated and the pressure on firms to pass on raw material cost increases to selling prices has waned compared to a while ago. The rate of increase in general services prices has decelerated somewhat, particularly for items such as dining-out and housework-related services (e.g., services related to housing repairs and maintenance), with the pressure on firms to pass on raw material cost increases waning compared to a while ago. That said, a pass-through of higher personnel expenses to consumer prices has progressed moderately for items including tutorial and lesson fees. Meanwhile, the rate of increase in hotel charges has remained relatively high. The year-on-year rate of change in overall administered prices has been flat recently because, while factors such as dissipation of the effects of the previous year's hikes in fire and earthquake insurance premiums have been observed, railway fares and other prices have been raised.

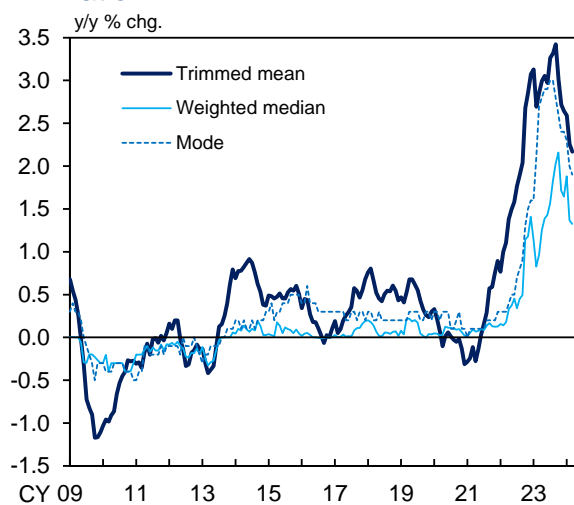
The indicators for capturing the underlying trend in the CPI have exhibited the following developments (Chart 36).^{15, 16, 17} The trimmed

Chart 35: CPI (Excluding Temporary Factors)



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 staff estimates and exclude mobile phone charges and the effects of the consumption tax hike, policies concerning the provision of free education, and travel subsidy programs.

Chart 36: Various Measures of Core Inflation



Sources: Bank of Japan; Ministry of Internal Affairs and Communications.
 Note: Based on staff calculations using the CPI excluding the effects of the consumption tax hikes, policies concerning the provision of free education, and travel subsidy programs. The CPI figures from April 2020 onward are staff estimates and exclude the effects of measures such as free higher education introduced in April 2020.

¹⁵ The trimmed mean is calculated by excluding items that belong to a certain percentage of the upper and lower tails of the price change distribution (10 percent of each tail) in order to eliminate the effects of large relative price changes. The mode is the inflation rate with the highest density in the price change 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. Each indicator is calculated using data for each CPI item that excludes the effects of the consumption tax hikes, policies concerning the provision of free education, and travel subsidy programs.

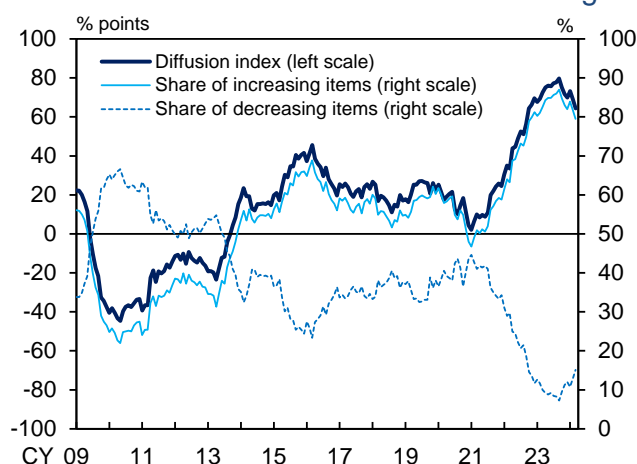
mean of the year-on-year rate of change in the CPI has been in the range of 2.0-2.5 percent as the impact of the previous year's price hikes has dissipated. The mode and the weighted median have been at around 2 percent and in the range of 1.0-1.5 percent, respectively. Looking at the year-on-year price changes across all CPI items (less fresh food), the share of price-increasing items minus the share of price-decreasing items has decreased moderately (Chart 37).

Meanwhile, the year-on-year rate of change in the domestic demand deflator has been at around 2 percent (Chart 33). By component, that for the private consumption deflator has been in the range of 2.5-3.0 percent. The rates of increase in such deflators as for business fixed investment have decelerated moderately. The year-on-year rate of change in the GDP deflator has been at around 4 percent recently; specifically, the rate of increase in the domestic demand deflator has remained relatively high despite slowing somewhat, while the rate of change in the import deflator has been negative, mainly reflecting a waning of the effects of past high crude oil prices.

Environment Surrounding Prices

In the outlook for prices, the main factors that determine inflation rates are assessed as follows.

Chart 37: 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 for which price indices increased/decreased from a year earlier. Based on staff calculations using the CPI (less fresh food) excluding the effects of the consumption tax hikes, policies concerning the provision of free education, and travel subsidy programs. The CPI figures from April 2020 onward are staff estimates and exclude the effects of measures such as free higher education introduced in April 2020.

¹⁶ In this report, the mode is defined as the inflation rate with the highest density in the distribution that is estimated parametrically by fitting a normal inverse Gaussian distribution to the observed price change distribution in each period. It should be noted that, with dispersions of the observed distributions increasing, the fit of the normal inverse Gaussian distribution has deteriorated recently. Therefore, estimates of this mode should be interpreted with some latitude.

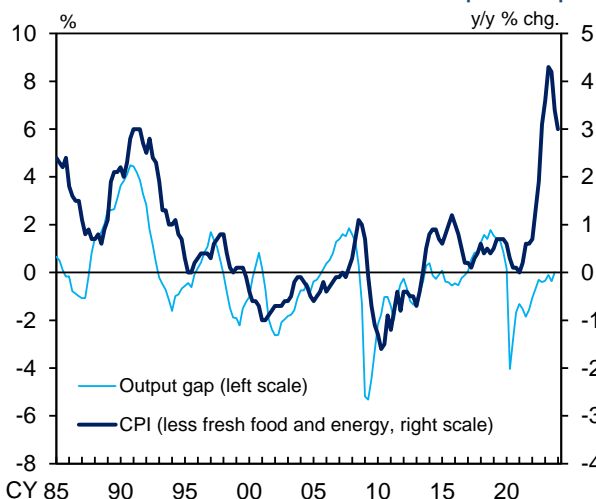
¹⁷ See Box 4 for approaches to examining underlying inflation in the current phase.

First, the output gap is likely to continue to widen moderately within positive territory toward the end of the projection period (Charts 2 and 38).

Second, medium- to long-term inflation expectations have risen moderately (Chart 39). The March 2024 *Tankan* shows that figures for firms' inflation outlook for general prices have been at high levels. Given that the formation of inflation expectations in Japan is largely adaptive, the increase in inflation seen thus far has brought about a rise in households' and firms' medium- to long-term inflation expectations. Firms' behavior has shifted more toward raising wages and prices, and it is highly likely that firm wage increases that are higher than those seen in the previous year will be achieved in this year's annual spring labor-management wage negotiations. In addition, moves to reflect wage increases in selling prices have been strengthening. Regarding the outlook, inflation expectations are expected to rise moderately, with continued improvement in the output gap and changes in firms' wage- and price-setting behavior. Under these circumstances, the virtuous cycle between wages and prices is projected to keep intensifying through achievement of wage increases that reflect price rises and through a pass-through of wage increases to selling prices.

Third, the year-on-year rate of change in the import price index had remained negative due to dissipation of the impact of past high commodity prices, but since such negative contribution has ended, the rate has been at around 0 percent recently (Charts 41 and 42). Looking at the final demand-intermediate demand (FD-ID) price

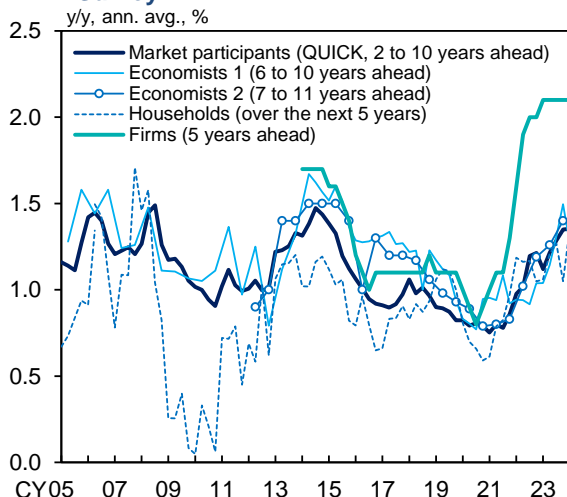
Chart 38: Inflation Rate and Output Gap



Sources: Ministry of Internal Affairs and Communications; Bank of Japan.
 Notes: 1. The CPI figures are staff estimates and exclude mobile phone charges and the effects of the consumption tax hikes, policies concerning the provision of free education, and travel subsidy programs.
 2. Figures for the output gap are staff estimates.

Chart 39: Inflation Expectations

1. Survey



Sources: Bank of Japan; QUICK, "QUICK Monthly Market Survey <Bonds>"; JCER, "ESP Forecast"; Consensus Economics Inc., "Consensus Forecasts."
 Notes: 1. "Economists 1" shows the forecasts of economists in the *Consensus Forecasts*. "Economists 2" shows the forecasts of forecasters surveyed for 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 for a 5-choice question.
 3. Figures for firms show the inflation outlook of enterprises for general prices (all industries and enterprises, average) in the *Tankan*.

2. BEI



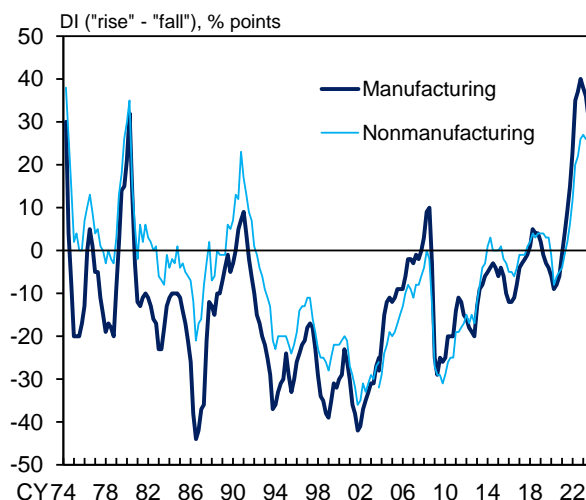
Source: Bloomberg.
 Note: The BEI (break-even inflation) rate is the yield spread between fixed-rate coupon-bearing JGBs and inflation-indexed JGBs. Inflation-indexed JGBs issued since October 2013 are designated as "new," while the rest are designated as "old." Figures for "old (longest)" are calculated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

indexes, the index for stage 1 of the ID -- which shows developments in an upstream stage of the production process -- had seen a lowering in its level compared to around last autumn; however, reflecting the subsequent rise in crude oil prices and depreciation of the yen, it has increased slightly recently (Chart 43). That for stage 2 of the ID has remained on a moderate uptrend. That said, the indexes for stages 3 and 4 of the ID, which show developments in relatively downstream stages of the production process, have remained more or less flat. This indicates that the upward pressure on the CPI stemming from the past rise in import prices has weakened compared to a while ago.

Meanwhile, the year-on-year rate of change in energy prices (e.g., gasoline prices and electricity charges) had remained negative due to the government's measures to reduce the household burden of higher gasoline prices, electricity charges, and gas charges.¹⁸ However, it has been at around 0 percent recently, largely because discounts on electricity and gas charges, which have made a negative contribution to energy prices, have been reduced compared to

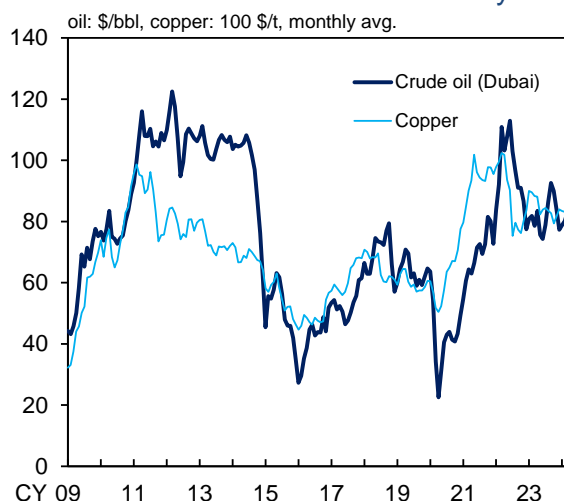
¹⁸ Looking at the government's energy-related economic measures, with regard to gasoline subsidies, it has introduced a measure to provide subsidies to petroleum distributors and importers as funds to contain a sharp rise in their selling prices when the nationwide average for retail gasoline prices exceeds the benchmark price (168 yen per liter). After gradually reducing the subsidies from January 2023, the government revised the measure and expanded the subsidies in early September, in response to crude oil prices rising again. With regard to electricity charges, through its measures to reduce the household burden, electricity charges were cut by 7 yen per kilowatt-hour (roughly a 20 percent discount per month for typical households) for the period from February through September 2023, and have been cut by 3.5 yen per kilowatt-hour since October (the months refer to the timing at which electricity charges are calculated). Regarding manufactured and piped gas charges, roughly similar measures to reduce the household burden have been introduced.

Chart 40: Output Prices



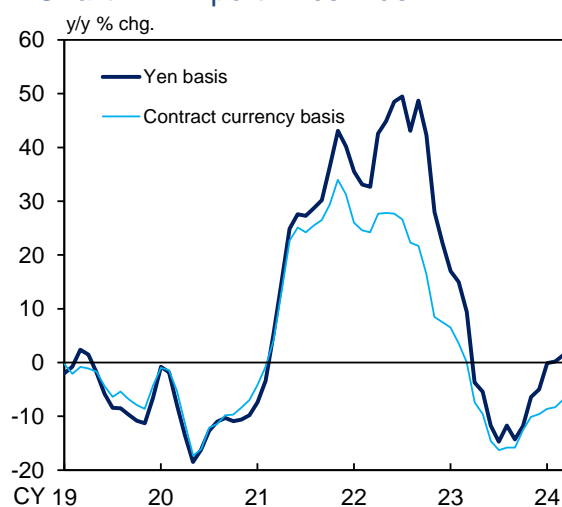
Source: Bank of Japan.
Note: Based on the *Tankan*. All enterprises. There is a discontinuity in the data for December 2003 due to a change in the survey framework.

Chart 41: International Commodity Prices



Sources: Nikkei Inc.; Bloomberg.

Chart 42: Import Price Index



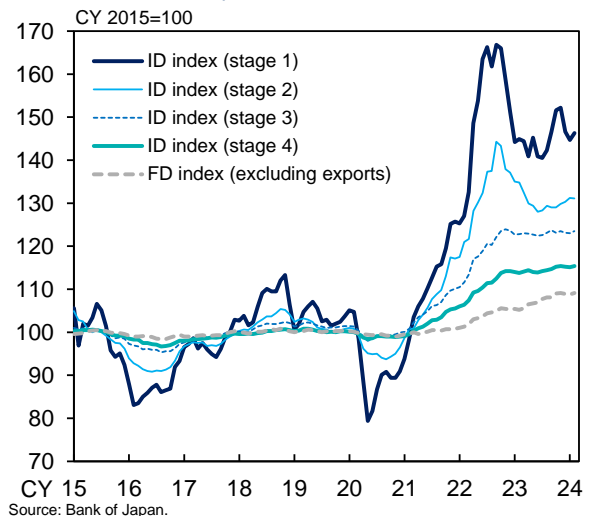
Source: Bank of Japan.

the previous year. As for the outlook, the effects of the recent rise in crude oil prices is expected to push up the year-on-year rate of change in energy prices, and assuming that the government's measures to reduce the household burden of higher energy prices will be phased out, the rate is highly likely to register a relatively large positive figure because a waning of the effects of these measures pushing down such prices of the previous year is expected to be observed.^{19,20} After the impact of the rebound caused by the phasing out of the government's measures dissipates, the rate is projected to be slightly negative in light of developments in the futures market.

Outlook for Prices

Based on this underlying scenario, the year-on-year rate of increase in the CPI (all items less fresh food and energy) is likely to decelerate due to a gradual waning of the effects of the pass-through to consumer prices of cost increases led by the past rise in import prices. Subsequently, the rate of increase is expected to accelerate moderately and be at around 2 percent, as the output gap continues to improve and as medium- to long-term inflation expectations and wage growth rise, accompanied by changes in

Chart 43: FD-ID Price Indexes (All Commodities)



¹⁹ The government announced that it will extend the implementation period of its gasoline subsidies, which was initially through the end of April 2024. Regarding measures to reduce the burden of higher electricity and gas charges, it also announced that the current discount rate to these charges will continue to be applied to those up to May 2024, the rate will be cut to half in June, and the measures will be discontinued at the end of that month (the months refer to the timing at which the charges are calculated).

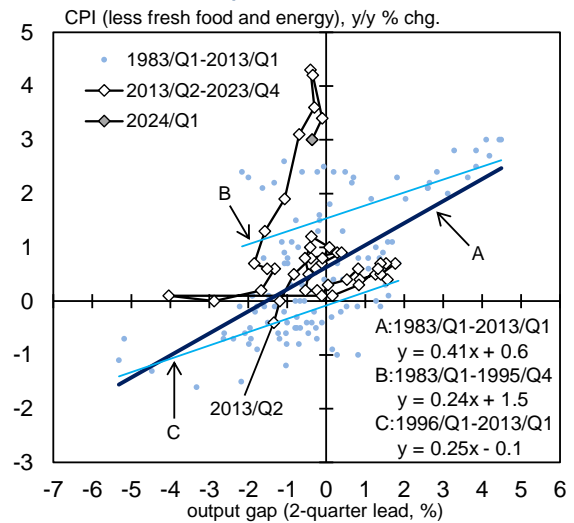
²⁰ It is projected that the rate of change in energy prices for fiscal 2024 will also be pushed up by the hike in the rate of renewable energy surcharges on electricity.

factors such as firms' wage- and price-setting behavior (Chart 44).²¹

Taking account of the aforementioned developments in energy prices, the year-on-year rate of increase in the CPI (all items less fresh food) is likely to be in the range of 2.5-3.0 percent for fiscal 2024 and then be at around 2 percent for fiscal 2025 and 2026. In the first half of the projection period, the rate of increase is expected to be pushed up by the effects of the recent rise in crude oil prices and a waning of the effects of the government's economic measures pushing down CPI inflation, while the effects of the pass-through to consumer prices of cost increases led by the past rise in import prices are likely to wane. Thereafter, the rate is projected to be at around 2 percent in reflection of the developments in the CPI for all items less fresh food and energy.

That said, there remain uncertainties over whether underlying inflation will increase with a stronger linkage between wages and prices. Although relatively high wage increases are likely to be achieved in this year's annual spring labor-management wage negotiations, close attention is warranted on the extent to which moves to reflect wage developments in selling prices will become widespread. On the other hand, moves to reflect wages in selling prices could strengthen to a greater extent than expected, and upward pressure on wages could intensify with labor market conditions tightening. In this situation, there is also a possibility that both

Chart 44: Phillips Curve



Sources: Ministry of Internal Affairs and Communications; Bank of Japan.
Notes: 1. The CPI figures are staff estimates and exclude mobile phone charges and the effects of the consumption tax hikes, policies concerning the provision of free education, and travel subsidy programs.
2. Figures for the output gap are staff estimates.

²¹ Box 3 outlines recent developments surrounding the CPI, specifically, the current situation of the linkage between wages and prices.

wages and prices will deviate upward from the baseline scenario, accompanied by a rise in medium- to long-term inflation expectations.

III. Financial Developments in Japan

Financial Conditions

Financial conditions have been accommodative.²²

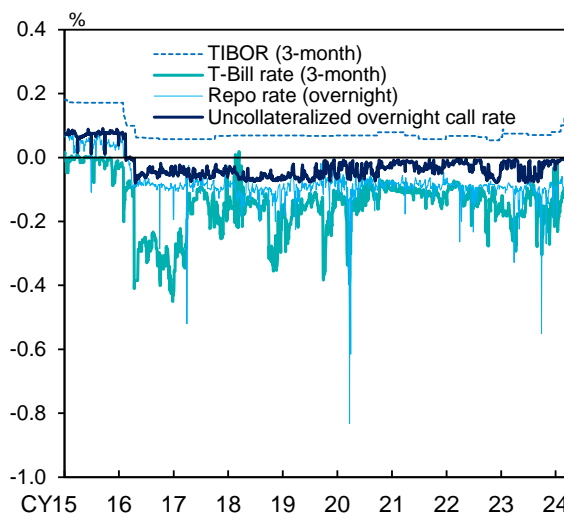
Looking at short-term interest rates, the uncollateralized overnight call rate had been in the range of minus 0.1 to 0 percent under the framework of Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control. Following the changes in the monetary policy framework decided at the March 2024 Monetary Policy Meeting, it has been in the range of 0 to 0.1 percent (Chart 45). Interest rates on term instruments have risen.

Firms' funding costs have increased recently but have remained at low levels (Chart 46). Lending rates (the average interest rates on new loans and discounts) had been at extremely low levels through February 2024. Since March, however, some base rates for short-term loans have risen. Issuance rates for CP have increased recently but have remained at low levels. Those for corporate bonds have been more or less flat, albeit with fluctuations.

The DI in the *Tankan* for financial institutions' lending attitudes as perceived by firms suggests that such attitudes have remained accommodative on the whole (Chart 47). That for issuance conditions for CP has continued to show net "easy" conditions. As suggested by the latter,

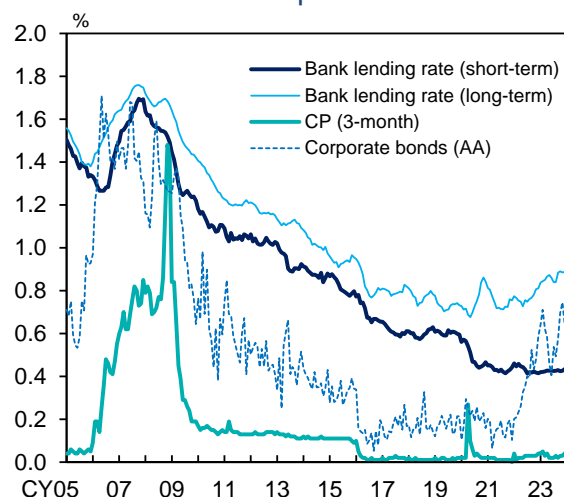
²² Box 5 outlines the assessment of financial conditions in terms of interest rates.

Chart 45: Short-term Interest Rates



Sources: Bank of Japan; JBA TIBOR Administration; Bloomberg.
Note: Figures for repo rate are the *Tokyo Repo Rate*.

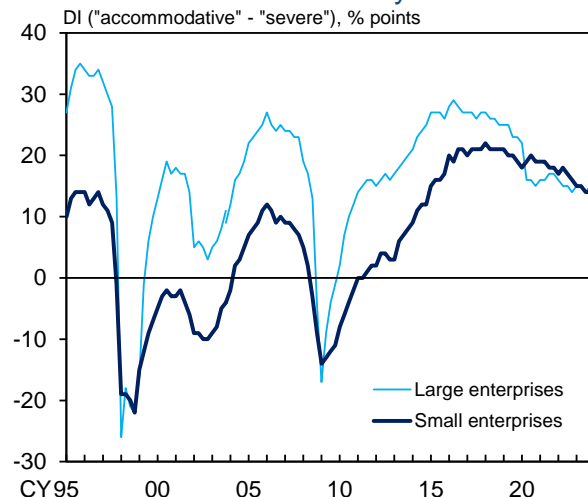
Chart 46: Bank Lending Rates and Issuance Yields for CP and Corporate Bonds



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

- Notes: 1. Figures for issuance yields for CP up through September 2009 are the averages for CP (3-month, rated a-1 or higher). Those from October 2009 onward 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 are 6-month backward moving averages.

Chart 47: Lending Attitudes of Financial Institutions as Perceived by Firms



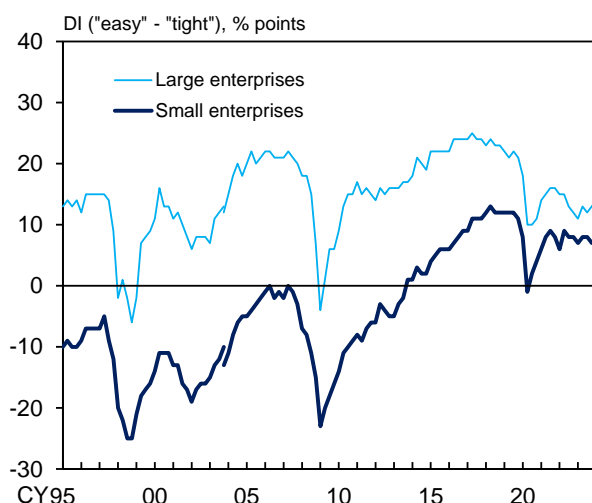
Source: Bank of Japan.
Note: Based on the *Tankan*. All industries. There is a discontinuity in the data for December 2003 due to a change in the survey framework.

issuance conditions for CP and corporate bonds have been favorable. The DI for firms' financial positions in the *Tankan* suggests that they have been at favorable levels on the back of a recovery in economic activity and progress in the pass-through of cost increases to selling prices (Chart 48).

Firms' demand for funds has increased moderately on the back of, for example, the recovery in economic activity as well as mergers and acquisitions of firms. In this situation, the year-on-year rate of increase in the amount outstanding of bank lending has been at around 3.5 percent (Chart 49). That in the aggregate amount outstanding of CP and corporate bonds has been in the range of 1.5-2.0 percent.

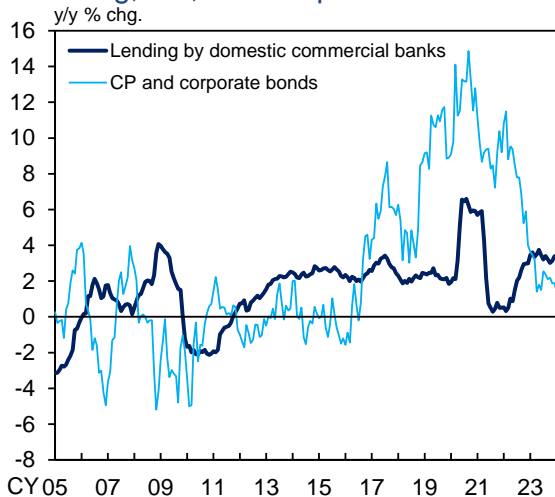
The year-on-year rate of change in the monetary base has been at around 1.5 percent. The rate of change in the money stock (M2) has been at around 2.5 percent, as the amount outstanding of bank lending has continued to increase and fiscal spending has kept pushing the rate up (Chart 50).

Chart 48: Firms' Financial Positions



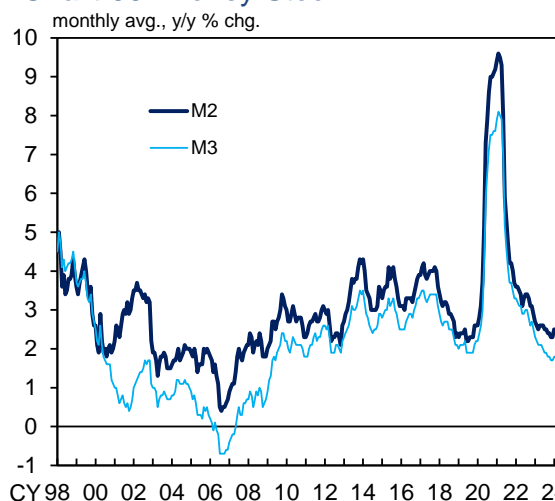
Source: Bank of Japan.
 Note: Based on the *Tankan*. All industries. There is a discontinuity in the data for December 2003 due to a change in the survey framework.

Chart 49: Amounts 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 the period.

Chart 50: Money Stock



Source: Bank of Japan.

Developments in Financial Markets

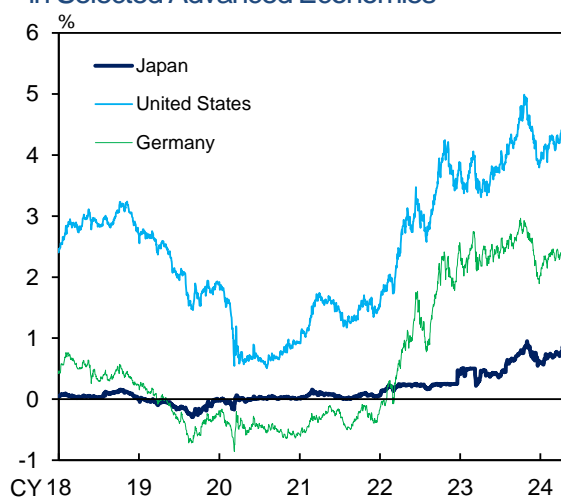
In global financial markets, long-term interest rates and stock prices in major economies had followed an uptrend through March, mainly reflecting solid economic indicators in the United States. Subsequently, however, stock prices have turned to a decline in many economies, while long-term interest rates have risen significantly with market attention being drawn to the prolonged monetary tightening in the United States, and geopolitical risks in the Middle East have heightened.

Yields on 10-year government bonds in the United States have risen substantially, mainly reflecting solid economic indicators and attention, particularly since the beginning of April, on the prolonged monetary tightening (Chart 51). Yields on 10-year government bonds in Europe have increased, in line with developments in those in the United States. In Japan, yields on 10-year government bonds have increased as well.²³

Premiums for U.S. dollar funding through the dollar/yen foreign exchange swap market have been at low levels on the whole (Chart 52).

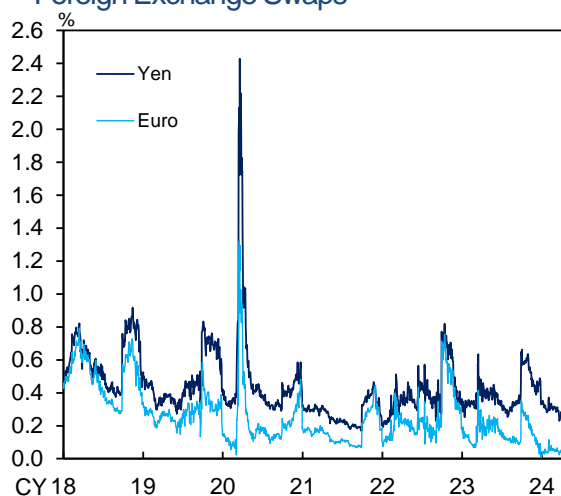
While stock prices in the United States had risen against the background of solid economic indicators and of growth expectations supported by an expansion in demand for new technologies in the high-tech industry, they have turned to a decline recently, mainly reflecting the rise in

Chart 51: 10-Year Government Bond Yields in Selected Advanced Economies



Source: Bloomberg.

Chart 52: Dollar Funding Premiums through Foreign Exchange Swaps



Source: Bloomberg.

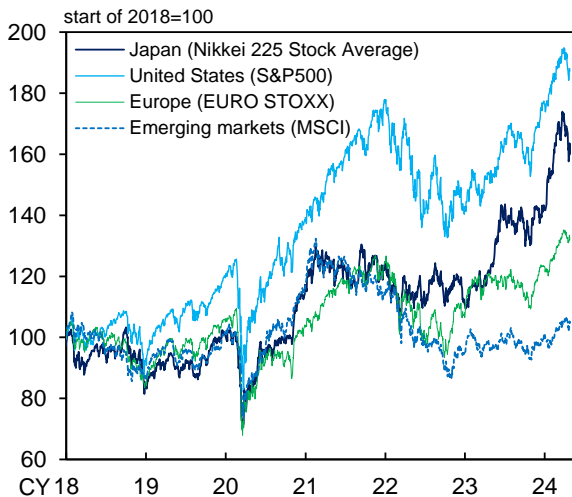
Notes: 1. U.S. dollar funding premiums are calculated as the difference between U.S. dollar fundings rates (3-month) in the dollar/yen or euro/dollar foreign exchange swap market and those in the money market.

2. The interest rates used for the calculation are as follows: for the yen, the OIS rate; for the euro, the EONIA-referencing OIS rate before October 4, 2019, and the €STR-referencing OIS rate thereafter; for the U.S. dollar, the OIS rate before January 3, 2019, and the SOFR thereafter.

²³ Box 6 examines the impact of the Bank's Japanese government bond (JGB) purchases on the yield curve.

long-term interest rates and the heightened geopolitical risks in the Middle East (Chart 53). Those in Europe have decreased after rising significantly in line with the increase in U.S. stock prices. Stock prices in Japan had risen considerably, in reflection of the increase in U.S. stock prices and solid corporate results, but have declined recently, in line with the decrease in U.S. stock prices. Stock prices in emerging economies have declined, mainly reflecting the increase in U.S. yields, after rising on the back of, for example, a pick-up in the Chinese economy.

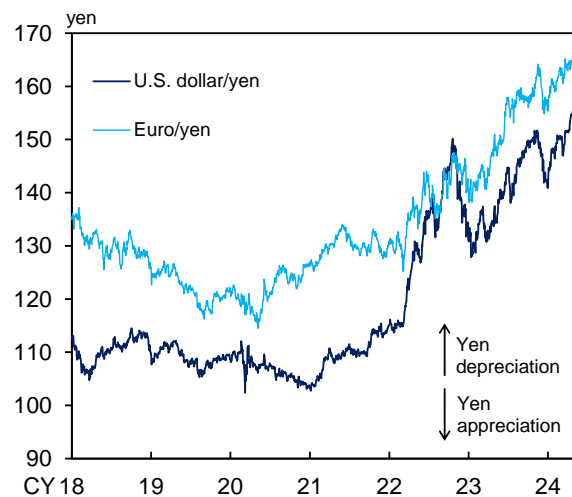
Chart 53: Selected Stock Price Indices



Source: Bloomberg.
Note: Figures for emerging markets are those for the MSCI Emerging Markets Index (local currency).

In foreign exchange markets, the yen has depreciated against the U.S. dollar, albeit with fluctuations, reflecting attention to factors such as the yield differential between Japan and the United States (Chart 54). The yen has also depreciated against the euro, albeit with fluctuations.

Chart 54: U.S. Dollar/Yen and Euro/Yen

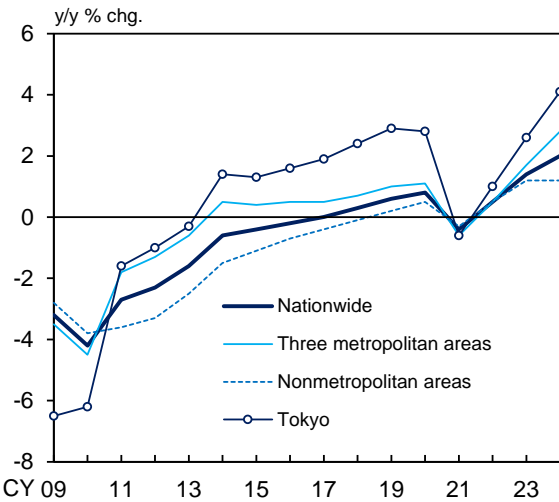


Source: Bloomberg.

Land Prices

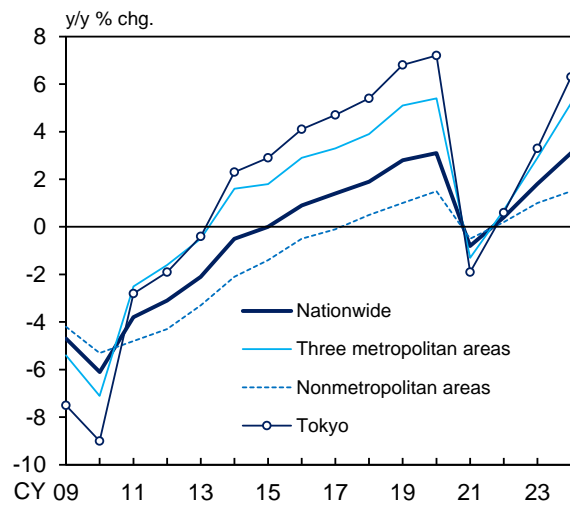
Land prices have increased in reflection of the economic recovery. According to the *Land Market Value Publication* for 2024 (as of January 1), the year-on-year rates of increase in both residential and commercial land prices have accelerated (Charts 55 and 56). In the three major metropolitan areas (Tokyo, Osaka, and Nagoya), the year-on-year rates of increase in both residential and commercial land prices have accelerated. In nonmetropolitan areas, the rate of increase in residential land prices has been flat, while the rate of increase in commercial land prices has accelerated.

Chart 55: Residential Land Prices



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

Chart 56: Commercial Land Prices



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

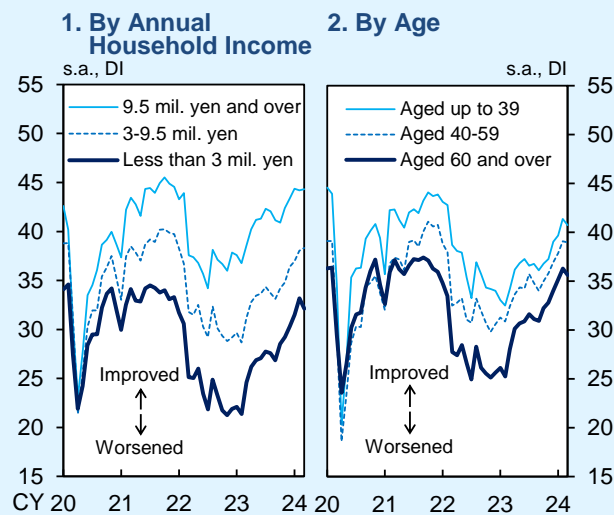
(Box 1) Current Situation and Outlook for Private Consumption

A look at recent developments in private consumption shows that, in addition to the impact of price rises, temporary factors such as a decline in automobile sales due to a suspension of shipment at some automakers have exerted downward pressure. In terms of the impact of price rises, as a decline in real income has become prolonged, households are gradually becoming more defensive in their spending. By type, sales of items including food (non-durable goods) have seen a gradual decline with a continued rise in their prices (Chart 28). While households' sentiment has been recovering moderately on the whole, partly due to expectations of an improvement in income, as described below, it has been relatively weak among low-income and senior households (Chart B1-1). Among the seniors, moves to restrain purchase quantities relative to the pre-pandemic period have been spreading (Chart B1-2).

Nevertheless, private consumption is expected to increase moderately in reflection of a couple of factors described below, in addition to a waning of temporary factors, such as a decline in automobile sales.

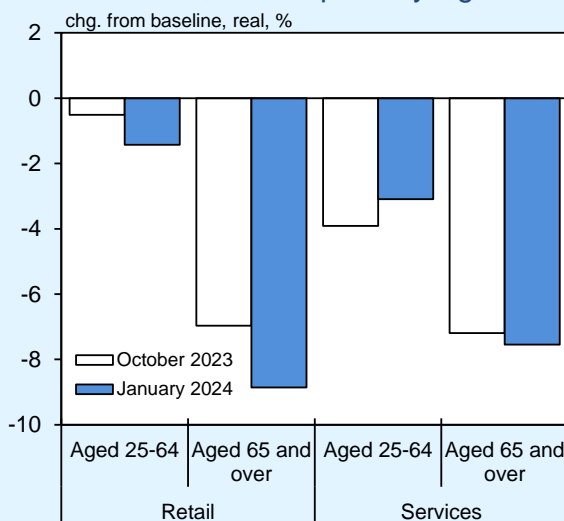
First, with regard to prices, the impact of cost-push pressure stemming from the past rise in import prices has been waning clearly. For the time being, the slowdown in the rate of increase in food prices is expected to continue steadily, and the downward pressure on consumption from this side is projected to ease, although attention

Chart B1-1: Overall Livelihood



Source: Cabinet Office.
Note: Figures show developments in the index of consumers' perceptions of their overall livelihoods for two-or-more-person households in the *Consumer Confidence Survey*. Figures are the weighted averages for each household income group and age of household head group using the number of households as weights.

Chart B1-2: Consumption by Age



Sources: Ministry of Internal Affairs and Communications; Nowcast Inc./ JCB, Co., Ltd., "JCB Consumption NOW."

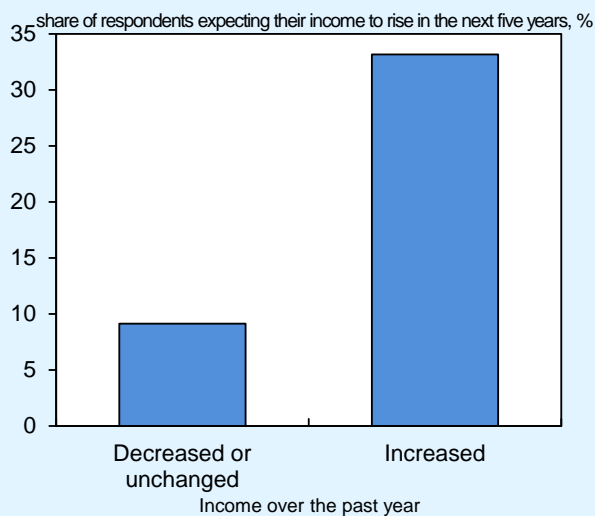
Notes: 1. The chart shows the consumption per person in *JCB Consumption NOW*. Real values are obtained using the corresponding CPIs.
2. The baseline is the average for the corresponding months for fiscal 2016 through fiscal 2018.

should be paid to the potential impact of the recent rise in crude oil prices.

Second, with regard to income, the results of this year's spring labor-management wage negotiations are expected to be reflected in workers' actual salary payments through the summer. Consequently, nominal wages are expected to rise clearly.²⁴ For pensioners, pensions for fiscal 2024 have been revised upward by 2.5-3.0 percent from last year. The cuts in income tax and inhabitant tax as part of the government's economic stimulus measures will also underpin households' disposable income.

Moreover, the prospect of two consecutive years of high-level base pay increases is expected to create an expectation among households of increasing permanent income -- that is, a perception that wages will continue to increase in the future, thereby supporting private consumption. In this context, an analysis of household survey microdata shows that a high percentage of households whose income has improved recently expect their income to increase in the future as well (Chart B1-3). Furthermore, estimation results show that, as the expectation of continued improvement in income grows, this exerts effects that push up current consumption (Chart B1-4). In addition, the recent substantial rise in stock prices is expected to push up private consumption through wealth effects (Chart B1-5).

Chart B1-3: Wage Increases and Households' Income Outlook



Source: JTUC Research Institute for Advancement of Living Standards.
Note: The vertical axis shows the share of respondents who answered that they expected their wages in five years to be considerably or somewhat higher than the current wages of those five years their senior in the same company. The bar labeled "increased" shows this share for respondents who replied that their income had increased over the past year, while the bar labeled "decreased or unchanged" shows the share for respondents who replied that their income had decreased or remained unchanged over the past year. Figures are based on the April 2023 survey.

²⁴ See also Box 2 of this report for details on the 2024 spring labor-management wage negotiations.

The pace and degree of such improvements in income will differ depending on households' attributes, such as their household type (working household, pensioner household, etc.), the level of increase in base pay at their place of work, and their financial asset holdings. It is necessary to continue to carefully examine developments in private consumption, taking into account the differences across household attributes.

Chart B1-4: Positive Effects of Wage Increases on Consumption

1. Estimation Model

(Ordered Probit Model)

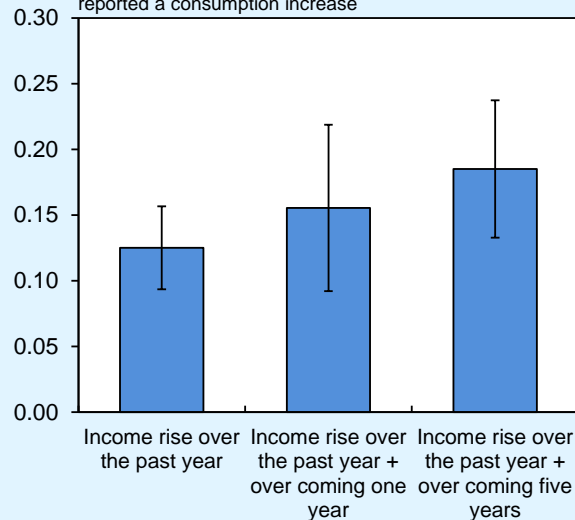
Dependent variable:
Change in consumption over the past year

Explanatory variables:

- (1) Income rise over the past year dummy
- (2) Income rise over the past year dummy
× Income expected to rise over coming one year dummy
- (3) Income rise over the past year dummy
× Income expected to rise over coming five years dummy

2. Estimation Results

marginal effects on the probability that respondents reported a consumption increase



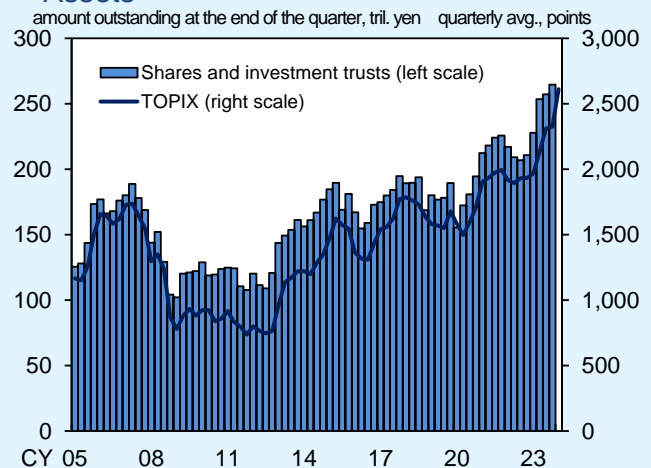
Source: JTUC Research Institute for Advancement of Living Standards.

Notes: 1. The bands denote the 95 percent confidence intervals. The estimation period is from 2013 to 2023 (April surveys). The horizontal axis shows different combinations of the dummies for actual and expected rises in income used in the marginal effects estimation.

2. The dummy "over coming one year" takes a value of 1 if the respondent answered that they expected their wages to rise considerably or somewhat over the coming year. The dummy "over coming five years" takes a value of 1 if the respondent answered that they expected their wages in five years to be considerably or somewhat higher than the current wages of those five years their senior in the same company.

3. The estimations control for respondents' perceptions of and outlook for income, prices, and economic conditions, as well as their age group, income group, job status, etc.

Chart B1-5: Stock Prices and Household Assets



Sources: Bank of Japan; Bloomberg.

Note: Figures for shares and investment trusts are those for listed shares and investment trust beneficiary certificates held by households.

(Box 2) Spring Labor-Management Wage Negotiations in 2024

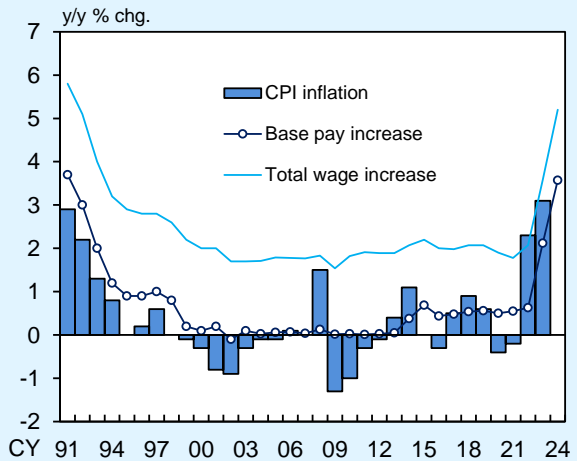
Developments in the annual spring labor-management wage negotiations this year show that moves to raise wages have been accelerating further, as many firms have agreed to higher wage increases than those last year, which already were relatively high.²⁵ The average rate of increase in wages for regular employees in labor unions that belong to the Japanese Trade Union Confederation (Rengo) -- which mainly consists of labor unions of large firms -- marked the highest level in 33 years since 1991 (Chart B2-1[1]).

By firm size, not only firms with 1,000 or more union members but also smaller firms have agreed to much higher rates of wage increases than last year (Chart B2-1[2]). Moreover, the rate of increase in wages of part-time employees, which were raised significantly last year, has accelerated as well. The labor market has continued to face structural changes, including intensifying labor shortages and growing job markets for workers looking for new jobs. Under such circumstances, given the price rises and further heightened social momentum for wage increases, large firms' stance has shifted more toward raising wages.

Small and medium-sized firms (hereafter referred to as "SMEs"), which have low union membership

Chart B2-1: 2024 Spring Wage Negotiations (Aggregation by Rengo)

1. Developments over Time



Sources: Japanese Trade Union Confederation (Rengo); Central Labour Relations Commission; Ministry of Internal Affairs and Communications.

Notes: 1. Figures for CPI inflation are for all items less fresh food, excluding the effects of the consumption tax hikes, etc.

2. Figures for base pay and total wage increases from 1991 to 2013 are those published by the Central Labour Relations Commission, while those from 2014 to 2024 are figures released by Rengo (the figures for 2024 are from Rengo's fourth aggregation).

2. By Type of Employment and Firm Size

	base pay increase, %		
	CY 2022	CY 2023	CY 2024
Regular employees	0.6	2.1	3.6
1,000 or more	0.6	2.2	3.6
300 to 999	0.7	2.1	3.6
100 to 299	0.7	2.0	3.4
99 or less	0.8	1.9	2.9
Part-time employees	2.3	5.1	6.1

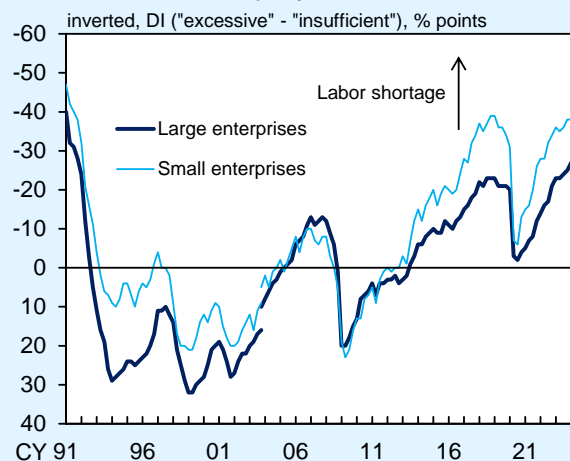
Source: Japanese Trade Union Confederation (Rengo).

Note: The figures for 2024 are from Rengo's fourth aggregation. The figures for the breakdown of regular employees are aggregated values based on the number of union members. Part-time employees include fixed-term employees.

²⁵ Regarding the spring labor-management wage negotiations in 2023, see Box 1 of the April 2023 Outlook Report and Box 1 of the October 2023 Outlook Report.

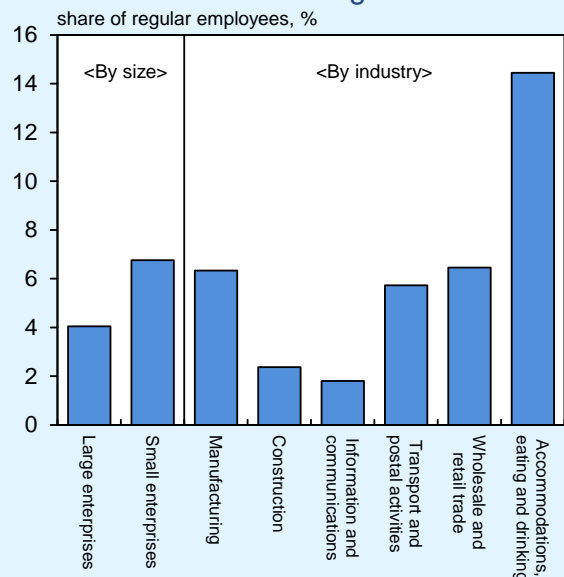
rates, often conduct their wage negotiations from April onward. Therefore, at this point, the full picture of their wage revisions is not yet clear. That said, SMEs face more intense labor shortages than large firms, and many of them are strongly aware of the need to raise wages (Chart B2-2). In addition, many SMEs have mentioned that they want to reference the rate of wage increases agreed in the wage negotiations of large firms for their own wage increases. Therefore, the positive results of the negotiations of large firms are likely to support SMEs' wage increases. Meanwhile, among SMEs and firms in the services sector, such as eating and drinking services, many have pointed to the minimum wage as one of the reasons why full-time employees' wages need to be raised, in addition to changes in the labor market. At these firms, the differential between wages of full-time and part-time employees is small and the increase in the minimum wage seems to have induced wage increases not only for part-time employees but also for full-time employees (Chart B2-3).²⁶ In addition, as described in Box 3, moves to pass labor cost increases on to selling prices have been spreading among firms, including SMEs, and this is likely to encourage wage increases. In this situation, several surveys on SMEs' stance toward wage increases, conducted ahead of the wage negotiations, suggest that there has been a shift toward wage increases (as seen in an increase in the number of firms planning to raise base pay and a rise in the rate of planned wage increases) (Chart B2-4).

Chart B2-2: Employment Conditions DI



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

Chart B2-3: Regular Employees Slightly above the Minimum Wage



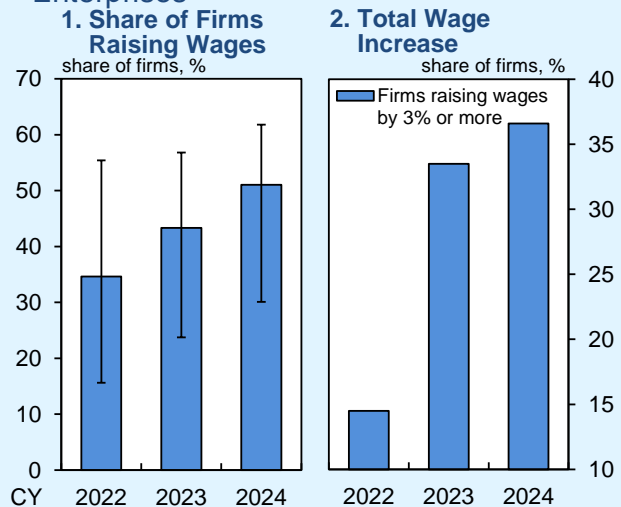
Source: Ministry of Health, Labour and Welfare.
 Notes: 1. Figures show the share of regular employees with hourly scheduled cash earnings no more than 100 yen above the minimum wage, based on staff calculations using microdata from the 2023 *Basic Survey on Wage Structure*.
 2. Large enterprises are enterprises with 1,000 or more employees. Small enterprises are enterprises with 5 to 99 employees.

²⁶ The government aims to raise the minimum wage (hourly wages, all Japan average) to 1,500 yen.

In this regard, at the April 2024 meeting of general managers of the Bank's branches, many branches reported that moves to raise wages -- at similar levels as in 2023 or more -- were expected even among regional SMEs, as labor market conditions have been tightening and firms have been faced with intensifying labor shortages. That said, there were also reports that a number of firms were (1) maintaining a cautious stance toward raising wages in view of the severe situation in their profits or (2) taking a wait-and-see stance to see the situation for their competitors regarding the degree of wage increases. Given such circumstances, the need to carefully monitor future developments was noted at the meeting.²⁷ Indeed, the pace of improvement in corporate profits and the pace of decline in labor share have been more moderate at SMEs than at large firms; also, both corporate profits and labor share vary among SMEs (Chart B2-5).²⁸ As this may suppress the growth rate of wages at SMEs, it warrants attention.

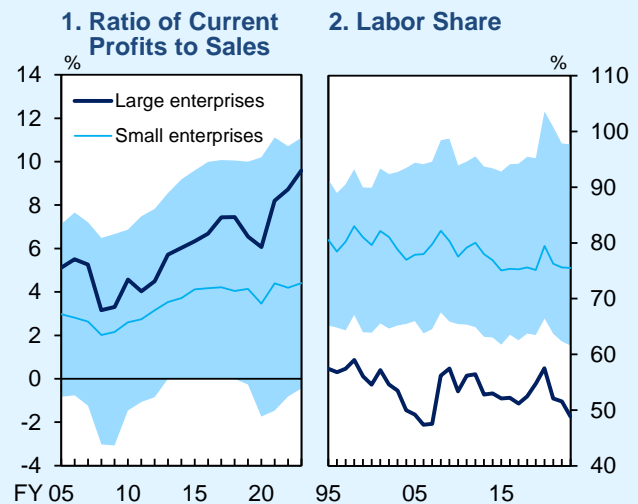
The results of wage negotiations will likely be reflected in actual wages through this summer. Although there remain uncertainties regarding factors such as the future course of wage revisions at SMEs, it is highly likely that the growth rate of scheduled cash earnings will

Chart B2-4: Wage Developments in Small Enterprises



Sources: Teikoku Databank, Ltd.; Tokyo Shoko Research, Ltd.; Japan/Tokyo Chamber of Commerce and Industry (JCCI and TCCI); Japan Finance Corporation.
 Notes: 1. In the left-hand chart, figures show the average of several surveys of small enterprises regarding their plans on raising base pay. The bands indicate the highest and lowest survey results.
 2. In the right-hand chart, figures show the share of firms in a JCCI-TCCI survey planning to raise total wages by 3 percent or more among firms planning to raise wages.

Chart B2-5: Corporate Profits and Labor Share



Source: Ministry of Finance.
 Notes: 1. Figures for large/small enterprises are annual means. The shaded areas denote the 25th-75th percentile distributions for small enterprises, based on staff calculations using microdata from the *Financial Statements Statistics of Corporations by Industry, Quarterly*.
 2. Large enterprises are enterprises with a capitalization of 1 billion yen or more, while small enterprises are enterprises with a capitalization of 10 million yen or more but less than 100 million yen. Figures exclude "finance and insurance" and those for fiscal 2009 onward also exclude pure holding companies.

²⁷ For details, see Bank of Japan, "Kaku chiiki kara mita keiki no genjō (2024 nen 4 gatsu shitenchō kaigi ni okeru hōkoku) [Current economic situation seen in each region (reports made at the April 2024 meeting of general managers of the Bank's branches)] (available only in Japanese).

²⁸ Box 2 of the January 2024 Outlook Report points out that it may not be easy for firms with a high level of labor share to increase distribution to employees through wage increases. However, it also points out that even such firms tend to carry out relatively high wage increases, reflecting intensifying labor shortages and an improvement in profits through rises in output prices.

increase further, and this is likely to underpin private consumption, as described in Box 1.

(Box 3) Linkage between Wages and Prices: Spread of Moves to Pass Labor Cost Increases on to Selling Prices

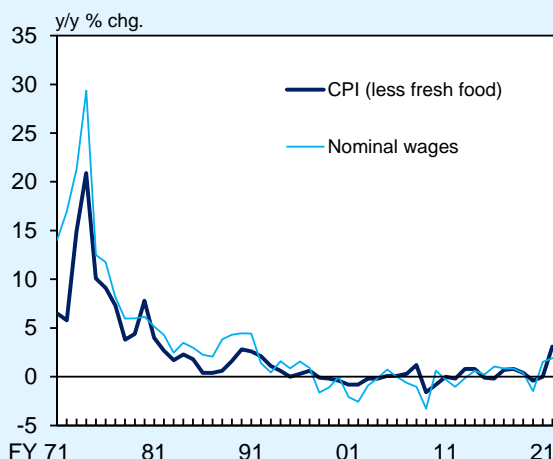
While both the year-on-year rates of change in wages and prices had remained rigidly at around 0 percent since the 2000s, they have been rising recently (Chart B3-1). When considering the outlook for price developments, whether the linkage between wages and prices would strengthen gradually has become increasingly important, as pointed out in past Outlook Reports.²⁹ This box provides an update on the current situation of the linkage between wages and prices.

First, regarding spillovers from prices to wages, as shown in Box 2, following last year, a high-level base pay increase is expected to be achieved at the spring labor-management wage negotiations in 2024.

Second, with regard to spillovers from wages to prices, developments in services prices -- where labor costs account for a high share of output prices -- are particularly important. In this regard, this box examines the current situation with moves to pass higher labor costs on to selling prices both qualitatively and quantitatively.

Some firms still indicate that "getting consumers to accept higher prices due to higher labor costs

Chart B3-1: Developments in Wages and Prices



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

Notes: 1. The CPI figures are staff estimates and exclude the effects of the consumption tax hikes, policies concerning the provision of free education, and travel subsidy programs. Figures for nominal wages are for establishments with 30 or more employees up through fiscal 1990, and with 5 or more employees from fiscal 1991 onward. Figures from fiscal 2016 onward are based on continuing observations following the sample revisions.
2. Figures for fiscal 2023 are April 2023-February 2024 averages.

Chart B3-2: Interview Responses by Firms

- Getting consumers to accept higher prices due to higher labor costs is difficult (manufacturer).
- We raised membership fees because we increased wages to recruit and retain employees (sports club).
- We expect labor market conditions to remain tight. Moreover, the continuous increase in minimum wages planned by the government will add upward pressure on wages for regular employees. Considering these factors, we have raised prices to secure funds for future wage increases (eating and drinking).
- We believe that higher labor costs should basically be absorbed through productivity gains. However, we recently changed our stance in negotiating input costs to take suppliers' wages into account (manufacturer).

Source: Interviews by the Bank of Japan.
Note: The industry of the interviewee is shown in parentheses.

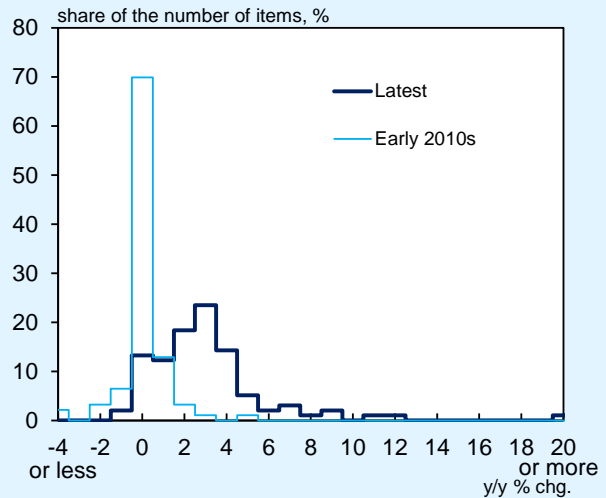
²⁹ Regarding the linkage between wages and prices, see also Box 3 of the October 2023 Outlook Report and Box 3 of the January 2024 Outlook Report.

is difficult," but in services industries, labor costs increasingly have been passed on to selling prices, as labor shortages have been exerting upward pressure on wages (Chart B3-2). Moreover, to prepare for future wage increases, some firms have raised selling prices in advance. With regard to goods prices, manufacturers still tend to hold the view that "higher labor costs should be absorbed through productivity gains"; nevertheless, moves to pass labor costs on to selling prices seem to have been spreading gradually.

Next, a look at the distribution of changes in services prices by item shows that the distribution overall has shifted to the right (Chart B3-3). This is mainly due to the fact that the inflation rates have been increasing in items such as dining out and services related to housing repairs and maintenance due to the strong impact of the past rise in import prices (Chart B3-4). As this impact wanes, such increase in the inflation rate is likely to slow. In contrast, the right tail of the distribution has become thicker recently, in culture and recreational services (such as monthly lesson fees) and in items with a high ratio of labor costs to total costs, suggesting that moves to pass labor cost increases on to selling prices have been spreading.

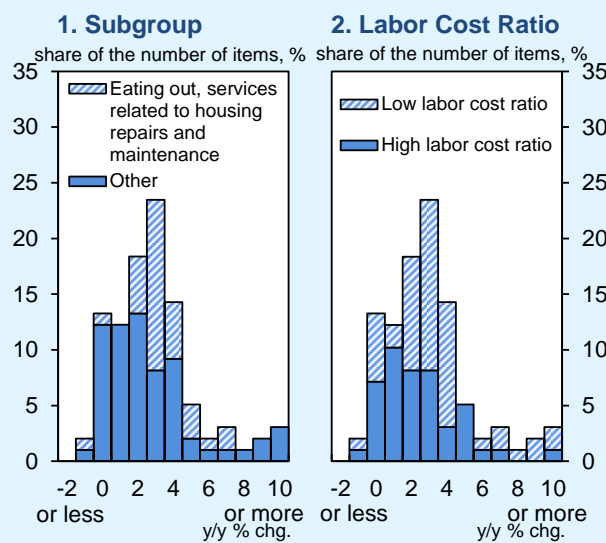
Furthermore, the following part attempts to carry out quantitative analyses that have been presented in the Bank's publications including the October 2023 Outlook Report. In Chart B3-5, a look at elasticity, which represents the response of inflation rates to wage increases, indicates that, although the CPI less fresh food has been

Chart B3-3: Price Change Distribution of General Services, Total



Source: Ministry of Internal Affairs and Communications.
 Notes: 1. Figures show the CPI for general services (less housing rent and the effects of travel subsidy programs).
 2. Figures for the early 2010s are as of March 2012 and the latest figures are as of March 2024.

Chart B3-4: Price Change Distribution of General Services, Breakdown

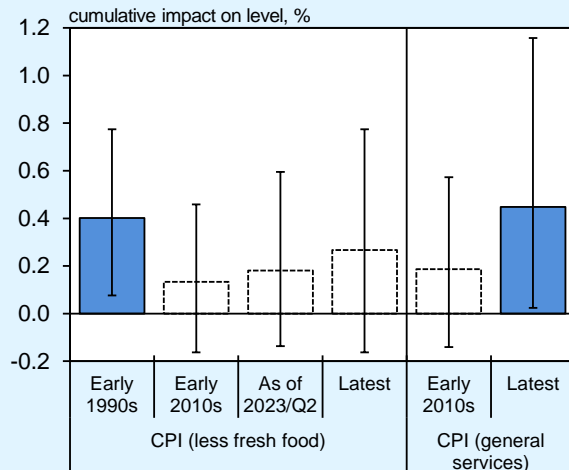


Source: Ministry of Internal Affairs and Communications.
 Notes: 1. Figures show the CPI for general services (less housing rent and the effects of travel subsidy programs). Figures are as of March 2024.
 2. Figures for "other" include culture and recreation.
 3. In the right-hand chart, CPI items are matched to the items in the 2015 *Input-Output Tables for Japan* and grouped in terms of the share of "wages and salaries" and other labor costs in the domestic output of those items. Figures for items with a high (low) labor cost ratio are for items that fall into the top (bottom) 50 percent in general services.

increasingly reactive, it is not statistically significant yet; on the other hand, the elasticity of the services prices to wage increases has increased recently in a statistically significant way. Moreover, "low-volatility items," "wage factors," and "the trend in services prices," all of which are estimated using the statistical methods to determine upward pressure on prices deriving from the linkage between wages and prices, have been increasing further (Chart B3-6).³⁰ In addition, high base pay increases are expected to be agreed in the 2024 spring labor-management wage negotiations. This will also encourage an increased spillover from wages to prices.

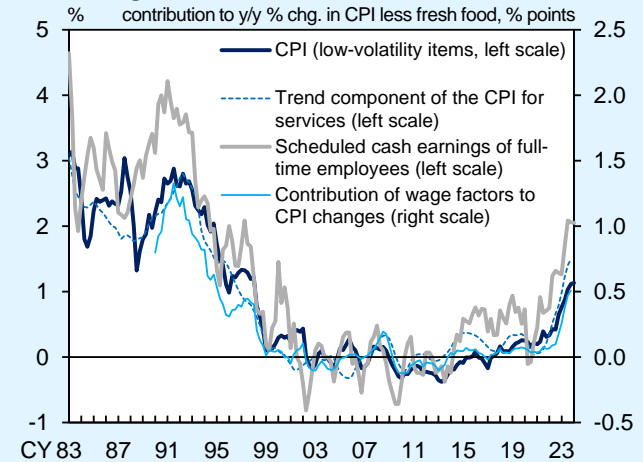
As explained, positive developments have been spreading in firms' wage- and price-setting behavior as time has passed. It is necessary to keep monitoring carefully from various standpoints if recent changes in firms' behavior will continue. A few firms point out that "it is easy to pass labor costs on to selling prices together with a rise in raw material costs amid the remaining effects of the rise in the latter, which is an exogenous shock common to many firms." Going forward, careful attention is warranted in particular on whether labor cost increases will continue to be passed on to selling prices as the effects of the past rise in raw material costs wane further.

Chart B3-5: Response of Prices to a 1% Increase in Wages



Sources: Ministry of Internal Affairs and Communications; Cabinet Office; Bank of Japan.
 Notes: 1. Figures show the estimation results of a time-varying parameter VAR model consisting of the output gap, nominal wages, and the CPI. Import prices are added as an exogenous control variable. The CPI figures are staff estimates and exclude temporary factors.
 2. Figures are 4-quarter cumulative impulse responses. The bands indicate the 75 percent confidence intervals, while the broken lines indicate that the results are not statistically significant. Figures for the early 1990s are as of 1991/Q2, those for the early 2010s are as of 2012/Q2, and the latest figures are as of 2023/Q4.

Chart B3-6: CPI and Scheduled Cash Earnings



Sources: Ministry of Internal Affairs and Communications; Ministry of Health, Labour and Welfare; Bank of Japan.
 Notes: 1. Figures for low-volatility CPI items and scheduled cash earnings of full-time employees are year-on-year percentage changes, while those for the trend component of the CPI for services are the 6-quarter backward moving averages of annualized quarter-on-quarter percentage changes. Figures for scheduled cash earnings of full-time employees before 1994 are those for regular employees. Moreover, figures from 2016 onward are based on continuing observations following the sample revisions.
 2. Figures for the contribution of wage factors to CPI changes are based on the relationship between the CPI and wages, estimated using a 4-variable VAR model comprising import prices (yen basis), the output gap, wages (scheduled cash earnings of full-time employees), and price indices for low-, medium-, and high-volatility items in the CPI. The estimates are obtained using 20-year rolling regressions for low-, medium-, and high-volatility CPI items.
 3. Figures for the trend component of the CPI for services are the composite of the sector-specific price trend for services and the common trend in services prices and wages. The figures are estimated using category-level services prices and industry-level scheduled cash earnings.

³⁰ For details of each indicator, see "Recent Developments in the Linkage between Wages and Prices," *Bank of Japan Review Series*, forthcoming.

(Box 4) Approaches to Examining Underlying Inflation

In forecasting consumer price inflation, it is important to capture the underlying inflation trend by examining the factors that fundamentally drive price changes and excluding the effects of temporary fluctuations, such as in input prices.

Capturing an underlying inflation trend is not an easy task, even under normal circumstances, and it is especially difficult in the current phase. The reason is that price inflation in the current phase is characterized by two notable components: (1) cost-push inflation triggered by the sharp rise in import prices and (2) the intensification of the virtuous cycle between wages and prices, where price increases have been accompanied by wage increases resulting from changes in firms' wage- and price-setting behavior following the first component (Chart B4-1). The direct impact of the first component is likely to fade once the rise in import prices comes to a halt, and in this sense it can be regarded as a temporary change (Chart B4-2). On the other hand, the effect of the second component is expected to push up prices in the long run by making price developments better reflect domestic supply and demand conditions and by raising inflation expectations. Therefore, in the current phase, it is important to extract the second component in order to capture the underlying inflation trend. Given the specific nature of the current phase, this box presents three approaches to examining underlying inflation.

Chart B4-1: Price Developments in the Current Phase (Conceptual Diagram)

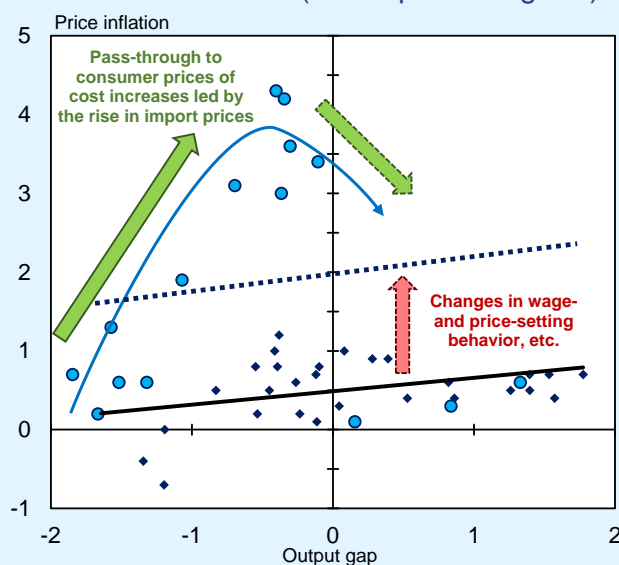
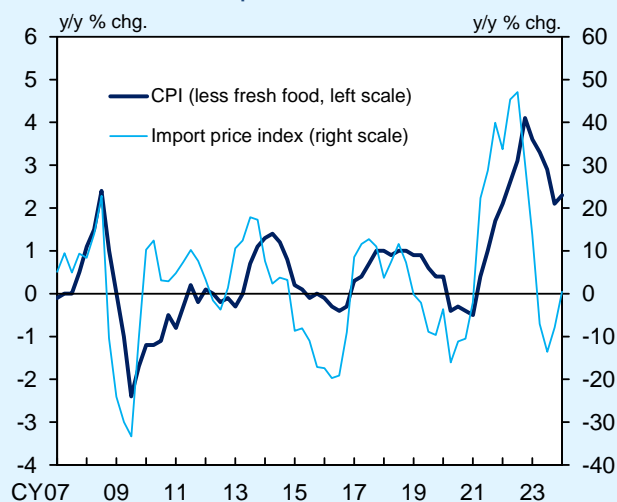


Chart B4-2: Import Prices and the CPI



Sources: Bank of Japan; Ministry of Internal Affairs and Communications.
 Note: Figures of the import price index are on a yen basis. The CPI figures are staff estimates and exclude mobile phone charges and the effects of the consumption tax hikes, policies concerning the provision of free education, and travel subsidy programs.

The first approach is to construct indicators from price statistics that (1) are less susceptible to temporary fluctuations, such as in import prices, and (2) reflect underlying developments such as changes in labor costs. As for the former, the Bank has conventionally used consumer price indicators that exclude highly volatile items (such as fresh food and energy) and indicators that use information on the distribution of price changes (such as the trimmed mean, the weighted median, and the mode); however, in the current phase, these indicators, like the CPI itself, have risen sharply since prices of an extremely wide range of items have shown large increases in the wake of the rise in import prices.³¹ Therefore, the Bank has recently developed a new indicator that extracts *low-volatility items*, which are less susceptible to temporary factors, by classifying items based on their rate of price change (Chart B4-3[1]).³² While this indicator remained close to zero percent for the past 25 years or so, it has been rising gradually recently.

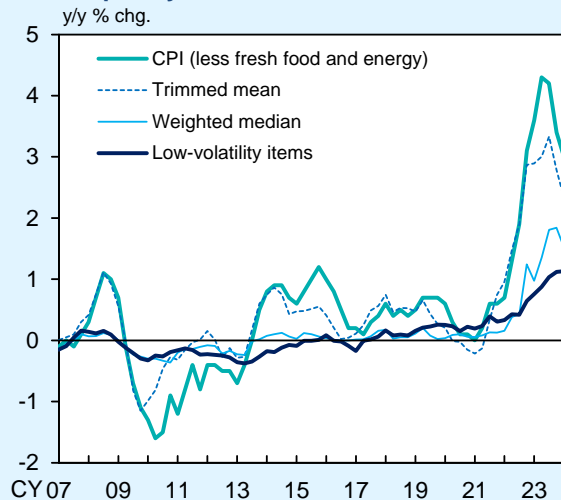
Meanwhile, with regard to the latter, i.e., indicators reflecting developments in labor costs, one method is to use a model to extract the part of changes in consumer prices that can be regarded as due to *wage factors*, while another method would be to extract the trend component of the CPI for services, where labor costs account for a

³¹ The Bank has been compiling various measures of underlying inflation for many years and regularly releases some of them on its website. For details, see "Measures of Underlying Inflation" under Research Data on the Bank's website.

³² For details, see "Recent Developments in the Linkage between Wages and Prices," *Bank of Japan Review Series*, forthcoming. The Review article also focuses on cost information for items that make up the CPI and presents developments in items with a low share of import costs to total costs and items with a high share of labor costs to total costs.

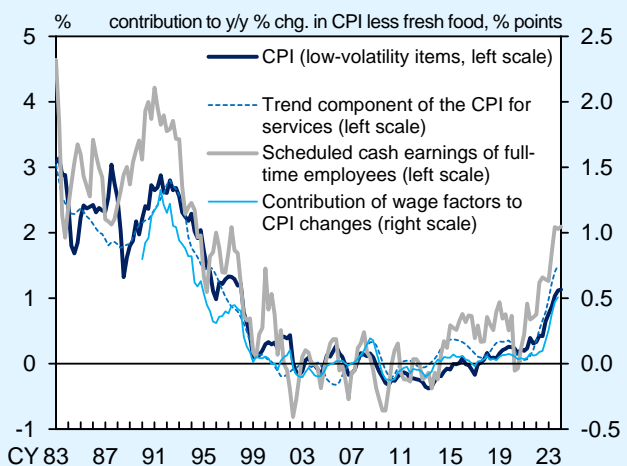
Chart B4-3: Measures of Underlying Inflation Based on Price Statistics

1. Indicators Excluding Items Susceptible to Temporary Fluctuations



Sources: Bank of Japan; Ministry of Internal Affairs and Communications.
 Notes: 1. The CPI figures are staff estimates and exclude mobile phone charges and the effects of the consumption tax hikes, policies concerning the provision of free education, and travel subsidy programs.
 2. Low-volatility items are items that fall into the bottom third in terms of their volatility using long-term time series data for the CPI (less fresh food).

2. Indicators Likely Reflecting Wage Developments



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

Notes: 1. Figures for low-volatility CPI items and scheduled cash earnings of full-time employees are year-on-year percentage changes, while those for the trend component of the CPI for services are the 6-quarter backward moving averages of annualized quarter-on-quarter percentage changes. Figures for scheduled cash earnings of full-time employees before 1994 are those for regular employees. Moreover, figures from 2016 onward are based on continuing observations following the sample revisions.

2. Figures for the contribution of wage factors to CPI changes are based on the relationship between the CPI and wages, estimated using a 4-variable VAR model comprising import prices (yen basis), the output gap, wages (scheduled cash earnings of full-time employees), and price indices for low-, medium-, and high-volatility items in the CPI. The estimates are obtained using 20-year rolling regressions for low-, medium-, and high-volatility CPI items.

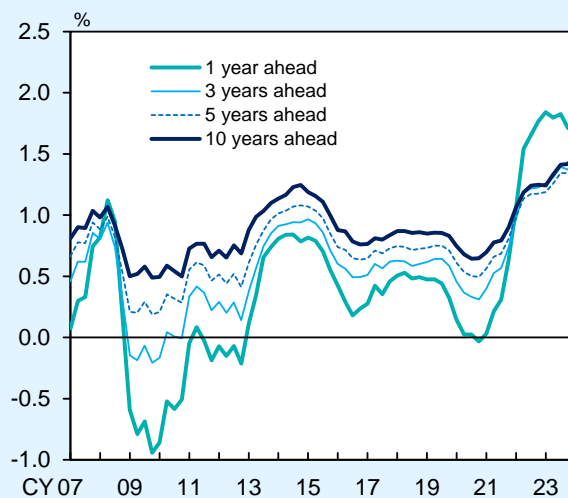
3. Figures for the trend component of the CPI for services are the composite of the sector-specific price trend for services and the common trend in services prices and wages. The figures are estimated using category-level services prices and industry-level scheduled cash earnings.

large share in overall costs (Chart B4-3[2]). These indicators have been rising moderately in recent years, and their developments are similar to those in wages (scheduled cash earnings of full-time employees), which means they may be useful for examining the linkage between wages and prices.

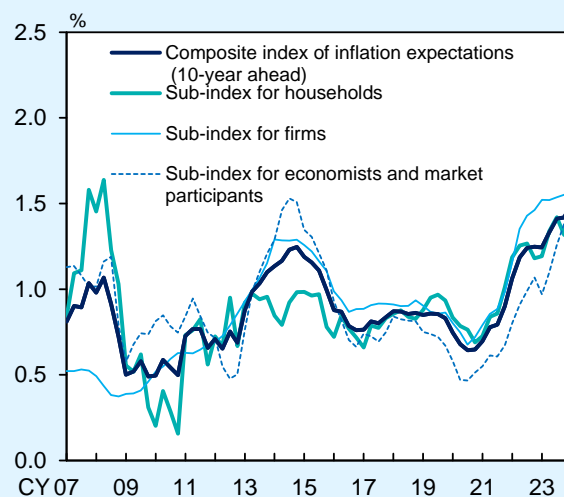
The second approach is to focus on indicators related to inflation expectations, which represent people's perceptions of price developments.³³ However, such indicators of inflation expectations vary across economic agents and forecast horizons, and have different meanings, statistical characteristics, and biases. In addition to carefully examining each of the individual indicators (Chart 39), the Bank has constructed a composite index that aggregates the information contained in each of the indicators using statistical methods.³⁴ This composite index of inflation expectations has recently been hovering around the past 20-year peaks for all horizons (Chart B4-4[1]). A more detailed look shows that 1-year-ahead inflation expectations have declined somewhat in an adaptive manner that reflects the decline in actual inflation, while longer-term inflation expectations have continued to rise moderately. Moreover, the sub-indexes of 10-year inflation expectations for households, firms, and economists and market participants all have been increasing recently (Chart B4-4[2]).

Chart B4-4: Measures of Underlying Inflation Based on Indicators of Inflation Expectations

1. Composite Index of Inflation Expectations, by Forecast Horizon



2. Composite Index of 10-Year-Ahead Inflation Expectations, by Type of Economic Agents



Sources: Bank of Japan; QUICK, "QUICK Monthly Market Survey <Bonds>"; Consensus Economics Inc., "Consensus Forecasts"; Bloomberg.

Note: Based on the first principal component for each forecast horizon extracted from the following six indicators: two indicators for households from the *Opinion Survey on the General Public's Views and Behavior* (for qualitative and quantitative questions), one indicator for firms from the *Tankan*, and three indicators for economists and market participants from the QUICK Survey, the Consensus Forecasts, and data based on inflation swap rates. Estimated using data as of April 12. Data for firms before 2014 are obtained from the following paper: Nakajima, J. (2023), "Estimation of Firms' Inflation Expectations Using the Survey DI," IER Discussion Paper Series A.749, Hitotsubashi University.

³³ Conceptually, medium- to long-term inflation expectations correspond to the intercept of the Phillips curve (i.e., the intersection with the vertical axis) shown in Chart B4-1.

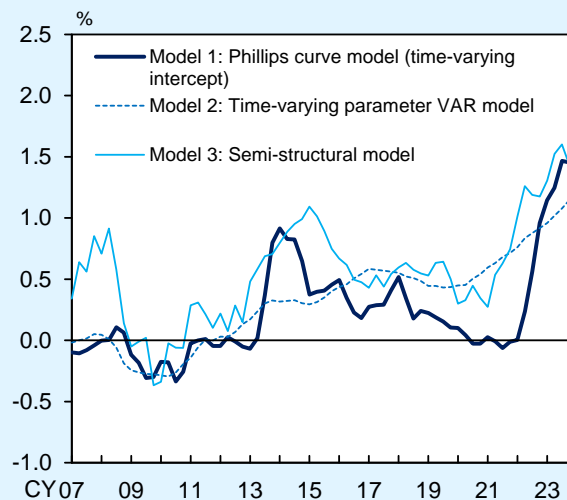
³⁴ Specifically, using principal component analysis, the common components of each indicator are extracted. Moreover, the mean and variance of the aggregate indicators are based on the inflation expectations of economists and market participants, which have relatively small biases. For details, see "Assessing Measures of Inflation Expectations: A View from Term Structure and Forecasting Power," *Bank of Japan Review Series*, forthcoming.

The third approach is to construct economic models and then estimate indicators of trend inflation using statistical methods. Trend inflation here is defined as the long-run value that actual inflation could converge to in the absence of additional shocks to the economy. While the literature provides a variety of models to estimate trend inflation, this box focuses on three. The first is a Phillips curve model with a time-varying intercept (Model 1). The second and third models focus not only on the relationship between prices and economic activity, but also on that between prices and wages; namely, a vector autoregressive (VAR) model that captures the changing relationships between price inflation, wage growth, and economic activity over time (Model 2), and a semi-structural model that assumes short- and long-run relationships between price inflation, wage growth, and inflation expectations (Model 3).

The estimation results in Chart B4-5 show that trend inflation estimates have gradually increased in all models. It should be noted, however, that the results need to be interpreted with some caution since they largely depend on the assumptions made in the models and as the results may be revised when new data become available.

All three approaches support, to varying degrees, the view that underlying inflation in Japan has been rising. It should be noted that all of the approaches presented in this box have limitations, such as the fact that they are based on specific assumptions. In particular, individual estimates and short-term changes in them should be interpreted with considerable latitude. To

Chart B4-5: Measures of Underlying Inflation Based on Macroeconomic Models (Estimates of Trend Inflation)



Sources: Bank of Japan; Ministry of Health, Labour and Welfare; Ministry of Internal Affairs and Communications; Cabinet Office; Google Trends; QUICK, "QUICK Monthly Market Survey <Bonds>"; Consensus Economics Inc., "Consensus Forecasts"; Bloomberg.

- Notes: 1. Model 1 is based on a Phillips curve model with regime-switching intercept and slope. Its time-varying intercept is regarded as trend inflation. For details, see Nakajima, J. (2023), "Estimating Trend Inflation in a Regime-Switching Phillips Curve," IER Discussion Paper Series A.750, Hitotsubashi University.
2. Model 2 is based on a time-varying parameter VAR model with four variables: the CPI inflation rate, the output gap, import price growth, and wage growth. Trend inflation is defined as the long-run value that actual inflation could converge to for each date. For details, see Rudd, J. B. (2020), "Underlying Inflation: Its Measurement and Significance," FEDS Notes, September 18.
3. Model 3 is based on a semi-structural model with four endogenous variables: the CPI inflation rate, short- and long-term inflation expectations, and wage growth. Trend inflation is defined as the long-run value that actual inflation could converge to (400-quarter ahead value in the simulation) for each date. For details, see Nakamura, K. et al. (2024), "What Caused the Pandemic-Era Inflation?: Application of the Bernanke-Blanchard Model to Japan," Bank of Japan Working Paper Series, 24-E-1.

comprehensively assess the underlying inflation, it is necessary to take a variety of perspectives into account, including anecdotal information from firms, in addition to the analyses presented here.

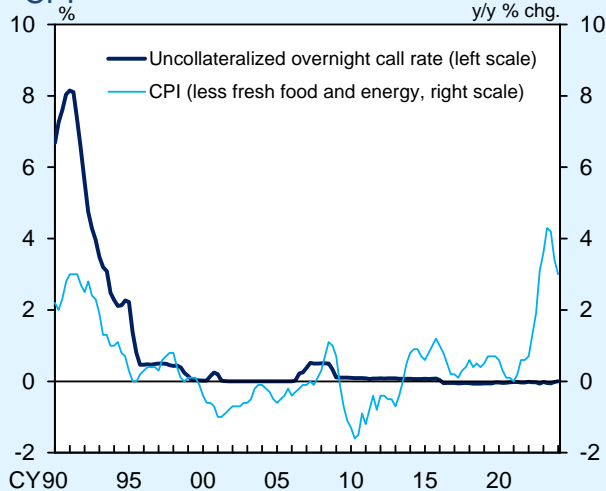
(Box 5) Assessing Financial Conditions in Terms of Interest Rates

In general, monetary easing by central banks is undertaken with the intention of stimulating aggregate demand and employment by creating accommodative financial conditions, which in turn pushes up wages and prices by tightening labor market conditions. In this context, the degree of monetary accommodation needs to be assessed broadly in terms of developments in interest rates, firms' funding conditions, and financial market developments. This box provides an overview of ways to assess financial conditions, focusing on interest rate developments.

From a theoretical point of view, the following three points are important to bear in mind when assessing financial conditions in terms of interest rates. First, a low nominal interest rate does not necessarily imply a highly accommodative environment. While short-term interest rates in Japan have remained close to 0 percent for a long period of time, since the late 1990s, the average inflation rate from 2000 to the early 2010s was below 0 percent (Chart B5-1). When people expect prices to fall in the future, they have less incentive to borrow for the purpose of consumption or investment. Therefore, in terms of decision-making by economic agents, it is important to look at the real interest rate, which is the nominal interest rate minus the expected rate of inflation.

As described in Box 4, there are various measures of inflation expectations, and their levels should be interpreted with some caution.

Chart B5-1: Nominal Short-Term Rate and CPI



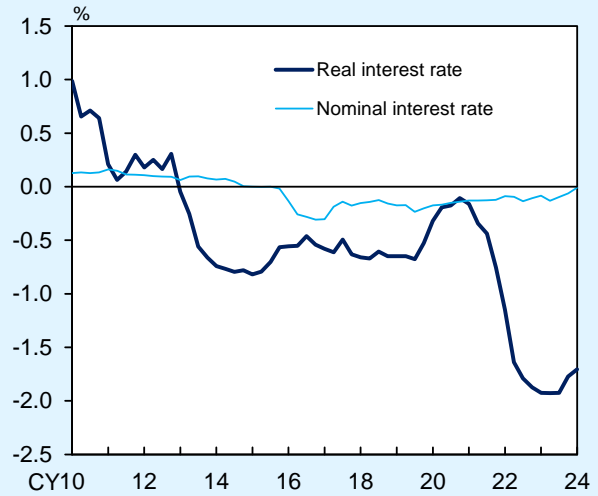
Sources: Bank of Japan; Ministry of Internal Affairs and Communications.
Note: The CPI figures are staff estimates and exclude mobile phone charges and the effects of the consumption tax hikes, policies concerning the provision of free education, and travel subsidy programs.

As such, the composite indicator of inflation expectations -- an aggregate of these various measures with some assumptions -- is used to estimate the level of real interest rates at the macro level (Chart B5-2). It suggests that, although nominal interest rates for one-year maturity have fluctuated only slightly, short-term (one-year) real interest rates, reflecting higher inflation expectations, (1) have generally remained negative following the introduction of Quantitative and Qualitative Monetary Easing (QQE) in 2013 and (2) have become even more negative since 2022. Meanwhile, long-term (10-year) real interest rates (1) have been clearly negative since 2013, mainly due to a substantial decline in nominal interest rates. Moreover, (2) despite a moderate rise in nominal interest rates from 2022, real interest rates have been more or less unchanged, mainly because of a simultaneous increase in long-term inflation expectations.

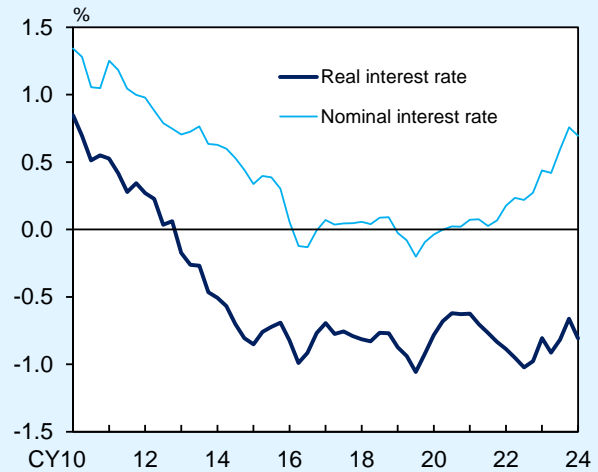
Second, for any given real interest rate level, the impact of real interest rates differs between economies with strong and weak funding demand. For example, in an economy with a high potential growth rate, the real interest rate level that is neutral to economic activity and prices -- the so-called natural rate of interest -- also tends to be higher, so the easing effects of any given real interest rate level will be larger. For this reason, the real interest rate gap -- i.e., the difference between the real interest rate and the natural interest rate -- is often used as an indicator to

Chart B5-2: Real Interest Rates by Maturity

1. 1-Year



2. 10-Year



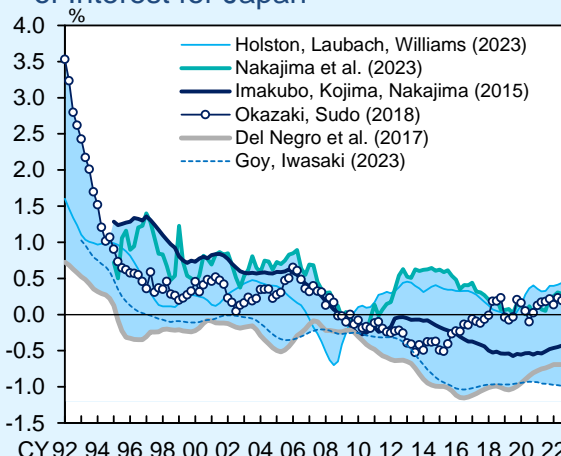
Sources: Bank of Japan; QUICK, "QUICK Monthly Market Survey <Bonds>"; Consensus Economics Inc., "Consensus Forecasts"; Bloomberg.
 Note: Figures for real interest rates for each maturity are calculated as government bond yields minus the composite index of inflation expectations (staff estimates) for the corresponding maturity.

assess the degree of monetary accommodation.³⁵ A larger negative real interest rate gap indicates more accommodative financial conditions.

That said, since the natural rate of interest cannot be directly observed in the real world, it must be estimated based on some kind of economic model. As shown in Chart B5-3, all estimates of the natural interest rate using various models show a decline in the long run. At the same time, there is considerable variation in their levels, meaning that it is difficult to specify the level of the natural interest rate.³⁶

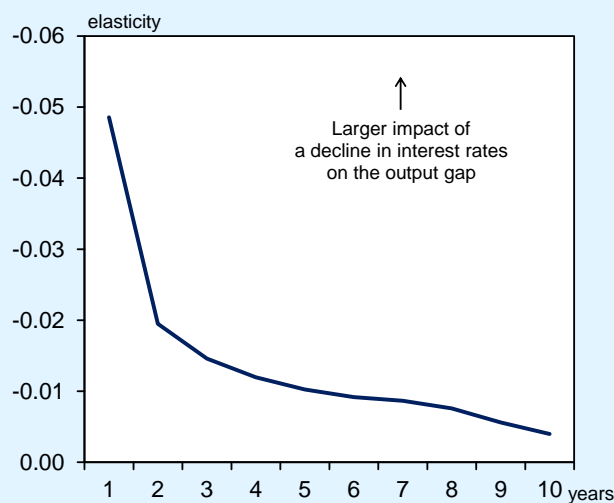
Third, it is also important to assess financial conditions by taking account of their impact on the real economy. The Bank's *Comprehensive Assessment* in 2016 shows that the effects of a decline in interest rates on the real economy are relatively large in the case of short- to medium-term interest rates and become smaller for longer maturities (Chart B5-4). Therefore, it should be noted that the impact of a decline in interest rates on the real economy may differ by maturity. In addition, as pointed out at the beginning of this box, the degree of monetary

Chart B5-3: Estimates of the Natural Rate of Interest for Japan



Sources: Bank of Japan; Ministry of Finance; Ministry of Health, Labour and Welfare; Cabinet Office; Ministry of Internal Affairs and Communications; Bloomberg; Consensus Economics Inc., "Consensus Forecasts."
 Note: The estimates are based on staff calculations using the models proposed in the different papers. The shaded area indicates the range of natural interest rate estimates from the minimum to the maximum.

Chart B5-4: Effects of a Decline in Interest Rates on the Output Gap, by Maturity



Sources: Bank of Japan; QUICK, "QUICK Monthly Market Survey <Bonds>"; Consensus Economics Inc., "Consensus Forecasts"; Bloomberg.
 Note: For details of the methodology, see Appendix 8 in the *Comprehensive Assessment* released in September 2016. The results are re-estimated using the latest data.

³⁵ In standard macroeconomic models, an increase in the degree of monetary accommodation, as measured by the real interest rate gap, is assumed to have a positive impact on the output gap. Previous studies such as Laubach and Williams (2003) estimated the natural rate of interest based on this relationship.

Laubach, T. and J. C. Williams (2003), "Measuring the Natural Rate of Interest," *The Review of Economics and Statistics*, vol. 85 (4): 1063-1070.

³⁶ For details on the estimation methods, see the presentation material by the Monetary Affairs Department, "The Effects and Side Effects of Unconventional Monetary Policy" (available only in Japanese), reported at the first workshop on the "Review of Monetary Policy from a Broad Perspective."

accommodation can also vary depending on factors other than developments in interest rates -- including firms' funding conditions, such as banks' lending stance and credit risk premiums, and developments in financial markets, such as stock prices and foreign exchange rates.

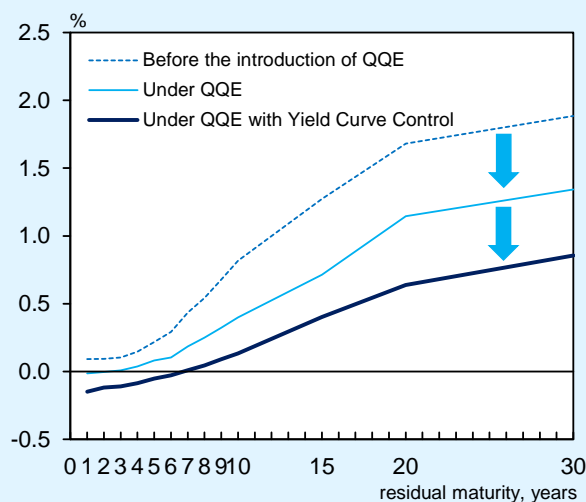
As seen above, to grasp financial conditions in Japan, it is important to make a comprehensive assessment based not only on nominal interest rates but also on real interest rates -- i.e., nominal interest rates minus inflation expectations -- and the natural rate of interest, while carefully examining the impact of financial conditions on the real economy.

(Box 6) Impact of the BOJ's JGB Purchases on the Yield Curve

The Bank has purchased JGBs to push down the overall yield curve, which in turn has affected economic activity and prices (Chart B6-1). This box attempts to quantitatively assess the impact on the formation of long-term interest rates of policy measures such as large-scale JGB purchases, the setting of a target level for long-term interest rates, and fixed-rate purchase operations, under the previous policy framework of Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control.

Conceptually, the effects of large-scale central bank purchases of government bonds on long-term interest rates are often divided into (1) the flow effect and (2) the stock effect. The flow effect is the direct impact that central bank government bond purchases in the secondary market have in terms of pushing down yields on the bonds being purchased. On the other hand, the stock effect refers to the impact that the central banks' large holdings of government bonds have in terms of pushing down interest rates of various maturities by affecting the allocation of risk among the market participants. Recent empirical studies suggest that the stock effect tends to be more persistent than the flow effect.³⁷ Using the demand and supply curve framework shown in Chart B6-2, the stock effect

Chart B6-1: Yield Curves



Source: Bloomberg.
Note: Figures for "before the introduction of QQE" are the average from January 3, 2012, to April 3, 2013; for "under QQE," the average from April 4, 2013, to September 20, 2016; and for "under QQE with Yield Curve Control," the average from September 21, 2016, to March 18, 2024.

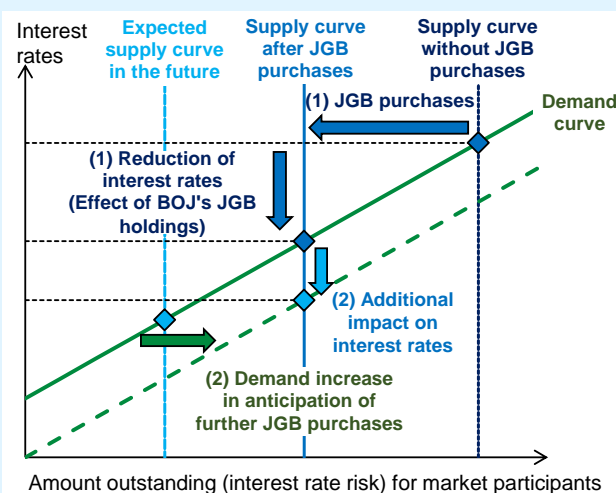
³⁷ See, for example, the following studies.

Bernanke, B. S. (2020), "The New Tools of Monetary Policy," *American Economic Review*, vol. 110 (4): 943-983.

Sudo, N. and M. Tanaka (2021), "Quantifying Stock and Flow Effects of QE," *Journal of Money, Credit and Banking*, vol. 53 (7): 1719-1755.

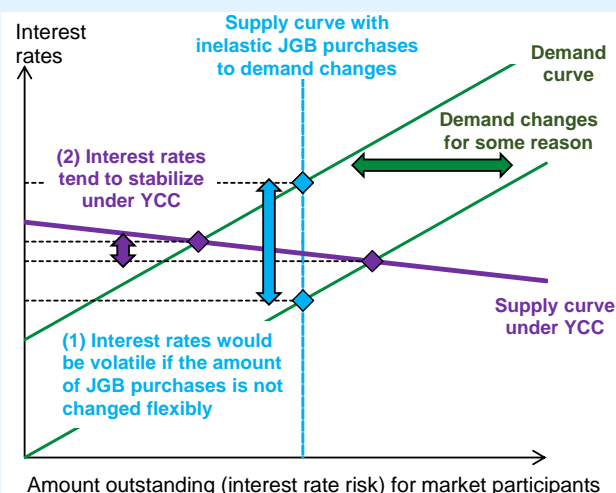
can be summarized as follows: larger central bank holdings of long-term government bonds reduce the total amount of interest rate risk for market participants, which lowers interest rates -- in particular, the term premium -- through new risk-taking by such participants. Moreover, this impact could occur before actual government bond purchases are made -- which is the so-called announcement effect -- as market participants anticipate that the central bank will purchase them in the future.

Chart B6-2: Stock Effect of JGB Purchases



QQE with Yield Curve Control, introduced in September 2016, affects the formation of market interest rates through large-scale purchases of JGBs. From this perspective, it can be classified as a form of central bank purchases of government bonds, and the stock effect plays an important role in affecting long-term interest rates. However, since Yield Curve Control (YCC) is a framework that directly targets the level of long-term interest rates, its impact differs in several respects. First, as shown in Chart B6-3, under the framework without YCC, which targets the amount of purchases and/or holdings, interest rates could fluctuate substantially in response to changes in demand for JGBs; on the other hand, under YCC, the range within which long-term interest rates are allowed to fluctuate is fixed, so that fluctuations in interest rates are stabilized, with the amount of purchases determined endogenously in response to changes in the demand for JGBs. Second, if the Bank conducts YCC to keep interest rates strictly between the upper and lower bounds, interest rates may fall within this range in a self-fulfilling manner without

Chart B6-3: Effect of Yield Curve Control on Interest Rate Fluctuations



purchases actually being made, as market participants anticipate the conduct of YCC.³⁸

Although YCC has such positive effects, it should be noted that it may also lead to a deterioration in market functioning, such as suppressing the price discovery function of the market and its liquidity. Moreover, when interest rates nearly reached the upper bound under the strict conduct of YCC from around mid-2022 to early 2023, the negative impact on market functioning increased, resulting in, for example, high volatility in other financial markets, including the foreign exchange market.

Chart B6-4 shows the results of estimating simple long-term interest rate models constructed on the basis of the above considerations. First, in order to capture the stock effect of JGB purchases in such a way that the models include the effects of market participants' expectations on the Bank's future JGB holdings, the variable "expected BOJ holdings of JGBs in the future" is constructed on the basis of certain assumptions and used as an explanatory variable. Second, in order to capture the effects of setting a target range under YCC, the models include the probabilities that the targeted long-term yield exceeds the upper bound of the YCC range and that it exceeds the offer rate of "fixed-rate purchase operations for consecutive days," which are priced in the options market. As these probabilities increase, market

**Chart B6-4: Estimation Results:
Long-term Interest Rate Models**

	Model 1	Model 2
Dependent variable:	10-year JGB yields	10-year JGB yields (sum of estimated coefficients for expected short-term interest rate component and term premium)
Expected BOJ holdings of JGBs in the future (share in total outstandings)	-0.024 ***	-0.021 ***
Probability that the upper bound of the YCC range is exceeded	-0.008 **	-0.037 ***
Probability that the offer rate of "fixed-rate purchase operations for consecutive days" is exceeded	-0.023 ***	-0.053 ***
Probability that the lower bound of the YCC range is exceeded	-0.002	0.028 ***
10-year U.S. Treasury yields	0.230 ***	0.246 ***
CPI (less fresh food and energy)	0.055 ***	0.083 ***
Uncollateralized overnight call rate	0.583 ***	0.777 ***
Constant	0.537 ***	0.473 ***
Adjusted R-squared	0.936	0.919
Estimation period	January 1997 to December 2023	

Sources: Bank of Japan; Ministry of Internal Affairs and Communications; Bloomberg; LSEG Eikon.

Notes: 1. *** and ** denote statistical significance at the 1 and 5 percent levels, respectively.

2. Expected BOJ holdings of JGBs in the future denote the estimated share of the BOJ's JGB holdings in the total amount outstanding 2 years ahead of each month, which would be realized under the assumption that the BOJ continues to purchase the same amount of JGBs in the next 2 years as in the corresponding month (up to September 2016) or purchase JGBs based on the monthly purchase schedule at that time (from October 2016). The share is calculated on the basis of the interest rate risk. The probability that the upper bound of the YCC range (the lower bound of the YCC range or the offer rate of the "fixed-rate purchase operations for consecutive days") is exceeded is the probability that long-term interest rates will exceed such level after 3 months, which is priced in the options market.

3. The coefficients in Model 2 are the sum of the coefficients of the regression results for models with the two components -- the expected short-term interest rate component and the term premium -- of the 10-year interest rates as dependent variables.

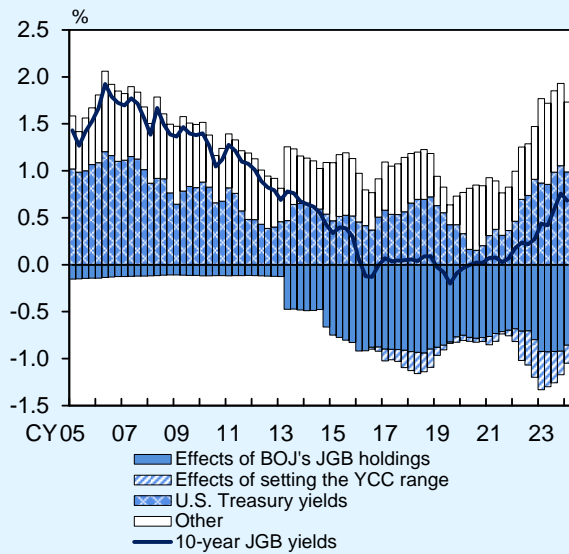
³⁸ Studies (e.g., Hattori and Yoshida, 2023) show that, after the introduction of YCC, fluctuations in 10-year interest rates have indeed been contained.

Hattori, T. and J. Yoshida (2023), "Yield Curve Control," *International Journal of Central Banking*, December 2023: 403-438.

participants' expectations that the likelihood of the Bank's response to prevent interest rates from rising becomes high in the future will be factored into market prices in advance. The estimation results show that all variables, including other control variables, have a statistically significant impact. Using these results, Chart B6-5, which presents a decomposition of developments in long-term interest rates, shows that long-term interest rates are pushed down by about 1.0 percentage point on average, mainly through the stock effect, although the results from such simple models should be interpreted with considerable latitude.³⁹ Moreover, Chart B6-6 -- which shows the results when applying the same models to interest rates with different maturities and decomposes the changes in the yield curve -- indicates that, since the introduction of QQE in 2013, large-scale monetary easing has pushed down not only 10-year interest rates but the yield curve as a whole.

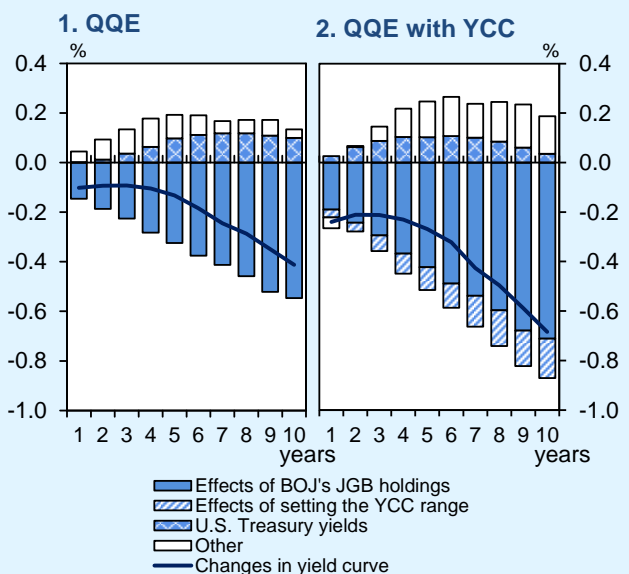
In March 2024, the Bank changed its policy framework from the previous large-scale monetary easing, including the framework of QQE with Yield Curve Control, and decided to conduct monetary policy by guiding the short-term interest rate as a primary policy tool. As a result, long-term interest rates are now basically formed in financial markets, and the effects of setting the YCC range seen in Chart B6-5 in terms of putting downward pressure on long-term interest rates are likely to

Chart B6-5: Sources of Changes in Long-Term Interest Rates



Sources: Bank of Japan; Ministry of Internal Affairs and Communications; Bloomberg; LSEG Eikon.
 Note: Figures are calculated based on the average coefficients of Models 1 and 2 in Chart B6-4. "Effects of BOJ's JGB holdings" are calculated on the basis of the coefficients on the expected BOJ holdings of JGBs in the future, and "effects of setting the YCC range" are calculated based on the coefficients on the probabilities in Chart B6-4 (such as the probability that the upper bound of the YCC range is exceeded).

Chart B6-6: Sources of Changes in the Yield Curve



Sources: Bank of Japan; Ministry of Internal Affairs and Communications; Bloomberg; LSEG Eikon.
 Notes: 1. In the left-hand chart, figures are the average from April 2013 to August 2016 relative to the average from January 2012 to March 2013. In the right-hand chart, figures are the average from September 2016 to March 2024 relative to the average from January 2012 to March 2013.
 2. Figures are calculated on the basis of Models 1 and 2 in Chart B6-4, but for each maturity from 1 year to 10 years. In the estimations, U.S. Treasury yields for the corresponding maturities are used.

³⁹ In the March 2021 *Assessment for Further Effective and Sustainable Monetary Easing*, the Bank shows the empirical results that its JGB purchases have significantly pushed down long-term interest rates by about 1.0 percentage point on average, using slightly different model specifications.

have shrunk substantially.⁴⁰ On the other hand, the Bank's JGB holdings are expected to remain at high levels for the time being. The basic ideas and estimation results described in this box imply that the Bank's ongoing purchases and holdings of JGBs will continue to affect the formation of the yield curve, mainly through the stock effect. The quantitative results presented here should be interpreted with considerable latitude as the effects of JGB purchases may differ over time. That said, based on these circumstances, the Bank will continue to achieve appropriate financial conditions while responding to developments in economic activity and prices by guiding the short-term interest rate as a primary policy tool.

⁴⁰ The Bank decided in the March 2024 Monetary Policy Meeting that, in the case of a rapid rise in long-term interest rates, it will make nimble responses by, for example, increasing the amount of JGB purchases, regardless of the monthly schedule of JGB purchases. Although it is difficult to quantify the effects of this statement using the analytical framework in this box since it does not indicate a specific target level of the long-term yield in advance, it is expected to contribute to the stable formation of long-term interest rates in a manner similar to the setting of an upper bound under YCC.

