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# *Outlook for Economic Activity and Prices*

*January 2025*



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

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## Outlook for Economic Activity and Prices (January 2025)

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

#### Summary

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- Japan's economy is likely to keep growing at a pace above its potential growth rate, with overseas economies continuing to grow 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, at around 2.5 percent for fiscal 2025, and at around 2 percent for fiscal 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, underlying CPI inflation is expected to increase gradually, since it is projected that, with a growing sense of labor shortage, the output gap will improve and 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, underlying CPI inflation is likely to be at a level that is generally consistent with the price stability target. Through fiscal 2025, rice prices are likely to be at high levels and the effects of the government's measures pushing down inflation will dissipate, and these factors are expected to make a positive contribution to the year-on-year rate of increase in the CPI (all items less fresh food).
  - Comparing the projections with those presented in the previous *Outlook for Economic Activity and Prices* (Outlook Report), the projected real GDP growth rates are more or less unchanged. The projected year-on-year rates of increase in the CPI (all items less fresh food) for fiscal 2024 and 2025 are higher, reflecting the rise in rice prices and the higher import prices stemming from factors such as the recent depreciation of the yen.
  - 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. In particular, with firms' behavior shifting more toward raising wages and prices recently, exchange rate developments are, compared to the past, more likely to affect prices.
  - With regard to the risk balance, risks to economic activity are generally balanced. Risks to prices are skewed to the upside for fiscal 2024 and 2025.
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<sup>1</sup> "The Bank's View" was decided by the Policy Board at the Monetary Policy Meeting held on January 23 and 24, 2025.

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

Japan's economy has recovered moderately, although some weakness has been seen in part. Overseas economies have grown moderately on the whole. Exports and industrial production have been more or less flat. Corporate profits have been on an improving trend 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 on a moderate increasing trend despite the impact of price rises and other factors. 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 3 percent recently, as services prices have continued to rise moderately, reflecting factors such as wage increases, and as the government's measures to reduce the household burden of higher energy prices have been scaled back, 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 Japan<sup>2</sup>**

### **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 continuing to grow moderately and as a virtuous cycle from income to spending gradually intensifies against the background of factors such as accommodative financial conditions.

The projected real GDP growth rates are more or less unchanged from those presented in the previous Outlook Report.

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 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, nominal wages are expected to keep increasing clearly, 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 continue increasing moderately, mainly reflecting the rise in wage growth. Private consumption is also projected to be underpinned, for the time being, by the

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<sup>2</sup> Each Policy Board member makes their forecasts taking into account the effects of past policy decisions and, with regard to the future conduct of policy, referring to views incorporated in financial markets that the policy interest rate will rise moderately.

government's initiatives such as the continuation of measures to reduce the household burden of higher gasoline and other prices, despite these measures being scaled back.

In the corporate sector, exports and production are likely to return to an uptrend, mainly due to a recovery in global demand for IT-related goods, as overseas economies continue to 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.<sup>3</sup> 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, at around 2.5 percent for fiscal 2025, and at around 2 percent for fiscal 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, underlying CPI inflation is expected to increase gradually, since it is projected that, with a growing sense of labor shortage, the output gap will improve and 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, underlying CPI inflation is likely to be at a level that is generally consistent with the price stability target. Through fiscal 2025, rice prices are likely to be at high levels and the effects of the government's measures pushing down inflation will dissipate, and these factors are expected to make a positive contribution to the year-on-year rate of increase in the CPI (all items less fresh food).

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<sup>3</sup> Under a specific methodology, Japan's recent potential growth rate is estimated to be around 0.5 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 high uncertainties over how factors such as advances in digitalization will affect the trends in productivity or labor supply.

Comparing the projections with those presented in the previous Outlook Report, the projected year-on-year rates of increase in the CPI (all items less fresh food) for fiscal 2024 and 2025 are higher, reflecting the rise in rice prices and the higher import prices stemming from factors such as the recent depreciation of the yen.

The outlook for the CPI (all items less fresh food) depends on the assumptions regarding crude oil prices and the government's 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 be at around 2 percent, mainly because services and other prices are expected to continue rising moderately, reflecting factors such as wage increases, and rice prices are likely to rise, although the effects of the pass-through to consumer prices of cost increases led by the past rise in import prices are projected to wane gradually.

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 have tightened 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. In this situation, upward pressure on wages and prices is likely to be stronger than suggested by the output gap, given that firms in many industries have started to face labor supply constraints.

Medium- to long-term inflation expectations have risen moderately. Firms' inflation outlook for general prices in the *Tankan* (Short-Term Economic Survey of Enterprises in Japan) has increased moderately. 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 nominal wages have increased clearly. In addition, with wages continuing to rise, there has been an increase in moves to reflect higher costs, such as increased personnel expenses and distribution costs, in selling prices. Regarding the outlook, with labor market conditions remaining tight, inflation expectations are expected to rise moderately, as changes in firms' wage- and price-setting behavior are likely to continue. 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. With regard to this year's annual spring labor-management wage negotiations, there have been many views expressed by firms stating that they will continue to raise wages steadily, following the solid wage increases last year.

Considering the above assessments, with a growing sense of labor shortage, 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, underlying CPI inflation 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. While attention has been drawn to uncertainties surrounding policy conduct in the United States, the U.S. economy has been solid, and global financial and capital markets have been stable on the whole. However, attention continues to be warranted on the possibility that these uncertainties surrounding policy conduct will have an impact not only on economic activity and prices in the United States, but also on the global economy and global financial and capital markets. In addition, in the United States and Europe, uncertainties remain regarding the impact of past policy interest rate hikes. Meanwhile, depending on factors such as the course of the situation surrounding Ukraine and the Middle East, downward pressure on overseas economies could heighten. Regarding the Chinese economy, there are high uncertainties surrounding the future pace of growth, as adjustment pressure has continued in the real estate and labor markets, and it is necessary to pay attention to how excessive supply capacity of some goods will affect global 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, factors such as heightened geopolitical risks and growing trade frictions could change the trend of globalization.

## **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 firms' wage- and price-setting behavior. Firms' behavior has shifted more toward raising wages and prices, and it is expected in the baseline scenario that the virtuous cycle between wages and prices will continue to intensify. However, given that firms, especially small and medium-sized firms, have continued to report that it has been difficult to pass on their employees' higher wages to their selling prices, it will be necessary to pay close attention to whether moves to pass on increases in costs, including wages, to selling prices will weaken with the waning of the effects of the pass-through of import prices to consumer 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 growing expectations that labor market conditions will continue to be tight. 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. In addition, with firms' behavior shifting more toward raising wages and prices recently, exchange rate developments are, compared to the past, more likely to affect prices.

## IV. Conduct of Monetary Policy

In the context of the price stability target, the Bank assesses the aforementioned economic and price situation from two perspectives and then outlines its thinking on the future conduct of monetary policy.<sup>4</sup>

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, at around 2.5 percent for fiscal 2025, and at around 2 percent for fiscal 2026. Meanwhile, underlying CPI inflation is expected to increase gradually, since it is projected that, with a growing sense of labor shortage, the output gap will improve and 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, underlying CPI inflation 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 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. Risks to prices are skewed to the upside for fiscal 2024 and 2025.

Examining risks on the financial side, overheating has generally not been seen in asset markets and financial institutions' credit activities, although attention continues to be warranted on the pace of increase in stock and real estate prices. 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

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<sup>4</sup> As for the examination from two perspectives in the context of the price stability target, see the Bank's statement released on January 22, 2013, entitled "The 'Price Stability Target' under the Framework for the Conduct of Monetary Policy."

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.

As for the conduct of monetary policy, while it will depend on developments in economic activity and prices as well as financial conditions going forward, given that real interest rates are at significantly low levels, if the aforementioned outlook for economic activity and prices will be realized, the Bank will accordingly continue to raise the policy interest rate and adjust the degree of monetary accommodation. With the price stability target of 2 percent, it 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.

### 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 2024	+0.4 to +0.6 [+0.5]	+2.6 to +2.8 [+2.7]	+2.1 to +2.3 [+2.2]
Forecasts made in October 2024	+0.5 to +0.7 [+0.6]	+2.4 to +2.5 [+2.5]	+1.9 to +2.1 [+2.0]
Fiscal 2025	+0.9 to +1.1 [+1.1]	+2.2 to +2.6 [+2.4]	+2.0 to +2.3 [+2.1]
Forecasts made in October 2024	+1.0 to +1.2 [+1.1]	+1.7 to +2.1 [+1.9]	+1.8 to +2.0 [+1.9]
Fiscal 2026	+0.8 to +1.0 [+1.0]	+1.8 to +2.1 [+2.0]	+1.9 to +2.2 [+2.1]
Forecasts made in October 2024	+0.8 to +1.1 [+1.0]	+1.8 to +2.0 [+1.9]	+1.9 to +2.2 [+2.1]

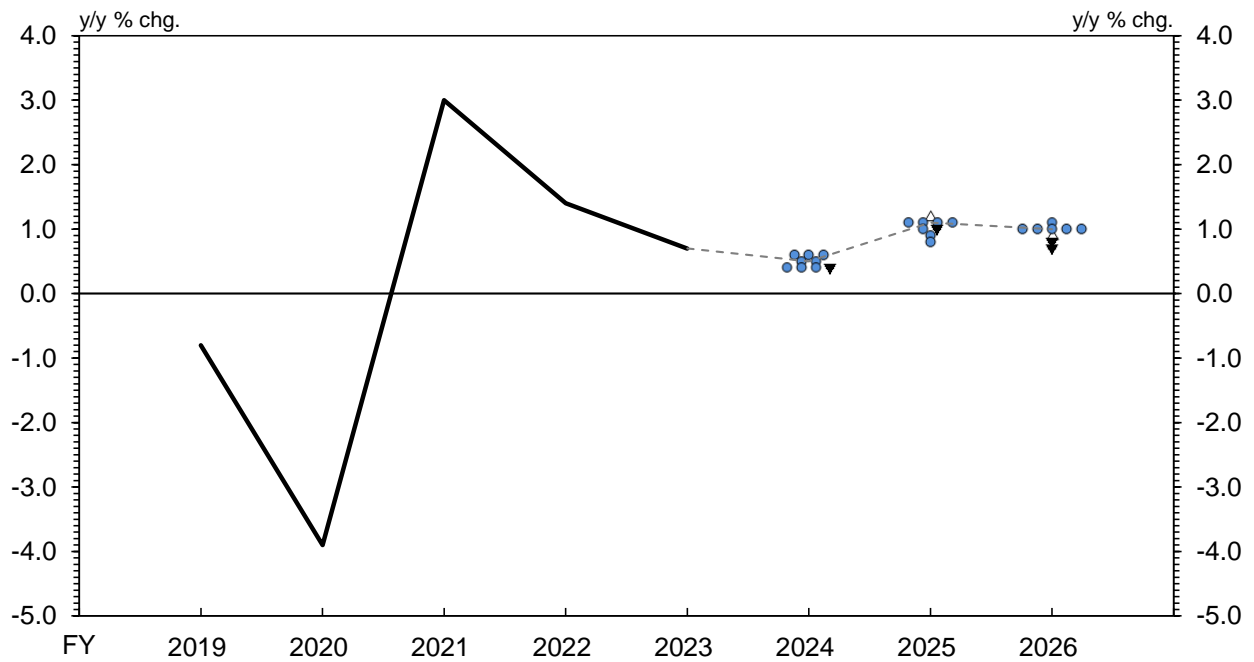
Notes: 1. Figures in brackets indicate the medians of the Policy Board members' forecasts (point estimates).

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.

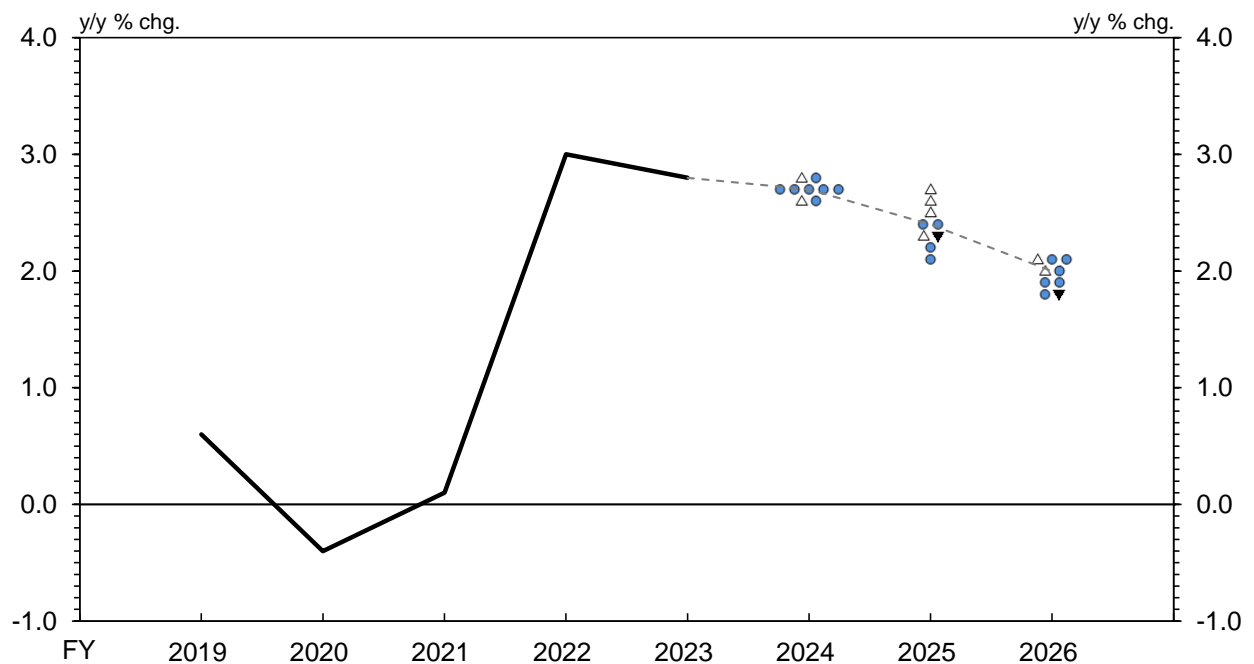
3. Each Policy Board member makes their forecasts taking into account the effects of past policy decisions and with reference to views incorporated in financial markets regarding the future conduct of policy.

## 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 Background<sup>5</sup>

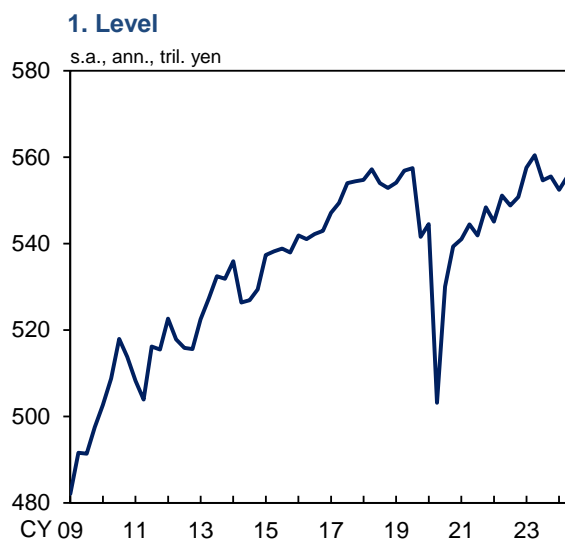
### I. Current Situation of Economic Activity and Its Outlook

#### A. Economic Developments

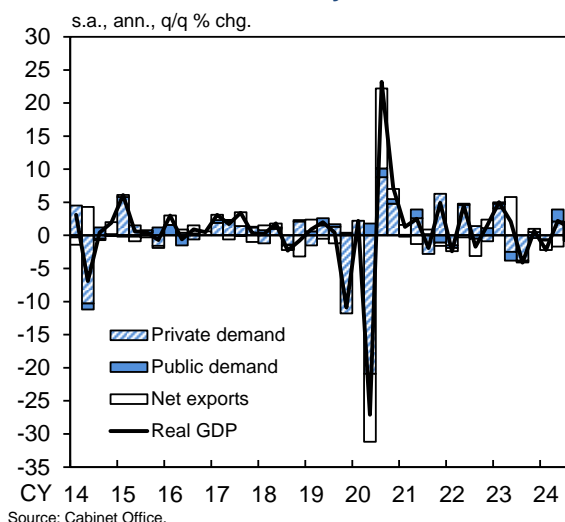
Japan's economy has recovered moderately, although some weakness has been seen in part.

The real GDP growth rate increased for two consecutive quarters: it registered 0.5 percent on a quarter-on-quarter basis for the April-June quarter of 2024, and 2.2 percent on an annualized basis, and then marked 0.3 percent on a quarter-on-quarter basis for the July-September quarter, and 1.2 percent on an annualized basis (Chart 1). Looking at the breakdown, private consumption increased, as services consumption remained on a moderate uptrend and as goods consumption rose, partly due to the effects of hot weather during the summer and stockpiling demand to prepare for natural disasters. These developments show that domestic demand has risen moderately. As for net exports, while exports increased due to a recovery in global demand for IT-related goods, an uptrend in imports of digital-related services led to an overall negative contribution to the real GDP growth rate. In this situation, the output gap -- which captures the utilization of labor and capital -- narrowed somewhat within negative territory in the July-September quarter (Chart 2).

Chart 1: Real GDP



**2. Annualized Quarterly Growth Rate**



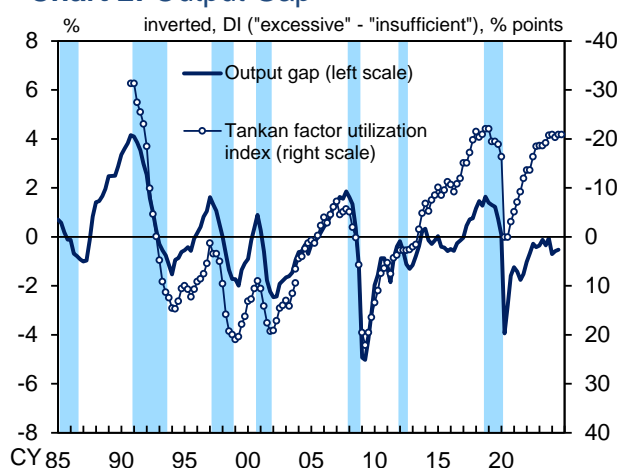
<sup>5</sup> "The Background" provides explanations of "The Bank's View" decided by the Policy Board at the Monetary Policy Meeting held on January 23 and 24, 2025.

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, exports and production have been more or less flat. Corporate profits have been on an improving trend and business sentiment has stayed at a favorable level. In this situation, business fixed investment has been on a moderate increasing trend. Business fixed investment plans (in nominal terms) in the December 2024 *Tankan* indicate that the year-on-year rate of increase in planned investment for fiscal 2024 is relatively high, compared with past December *Tankan* surveys. In the household sector, the employment and income situation has improved moderately. Under these circumstances, private consumption has been on a moderate increasing trend despite the impact of price rises and other factors.

Japan's economy is likely to keep growing at a pace above its potential growth rate, with overseas economies continuing to grow 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 with those presented in the previous Outlook Report, all projected growth rates are more or less unchanged.

The potential growth rate seems to have been at around 0.5 percent recently: while the downtrend in working hours reflecting working-style reforms, for example, has continued, growth in capital stock has accelerated and total factor productivity

**Chart 2: Output Gap**



Source: Bank of Japan.

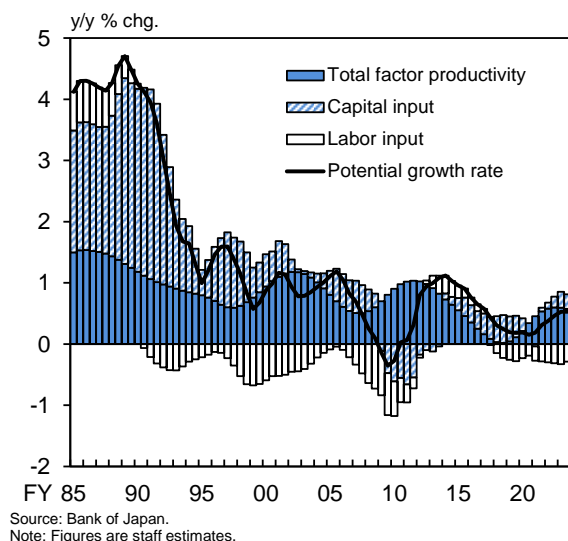
Notes: 1. Figures for the output gap are staff estimates.

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.

(TFP) has continued to grow moderately (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 various measures and by accommodative financial conditions.<sup>6</sup>

**Chart 3: Potential Growth Rate**



Details of the outlook for each fiscal year are as follows. In the second half of 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 continuing to grow moderately and accommodative financial conditions being maintained. Goods exports are likely to be flat. Inbound tourism demand is projected to keep increasing. Business fixed investment is expected

<sup>6</sup> 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.

to continue on an increasing trend, mainly on the back of accommodative financial conditions. In the household sector, nominal employee income is likely to continue to see a clear increase, reflecting a rise in employment on the back of an increase in domestic and external demand, as well as an acceleration in nominal wage growth. Moreover, government measures, such as those to reduce the household burden of higher energy prices, are projected to push up disposable income. In this situation, private consumption is expected to remain on a moderate increasing trend, despite being affected by price rises.

In fiscal 2025 and 2026, Japan's economy is expected to grow at a pace above its potential growth rate, with domestic and external demand rising. With overseas economies continuing to grow moderately, goods exports are likely to return to an uptrend and then increase moderately, mainly due to a recovery in global demand for IT-related goods. 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. In the household sector, regarding the employment situation, nominal employee income is likely to continue to see a clear increase. 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

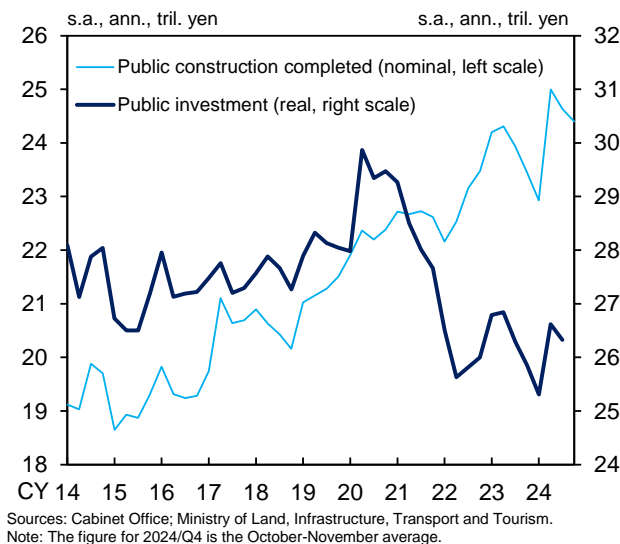
Public investment has generally been more or less flat, albeit with fluctuations (Chart 4). While construction based on the government's economic measures, including construction related to building national resilience, has progressed, the amount of public construction completed -- a coincident indicator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

As for the outlook, public investment is likely to be more or less flat.<sup>7</sup> Government consumption is projected to continue increasing moderately, reflecting an uptrend in healthcare and nursing care expenditures.

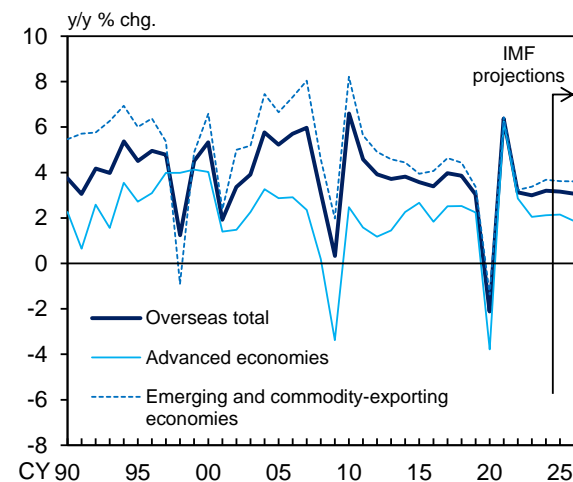
### Overseas Economies

Overseas economies have grown moderately on the whole (Chart 5). By region, the U.S. economy has grown firmly, mainly led by private consumption. European economies have

**Chart 4: Public Investment**



**Chart 5: Overseas Economies**



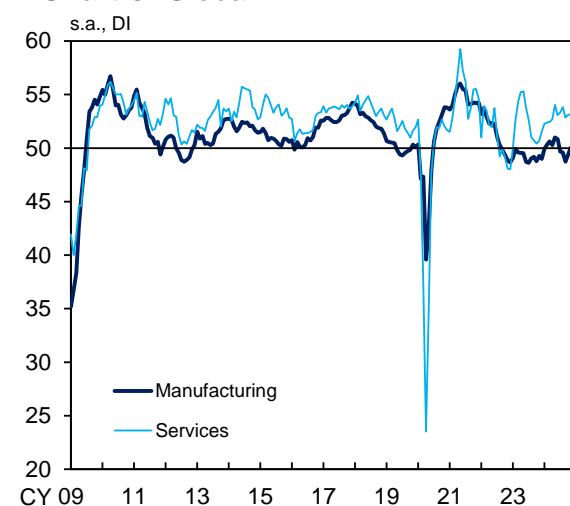
<sup>7</sup> The five-year acceleration measures for building national resilience with a project size of about 15 trillion yen were decided by the Cabinet in December 2020. In these measures, public investment projects for disaster prevention, disaster mitigation, and building national resilience are to be implemented intensively over five years from fiscal 2021 through fiscal 2025. The government's economic measures decided by the Cabinet in November 2024 also include efforts to implement the acceleration measures.

bottomed out, although weakness has remained in part. The pace of improvement in the Chinese economy has been on a slowing trend, with continued downward pressure from adjustments in the real estate and labor markets, although government policies have pushed up the economy recently. Emerging and commodity-exporting economies other than China have improved moderately on the whole, as exports have picked up, mainly led by IT-related goods. Among those in Asia, which have close links to Japan's economy, the ASEAN economies have improved moderately as exports have picked up. The NIEs economies also have improved moderately on the back of a recovery in exports, mainly led by IT-related goods, although the pace of improvement in domestic demand has continued to decelerate.

Looking at the Global PMI to see the current situation for the global economy, figures for the services industry have been clearly above 50 -- the break-even point between improvement and deterioration in business conditions -- while figures for the manufacturing industry have been at around 50 (Chart 6).

As for the outlook, overseas economies are projected to keep growing moderately. Looking at developments by region for the time being, the U.S. economy is likely to continue growing firmly. European economies are expected to pick up moderately. The Chinese economy is projected to continue to see moderate growth reflecting government support, despite the continued downward pressure from adjustments in the real estate and labor markets. Emerging and

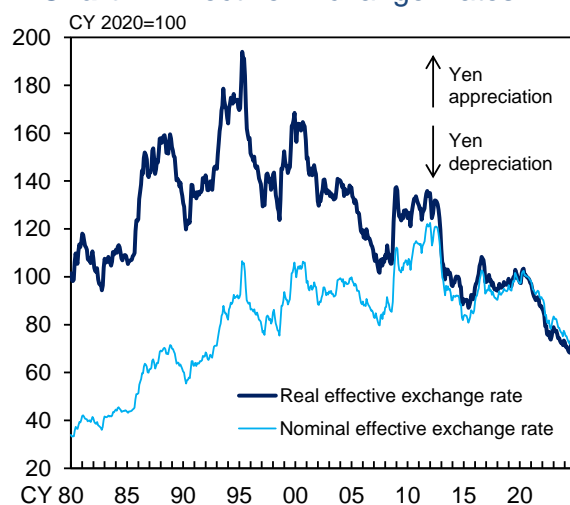
**Chart 6: Global PMI**



Source: Copyright © 2025 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.

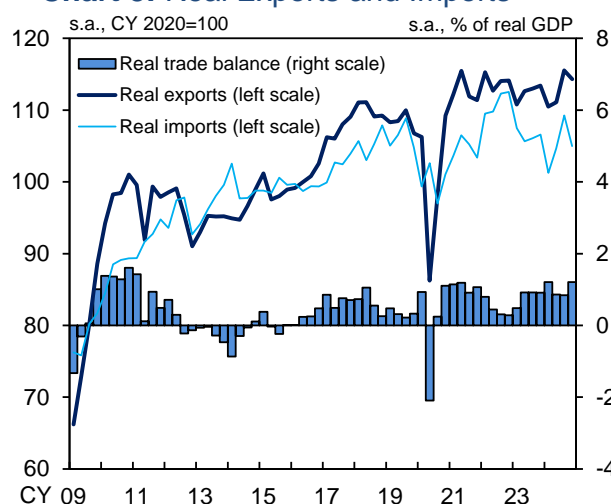
Note: Figures are based on the broad effective exchange rate indices. Figures prior to 1994 are calculated using the narrow indices.

commodity-exporting economies other than China are likely to continue to see moderate growth with external demand recovering.

## Exports and Imports

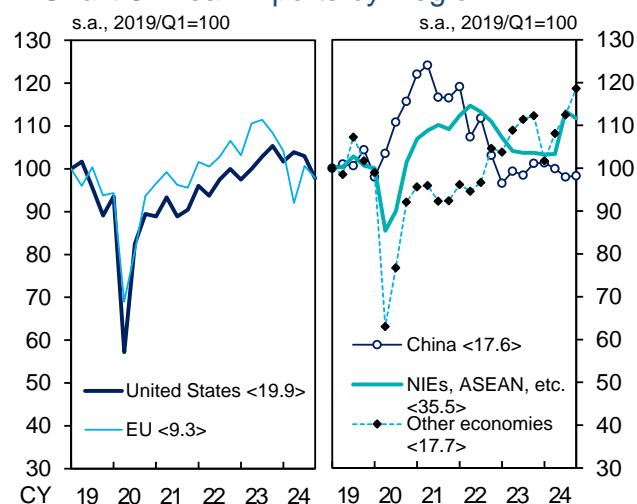
Exports have been more or less flat (Chart 8). By region, exports to the United States have declined recently, mainly affected by the dockworkers strike on the U.S. East Coast (Chart 9). Exports to Europe have been relatively weak, mainly for capital goods. Regarding exports to China, while exports of semiconductor production equipment have increased, exports of goods such as intermediate goods have been relatively weak against the background of a slowdown in the Chinese economy. Exports to the NIEs, ASEAN, and some other Asian economies have picked up on the back of a recovery in global demand for IT-related goods. Exports to other economies have increased, mainly led by automobiles. By goods, exports of automobile-related goods have been more or less flat; more recently, however, the effects of the dockworkers strike in the United States have been seen (Chart 10). Exports of capital goods have been more or less flat when fluctuations are smoothed out: while there has been a pause in demand for construction machinery and other items, exports of semiconductor production equipment have increased. Exports of IT-related goods have picked up against the background of the recovery in global demand for such goods; more recently, however, exports of components for smartphones have seen a reactionary decline, as sales of smartphones have been sluggish after an increase in production in the previous quarter. Meanwhile, exports of intermediate goods have

**Chart 8: Real Exports and Imports**



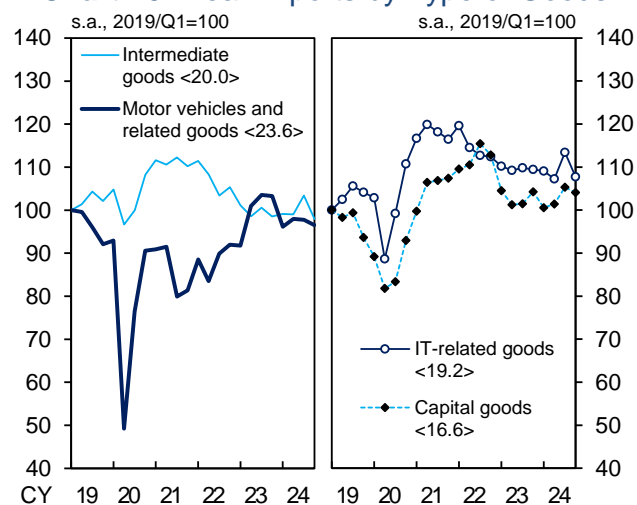
Sources: Bank of Japan; Ministry of Finance; Cabinet Office.  
Note: Based on staff calculations.

**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 2024.  
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 2024.

been at relatively low levels, mainly reflecting an oversupply of raw materials, particularly in Asia.

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

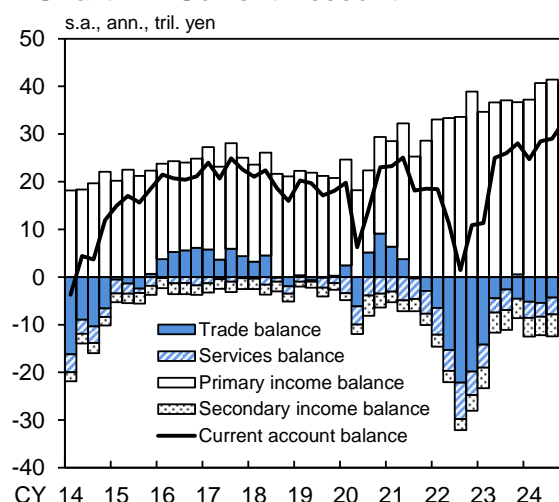
Imports have been more or less flat (Chart 8). They are expected to follow a moderate uptrend on the back of developments in demand induced by increases in domestic demand and exports.

## External Balance

The nominal current account surplus has been at a high level (Chart 11). The trade balance has been on a declining trend. Despite a surplus in the travel balance -- which reflects the increase 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.<sup>8</sup> Meanwhile, the primary income balance surplus has remained at a high level.

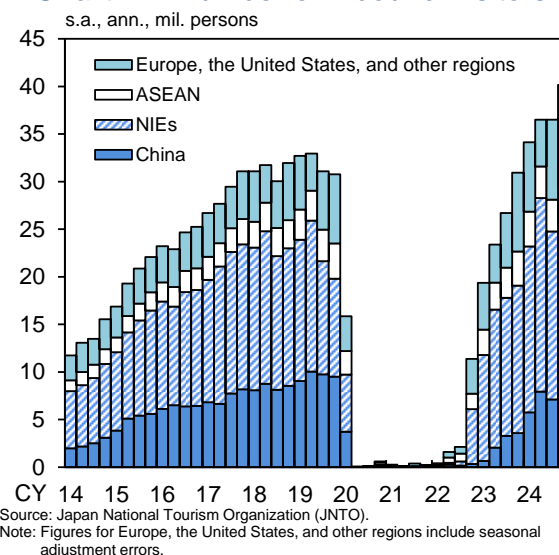
The nominal current account balance is likely to follow a moderate improving trend. This is based on the projection that the primary income balance surplus will increase moderately, and that the trade balance deficit will decline moderately due to factors such as an increase in goods exports. Meanwhile, the services balance deficit is expected to remain more or less at the current low

**Chart 11: Current Account**



Source: Ministry of Finance and Bank of Japan.  
Note: Figures for 2024/Q4 are October-November averages.

**Chart 12: Number of Inbound Visitors**



<sup>8</sup> See Box 1 for recent developments in the services balance.

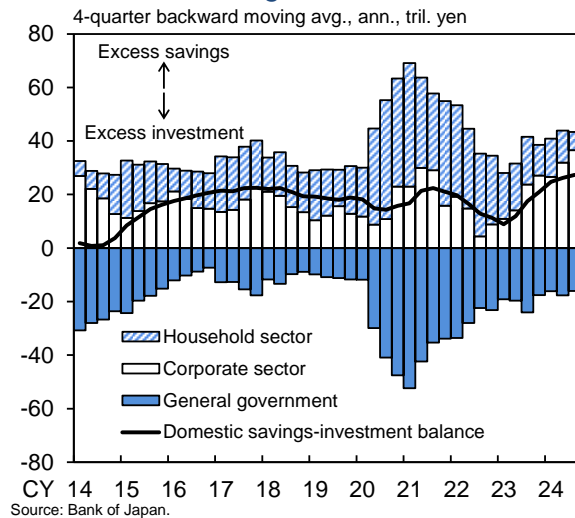
level: while the rise in inbound tourism demand will make a positive contribution, the increase in payments for digital-related services will make a negative contribution.

In terms of the savings-investment balance, overall excess savings in Japan's economy have been on a moderate expanding trend. This is because excess savings in the corporate sector have been on an increasing trend in reflection of an improving trend in corporate profits, while those in the household sector have been on a declining trend, with a moderate uptrend in private consumption. Overall excess savings in the economy are projected to continue 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).

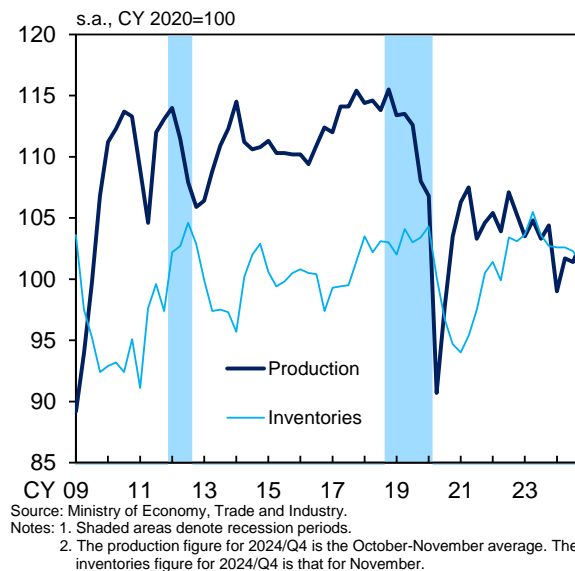
## Industrial Production

Industrial production has been more or less flat (Chart 14). By major industry, production of "transport equipment" has increased, mainly due to the dissipation of the effects of the suspension of operations at factories in the automobile industry due to the typhoon, although production of aircraft parts has decreased due to strikes at some aircraft manufacturers. Production of "electronic parts and devices" has picked up with the recovery in global demand for IT-related goods; however, production of components for smartphones has recently seen a reactionary decline, as sales of smartphones have been sluggish after the increase in production in the previous quarter. Production of "electrical machinery, and information and communication

**Chart 13: Savings-Investment Balance**



**Chart 14: Industrial Production**



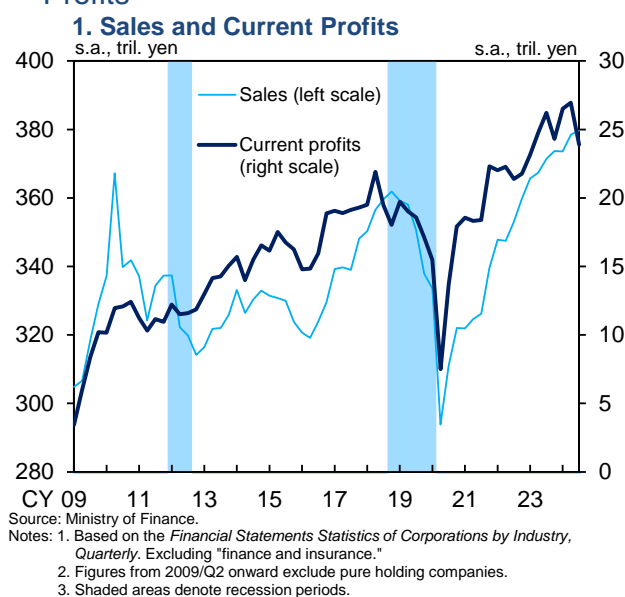
electronics equipment" has increased, due to renewal demand for personal computers that were introduced as part of the GIGA (Global and Innovation Gateway for All) school program. Despite a pause in demand for construction machinery and other items, production of "general-purpose, production, and business-oriented machinery" has started to pick up, reflecting an increase in production of semiconductor production equipment. Meanwhile, production of "chemicals (excluding medicine)" has been at a low level, mainly due to an oversupply of raw materials, particularly in Asia.

Industrial production is projected to return to an uptrend, mainly due to the recovery in global demand for IT-related goods.

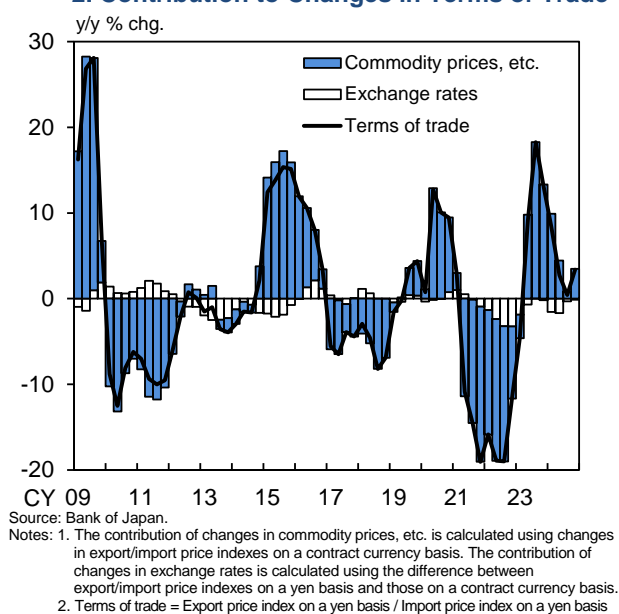
## Corporate Profits

Corporate profits have been on an improving trend. According to the *Financial Statements Statistics of Corporations by Industry, Quarterly*, current profits for all industries and enterprises for the July-September quarter of 2024 remained at relatively high levels, despite declining from the previous quarter (Chart 15). This decline reflects the decrease in non-operating profits, which is mainly due to the increase in foreign exchange losses on foreign currency denominated assets held by firms, reflecting the yen's appreciation in the July-September quarter. Operating profits for all industries and enterprises declined slightly. This is because, while a recovery in demand for IT-related goods exerted upward pressure, downward pressure was exerted by the effects of intensified competition in overseas markets in transportation machinery and by appraisal losses

**Chart 15: Indicators Related to Corporate Profits**



## 2. Contribution to Changes in Terms of Trade

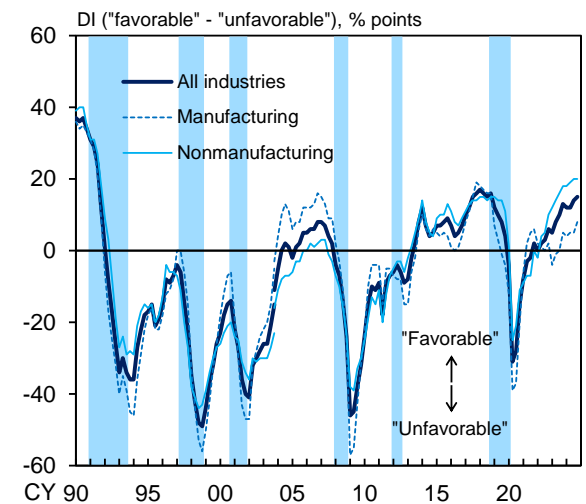


on inventories in petroleum, coal, and wholesaling due to a decline in commodity prices.

By industry and firm size, current profits for manufacturers, regardless of firm size, have declined. This is mainly due to foreign exchange losses reflecting the yen's appreciation in the July-September quarter, and operating profits of these manufacturers have declined only slightly, due to the factors mentioned in the previous paragraph. As for nonmanufacturers, current profits of large firms have been more or less flat: while operating profits in wholesaling have decreased, reflecting appraisal losses on inventories due to a decline in commodity prices, non-operating profits in the industry have increased, reflecting appraisal gains on stocks of affiliated firms resulting from business realignment and other factors. Current profits of small and medium-sized nonmanufacturers have declined, mainly in the services industry, pushed down temporarily by a decrease in travel demand, including inbound tourism demand, due to natural disasters.

Business sentiment has stayed at a favorable level. The December *Tankan* shows that the diffusion index (DI) for business conditions has remained at a favorable level (Chart 16). By industry, the DI for manufacturing has improved. The DIs for "iron and steel" and "ceramics, stone, and clay" (large enterprises) have deteriorated, reflecting sluggish external demand; on the other hand, the DIs for industries such as "general-purpose machinery" and "production machinery" have improved, with favorable demand related to business fixed investment, and

**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.



the DI for motor vehicles (large enterprises) has also improved as the effects of the suspension of operations at factories due to the typhoon at the end of August have dissipated. Progress in the pass-through of cost increases to selling prices has also contributed to an improvement in the DI for basic materials (small enterprises). With regard to demand for IT-related goods, while the DI for chemicals has improved, that for electrical machinery (large enterprises) has deteriorated due to sluggish sales of smartphones and other factors. The DI for nonmanufacturing has been flat. The DI for retailing has deteriorated due to a dissipation of the effects of the summer's hot weather and stockpiling demand to prepare for natural disasters, and sluggish sales of seasonal merchandise due to lingering summer heat. The DI for "accommodations as well as eating and drinking services" (large enterprises) has also deteriorated, affected by labor shortages and the rise in raw material prices. On the other hand, the DIs for "transport and postal activities" and "construction" have improved, with the pass-through of cost increases to selling prices progressing among small firms, and the DI for "information services" has also improved on the back of the demand for digital-related investment. The DI for "accommodations as well as eating and drinking services" (small enterprises) has also improved against the background of solid inbound tourism demand and private consumption.

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

## Business Fixed Investment

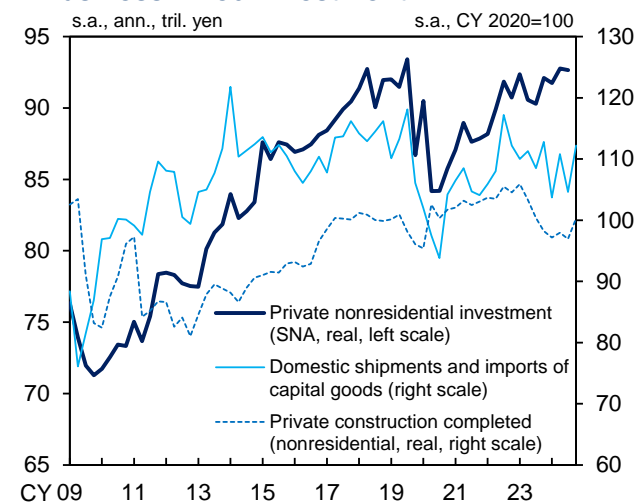
Business fixed investment has been on a moderate increasing trend (Chart 17).<sup>9</sup> The aggregate supply of capital goods -- a coincident indicator of machinery investment -- has generally been more or less flat. This reflects the fact that, while a decline in renewal investment by manufacturers of general-purpose machinery due to sluggish external demand has exerted downward pressure, investment in semiconductor production equipment has been on an uptrend, reflecting the recovery in demand for IT-related goods. Although moves to postpone investment have been observed against the background of factors such as high construction material prices, private construction completed (nonresidential) -- a coincident indicator of construction investment -- has been more or less flat, as there has been progress in, for example, the construction of logistics facilities and factories, and urban redevelopment projects.

Machinery orders -- a leading indicator of machinery investment -- have been at relatively high levels (Chart 18).<sup>10</sup> Developments in machinery orders by industry are as follows. In manufacturing, orders by the "general-purpose and production machinery" industry have been relatively weak due to a pause in demand for construction machinery and other items; however, orders by the "electrical machinery" industry have been on an uptrend against the background of the recovery in global demand for IT-related goods, and orders by the "chemicals" industry have also

<sup>9</sup> See Box 2 for labor supply constraints and the substitutability between capital and labor.

<sup>10</sup> See Box 3 for the link between labor supply constraints and corporate investment activity.

**Chart 17: Coincident Indicators of Business Fixed Investment**

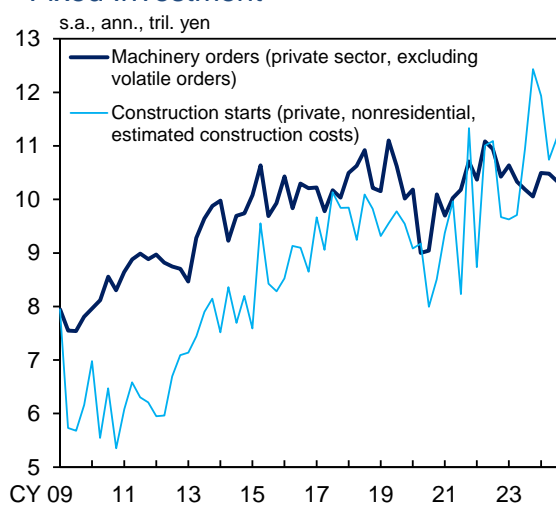


Sources: Cabinet Office; Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism.

Notes: 1. Figures for 2024/Q4 are October-November 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.

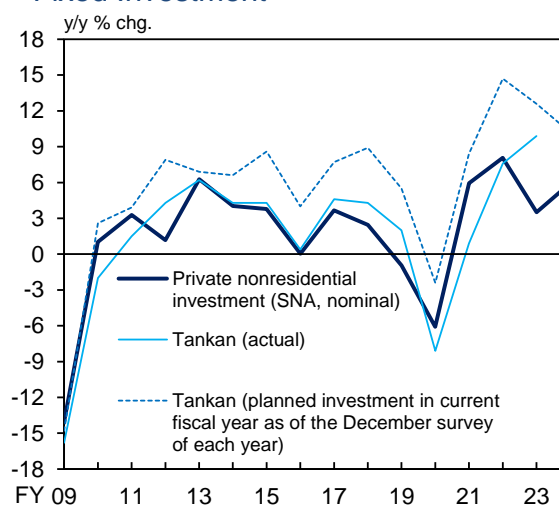
Notes: 1. Volatile orders are orders for ships and orders from electric power companies.

2. Figures for 2024/Q4 are October-November averages.

been on an uptrend, reflecting demand for investment in growth areas, such as components for semiconductors and electric vehicles. Orders from the nonmanufacturing industry have been at relatively high levels, mainly led by digital- and labor saving-related investments, albeit with fluctuations stemming from large-scale projects. Construction starts (in terms of planned expenses for private and nonresidential construction) -- a leading indicator of construction investment -- have been at relatively high levels, as construction of logistics facilities, urban redevelopment projects, and the establishment of new factories have continued. Looking at business fixed investment plans (in nominal terms) in the December *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) registered a year-on-year rate of increase of 10.2 percent for fiscal 2024 (Chart 19). As in the previous survey in September, this is a relatively high increase compared with past *Tankan* surveys in the same month.

Business fixed investment is expected to continue on an increasing trend, mainly on the back of accommodative financial conditions, as corporate profits continue on an improving trend. 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

**Chart 19: Planned and Actual Business Fixed Investment**



Sources: Bank of Japan; Cabinet Office.

Notes: 1. The *Takan* figures include software and R&D investments and exclude land purchasing expenses. R&D investment is not included before the March 2017 survey. The figures are for all industries including financial institutions.  
2. The figure for private nonresidential investment for fiscal 2024 is the 2024/Q2-Q3 average.

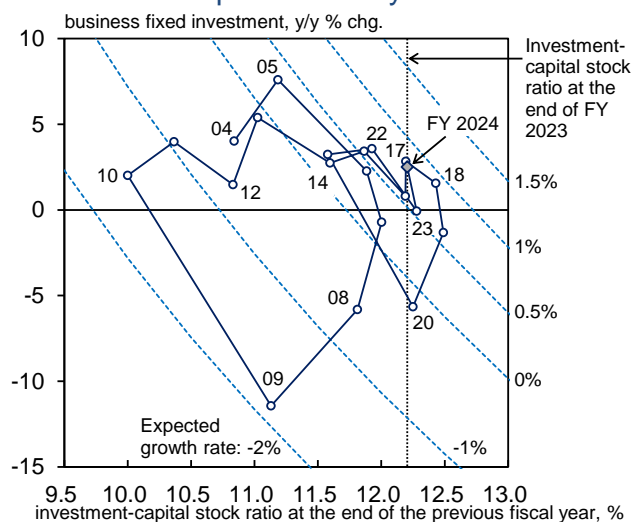
investment in logistics facilities, resulting from expanding e-commerce, and in offices and commercial facilities due to redevelopment projects; (4) investment in growth areas and to address environmental issues, such as decarbonization; and (5) semiconductor-related investment that is mainly aimed at strengthening supply chains and that also reflects government support. Toward the end of the projection period, investment that is less susceptible to fluctuations in economic activity, such as (4) investment in growth areas and to address environmental issues, is expected to increase. Regarding investment related to growth areas, such as digitalization and semiconductors, capital accumulation in these areas tends to be moderate due to a relatively small existing capital stock and to short depreciation periods reflecting rapid advances in technology (Chart 20).

## 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 overall has been more or less flat recently: while the number of non-regular employees in industries such as the face-to-face services industry has been on an increasing trend, the number of involuntary non-regular employees -- with labor market conditions tightening -- has been on a declining trend. With regard to labor market conditions, the

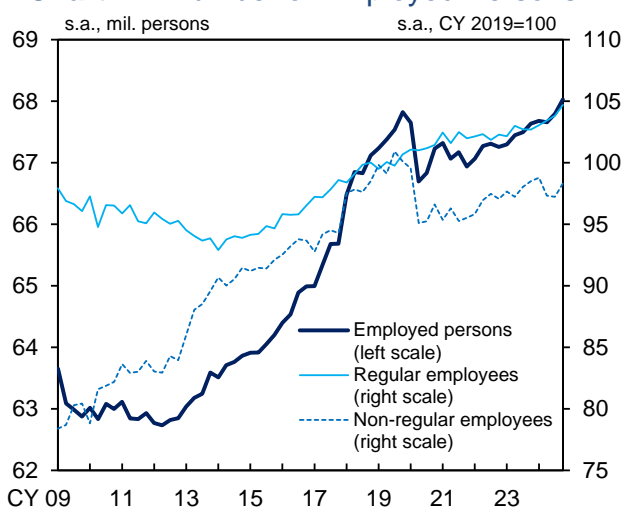
**Chart 20: Capital Stock Cycles**



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 2024 is the 2024/Q2-Q3 average.

**Chart 21: Number of Employed Persons**



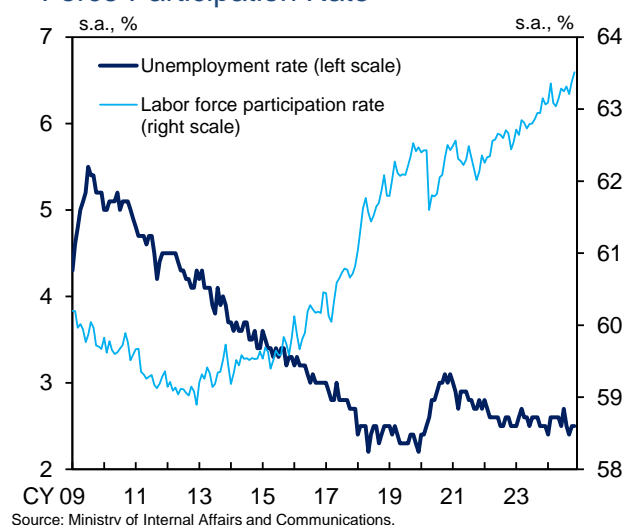
Source: Ministry of Internal Affairs and Communications.

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/Q4 are October-November averages.

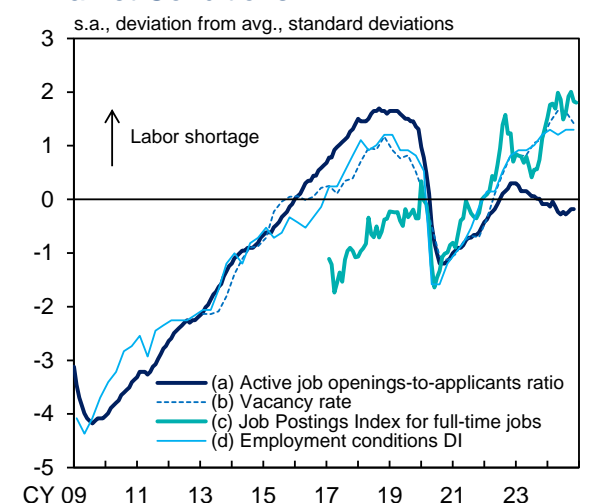
unemployment rate has remained at a low level (Chart 22). The active job openings-to-applicants ratio has been more or less flat, albeit with fluctuations, and has indicated somewhat less tight labor conditions compared with other indicators (Chart 23).<sup>11</sup> On the other hand, the employment conditions DI in the December *Tankan* shows that the degree of labor market tightness has been at a historically high level recently. Moreover, the job vacancy rate in the *Survey on Labour Economy Trend* and the Job Postings Index for full-time jobs show that labor market conditions for full-time employees have remained tight since the COVID-19 pandemic.<sup>12</sup> Meanwhile, the labor force participation rate has been on a moderate uptrend, particularly for women, when fluctuations are smoothed out (Chart 22).

With regard to the outlook for the employment situation, the number of regular employees is likely to increase moderately, mainly in industries with labor shortages, such as the information and communications industry. The number of non-regular employees is expected to remain more or less flat, partly due to firms making a shift to regular employment. In this context, the number of overall employees is likely to increase

**Chart 22: Unemployment Rate and Labor Force Participation Rate**



**Chart 23: Various Measures of Labor Market Conditions**



Sources: Ministry of Health, Labour and Welfare; Bank of Japan; Nowcast Inc.  
Notes: 1. Figures are normalized using the average and standard deviation for the period from 2013 onward (figures for the Job Postings Index for full-time jobs are normalized using the average and standard deviation for the period from 2017 onward). Figures for the vacancy rate are 2-quarter backward moving averages (figures from 2013 to 2014 are staff estimates). Figures for the employment conditions DI are for all industries and enterprises.  
2. The data sources for (a), (b), (c), and (d) are the *Employment Referral Statistics*, the *Survey on Labour Economy Trend*, *HRog Wage Now*, and the *Tankan*, respectively.

<sup>11</sup> See Box 4 for the relationship between labor market conditions and wages. The reason developments in the active job openings-to-applicants ratio in the *Employment Referral Statistics* have differed from other indicators recently may be due to a decrease in the use of the Public Employment Security Office and an increase in the use of private employment agencies, resulting in a decline in the number of active job openings in the *Employment Referral Statistics*.

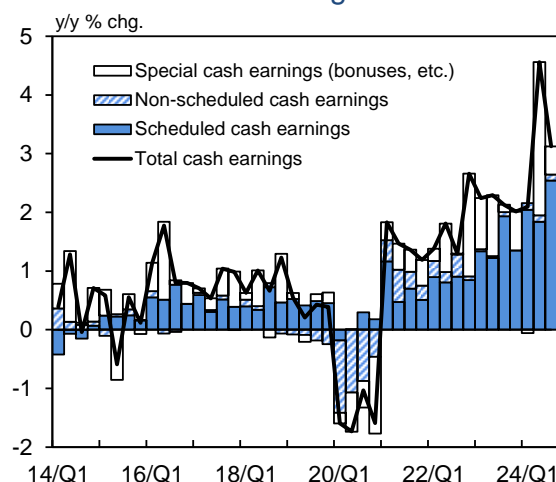
<sup>12</sup> The job vacancy rate in the *Survey on Labour Economy Trend* is calculated as the number of job vacancies divided by the number of full-time employees. The Job Postings Index for full-time jobs is based on the number of full-time jobs advertised through private online job boards and the Public Employment Service Center (adjusted for duplicate postings).

moderately. However, the pace of increase 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.

On the wage side, nominal wages per employee have increased clearly (Chart 24).<sup>13</sup> Looking at the breakdown, the year-on-year rate of increase in scheduled cash earnings has remained at a relatively high level (Chart 25). Specifically, the rate of increase for full-time employees has been at around 3 percent. The year-on-year rate of increase in hourly scheduled cash earnings for part-time employees has shown high growth of around 3-4 percent, albeit with fluctuations, as labor market conditions have remained tight. The year-on-year rate of change in non-scheduled cash earnings has been positive, albeit with fluctuations. Special cash earnings (bonuses) have increased as a trend, with an improving trend in corporate profits.

With regard to the outlook for wages, the rate of increase in scheduled cash earnings is likely to continue to show relatively high growth. 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

**Chart 24: Nominal Wages**

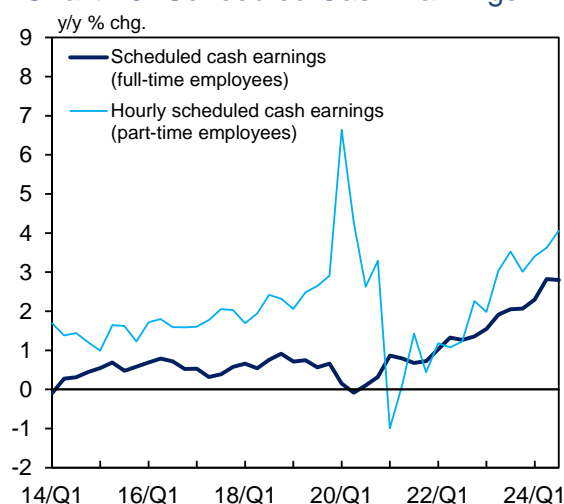


Source: Ministry of Health, Labour and Welfare.

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: 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.

<sup>13</sup> Wages in the *Monthly Labour Survey* are assessed on the basis of continuing observations, which are less susceptible to fluctuations due to sample revisions.

increase in labor force 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 continuing on 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.

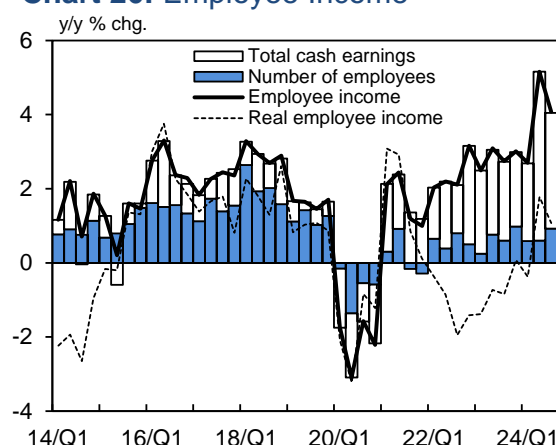
In light of the aforementioned employment and wage conditions, employee income has increased clearly in nominal terms (Chart 26). In real terms, the year-on-year rate of change in employee income has been positive recently. With regard to the outlook, nominal employee income is likely to continue to see a clear increase in reflection of an acceleration in nominal wage growth. Under these circumstances, a positive trend, albeit with fluctuations, is expected to take hold for the year-on-year rate of change in real employee income.

## Household Spending

Private consumption has been on a moderate increasing trend despite the impact of price rises and other factors.

The Consumption Activity Index (CAI, travel balance-adjusted) -- which is calculated by combining various sales and supply-side statistics from the viewpoint of gauging Japan's consumption activity in a comprehensive manner -- increased in the July-September quarter of 2024, partly because of a rise in sales of goods due to the effects of hot weather and stockpiling

**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).



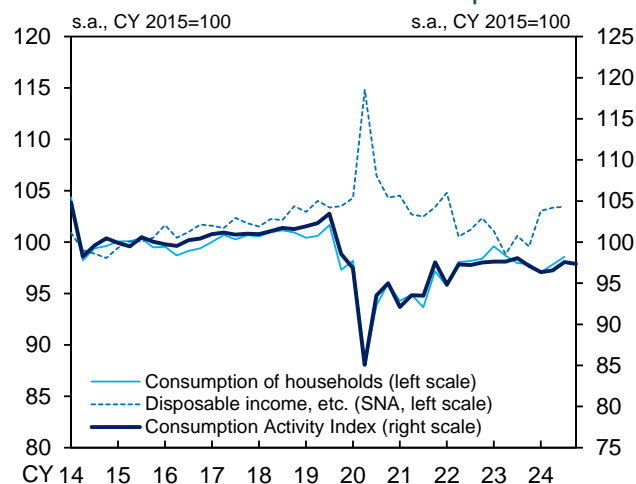
demand to prepare for natural disasters, and with services consumption increasing moderately as a trend (Charts 27 and 28).<sup>14</sup> The index then decreased slightly on average in the October-November period relative to the July-September quarter, mainly for nondurable goods, partly because of a reactionary decline to the rise in sales of goods due to the effects of hot weather and stockpiling demand to prepare for natural disasters. 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 on a moderate increasing trend, although some firms have pointed to the effects of consumers' increased thriftiness due to price rises (Chart 29).

By type, consumption of durable goods has picked up (Chart 28). Automobiles sales have been at a relatively high level. Sales of household electrical appliances have picked up moderately as a trend.

Consumption of nondurable goods (e.g., "beverages and food" and "clothes") has continued on a decreasing trend, mainly reflecting the impact of high prices. Sales at supermarkets and other stores have exceeded the levels seen in the previous year. Meanwhile, sales of high-end goods at department stores have remained strong, and New Year sales appear to have been favorable.

<sup>14</sup> 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.

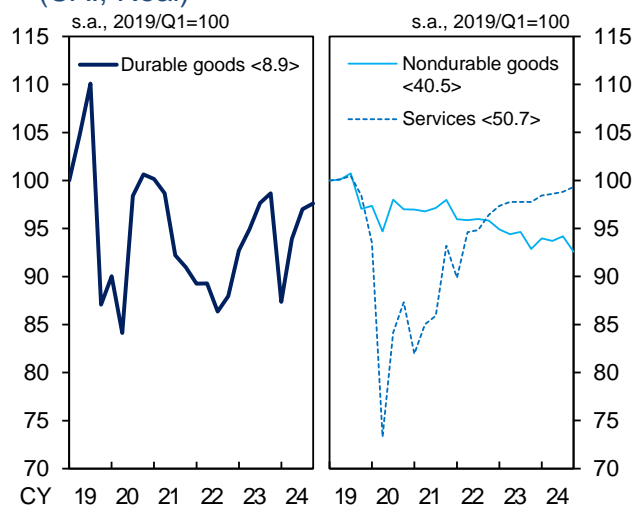
**Chart 27: Real Private Consumption**



Sources: Bank of Japan; Cabinet Office, etc.

- Notes: 1. Figures for the Consumption Activity Index (CAI) are based on staff calculations. The CAI figures are travel balance adjusted; i.e., they exclude inbound tourism consumption and include outbound tourism consumption. The figure for 2024/Q4 is the October-November average.  
2. Figures for consumption of households exclude imputed rent.  
3. "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.

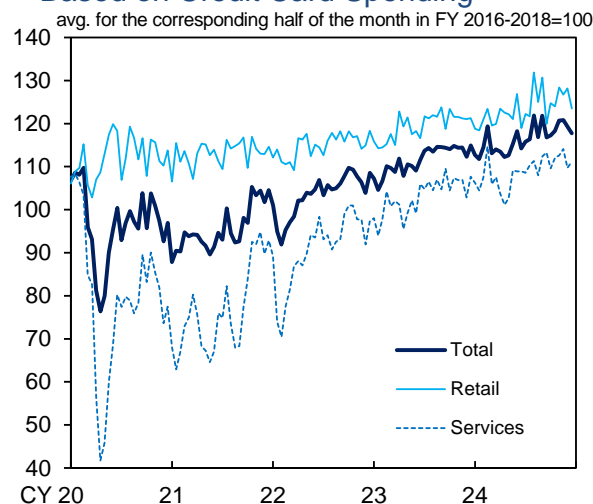
**Chart 28: Consumption Activity Index (CAI, Real)**



Sources: Bank of Japan, etc.

- Notes: 1. Based on staff calculations. Figures in angular brackets show the weights in the CAI. Figures for 2024/Q4 are October-November 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.  
2. Figures exclude telecommunications and energy (fuel, electricity, gas, heat supply, and water). Based on staff calculations.

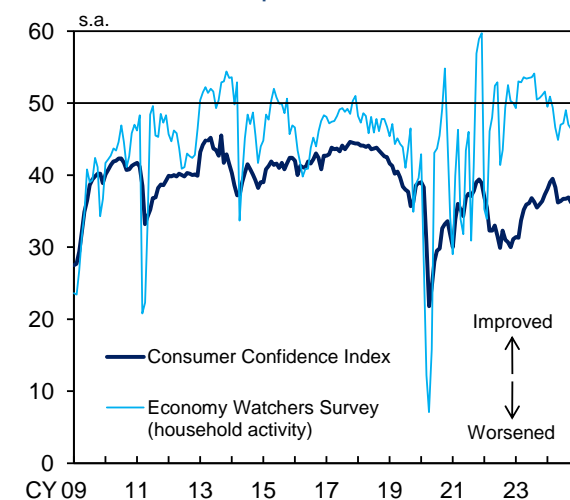


Services consumption has increased moderately as a trend (Charts 28 and 29). Dining-out has been on a moderate increasing trend, despite the effects of high prices, changes in consumers' lifestyles, and constraints on operating hours and the number of restaurants. Domestic travel has been at a relatively high level. While overseas travel has seen a pause in the recovery, with relatively high travel costs, it seems to have been favorable from late December through early January, boosted partly by calendar factors.

Looking at confidence indicators related to private consumption, the Consumer Confidence Index in the *Consumer Confidence Survey* -- which asks consumers for their views on the outlook for the coming six months -- has been more or less flat (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 improved compared to the past, albeit with fluctuations, mainly reflecting the improvement in the income situation.

Regarding the outlook, for the time being, although private consumption is expected to be affected by price rises, it is projected to continue on a moderate increasing trend, 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 be more or less flat, albeit with fluctuations due to the effects of the government's economic measures (Chart 31).

**Chart 30: Confidence Indicators Related to Private Consumption**



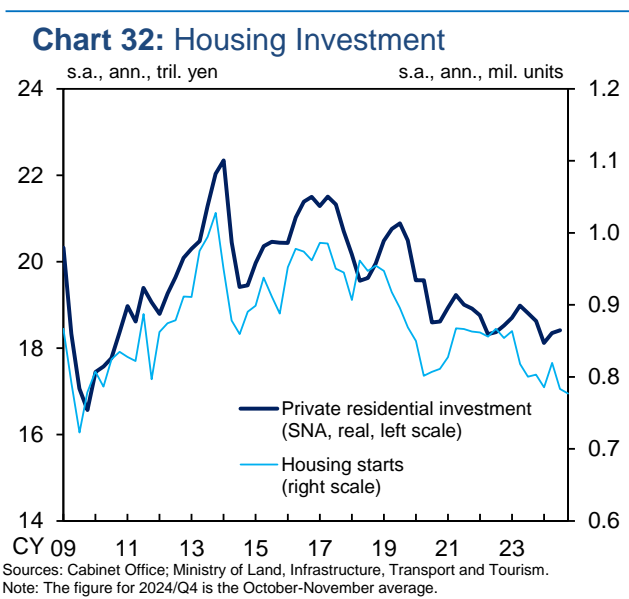
Source: Cabinet Office.  
Note: Figures for the *Economy Watchers Survey* are those for the current economic conditions DI.

**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.

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.



## II. Current Situation of Prices and Their Outlook

### Developments in Prices

The quarter-on-quarter rate of increase in the producer price index (PPI, adjusted for the effects of seasonal changes in electricity rates) has accelerated, reflecting factors such as a rise in rice prices and the impact of the yen's depreciation (Chart 33). The year-on-year rate of increase in the services producer price index (SPPI, excluding international transportation) has remained relatively high at around 3 percent recently, mainly on the back of the rise in personnel expenses.

The year-on-year rate of increase in the CPI (all items less fresh food) has been at around 3 percent recently (Chart 34). This reflects the fact that, although the effects of the pass-through to consumer prices of cost increases led by the past rise in import prices have waned, services prices -- reflecting factors such as wage increases -- have continued to rise moderately, and the government's measures to reduce the household burden of higher energy prices have been scaled back.

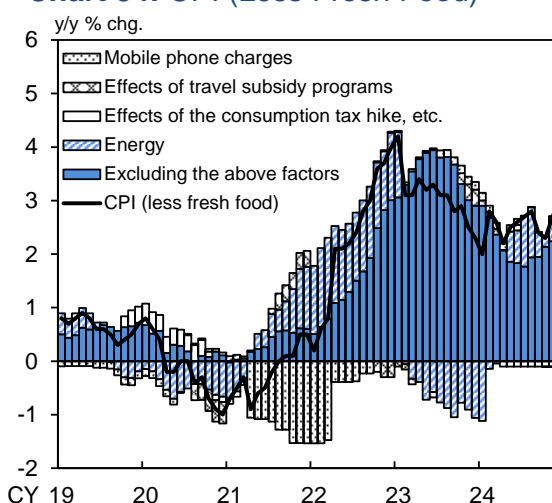
The year-on-year rate of increase in the CPI (all items less fresh food and energy, excluding temporary factors such as the effects of the government's domestic travel discount program) has accelerated (Chart 35).<sup>15</sup> This reflects the

**Chart 33: Inflation Indicators**

	y/y % chg.			
	24/Q1	24/Q2	24/Q3	24/Q4
<b>Consumer Price Index (CPI)</b>				
Less fresh food	2.5	2.4	2.6	2.6
Excluding temporary factors	2.3	2.4	2.8	2.8
Less fresh food and energy	3.2	2.2	2.0	2.3
Excluding temporary factors	3.0	2.1	2.1	2.5
<b>Producer Price Index (q/q % chg.)</b>	0.6	1.3	0.7	1.1
<b>Services Producer Price Index</b>	2.4	2.8	3.0	3.1
<b>GDP Deflator</b>	3.1	3.2	2.4	
Domestic demand deflator	2.0	2.6	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 policies concerning the provision of free education and travel subsidy programs.  
 3. The figure for the SPPI for 2024/Q4 is the October-November average.

**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, etc." include the effects of policies concerning the provision of free education. The figures from April 2020 onward are staff estimates and include the effects of measures such as free higher education.

<sup>15</sup> 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).

fact that, while the pressure on firms to pass on raw material cost increases to selling prices has waned compared to a while ago, moves to pass on higher costs -- such as increased personnel expenses and distribution costs -- to prices have been widely observed and rice prices have risen. Specifically, while the pressure on firms to pass on raw material cost increases has waned, the rate of increase in goods prices has accelerated, with rice prices continuing to rise. Despite the waning of such pressure, the rate of increase in general services prices has been more or less flat, as moves to pass on personnel expenses and other costs to prices have been observed.<sup>16</sup> Moves to pass on personnel expenses and other costs have been spreading for a wide range of items including housework-related services and culture and recreation. The year-on-year rate of change in administered prices has registered a relatively large positive figure, with increases in fire insurance premiums and other prices.

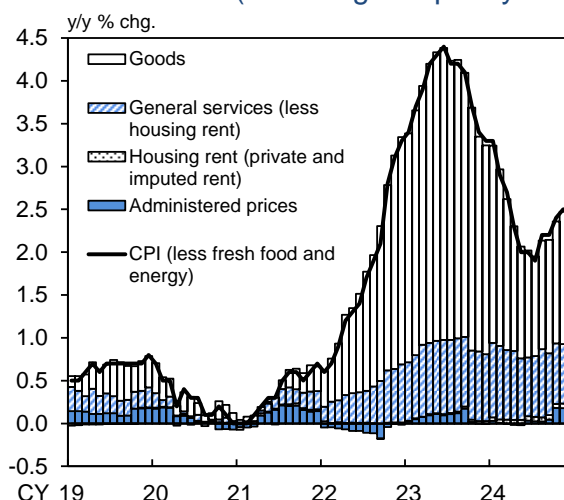
The indicators for capturing the underlying trend in the CPI have exhibited the following developments (Chart 36).<sup>17,18</sup> The trimmed mean

<sup>16</sup> See Box 5 for the trend in services prices.

<sup>17</sup> 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.

<sup>18</sup> 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.

**Chart 35: CPI (Excluding Temporary Factors)**

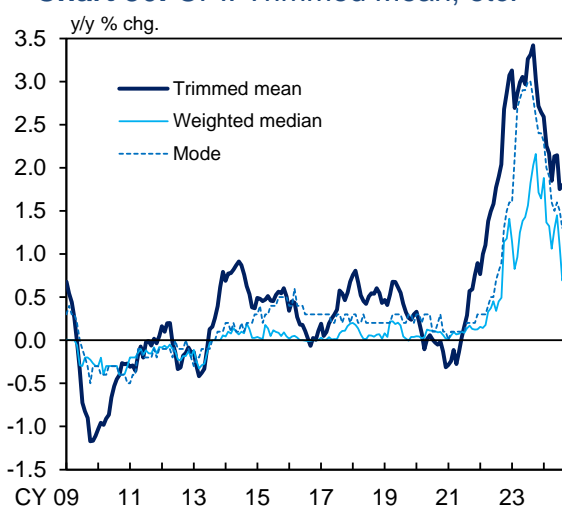


Source: Ministry of Internal Affairs and Communications.

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: CPI: Trimmed Mean, etc.**



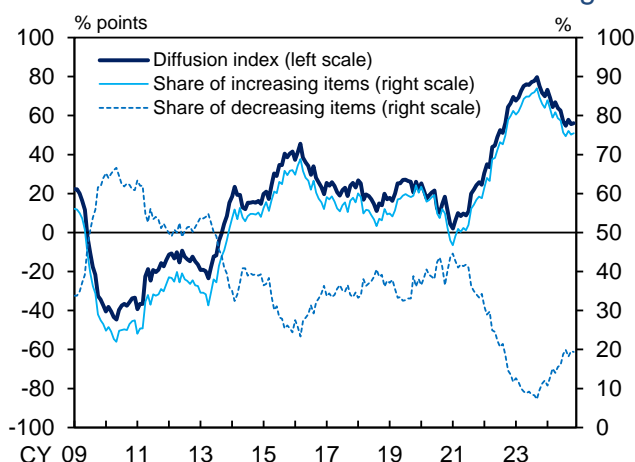
Sources: Bank of Japan; Ministry of Internal Affairs and Communications.

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. The latest figures are for November 2024.

of the year-on-year rate of change in the CPI has been in the range of 1.5-2.0 percent as the impact of the previous year's price hikes has dissipated. The mode and the weighted median have both been at around 1.0 percent. Moreover, looking at the year-on-year price changes across all CPI items (less fresh food), the share of items whose prices have increased minus the share of items whose prices have decreased has started to level off. This reflects the fact that moves to pass on personnel expenses and other costs to selling prices have continued, while the impact of the previous year's price hikes has dissipated (Chart 37). Indicators that exclude the impact of fluctuations in import prices in order to capture the inflationary pressure stemming from wage increases have remained on a moderate uptrend (Chart 38).<sup>19</sup> In addition, indicators of inflation expectations, which represent people's perceptions of price developments and are closely related to the underlying inflation trend, have increased moderately, as described below.<sup>20</sup>

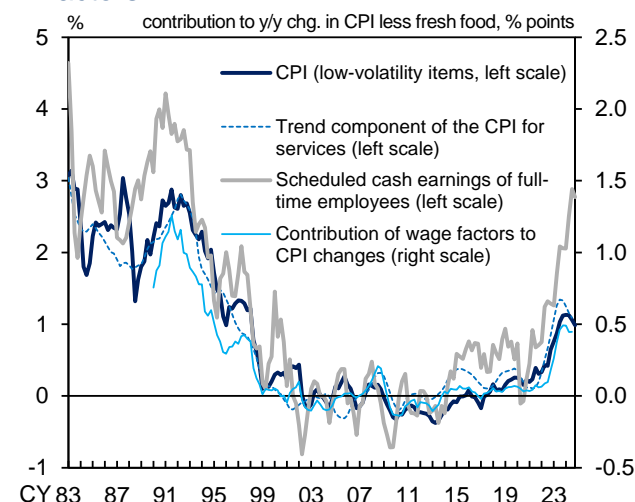
Meanwhile, the year-on-year rate of change in the domestic demand deflator has been at around 2 percent (Chart 33). By component, while the rate of increase in the private consumption deflator has decelerated compared to a while ago, the rates of increase in the private residential investment deflator and other deflators have been

**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. The latest figures are for November 2024.

**Chart 38: CPI Changes due to Wage Factors**



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.
4. Figures for 2024/Q4 are October-November averages.

<sup>19</sup> For details, see "Recent Developments in the Linkage between Wages and Prices," *Bank of Japan Review Series*, no. 24-E-2, May 2024.

<sup>20</sup> Since 2022, indicators such as the trimmed mean 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. For this reason, in the current phase, it is important to examine a wider range of indicators to grasp underlying inflation trends excluding factors such as temporary fluctuations in raw material prices. For details, see Box 4 in the April 2024 Outlook Report.

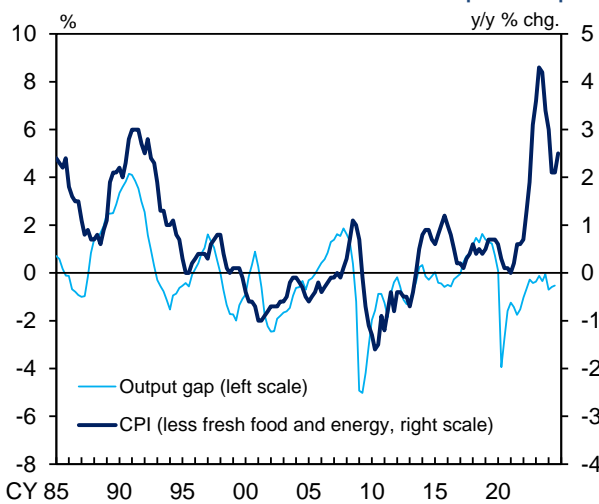
at around 3 percent. The rate of increase in the import deflator has decelerated, mainly affected by a decline in crude oil and other resource prices. The year-on-year rate of increase in the GDP deflator has decelerated; specifically, the rate of change in the domestic demand deflator has been positive, while the rise in the import deflator has exerted downward pressure.

## Environment Surrounding Prices

In the outlook for prices, the main factors that determine inflation rates are assessed as follows. First, the output gap is likely to continue to widen moderately within positive territory toward the end of the projection period (Charts 2 and 39). Meanwhile, labor market conditions have tightened 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. In this situation, upward pressure on wages and prices is likely to be stronger than suggested by the output gap, given that firms in many industries have started to face labor supply constraints.

Second, medium- to long-term inflation expectations have risen moderately (Chart 40). Firms' inflation outlook for general prices in the *Tankan* has increased moderately. 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 nominal wages have increased clearly. In addition, with wages continuing to rise, there has been an

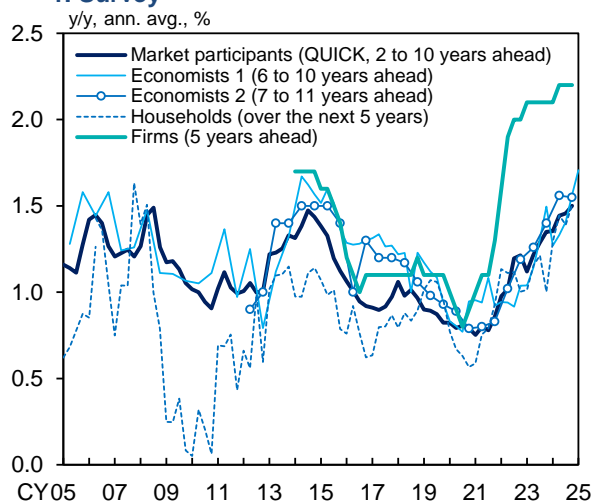
**Chart 39: Inflation Rate and Output Gap**



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.

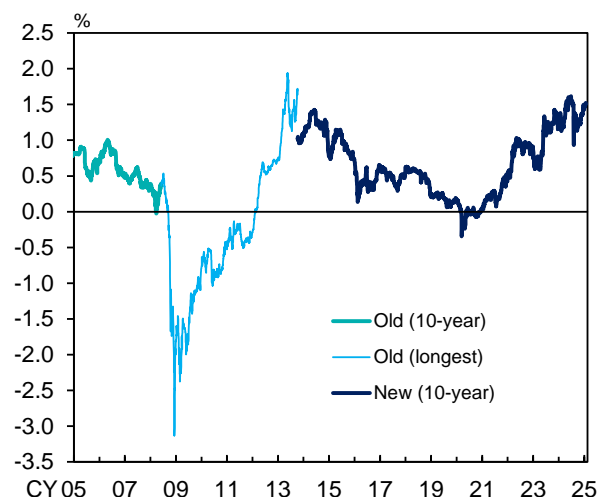
**Chart 40: Inflation Expectations**

### 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.

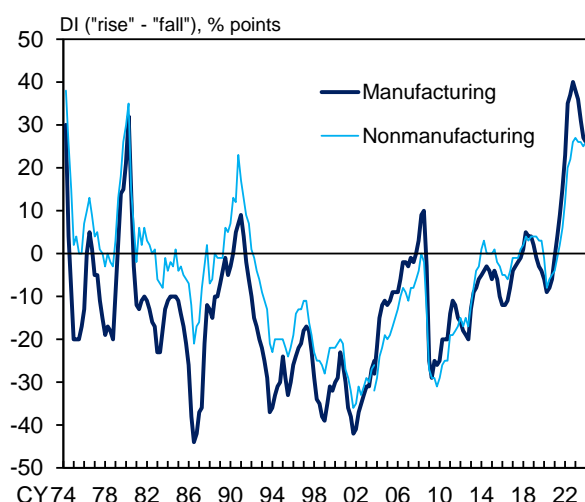


increase in moves to reflect higher costs, such as increased personnel expenses and distribution costs, in selling prices. Regarding the outlook, with labor market conditions remaining tight, inflation expectations are expected to rise moderately, as changes in firms' wage- and price-setting behavior are likely to continue. 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 import price index on a contract currency basis decreased somewhat, reflecting past developments in international commodity prices. On the other hand, exchange rate movements have led the index on a yen basis to rise again, after having resulted in a temporary decrease since summer last year (Charts 42 and 43). Looking at the final demand-intermediate demand (FD-ID) price indexes, the index for stage 1 of the ID -- which shows developments in an upstream stage of the production process -- has increased slightly, reflecting developments in import prices (Chart 44). The index for stage 2 of the ID has also increased slightly. The indexes for stages 3 and 4 of the ID, which show developments in relatively downstream stages of the production process, have been on a moderate increasing trend, as there have been moves to pass on past high raw material costs and increases in personnel expenses and other costs to prices.

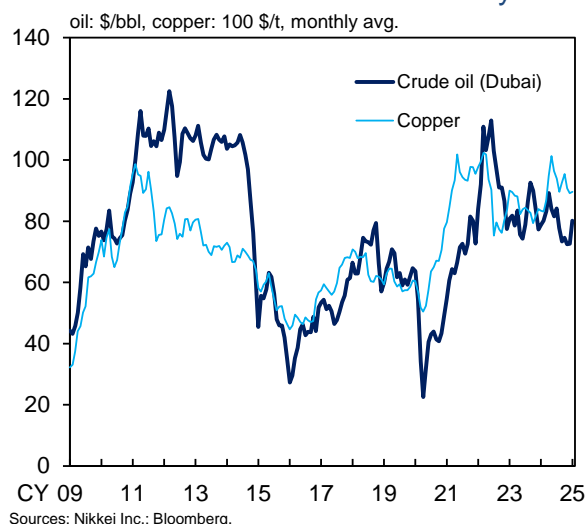
Meanwhile, with regard to the year-on-year rate of increase in energy prices (e.g., gasoline prices

**Chart 41: Output Prices**



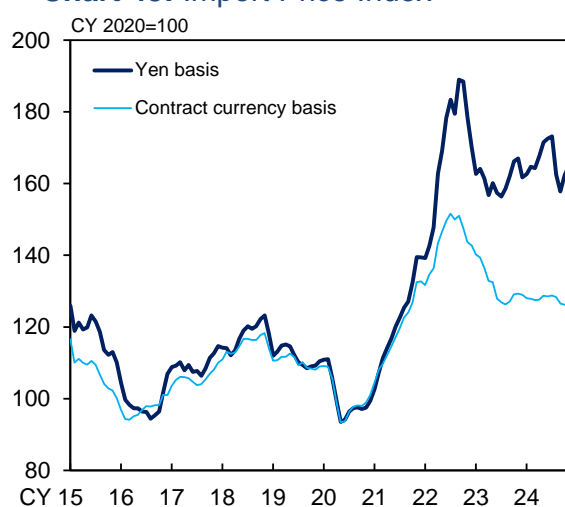
Source: Bank of Japan.  
Note: Based on the *Tanken*. All enterprises. There is a discontinuity in the data for December 2003 due to a change in the survey framework.

**Chart 42: International Commodity Prices**



Sources: Nikkei Inc.; Bloomberg.

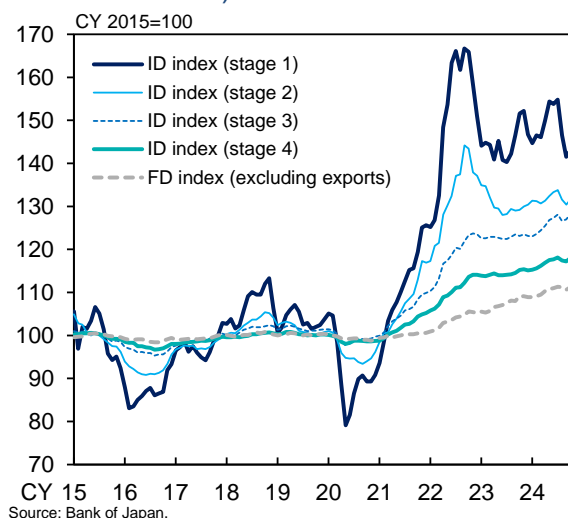
**Chart 43: Import Price Index**



Source: Bank of Japan.

and electricity charges), the discontinuation of the government's measures to reduce the household burden of higher electricity and gas charges and the scaling back of gasoline subsidies will push up the rate of increase in energy prices; however, as the government will resume the discontinued measures in February, to be continued through April 2025, this will likely push down the rate.<sup>21</sup> Thereafter, assuming that the government's measures to reduce the household burden of higher energy prices are discontinued in around April 2025, the rate of increase in energy prices for 2025 is very likely to be relatively high, albeit with fluctuations, due to the dissipation of the effects of these measures pushing down energy prices. After the impact of the rebound caused by the phasing out of the government's measures dissipates, the rate is projected to be more or less

**Chart 44: FD-ID Price Indexes (All Commodities)**



<sup>21</sup> The year-on-year rate of change in energy prices has been positive recently due to (1) the discontinuation of the government's measures to reduce the household burden of higher electricity and gas charges, which were introduced in 2023, and (2) price hikes reflecting the past rise in crude oil prices. Looking at the energy-related economic measures in more detail, with regard to gasoline subsidies, the government has continued to provide subsidies to petroleum distributors and importers as funds to contain a sharp rise in their selling prices. The amount of subsidies provided was reduced gradually after the turn of 2023, but was increased again in September 2023, so that the nationwide average for regular gasoline prices remained at a level of around 175 yen per liter from October 2023 through mid-December 2024. Thereafter, the subsidies were scaled back by around 5 yen per liter in mid-December 2024 and again in mid-January 2025. As for electricity charges, the government discontinued the discounts at the end of June 2024, and the year-on-year rate of change in these charges increased in July and August 2024; however, the government then cut the charges by 4 yen per kilowatt-hour for September and October 2024, and reduced the charges by 2.5 yen per kilowatt-hour for November. These cuts made a negative contribution to the year-on-year rate of change in electricity charges. The government has announced a resumption of the discounts for February through April 2025, with a discount of 2.5 yen per kilowatt-hour for February and March, and 1.3 yen per kilowatt-hour for April. (The months refer to the timing at which the charges are calculated.) Regarding manufactured and piped gas charges, measures to reduce the household burden roughly similar to those for electricity charges are being implemented.



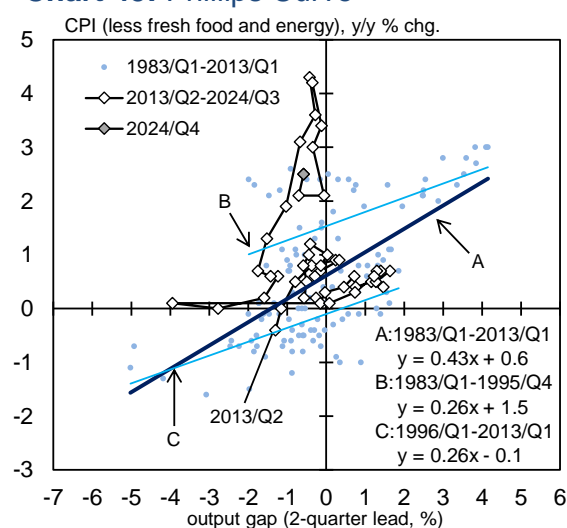
flat, in light of developments in the futures markets.

## 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 be at around 2 percent (Chart 45). This reflects that, while the effects of the pass-through to consumer prices of cost increases led by the past rise in import prices are expected to wane, 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. As for fiscal 2025, the rate of change in this CPI is also likely to be pushed up by the rise in rice prices.

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, at around 2.5 percent for fiscal 2025, and at around 2 percent for fiscal 2026. In the first half of the projection period, rice prices are likely to be at high levels and the effects of the government's measures pushing down CPI inflation will dissipate, and these factors are expected to make a positive contribution to the year-on-year rate of increase in the CPI (all items less fresh food). Thereafter, the rate of increase is projected to be at around 2 percent in reflection of the developments in the CPI for all items less fresh food and energy.

**Chart 45: 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.

That said, there remain uncertainties over whether underlying inflation will increase with a stronger linkage between wages and prices. In particular, close attention is warranted on the degree to which moves to reflect wage developments in selling prices will become widespread, including among small and medium-sized firms. On the other hand, if such moves strengthen to a greater extent than expected or the expectation of labor market conditions remaining tight grows, there is 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.

### III. Financial Developments in Japan

#### Financial Conditions

Financial conditions have been accommodative.

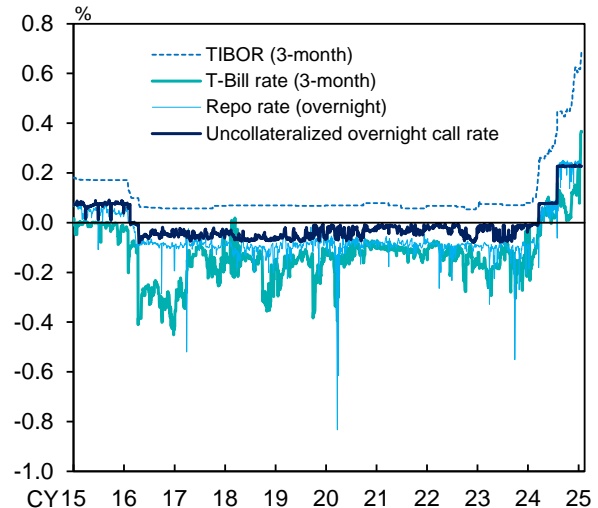
Looking at short-term interest rates, the uncollateralized overnight call rate has been at around 0.25 percent (Chart 46). Regarding interest rates on term instruments, the 3-month treasury discount bill (T-Bill) rate has risen.

Real interest rates have been negative (Chart 47).<sup>22</sup>

Firms' funding costs have increased but have remained at low levels on the whole (Chart 48). Lending rates (the average interest rates on new loans and discounts) have risen but have remained at low levels. Issuance rates for CP have increased. Issuance rates for corporate bonds have risen, reflecting the increase in their base rate.

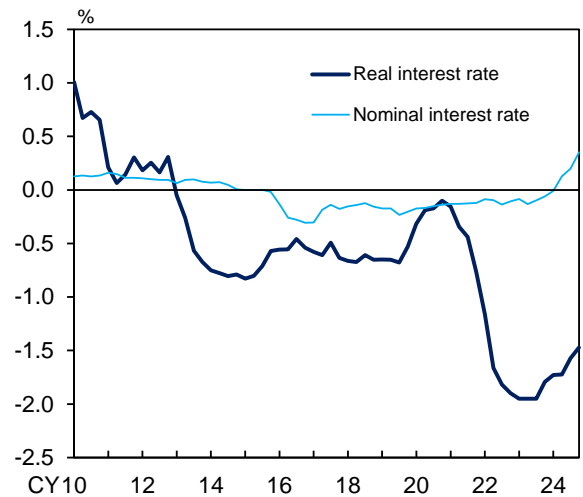
The DI in the *Tankan* for financial institutions' lending attitudes as perceived by firms suggests that such attitudes have remained accommodative on the whole (Chart 49). The DI for issuance conditions for CP has continued to show net "easy" conditions. As suggested by the latter, issuance conditions 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

Chart 46: Short-term Interest Rates



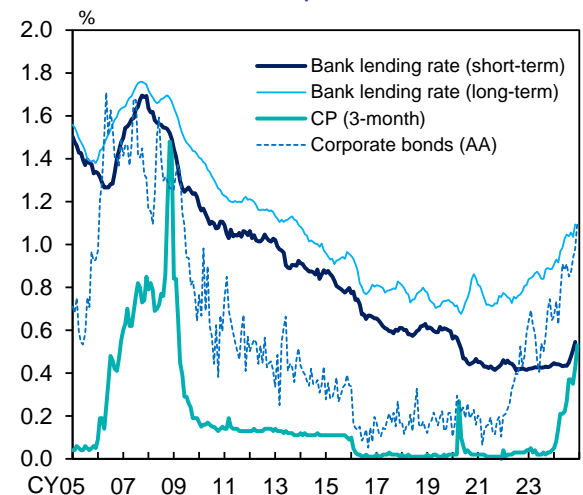
Sources: Bank of Japan; JBA TIBOR Administration; Bloomberg.  
Note: Figures for repo rate are the *Tokyo Repo Rate*.

Chart 47: Real Interest Rate (1-Year)



Sources: Bank of Japan; QUICK, "QUICK Monthly Market Survey <Bonds>"; Consensus Economics Inc., "Consensus Forecasts"; Bloomberg.  
Note: Figures for the real interest rate are calculated as government bond yields (1-year) minus the composite index of inflation expectations (staff estimates).

Chart 48: 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.

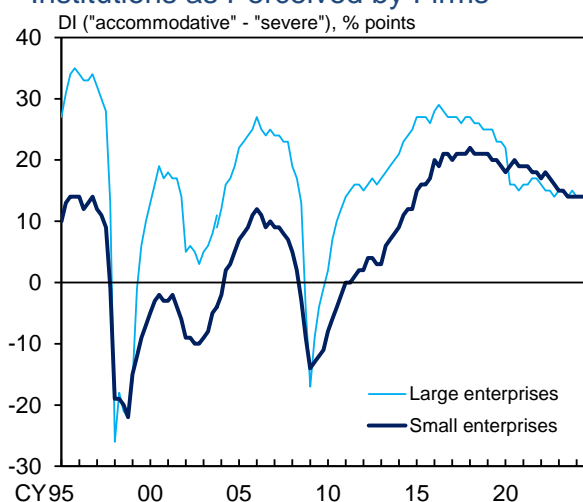
Notes: 1. Figures for issuance yields for CP up through September 2009 are the averages for CP (3-month, rated a-1 or higher). Those from October 2009 onward are the averages for CP (3-month, rated a-1).  
2. Figures for issuance yields for corporate bonds are the averages for domestically issued bonds 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.

<sup>22</sup> See Box 5 of the April 2024 Outlook Report for an assessment of financial conditions in terms of real interest rates.

the recovery in economic activity and progress in the pass-through of cost increases to selling prices (Chart 50).

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 51). That in the aggregate amount outstanding of CP and corporate bonds has been at around 4.5 percent.

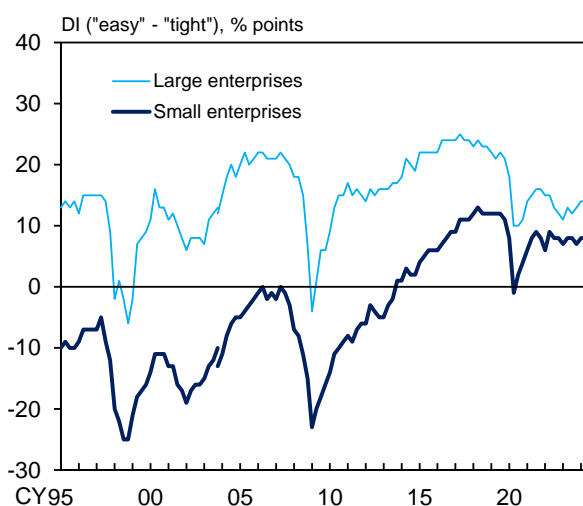
**Chart 49: Lending Attitudes of Financial Institutions as Perceived by Firms**



Source: Bank of Japan.

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

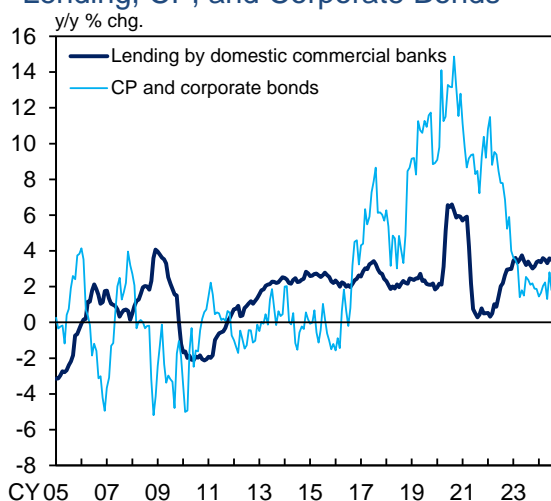
**Chart 50: Firms' Financial Positions**



Source: Bank of Japan.

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

**Chart 51: Amounts Outstanding of Bank Lending, CP, and Corporate Bonds**



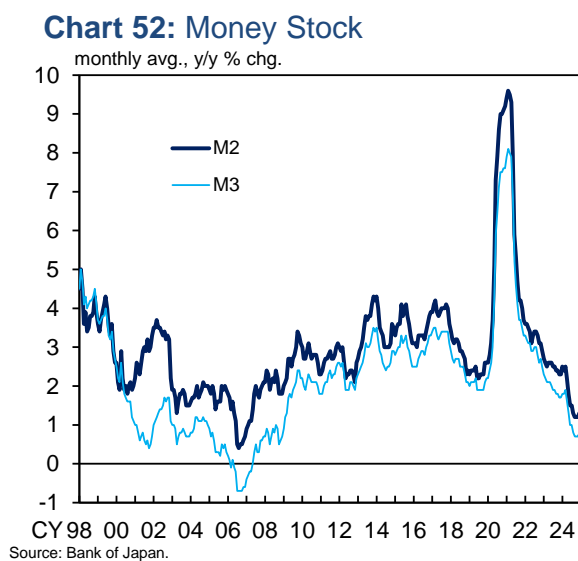
Sources: Bank of Japan; Japan Securities Depository Center;

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.

The rate of change in the money stock (M2) has been in the range of 1.0-1.5 percent, as the amount outstanding of bank lending has continued to increase and fiscal spending has kept pushing the rate up (Chart 52).



## Developments in Financial Markets

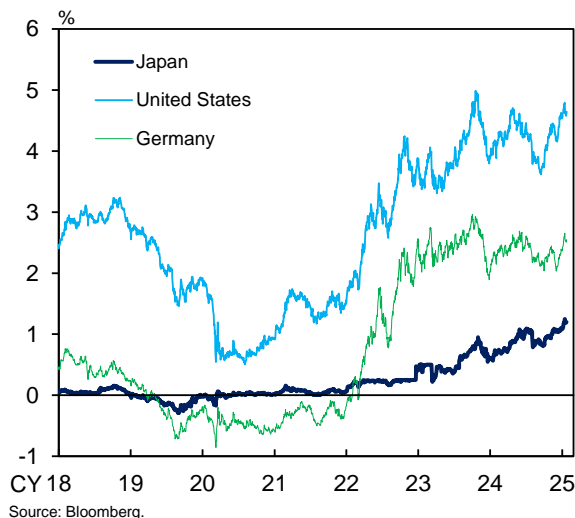
In global financial markets, market sentiment has remained at an improved level compared with a while ago, supported by factors such as solid economic indicators in the United States, although attention has continued to be drawn to uncertainties surrounding the policy conduct of the new U.S. administration.

Albeit with fluctuations due to speculation over the fiscal policy conduct of the new U.S. administration, yields on 10-year government bonds in the United States have risen, partly due to the view that the pace of policy interest rate cuts by the Federal Reserve is likely to be moderate, reflecting the solid economic indicators (Chart 53). Yields on 10-year government bonds in Europe and Japan have also risen, while fluctuating in line with those in the United States.

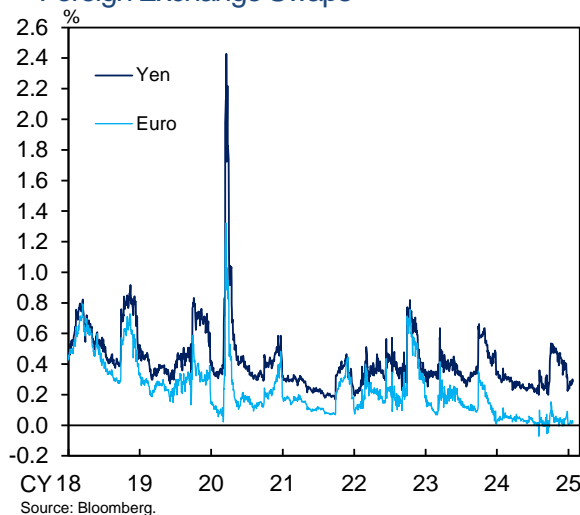
Premiums for U.S. dollar funding through the dollar/yen foreign exchange swap market have declined, due to dissipation of the effects of pushing up the premiums from the seasonal tightening of supply and demand conditions for this funding in view of the year-end (Chart 54).

Stock prices in the United States have increased, mainly reflecting heightened expectations for expansionary fiscal policies and deregulation under the new administration, although the increase in prices has been weighed down by a rise in interest rates (Chart 55). Stock prices in Europe have also increased. Meanwhile, stock prices in Japan have been more or less flat, while generally moving in line with those in the United

**Chart 53: 10-Year Government Bond Yields in Selected Advanced Economies**

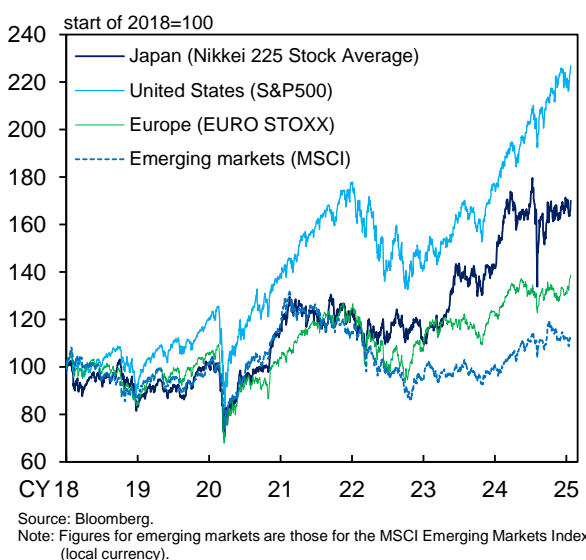


**Chart 54: Dollar Funding Premiums through Foreign Exchange Swaps**



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.

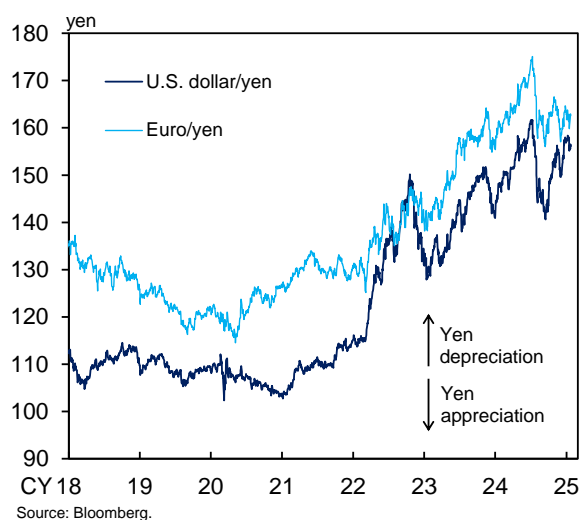
**Chart 55: Selected Stock Price Indices**



States. Stock prices in emerging economies have declined.

In foreign exchange markets, the yen has depreciated against the U.S. dollar as a trend, although the U.S. dollar/yen exchange rate fluctuated temporarily in both directions, reflecting attention to the yield differential between Japan and the United States (Chart 56). The yen has appreciated against the euro.

**Chart 56: U.S. Dollar/Yen and Euro/Yen**

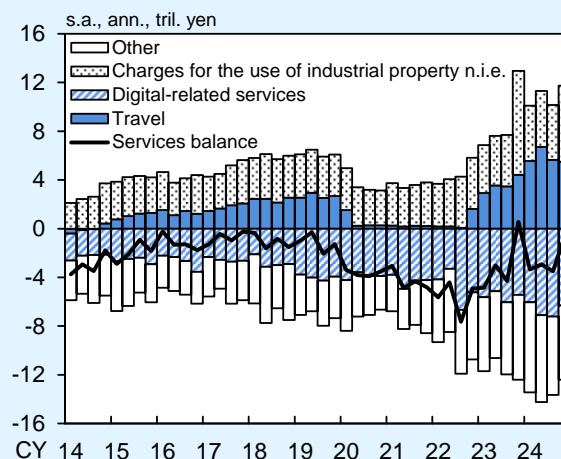


## (Box 1) Recent Developments in Services Balance

A look at recent developments in Japan's services balance shows that, while the balance of "travel," which includes inbound tourism, and that of "charges for the use of industrial property n.i.e." (such as charges for the use of patents and royalties received from overseas subsidiaries) have been improving, imports of digital-related services have increased, and the overall services balance has continued to see a slight deficit since the pandemic (Chart B1-1). This box analyzes recent developments in the travel balance and the digital-related services balance.

First, a detailed look at the travel balance shows that the total number of inbound visitors has recently reached approximately 40 million on a seasonally adjusted annualized basis, exceeding the figure of a little more than 30 million recorded before the pandemic (Chart B1-2[1]). By region, the increase in the number of visitors from China, NIEs, and ASEAN countries has slowed since the beginning of 2024, whereas that of visitors from Europe, North America, and other regions has been rising clearly. Moreover, the travel expenditure per inbound visitor has continued to be on an increasing trend, with an increase in items purchased, a rise in the unit cost of accommodation, and growing expenditure on eating and drinking, as well as the increase in visitors from Europe and North America, who tend to stay longer (Chart B1-2[2]). Given that both the number of inbound visitors and the travel expenditure per visitor have been increasing, the travel balance has improved on the whole. The travel balance is likely to see a widening in

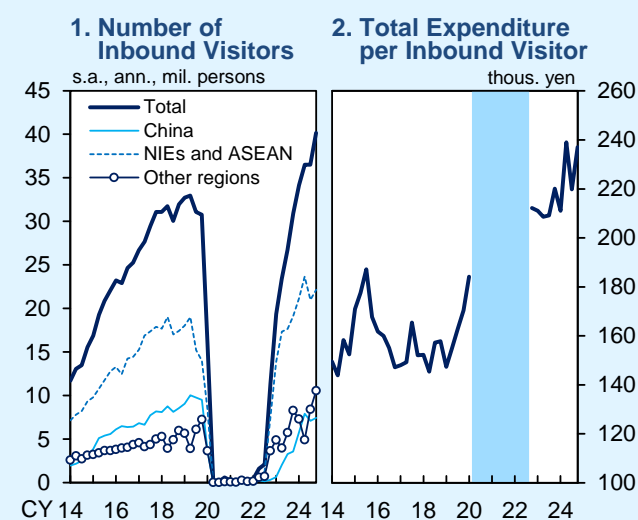
### Chart B1-1: Services Balance



Source: Ministry of Finance and Bank of Japan.

- Notes: 1. Figures for digital-related services, charges for the use of industrial property n.i.e., and other are seasonally adjusted based on staff calculations.  
2. Figures for digital-related services are those for "charges for the use of copyrights n.i.e.," "telecommunications, computer, and information services," and "professional and management consulting services."  
3. Figures for 2024/Q4 are October-November averages.

### Chart B1-2: Travel Balance



Sources: Japan Tourism Agency; Japan National Tourism Organization (JNTO).

- Notes: 1. Figures for the number of inbound visitors are seasonally adjusted based on staff calculations.  
2. The shaded area denotes the period when relevant surveys were suspended or conducted in scaled-down form due to the COVID-19 pandemic.

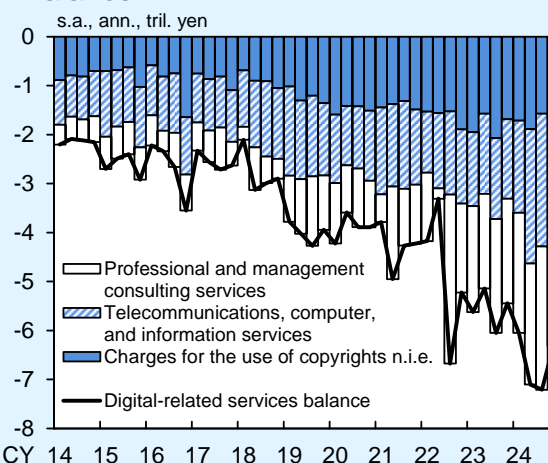


surplus, as the number of visitors is expected to continue increasing on the back of a rise in inbound tourism demand. It is, however, necessary to pay attention to the situation regarding intensifying labor shortages in inbound tourism-related industries and supply constraints in transportation, such as airport capacity.

Next, a closer look at the balance of digital-related services shows that each component of the services -- namely, (1) cloud and related services (e.g., "telecommunications, computer, and information services"), (2) license fees for streaming services (e.g., "charges for the use of copyrights n.i.e."), and (3) online advertising (e.g., "professional and management consulting services"), with almost similar shares -- is on an expanding trend (Chart B1-3). The increase in payments for cloud services is due to Japanese firms having expanded the use of digital technology with a view to increasing productivity and the use of digital tools becoming more widespread since the pandemic. The rise in license fees for streaming services and online advertising is attributable to the increase in the number of users of services provided by overseas online platforms.

In addition, developments in receipts and payments of the balance of digital-related services (including cloud services, license fees for streaming services, and online advertising) by each country show that the balance in the United States has been on an improving trend, reflecting strong business performance by firms that provide digital services, whereas in Japan, receipts (exports) of digital-related services are

**Chart B1-3: Digital-Related Services Balance**



Source: Ministry of Finance and Bank of Japan.  
Notes: 1. Figures are seasonally adjusted based on staff calculations.  
2. Figures for 2024/Q4 are October-November averages.

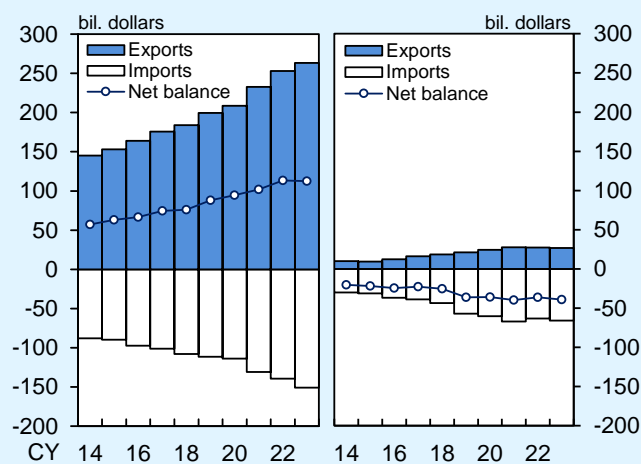
less than in the United States, and the balance continues to be in negative territory (Chart B1-4).

From the perspective of having a comparative advantage in international trade, the size of the balance in each category is not the main concern; what is important is whether those balances are contributing to the production of the value added of firms and of Japan. The export of digital services is said to be closely related to investment in intangible assets. The crucial question is whether the services exported by firms that have an advantage in fields such as intellectual property rights will increase, and whether such firms will become influential, for long-term macroeconomic growth in Japan. As for the import of digital services, these should be assessed from the perspective of whether domestic firms are using those imported services to improve productivity and profitability through the provision of new goods and services.

**Chart B1-4: Comparison of Digital-Related Services Balance**

**1. United States**

**2. Japan**



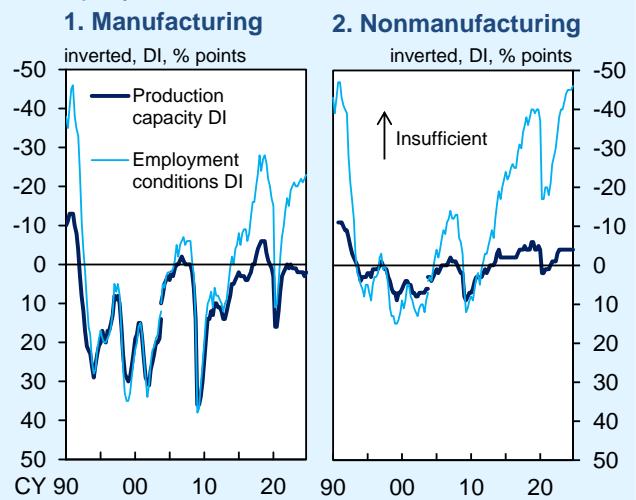
## (Box 2) Labor Supply Constraints and the Substitutability between Capital and Labor

This box examines the industry-level substitutability between capital and labor and considers the implications for labor supply constraints.

Looking at the relationship between the production capacity DI and the employment conditions DI shows that whereas, in the past, the two tended to move in tandem, the production capacity DI has recently tended not to indicate shortages, compared with employment, and this tendency has been particularly pronounced in the nonmanufacturing sector in recent years (Chart B2-1). While demand for both capital and labor usually increases when demand in the economy improves, in some industries, there is a difference between the ways demand for capital and demand for labor increase. This is because the elasticity of substitution between capital and labor in the production function differs from industry to industry.

To investigate this in more detail, the elasticity of substitution between capital and labor for the nonfinancial corporate sector (which accounts for about 70 percent of value added in the economy overall) was estimated using a constant elasticity of substitution (CES) production function using data from the *Financial Statements Statistics of Corporations by Industry, Quarterly*. Broadly speaking, the CES production function is a generalized form that encompasses the standard Cobb-Douglas production function when the elasticity of substitution is 1, and the Leontief

**Chart B2-1: Production Capacity and Employment Conditions**

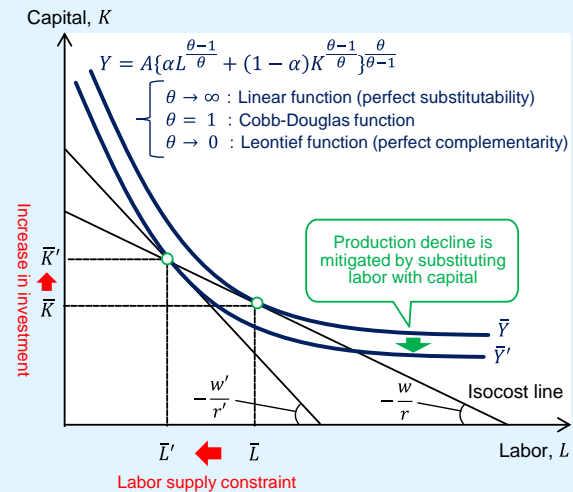


Source: Bank of Japan.

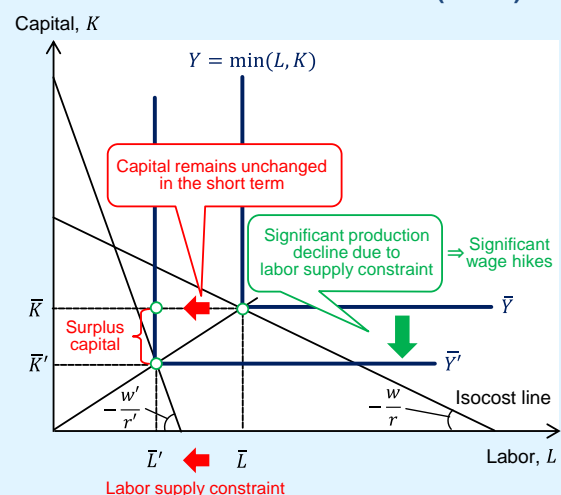
Note: Based on the *Tanken* (all enterprises, "excessive" - "insufficient"). There is a discontinuity in the data for December 2003 due to a change in the survey framework.

**Chart B2-2: Shape of Production Function and Labor Supply Constraints**

### 1. Constant Elasticity of Substitution (CES) Production Function



### 2. Leontief Production Function ( $\theta \rightarrow 0$ )

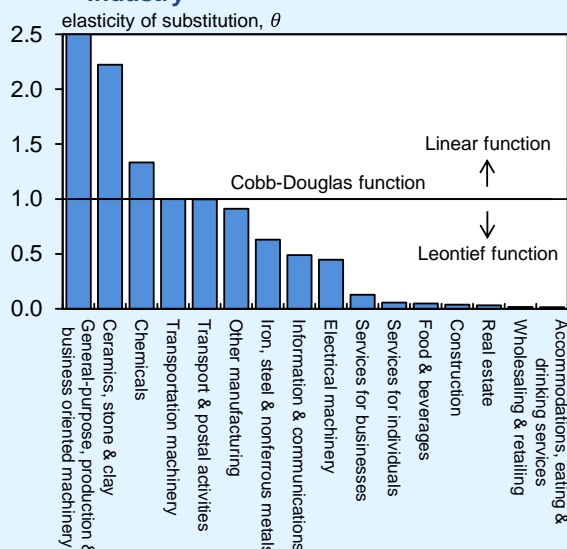


production function when the elasticity of substitution is 0, where production is determined by the production factor, which is scarcer than the others. In a CES production function with a high elasticity of substitution, when a firm or industry faces labor supply constraints, capital can be substituted to a certain extent, so that the production-suppressing effect will be mitigated (Chart B2-2[1]). On the other hand, in the case of a low elasticity of substitution, such as the Leontief production function, production will decrease significantly with the impact of labor supply constraints. Since production is constrained by the labor supply, even if there is a surplus of capital, this will not contribute to production (one example would be a restaurant that cannot operate at full capacity due to a shortage of employees) (Chart B2-2[2]).

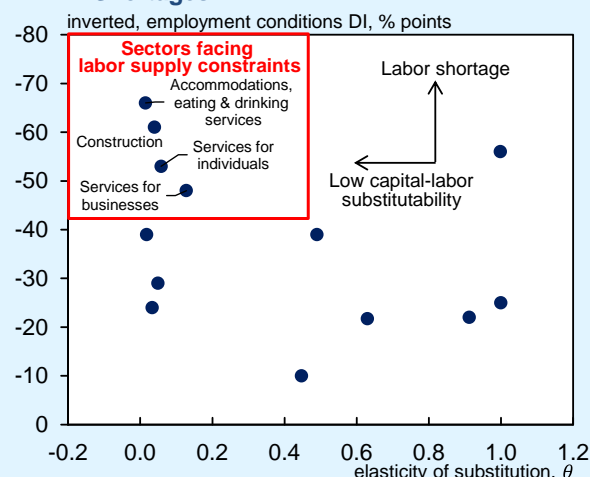
The results of the industry-level production function estimates suggest that, whereas the manufacturing sector is characterized by a high elasticity of substitution between capital and labor (for many industries, the value is greater than 1), the services and construction sectors are characterized by a low elasticity of substitution between production factors (i.e., production factors are highly complementary), and the shape of the production function in these sectors is similar to that of a Leontief production function (with an elasticity of substitution of less than 1) (Chart B2-3[1]). Depicting the relationship between the elasticity of substitution in each industry and the most recent employment conditions DI in a scatter diagram indicates that the services and construction sectors are facing serious labor shortages and are suffering from labor supply constraints as the elasticity of

**Chart B2-3: Estimation Results of CES Production Function**

### 1. Capital-Labor Substitution Elasticity by Industry



### 2. Capital-Labor Substitution and Labor Shortages



Sources: Ministry of Finance; Cabinet Office; Bank of Japan.

Notes: 1. Figures for the elasticity of substitution are calculated by estimating CES production functions by industry using the following variables from the *Financial Statements Statistics of Corporations by Industry, Quarterly*: value added, tangible fixed assets (excluding construction in progress), and the number of employees. Value added is the sum of operating profits, personnel expenses, and depreciation expenses. Real value added and real tangible fixed assets are obtained using SNA-based deflators. The estimation period is from 2000/Q1 to 2024/Q2.

2. Figures for transport and postal activities include warehousing, which has been increasingly automated in recent years.

3. Figures for the employment conditions DI are as of the December 2024 survey.

substitution between capital and labor is low and it is difficult to substitute capital for workers (Chart B2-3[2]).

These results suggest that industries with a low elasticity of substitution between capital and labor are facing labor constraints, and as shown by Chart B2-1, even in the manufacturing sector, the production capacity DI has not indicated capital shortages in recent years, compared with the intensifying labor shortages indicated by the employment conditions DI, and the sector is likely facing labor supply constraints. These observations suggest that in this phase, it is important to assess the dynamics in economic activity, prices, and wages by focusing on the labor market tightness.

### (Box 3) Labor Supply Constraints and Corporate Investment Activity

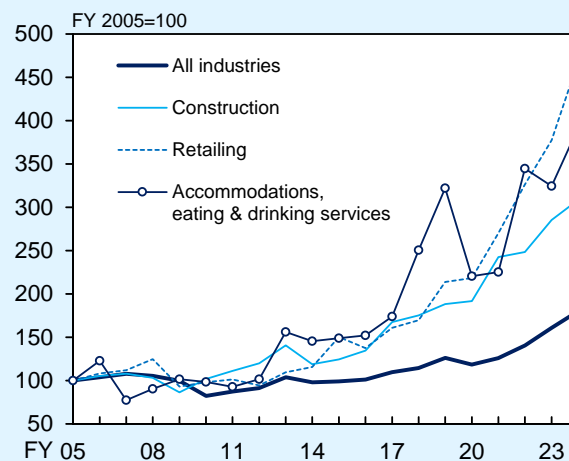
This box examines the impact of labor supply constraints on corporate investment activity. The *Tankan* shows that software investment is increasing rapidly in industries with severe labor shortages, indicating that there is a growing trend toward increasing productivity with a smaller workforce (Chart B3-1).

Moreover, according to the results of a large-scale survey conducted by the Bank last year, investment to address labor shortages was cited as one of the main reasons firms are currently taking a more active business fixed investment stance, regardless of firm size (Chart B3-2). In addition, large and medium-sized firms are also increasing investment in research and development, reflecting growing awareness of the need for investment related to decarbonization and digital transformation, and there is strong demand for specialist personnel to support this type of investment (Chart B3-3).

However, as seen in Box 2, the substitution of capital for labor is making only gradual progress, and production may be hampered by labor supply constraints. In fact, leading indicators of business fixed investment, such as machinery orders and construction starts, have remained flat, albeit at relatively high levels.

Related to this, there has been an upward trend in the backlog of machinery orders and construction. Looking at the backlog in machinery orders by

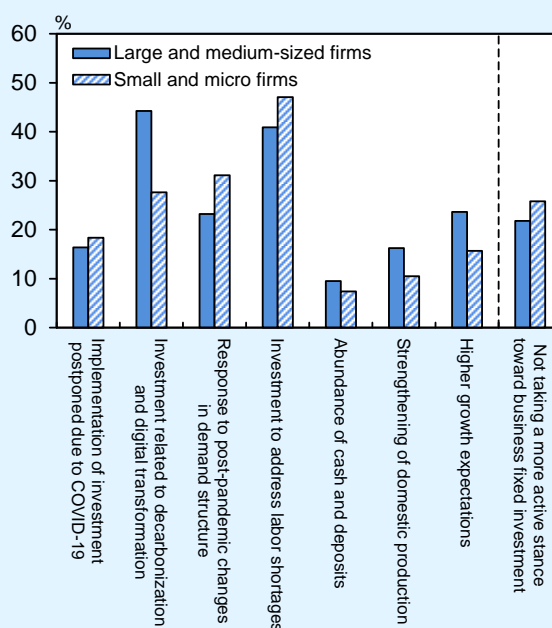
#### Chart B3-1: Software Investment



Source: Bank of Japan.

Note: Based on the *Tankan*. All enterprises. The figures for fiscal 2024 are forecasts from the December 2024 survey.

#### Chart B3-2: Reasons for a More Active Stance toward Business Fixed Investment



Source: Bank of Japan.

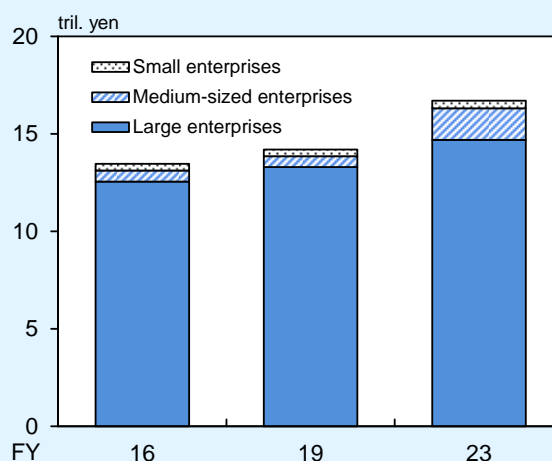
Note: Figures show the share of firms that chose each answer as the main reason for taking a more active stance toward domestic business fixed investment since the COVID-19 pandemic in the *Survey regarding Corporate Behavior since the Mid-1990s*. Up to three answers were allowed.

major item shows that while the order backlog for metal cutting machines has remained flat due to factors such as the soft real estate market in China, for items that require specialist skills and are in high demand stemming from the recovery of the IT cycle, such as electronic computers -- including semiconductor manufacturing equipment -- and communication equipment, the order backlog has been increasing as a whole (Chart B3-4[1]). Manufacturers of these high-tech items may be facing labor supply constraints due to a shortage of skilled personnel, making it difficult to increase production.

Moreover, in the construction industry, an indicator of the backlog -- calculated by dividing the value of unfinished construction on a given day by the average value of projects completed in the past 12 months -- is trending upward due to factors such as delays in the start of construction caused by labor shortages (Chart B3-4[2]). When the completion of factory buildings is delayed due to such construction delays, for example, the delivery of industrial robots due to be installed in these facilities will also be delayed, resulting in an increase in the backlog of orders for industrial robots.

Thus, labor supply constraints may be one of the reasons for firms delaying investments recently. Clearly, the fact that the order backlog is increasing is also evidence of robust demand. Consequently, in assessing future business fixed investment, it is necessary to pay attention not only to developments in demand but also to labor supply constraints due to labor shortages.

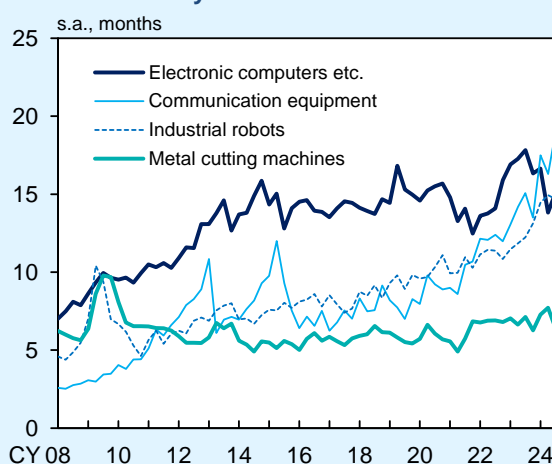
**Chart B3-3: R&D Investment**



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

**Chart B3-4: Investment Order Backlog**

### 1. Machinery Orders



### 2. Construction Orders



Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism.  
Notes: 1. In the upper chart, figures are calculated as the value of machinery orders yet to be executed at the end of the last month of the quarter divided by the average sales over the preceding three months.  
2. In the lower chart, figures are calculated as the value of construction work yet to be executed at the end of the last month of the quarter divided by the average value of construction work executed over the preceding 12 months.  
3. In the upper chart, figures for 2024/Q4 are as of end-November. In the lower chart, the figure for 2024/Q4 is as of end-October.



## (Box 4) Labor Market Conditions and Wages

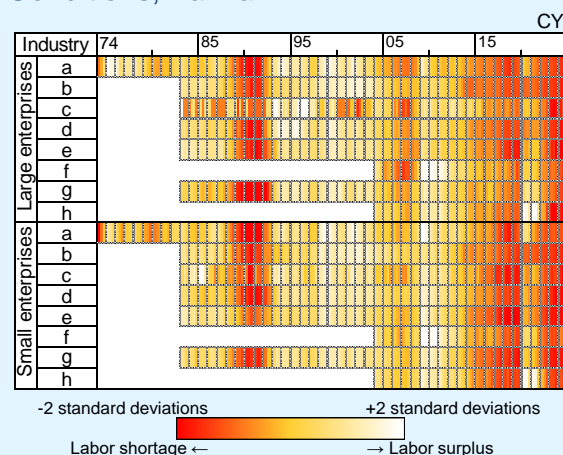
This box examines labor market conditions and wages. In order to examine the spread of tightness in labor market conditions across industries and firm sizes, we refer to the heat map of the employment conditions DI presented in the October 2024 Outlook Report. The heat map shows that labor shortages have continued to be severe across a wide range of industries and among both small and large firms (Chart B4-1). Examining labor market conditions for full-time and part-time employees separately and by industry and firm size shows that labor market conditions for full-time employees have recently become tighter than those for part-time employees and that the trend seems to be widely observed (Charts B4-2 and B4-3).<sup>23</sup>

Next, an unemployment-vacancy (U-V) analysis -- a method to distinguish structural and cyclical unemployment from the relationship between unemployment and job vacancies -- is carried out to estimate the structural unemployment rate, using the job vacancy rate in the *Survey on Labour Economy Trend*.<sup>24</sup> Frictional

<sup>23</sup> Heat maps of labor market conditions by industry, firm size, and type of employment are constructed using the Ministry of Health, Labour and Welfare's *Survey on Labour Economy Trend*, from which it is possible to obtain DIs for the excess/shortage of employees separately for full-time and part-time employees.

<sup>24</sup> In the U-V analysis, labor supply and demand are considered to be in equilibrium as a whole when the job vacancy rate equals the unemployment rate, and the unemployment rate at such time is regarded as the structural unemployment rate. In this box, the estimate of the structural unemployment rate is calculated in such a way that the slope of the U-V curve is stable in the long term, and that allows for variation in the intercept of the U-V curve using a statistical method.

**Chart B4-1: Heat Map for Labor Market Conditions, *Tankan***

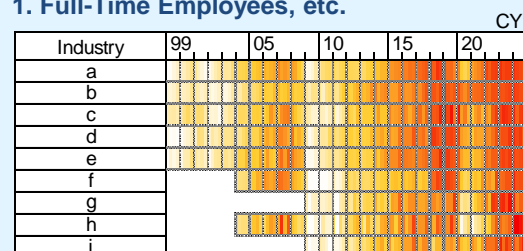


Source: Bank of Japan.

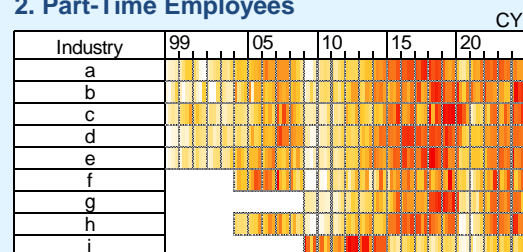
- Notes: 1. In this heat map, figures for the employment conditions DI in the *Tankan* are normalized using the average and standard deviation for each industry and enterprise size over the period overall. Large enterprises are enterprises with a capitalization of 1 billion yen or more, while small enterprises are enterprises with a capitalization of 20 million yen or more but less than 100 million yen.  
2. Figures for (g) services from March 2010 onward are calculated as the weighted averages of figures for "services for businesses" and "services for individuals." The number of reporting enterprises is used as weights.  
3. The industries are as follows:  
(a) manufacturing; (b) construction; (c) real estate; (d) wholesaling and retailing; (e) transport and postal activities; (f) information and communications; (g) services; (h) accommodations, eating and drinking services.

**Chart B4-2: Heat Map for Labor Market Conditions, by Industry**

### 1. Full-Time Employees, etc.



### 2. Part-Time Employees



Source: Ministry of Health, Labour and Welfare.

- Notes: 1. In these heat maps, figures for the DI for enterprises' employment conditions in the *Survey on Labour Economy Trend* are normalized using the average and standard deviation for each type of employment and industry over the period overall. In the upper chart, figures before 2008 are based on those for regular employees.  
2. Regarding the color coding, refer to the legend in Chart B4-1.  
3. The industries are as follows:  
(a) manufacturing; (b) construction; (c) real estate, goods rental and leasing; (d) wholesaling and retailing; (e) transport and postal activities; (f) information and communications; (g) living-related and personal services; (h) accommodations, eating and drinking services; (i) medical, health care, and welfare.

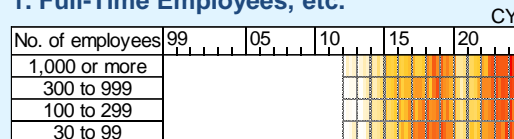


unemployment, resulting from voluntary unemployment to some extent, is one of the key determinants of the structural unemployment rate. This factor is especially relevant amid the growing market for job changers among full-time employees, particularly younger workers, and an increasing number of non-regular employees switching to become regular employees. With regard to voluntary unemployment, the number of those unemployed due to "voluntary separation" can be captured in the *Labour Force Survey*; taking this into account, the relationship between the voluntary unemployment rate and the structural unemployment rate is examined. Chart B4-4(1) shows that the two are highly correlated. It is worth noting that these two do not necessarily match, as they are calculated using different methods. One way to interpret this correlation is that, as the market for job changers has grown in recent years, the structural unemployment rate has been pushed up by workers who remain in the unemployment pool with a view to finding a better workplace, mainly among the younger population -- in other words, by the increasing number of "job hoppers." A calculation of the unemployment gap (the gap between the actual unemployment rate and the structural unemployment rate), using the estimate of the structural unemployment rate explained above, shows that the level of tightness in labor market conditions is higher than during the bubble period (Chart B4-4[2]).

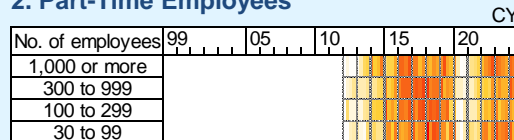
Taking into account the results above, the relationship between the tightness of labor market conditions and the nominal wage by type of employment shows that the slope of the Phillips curve for wages has become steeper since the

**Chart B4-3: Heat Map for Labor Market Conditions, by Enterprise Size**

**1. Full-Time Employees, etc.**



**2. Part-Time Employees**



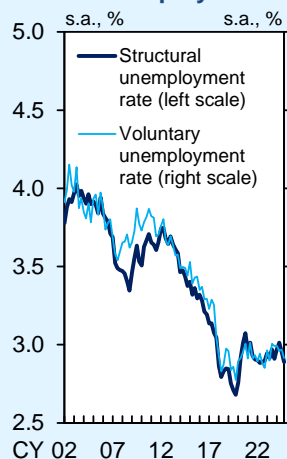
Source: Ministry of Health, Labour and Welfare.

Notes: 1. In these heat maps, figures for the DI for enterprises' employment conditions in the *Survey on Labour Economy Trend* are normalized using the average and standard deviation for each type of employment and enterprise size over the period overall. The size classification is based on enterprises' number of regular employees.

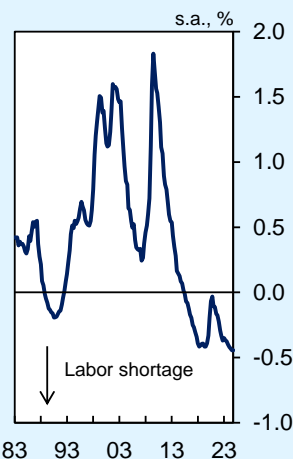
2. Regarding the color coding, refer to the legend in Chart B4-1.

**Chart B4-4: Unemployment Gap**

**1. Structural Unemployment Rate**



**2. Unemployment Gap**



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

Notes: 1. Figures for the structural unemployment rate from 2020/Q1 onward are estimated using the job vacancy rate from the *Survey on Labour Economy Trend*. Voluntary unemployment rate = Number of unemployed persons who voluntarily quit their job / Labor force

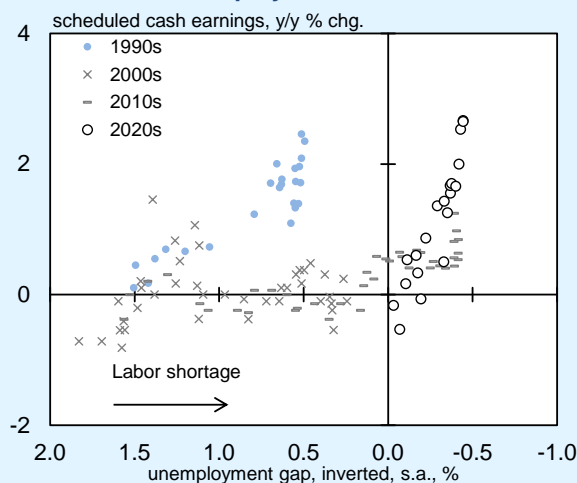
2. Unemployment gap = Unemployment rate - Structural unemployment rate

3. Figures for 2024/Q4 are October-November averages.

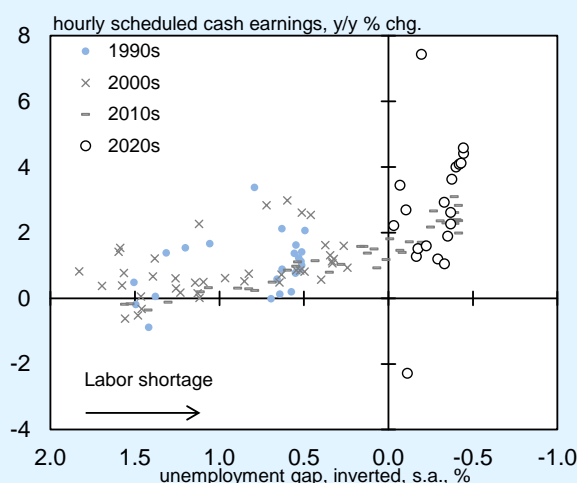
pandemic for both full-time and part-time employees (Chart B4-5). This steepening is considered to be due to the following two factors: (1) wages are now expected to continue rising in a sustained manner as labor shortages may continue in the medium to long term, and (2) firms' wage-setting stance has been shifting toward raising wages due to intensifying labor shortages.

## Chart B4-5: Wage Phillips Curve

### 1. Full-Time Employees



### 2. Part-Time Employees



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

Note: The sample period is from 1994/Q1 to 2024/Q4. Figures for 2024/Q4 are October–November averages.

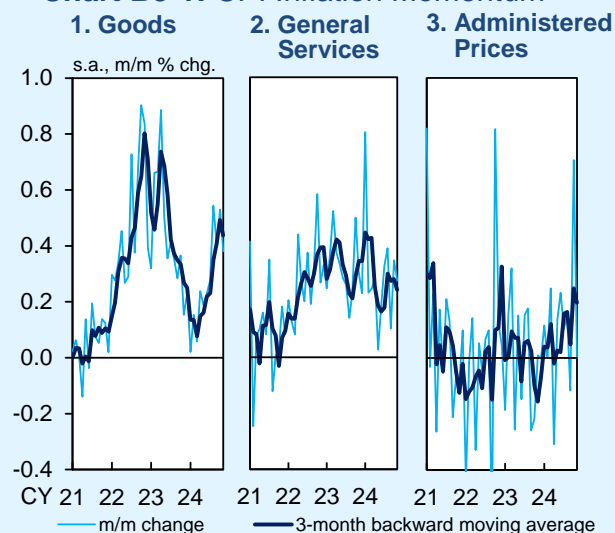
## (Box 5) Trend in Services Prices

This box examines the recent trend in services prices.

First, a look at the month-on-month rate of change in the seasonally-adjusted CPI for goods and services shows that, although the rate of increase in goods prices had been slowing down until early 2024 as the effects of a pass-through to consumer prices of cost increases led by the past rise in import prices have waned, it has been accelerating again recently, mainly due to a rise in the price of food products reflecting increased raw material and distribution costs and a rise in rice prices (Chart B5-1).<sup>25</sup> General services prices (less housing rent) have continued to show relatively high growth, albeit with fluctuations, suggesting that there has been progress in price rises that mainly reflect wage increases. Meanwhile, the rate of increase in administered prices has been growing moderately, although at a lower rate than that of other items.

Next, changes in services prices are examined. As explained in the July 2024 Outlook Report, services prices are often changed in April and October. Price increases taking place in those months are important indications of whether inflation will be sustained. Indeed, a look at the monthly frequency of price increases in services shows that prices have risen in April and October

**Chart B5-1: CPI Inflation Momentum**



Source: Ministry of Internal Affairs and Communications.

Note: 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. Figures for goods exclude fresh food and energy. Figures for general services exclude housing rent. Figures for administered prices consist of public services and water charges. The latest figures are for November 2024.

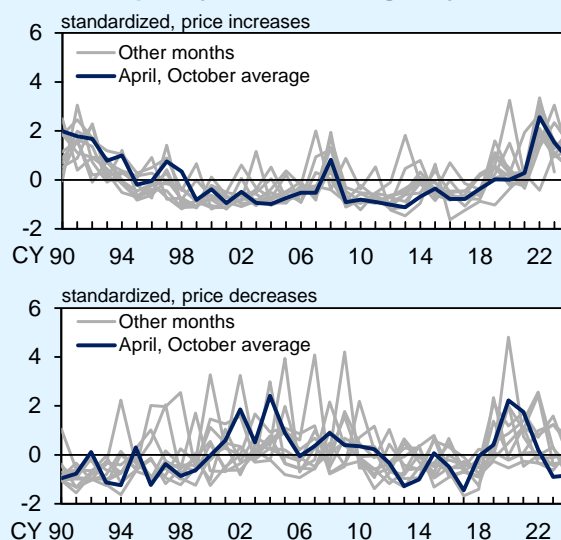
<sup>25</sup> Several factors are likely to have contributed to a rise in the price of rice, including upward pressure on costs (e.g., fertilizer and fuel) and a tightening of supply and demand.

recently, at about the same level as seen in the first half of the 1990s when services prices were rising on the whole (Chart B5-2[1]). Moreover, the chart shows that, in years in which price increases were higher in April and October, the frequency of increases in other months was also higher. To confirm this point, a test was carried out to determine whether there is any difference by month in the seasonally-adjusted frequency of price changes. The results show that there are no major statistical differences (Chart B5-2[2]). Given the above, in order to gauge the persistence in the momentum of CPI inflation, it is important to see whether price changes are also taking place in months other than April and October, when analyzing developments in the prices of general services. Turning to developments in the latter half of 2024, there were firms that increased the price of items in "dining out" and "services related to domestic duties," mainly reflecting a rise in raw material and labor costs. Although major price changes are likely to take place in April and October, price increases in other months are also important in examining the momentum of CPI inflation.

Finally, to identify trends in services prices, it is crucial to assess the relationship between wages and prices. In this regard, developments in items in the CPI with a high labor cost ratio show that they continue to be on a moderate uptrend (Chart B5-3). In addition, we take a look at the services producer price index (SPPI) by (1) labor cost ratio, and (2) matching items with corresponding industries in the *Tankan*. The results show that wage increases appear to have pushed up the price of items in the SPPI with a higher labor cost

**Chart B5-2: Price Changes in General Services**

**1. Frequency of Price Changes by Month**

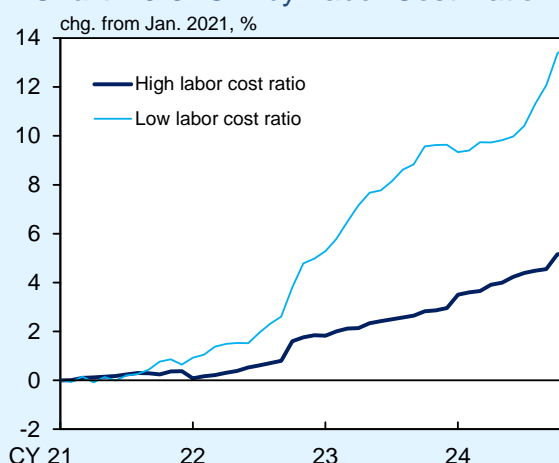


**2. Wald Test for Residual Seasonality**

Price increases	Price decreases	Net price changes
p=0.840	p=0.837	p=0.895

Source: Ministry of Internal Affairs and Communications.  
Notes: 1. Figures in the upper and middle charts are based on calculations using region- and item-level data from the *Retail Price Survey*.  
2. A Wald test was conducted with the null hypothesis that "all coefficients for the month dummies are equal to zero." The dependent variable is the frequency of price changes. Independent variables consist of month dummies and the 1-month lagged value of the frequency of price changes. The estimation period is from January 1990 to November 2024. The frequency of price changes is seasonally adjusted. For details of the estimation approach, see Hornstein, A. (2024), "Residual Seasonality in Monthly Core Inflation," Federal Reserve Bank of Richmond, Economic Brief, May 2024.

**Chart B5-3: CPI by Labor Cost Ratio**



Source: Ministry of Internal Affairs and Communications.  
Notes: 1. Based on staff calculations using the CPI excluding fresh food, energy, imputed rent, and the effects of temporary factors. The latest figures are for November 2024.  
2. 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 in the chart are the weighted averages of the items grouped in the top/bottom 25 percent.

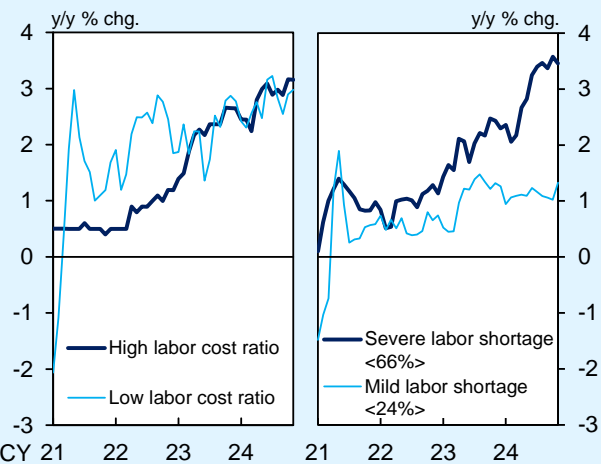
ratio and with more severe labor shortages (Chart B5-4).

Summarizing the above, services prices have begun to show a clear uptrend as wage increases have taken hold, on the back of the progress in price rises in services being reflected in the CPI and the SPPI in price changes that took place in October 2024.

In addition, the GDP deflator, which indicates domestic inflationary pressure, grew at a fast pace in 2023, mainly in unit profits, as firms passed on cost increases (Chart B5-5). On the other hand, since the start of 2024, the contribution of unit labor costs has been intensifying, reflecting wage increases. With wages and prices rising moderately, the growth rates of unit profits and unit labor costs are likely to become balanced.

**Chart B5-4: Services Producer Price Index**

1. By Labor Cost Ratio      2. By Degree of Labor Shortage

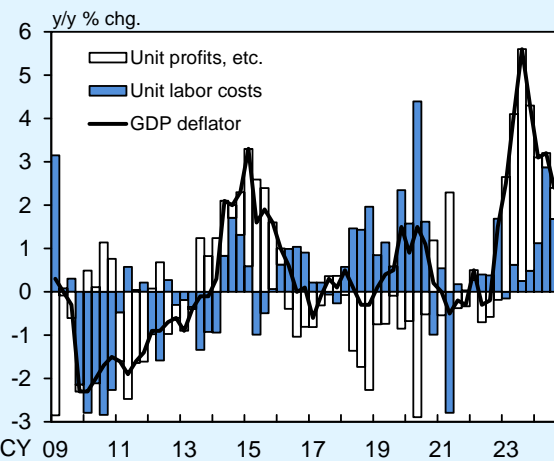


Sources: Ministry of Internal Affairs and Communications; Bank of Japan.

Notes: 1. In the left-hand chart, services producer price index (SPPI) 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. The SPPIs for services with a high/low labor cost ratio are calculated by taking the weighted average of items grouped into the top/bottom 50 percent of items in terms of their labor cost ratio.

2. In the right-hand chart, SPPI items are matched to industries in the *Tankan* and grouped in terms of the share of the number of enterprises responding in the employment conditions question that they had a "shortage" of employees. The share is calculated as the average for CY 2022 to 2024. The SPPIs for services with a severe/mild labor shortage are calculated by taking the weighted average of items matched to industries in which the share of enterprises indicating they had a "shortage" of employees was above/below that in the nonmanufacturing sector overall. Figures exclude international transportation, items linked to goods prices (leasing and rental), and items affected by pent-up demand (hotels, passenger transportation, etc.). Figures in angular brackets show the share of items in severe/mild labor shortage industries in the SPPI.

**Chart B5-5: GDP Deflator**



Source: Cabinet Office.

Note: Unit labor costs = Nominal compensation of employees / Real GDP

