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日本銀行
BANK OF JAPAN

Outlook for Economic Activity and Prices

October 2022

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

Outlook for Economic Activity and Prices (October 2022)

The Bank's View[1]

Summary

- Japan's economy is likely to recover toward the middle of the projection period, with the impact of the novel coronavirus (COVID-19) and supply-side constraints waning, although it is expected to be under downward pressure stemming from high commodity prices and slowdowns in overseas economies. Thereafter, as a virtuous cycle from income to spending intensifies gradually, Japan's economy is projected to continue growing at a pace above its potential growth rate.
- The year-on-year rate of change in the consumer price index (CPI, all items less fresh food) is likely to increase toward the end of this year due to rises in prices of such items as energy, food, and durable goods. The rate of increase is then expected to decelerate toward the middle of fiscal 2023 because the contribution of such price rises to this CPI is likely to wane. Thereafter, it is projected to accelerate again moderately on the back of improvement in the output gap and rises in medium- to long-term inflation expectations and in wage growth.
- Comparing the projections with those presented in the previous *Outlook for Economic Activity and Prices* (Outlook Report), the projected growth rates are somewhat lower, mainly for fiscal 2022, due to the effects of the spread of COVID-19 this summer and of slowdowns in overseas economies. The projected rates of increase in the CPI are higher, mainly for fiscal 2022, due to the effects of a pass-through to consumer prices of cost increases led by a rise in import prices.
- Concerning risks to the outlook, there remain extremely high uncertainties for Japan's economy, including the following: developments in overseas economic activity and prices; developments in the situation surrounding Ukraine and in commodity prices; and the course of COVID-19 at home and abroad and its impact. In this situation, it is necessary to pay due attention to developments in financial and foreign exchange markets and their impact on Japan's economic activity and prices.
- With regard to the risk balance, risks to economic activity are skewed to the downside. Risks to prices are skewed to the upside.

[1] "The Bank's View" was decided by the Policy Board at the Monetary Policy Meeting held on October 27 and 28, 2022.

I. Current Situation of Economic Activity and Prices in Japan

Japan's economy, despite being affected by factors such as high commodity prices, has picked up as the resumption of economic activity has progressed while public health has been protected from COVID-19. Overseas economies have recovered moderately on the whole, but slowdowns have been observed, mainly in advanced economies. Exports and industrial production have increased as a trend, with the effects of supply-side constraints waning. Corporate profits have been at high levels on the whole, and business sentiment has been more or less unchanged. In this situation, business fixed investment has picked up, although weakness has been seen in some industries. The employment and income situation has improved moderately on the whole. Private consumption has increased moderately, despite being affected by COVID-19. Housing investment has been relatively weak. Public investment has been more or less flat. Financial conditions have been accommodative on the whole, although weakness in firms' financial positions has remained in some segments. On the price front, the year-on-year rate of change in the CPI (all items less fresh food) has been at around 3 percent due to rises in prices of such items as energy, food, and durable goods. Meanwhile, inflation expectations have risen.

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

A. Baseline Scenario of the Outlook for Economic Activity

Toward the middle of the projection period, Japan's economy is likely to recover, with the impact of COVID-19 and supply-side constraints waning and with support from accommodative financial conditions and the government's economic measures, although it is expected to be under downward pressure stemming from high commodity prices and slowdowns in overseas economies.

Slowdowns have been observed in overseas economies, with inflationary pressure exerted on a global basis and central banks thereby continuing to raise policy interest rates. In addition, although prices of commodities such as crude oil and grains (e.g., wheat) have turned to a decline on the whole, past rises in these prices have brought about an outflow of income from (i.e., trading losses for) Japan, which relies on imports for most of these commodities, and have put downward pressure on households' real income and corporate profits through rises in energy and food prices. Japan's economy is projected to be under such downward pressure stemming from the slowdowns in overseas economies and the outflow of income, but is likely to recover because a self-sustaining increase in demand, including pent-up demand, is projected to continue with the impact of COVID-19 and supply-side constraints waning. Moreover, the government's various measures are expected to mitigate the negative impact on income.

In the household sector, regarding the employment situation, the number of regular employees is expected to continue increasing, and a rise in that of non-regular employees

is likely to become evident with a recovery in the face-to-face services sector. In addition, wage growth is expected to increase, reflecting improvement in labor market conditions. Due to these factors, employee income is projected to continue increasing moderately. In this situation, although private consumption is expected to be under downward pressure from the real income side due to price rises, it is projected to continue increasing. This is mainly because pent-up demand is likely to materialize, supported by household savings that had accumulated as a result of pandemic-related restrictions, as the resumption of consumption activities progresses further while public health is being protected. In the corporate sector, although overseas economies, particularly advanced economies, are projected to slow, exports and production are likely to remain on an uptrend with the effects of supply-side constraints waning and with support from high levels of order backlogs for automobiles and capital goods. Inbound tourism demand, which is categorized under services exports, is also expected to increase, mainly in reflection of the government's relaxation of entry restrictions. Although high raw material costs are projected to exert downward pressure, corporate profits are likely to remain at high levels on the whole, albeit with variation across industries and firm sizes. This will likely occur due to continued improvement in economic activity on the back of the materialization of pent-up demand, for example, and also partly due to the yen's depreciation. In this situation, an uptrend in business fixed investment is expected to become clear as accommodative financial conditions provide support and supply-side constraints wane. Meanwhile, public investment is projected to be more or less flat, with expenditure related to building national resilience continuing. Government consumption is expected to decline gradually in reflection of developments in expenditure related to COVID-19.

From the middle of the projection period, Japan's economy is projected to continue growing at a pace above its potential growth rate as a virtuous cycle from income to spending intensifies gradually in the overall economy. That said, the pace of growth is highly likely to decelerate gradually because the contribution of the materialization of pent-up demand is projected to wane.

In the household sector, employee income is likely to continue increasing on the back of a moderate rise in the number of employees associated with improvement in economic activity and of an increase in wage growth that reflects tightening labor market conditions and price rises. Supported by this increase in employee income, private consumption is expected to keep increasing steadily, although the materialization of pent-up demand is likely to slow. In the corporate sector, exports and production are likely to increase moderately with overseas economies picking up. Inbound tourism demand is expected to continue increasing. Corporate profits are likely to follow an improving trend since domestic and external demand is expected to increase and downward pressure stemming from high raw material costs is likely to wane gradually. In this situation, with support from accommodative financial conditions, business fixed investment is expected to continue

increasing, including investment to address labor shortage, digital-related investment, and research and development (R&D) investment related to growth areas and decarbonization.

Looking at the financial conditions on which the above outlook is based, it is expected that they will remain accommodative as the Bank pursues Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control, and that this will support an increase in private demand.[2] That is, the environment for external funding, such as bank borrowing and the issuance of CP and corporate bonds, is projected to remain accommodative. In this situation, firms' financial positions are likely to continue on an improving trend along with an economic recovery.

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

B. Baseline Scenario of the Outlook for Prices

The year-on-year rate of change in the CPI (all items less fresh food) is likely to increase toward the end of this year due to rises in prices of such items as energy, food, and durable goods. The rate of increase is then expected to decelerate toward the middle of fiscal 2023 because the contribution of such price rises to this CPI is likely to wane. Thereafter, it is projected to accelerate again moderately on the back of improvement in the output gap and rises in medium- to long-term inflation expectations and in wage growth. Looking at the projected developments in this CPI by fiscal year, the rate of change is expected to be relatively high at around 3 percent for fiscal 2022 and then be at around 1.5 percent for fiscal 2023 and fiscal 2024. Meanwhile, reflecting price developments in such items as food and durable goods, the year-on-year rate of change in the CPI (all items less fresh food and energy) is likely to see similar developments to those in the rate of change in the CPI (all items less fresh food), albeit with comparatively smaller range of fluctuations.

The main factors that determine inflation rates are assessed as follows. The output gap, which captures the utilization of labor and capital, has been slightly negative. With Japan's economy following a growth path that outpaces its potential growth rate, the gap is

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

[3] Under a specific methodology, Japan's recent potential growth rate is estimated to be in the range of 0.0-0.5 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 particularly high uncertainties in the current phase over how COVID-19 will affect the trends in productivity or labor supply.

projected to turn positive around the second half of fiscal 2022 and then continue to expand moderately. Under these circumstances, labor market conditions are expected to tighten, partly due to a deceleration in the pace of increase in labor force participation of women and seniors, and upward pressure on wages is projected to intensify gradually. This is likely to put upward pressure on personnel expenses on the cost side and contribute to an increase in households' purchasing power.

Medium- to long-term inflation expectations have risen, albeit at a moderate pace relative to short-term ones. The September 2022 *Tankan* (Short-Term Economic Survey of Enterprises in Japan) shows that the diffusion index (DI) for output prices has increased further and firms' inflation outlook for general prices has been at a high level, not only for the short term but also for the medium to long term. Given that the formation of inflation expectations in Japan is largely adaptive, an increase in actual inflation is expected to bring about a rise in households' and firms' medium- to long-term inflation expectations and, through changes in firms' price- and wage-setting behavior and in labor-management wage negotiations, lead to a sustained rise in prices accompanied by wage increases.

III. Risks to Economic Activity and Prices

A. Risks to Economic Activity

Regarding the aforementioned baseline scenario of the outlook for economic activity, there are extremely high uncertainties, including the following: developments in overseas economic activity and prices; developments in the situation surrounding Ukraine and in commodity prices; and the course of COVID-19 at home and abroad and its impact. Specifically, it is necessary to pay attention to the following upside and downside risks.

The first is developments in overseas economic activity and prices and in global financial and capital markets. Amid ongoing inflationary pressure on a global basis, central banks have raised policy interest rates rapidly, and moves to tighten monetary policy, including a reduction in monetary accommodation, are projected to continue for the time being. On this point, it is expected in the baseline scenario that inflation rates around the world will decline gradually and that overseas economies will continue to grow moderately, albeit at a decelerating pace. That said, vigilance against a wage-price spiral has heightened, mainly in advanced economies. In addition, there is concern in global financial and capital markets over whether it is possible to contain inflation and maintain economic growth simultaneously. With central banks continuing to make rapid policy interest rate hikes, there is a risk that global financial conditions will tighten further through adjustments in asset prices, fluctuations in foreign exchange markets, and capital outflows from emerging economies, and that this will eventually lead to overseas economies deviating downward from the baseline scenario. Taking this risk into account, it is necessary to pay

due attention to developments in financial and foreign exchange markets and their impact on Japan's economic activity and prices.

The second factor is developments in the situation surrounding Ukraine and the associated developments in prices of commodities, including grains. Depending on the course of this situation, overseas economies, particularly the euro area, could be pushed down further. In addition, although prices of commodities, including grains, have declined compared with a while ago, they could rise again depending on, for example, developments in the situation surrounding Ukraine. Given that Japan is a commodity importer, 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. Such deterioration in the terms of trade squeezes corporate profits and households' real income, and this could lead business fixed investment and private consumption to deviate downward from the baseline scenario through more cautious spending behavior of firms and households. On the other hand, if prices of commodities, including grains, see a clearer downtrend, the economy could deviate upward. On this point, in the baseline scenario, commodity prices are assumed to decline moderately on the whole toward the end of the projection period with reference, for example, to developments in futures markets. However, there are extremely high uncertainties, such as over geopolitical factors -- particularly the situation surrounding Ukraine -- and global efforts toward addressing climate change.

The third factor is how COVID-19 at home and abroad will affect private consumption and firms' export and production activities. COVID-19 resurged in Japan this summer, but its impact on the economy has remained small relative to past phases of COVID-19 surges, and the resumption of consumption activities has progressed steadily while public health has been protected. That said, depending on the course of COVID-19, upward pressure from pent-up demand could weaken by more than expected. On the other hand, if vigilance against COVID-19 lessens significantly, household savings that had accumulated as a result of pandemic-related restrictions could be withdrawn by more than expected and private consumption could be pushed up. In the meantime, supply-side constraints have remained in part, and if COVID-19 resurges at home and abroad in this situation, such constraints could intensify again through, for example, supply-chain disruptions. If this happens, Japan's exports and production could be pushed down and the adverse impact could even spill over to goods consumption and business fixed investment.

The fourth factor considered from a somewhat long-term perspective is firms' and households' medium- to long-term growth expectations. It is expected that efforts with a view to the post-COVID-19 era, digitalization, and decarbonization will change Japan's economic structure and people's working styles. In addition, the heightened geopolitical risks could change the trend of globalization, which has supported the growth of the global

economy to date. Depending on how households and firms react to these changes, their medium- to long-term growth expectations, the potential growth rate, and the output gap could go either upward or downward.

B. Risks to Prices

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

The first is high uncertainties over firms' price- and wage-setting behavior, which could exert either upward or downward pressure on prices. Recently, against the backdrop of high raw material costs, price hikes have been widely observed even among firms that had taken a cautious stance toward changing their selling prices, while their pricing decisions have been made in consideration of price setting by competitors. Depending on how much upward pressure will be exerted by raw material costs and on how firms' inflation expectations will develop, the pass-through of cost increases could accelerate by more than expected and lead prices to deviate upward from the baseline scenario. In addition, there is a possibility that wages and prices will rise by more than expected as more firms reflect price developments in wage setting through labor-management wage negotiations. On the other hand, given that, in Japan, the behavior and mindset based on the assumption that prices and wages will not increase easily are deeply entrenched, there is a risk that moves to increase wages will not strengthen and prices will deviate downward from the baseline scenario.

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. Fluctuations in international commodity prices have been significant, reflecting high uncertainties over, for example, developments in the situation surrounding Ukraine, while inflation rates have remained high on a global basis and foreign exchange markets have fluctuated sharply. How these factors will affect Japan's prices requires due attention.

IV. Conduct of Monetary Policy

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

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

The first perspective involves an examination of the baseline scenario of the outlook. Although it will take time, the year-on-year rate of change in the CPI is likely to increase gradually as an underlying trend toward achieving the price stability target, mainly on the back of improvement in the output gap and rises in medium- to long-term inflation expectations and in wage growth.

The second perspective involves an examination of the risks considered most relevant to the conduct of monetary policy. Concerning risks to the outlook, there remain extremely high uncertainties for Japan's economy, including the following: developments in overseas economic activity and prices; developments in the situation surrounding Ukraine and in commodity prices; and the course of COVID-19 at home and abroad and its impact. In this situation, it is necessary to pay due attention to developments in financial and foreign exchange markets and their impact on Japan's economic activity and prices. With regard to the risk balance, risks to economic activity are skewed to the downside. Risks to prices are skewed to the upside. On the financial side, overheating has not been seen in asset markets and financial institutions' credit activities. Japan's financial system has maintained stability on the whole. Although attention is warranted on, for example, the impact of the tightening of global financial conditions, the financial system is likely to remain highly robust on the whole even in the case of an adjustment in the real economy at home and abroad and in global financial markets, mainly because financial institutions have sufficient capital bases. When examining financial imbalances from a longer-term perspective, if downward pressure on financial institutions' profits, such as from low interest rates, the declining population, and excess savings in the corporate sector, becomes prolonged, this could create a risk of a gradual pullback in financial intermediation. On the other hand, under these circumstances, the vulnerability of the financial system could increase, mainly due to the search for yield behavior. Although these risks are judged as not significant at this point, it is necessary to pay close attention to future developments.[5]

As for the conduct of monetary policy, the Bank will continue with QQE with Yield Curve Control, aiming to achieve the price stability target of 2 percent, as long as it is necessary for maintaining that target in a stable manner. It will continue expanding the monetary base until the year-on-year rate of increase in the observed CPI (all items less fresh food) exceeds 2 percent and stays above the target in a stable manner.

For the time being, while closely monitoring the impact of COVID-19, the Bank will support financing, mainly of firms, and maintain stability in financial markets, and will not hesitate to take additional easing measures if necessary; it also expects short- and long-term policy interest rates to remain at their present or lower levels.

[5] For details, see the Bank's *Financial System Report* (October 2022).

(Appendix)

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 2022	+1.8 to +2.1 [+2.0]	+2.8 to +2.9 [+2.9]	+1.8 to +1.9 [+1.8]
Forecasts made in July 2022	+2.2 to +2.5 [+2.4]	+2.2 to +2.4 [+2.3]	+1.2 to +1.4 [+1.3]
Fiscal 2023	+1.5 to +2.0 [+1.9]	+1.5 to +1.8 [+1.6]	+1.5 to +1.8 [+1.6]
Forecasts made in July 2022	+1.7 to +2.1 [+2.0]	+1.2 to +1.5 [+1.4]	+1.2 to +1.4 [+1.4]
Fiscal 2024	+1.3 to +1.6 [+1.5]	+1.5 to +1.9 [+1.6]	+1.5 to +1.8 [+1.6]
Forecasts made in July 2022	+1.1 to +1.5 [+1.3]	+1.1 to +1.5 [+1.3]	+1.4 to +1.7 [+1.5]

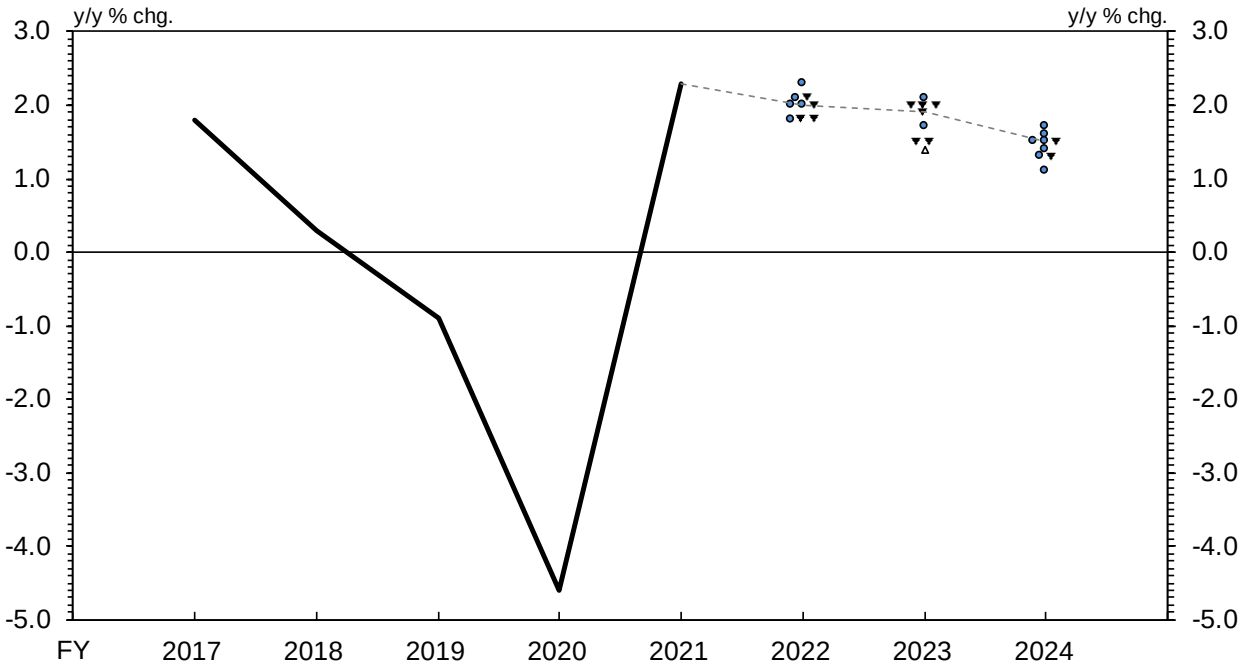
Notes: 1. Figures in brackets indicate the medians of the Policy Board members' forecasts (point estimates).

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.

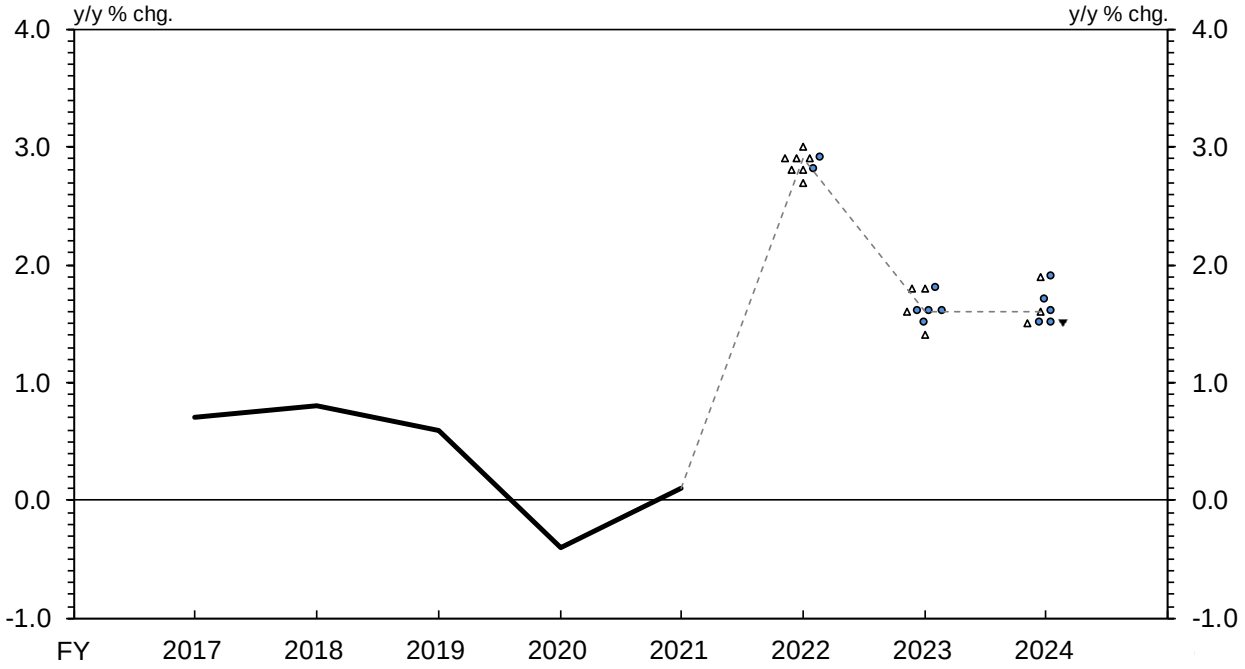
3. Each Policy Board member makes their forecasts taking into account the effects of past policy decisions and with reference to views incorporated in financial markets regarding the future conduct of policy.

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[6]

I. Current Situation of Economic Activity and Its Outlook

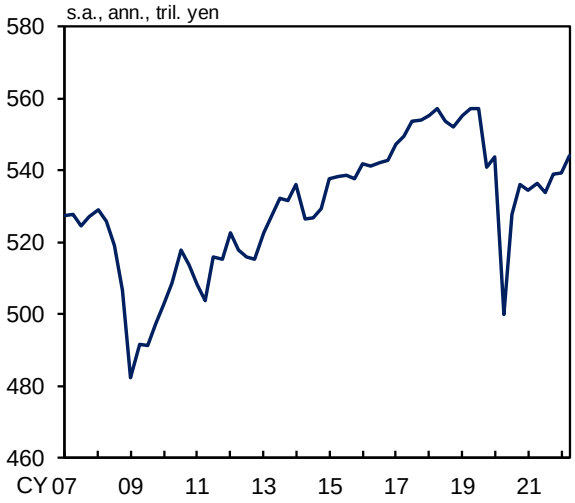
A. Economic Developments

Japan's economy, despite being affected by factors such as high commodity prices, has picked up as the resumption of economic activity has progressed while public health has been protected from COVID-19.

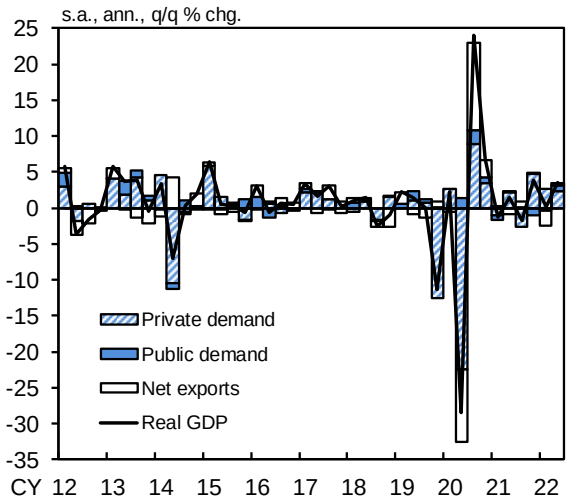
After being more or less unchanged for the January-March quarter of 2022, real GDP increased clearly for the April-June quarter, registering 0.9 percent on a quarter-on-quarter basis and 3.5 percent on an annualized basis (Chart 1). Looking at the breakdown, private consumption increased with the impact of COVID-19 waning, particularly for services consumption, and business fixed investment turned to an increase. Public investment, which had continued to decrease, was flat due to expenditure related to building national resilience continuing.[7] Meanwhile, net exports were more or less flat, with exports and imports being pushed down concurrently by delivery delays and supply-side constraints, both of which were due to

Chart 1: Real GDP

1. Level



2. Annualized Quarterly Growth Rate



Source: Cabinet Office.

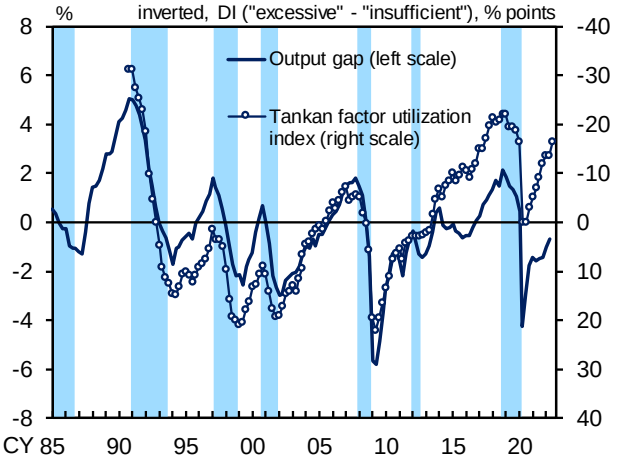
[6] "The Background" provides explanations of "The Bank's View" decided by the Policy Board at the Monetary Policy Meeting held on October 27 and 28, 2022.

[7] With regard to GDP statistics, retroactive revisions were made to correct improperly handled data in the *Current Survey on Orders Received for Construction* published by the Ministry of Land, Infrastructure, Transport and Tourism. The revisions were reflected in GDP figures with the release of the preliminary estimates of GDP for the April-June quarter of 2022. As a result, GDP figures for public investment for fiscal 2021 were revised upward, but this only had a slight impact of a 0.1 percentage point increase on the year-on-year rate of change in nominal GDP.

lockdowns such as in Shanghai. In this situation, the output gap -- which captures the utilization of labor and capital -- for the April-June quarter was negative despite improving from the previous quarter (Chart 2).

Monthly indicators and high-frequency data since then suggest that, although slowdowns have been observed in overseas economies, mainly advanced economies, Japan's economy has picked up, as the effects of supply-side constraints have waned and as the resumption of economic activity has progressed while public health has been protected. In the corporate sector, exports have increased as a trend, with the effects of supply-side constraints waning. While corporate profits have remained at high levels on the whole despite being affected by high commodity prices, business sentiment has been more or less unchanged. In this situation, business fixed investment has picked up, although weakness has been seen in some industries, and the business fixed investment plan for fiscal 2022 in the September 2022 *Tankan* indicates that investment is expected to increase clearly. In the household sector, private consumption has increased moderately, as the resumption of consumption activities has progressed while public health has been protected. This can be seen, for example, in developments in services consumption: the degree of decline remained relatively small even amid the COVID-19 resurgence from the second half of July through the first half of August, and such consumption has increased thereafter. Meanwhile, the employment and income situation has improved moderately on the whole, as labor

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.

market conditions have started to tighten while the economy has continued to pick up.

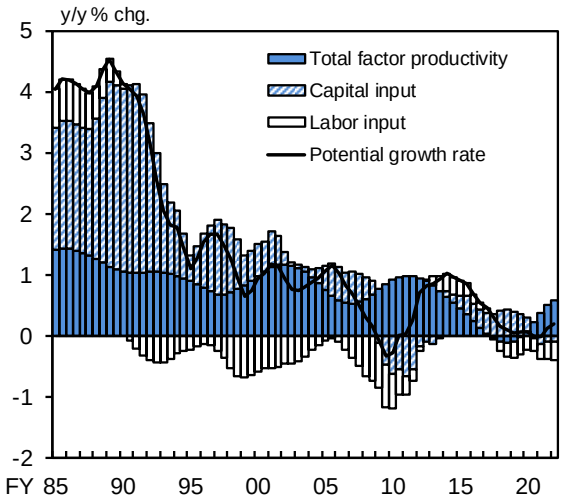
Japan's economy is likely to recover toward the middle of the projection period, with the impact of COVID-19 and supply-side constraints waning and with support from accommodative financial conditions and the government's economic measures, although it is expected to be under downward pressure stemming from high commodity prices and the slowdowns in overseas economies. [8] Thereafter, the economy is projected to continue growing at a pace above its potential growth rate as a virtuous cycle from income to spending intensifies gradually in the overall economy. That said, the pace of growth is highly likely to decelerate gradually because the contribution of the materialization of pent-up demand is projected to wane.

Looking at the projected economic developments by fiscal year, Japan's economy is likely to recover in the second half of fiscal 2022 with the impact of COVID-19 and supply-side constraints waning and with support from accommodative financial conditions and the government's economic measures, although it is expected to be under downward pressure stemming from high commodity prices and the slowdowns in overseas

[8] In November 2021, the Cabinet decided on the Economic Measures for Overcoming Coronavirus Infections and Opening Up a New Era, with a project size of around 78.9 trillion yen and fiscal spending of around 55.7 trillion yen. The government also formulated the Comprehensive Emergency Measures to Counter Soaring Crude Oil and Other Prices in April 2022 and, in September, additional measures to respond to the current soaring prices. The implementation of the budget based on these measures is expected to mainly push up government consumption and private consumption, and thereby support economic activity.

economies. For fiscal 2023, the growth rate is projected to remain relatively high, supported by accommodative financial conditions, although it is likely to decelerate somewhat with the remaining effects of the slowdowns in overseas economies. For fiscal 2024, the economy is likely to continue growing at a pace above its potential growth rate. Comparing the projections with those presented in the previous Outlook Report, the projected growth rates are somewhat lower, mainly for fiscal 2022, due to the effects of the spread of COVID-19 this summer and of slowdowns in overseas economies.

Chart 3: Potential Growth Rate



Source: Bank of Japan.
Note: Figures are staff estimates. Figures for the first half of fiscal 2022 are those for 2022/Q2.

The potential growth rate seems to have been in the range of 0.0-0.5 percent recently (Chart 3). This is because, although the growth rate of total factor productivity (TFP) has increased slightly, working hours have continued on a downtrend, reflecting working-style reforms, and growth in capital stock has decelerated as a result of past declines in business fixed investment. As for the outlook, the potential growth rate is expected to rise moderately. This is based on the projection that (1) the TFP growth rate will increase moderately, mainly on the back of advances in digitalization and investment in human capital and a resultant improvement in efficiency of resource allocation, (2) the pace of decline in working hours will slow with the effects of working-style reforms diminishing, and (3) growth in capital stock will accelerate cyclically. These developments are likely to be encouraged by the government's various measures and by accommodative financial conditions. However, in terms of labor, it is highly uncertain what kind of working style, including working from home, will take hold as the resumption of economic activity

progresses while public health is being protected. In addition, in the corporate sector, 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 the post-pandemic economic and industrial structures, including efforts toward digitalization and addressing climate change. Under these circumstances, the output gap and the potential growth rate, which are estimated based on a specific assumption regarding trends, should be interpreted with some latitude.

Details of the outlook for each fiscal year are as follows. In the second half of fiscal 2022, Japan's economy is likely to recover. This is because, although the economy is expected to be under downward pressure stemming from high commodity prices and the slowdowns in overseas economies, it is projected that the impact of COVID-19 on services consumption will wane and the effects of supply-side constraints will ease. Another reason is that accommodative financial conditions and the government's economic measures are likely to provide support. Specifically, while goods exports are likely to be affected by the slowdowns in overseas economies, they are expected to remain on an uptrend, with support from a waning of supply-side constraints and high levels of order backlogs for automobiles and capital goods. Inbound tourism demand, which is categorized under services exports, is projected to increase. Private consumption is expected to be pushed down by deterioration in real income due to price rises. However, on the back of improvement in the employment situation, it is projected to continue increasing because pent-up demand is likely to

materialize, supported by household savings that had accumulated as a result of pandemic-related restrictions, as the resumption of consumption activities progresses further while public health is being protected. With corporate profits being at high levels on the whole, an uptrend in business fixed investment is expected to become clear on the back of accommodative financial conditions and the waning of supply-side constraints. Overall government spending is projected to decrease somewhat. This is because, although expenditure related to COVID-19 is expected to remain at a high level, due in part to the formulation of economic measures, public investment is likely to decrease, given that the implementation of the fiscal 2022 budget for it was front-loaded in the first half of the fiscal year.

In fiscal 2023, the growth rate of Japan's economy is projected to remain relatively high, partly supported by accommodative financial conditions. However, with the remaining effects of the slowdowns in overseas economies, it is likely to decelerate somewhat, mainly reflecting slower materialization of pent-up demand and a waning of the effects of the government's economic measures. Japan's goods exports are projected to remain on an uptrend as the effects of supply-side constraints dissipate, although such exports will likely continue to be affected by the slowdowns in overseas economies. Inbound tourism demand is projected to keep increasing. Business fixed investment is expected to continue increasing, including investment to address labor shortage, digital-related investment, and investment for growth areas and to address environmental issues. Private consumption is also expected to keep increasing. This is based on the projection

that employee income will continue improving and pent-up demand will continue to materialize, albeit more slowly. Although progress in construction related to building national resilience and an uptrend in healthcare and nursing care expenditures are likely to provide support, government spending is expected to decline, reflecting a reduction in expenditure related to COVID-19.

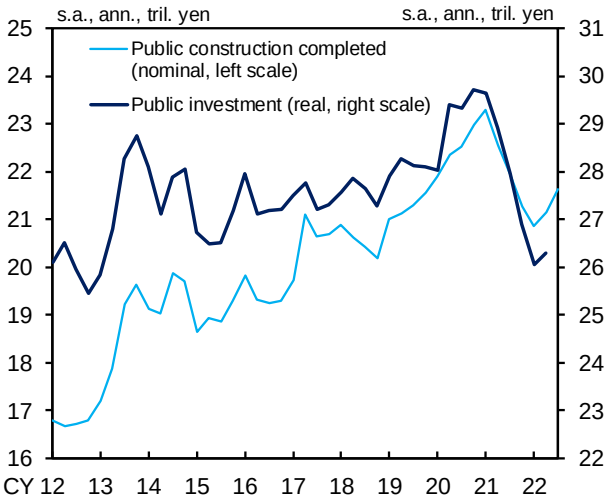
In fiscal 2024, although the pace of economic growth is likely to decelerate, mainly due to a waning of pent-up demand, Japan's economy is expected to continue growing at a pace above its potential growth rate, with accommodative financial conditions being maintained. Goods exports are likely to increase moderately on the back of a pick-up in overseas economies. Inbound tourism demand is projected to keep increasing. Business fixed investment is also expected to continue increasing, although it is likely to see deceleration in the pace of increase due to adjustment pressure stemming from the accumulation of capital stock. Although pent-up demand is likely to wane, private consumption is projected to continue increasing steadily as employee income continues to improve. Government spending is expected to turn to a moderate increase on the back of progress in construction related to building national resilience and of an uptrend in healthcare and nursing care expenditures.

B. Developments in Major Expenditure Items and Their Background

Government Spending

Public investment has been more or less flat (Chart 4). Although the amount of public construction completed -- a coincident indicator -- had followed a downtrend, mainly due to a decline in construction related to restoration following natural disasters, it has been more or less flat recently. This reflects progress in construction based on the government's economic measures, including construction related to building national resilience. Orders received for public construction -- a leading indicator -- have started to decrease after increasing due to the effects of the front-loaded implementation of the budget for public investment. Similarly, the value of public works contracted has turned to a decline recently.

Chart 4: Public Investment



Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism.
Note: The figure for 2022/Q3 is the July-August average.

As for the outlook, although public investment is likely to decrease for the time being due to a decline following the front-loaded implementation of the budget, it is then projected to be more or less flat, with expenditure related to building national resilience continuing. [9] Government consumption is likely to remain at a high level as a result of expenditure related to COVID-19, such as regarding vaccination. Thereafter, it is projected to see a temporary lowering in its level due to the reduction in such expenditure. Toward

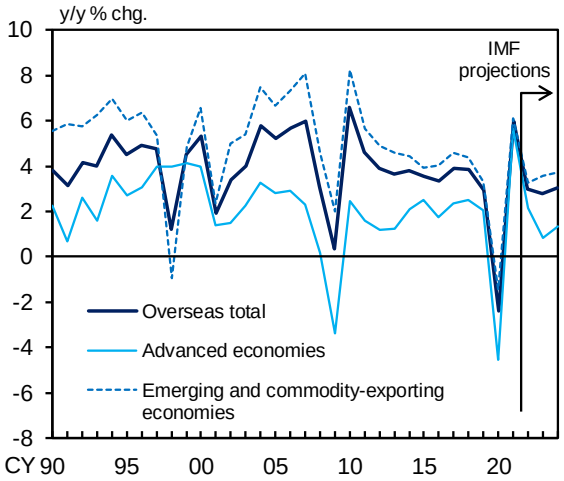
[9] The five-year acceleration measures for building national resilience with a project size of about 15 trillion yen were decided by the Cabinet in December 2020. In these measures, public investment projects for disaster prevention, disaster mitigation, and building national resilience are to be implemented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

the end of the projection period, however, government consumption is likely to return to an increasing trend, reflecting an uptrend in healthcare and nursing care expenditures.

Overseas Economies

Overseas economies have recovered moderately on the whole, but slowdowns have been observed, mainly in advanced economies (Chart 5). By region, the U.S. economy has slowed somewhat, in reflection of a surge in inflation and a continued rise in policy interest rates. European economies have recovered moderately with a resumption of economic activity; however, slowdowns have been observed as these economies have continued to be affected by the situation surrounding Ukraine. The Chinese economy has recovered from the state of being pushed down as the impact of lockdowns implemented around this spring, such as in Shanghai, has generally dissipated, although the impact of continuing with strict public health measures to contain the spread of COVID-19 has been observed in part. Emerging and commodity-exporting economies other than China have picked up on the whole, albeit with weakness seen in part. Among those in Asia, which are closely related to Japan's economy, the NIEs and the ASEAN economies have recovered on the whole because domestic demand has continued to improve with progress in the resumption of economic activity, although growth in exports has decelerated, particularly in those of IT-related goods. Looking at the Global PMI to see the current situation for the global economy, figures for both the manufacturing and services industries have declined and been around 50, the break-even point between improvement and deterioration in business

Chart 5: Overseas Economies



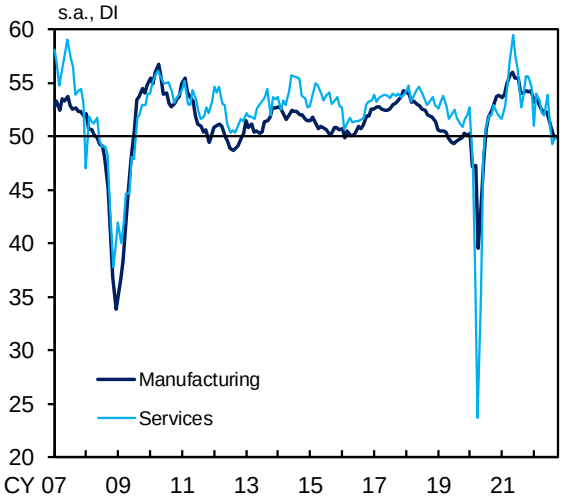
Sources: IMF; Ministry of Finance.
Note: Figures are the weighted averages of real GDP growth rates using countries' share in Japan's exports as weights. The real GDP growth rates are compiled by the IMF, and the rates from 2022 onward are its projections in the October 2022 *World Economic Outlook* (WEO). Figures for advanced economies are those for the United States, the euro area, and the United Kingdom. Figures for emerging and commodity-exporting economies are those for the rest of the world.

conditions (Chart 6). The world trade volume has increased despite being affected by such slowdowns, mainly observed in advanced economies, on the back of factors such as an easing of global disruptions in logistics (Chart 7).

As for the outlook, although the impact of COVID-19 and supply-side constraints is likely to wane, overseas economies are expected to slow toward the middle of the projection period, albeit with variation across countries and regions. This will likely occur due to the impact of global inflationary pressure, policy interest rate hikes by central banks, and the situation surrounding Ukraine. By region, the U.S. economy is expected to continue to slow due to a decline in real disposable income stemming from price rises and the impact of policy interest rate hikes. European economies are likely to slow, mainly due to a decline in natural gas supply from Russia, a surge in energy prices partly reflecting that decline, and policy interest rate hikes. Growth in the Chinese economy is projected to be pushed up for the time being by fiscal stimulus measures, including infrastructure investment, but thereafter its pace is expected to become moderate, mainly due to adjustment pressure remaining on the employment and income side and in the real estate market. The paces of improvement in emerging and commodity-exporting economies other than China are likely to decelerate gradually, with external demand slowing and prices rising, although the resumption of economic activity is expected to underpin domestic demand.

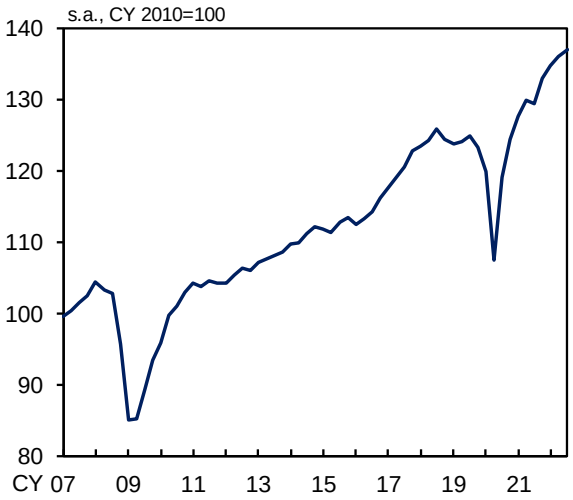
In sum, overseas economies are projected to slow toward the middle of the projection period;

Chart 6: Global PMI



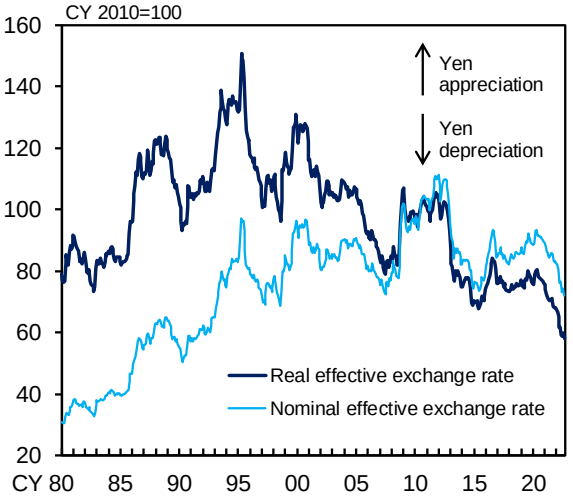
Source: Copyright © 2022 by S&P Global Market Intelligence, a division of S&P Global Inc. All rights reserved.
Note: Figures for manufacturing are the J.P.Morgan Global Manufacturing PMI. Figures for services are the J.P.Morgan Global Services Business Activity Index.

Chart 7: World Trade Volume



Source: CPB Netherlands Bureau for Economic Policy Analysis.
Note: Figures for the world trade volume are those for world real imports. The figure for 2022/Q3 is the July-August average.

Chart 8: Effective Exchange Rates



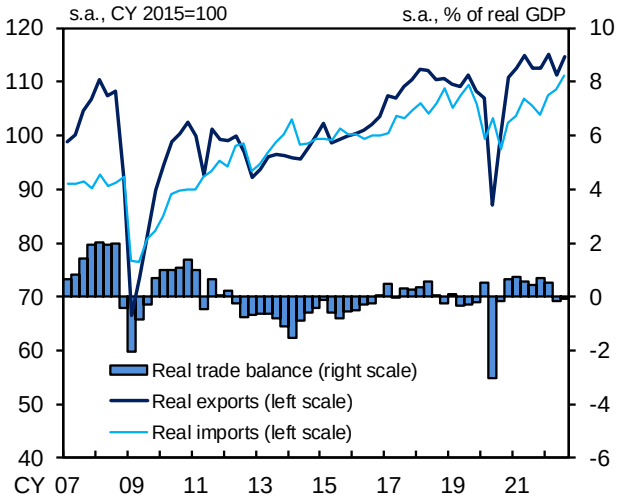
Source: BIS.
Note: Figures are based on the broad effective exchange rate indices. Figures prior to 1994 are calculated using the narrow indices.

however, downward pressure on them is likely to ease in steps thereafter as inflation rates decline gradually, mainly reflecting policy interest rate hikes by central banks. For this reason, overseas economies are likely to pick up, particularly in advanced economies. In addition, growth in emerging economies is projected to accelerate gradually, partly because various adjustment pressures in China are expected to wane in steps and because improvement in advanced economies and the Chinese economy is likely to spread to emerging and commodity-exporting economies other than China.

Exports and Imports

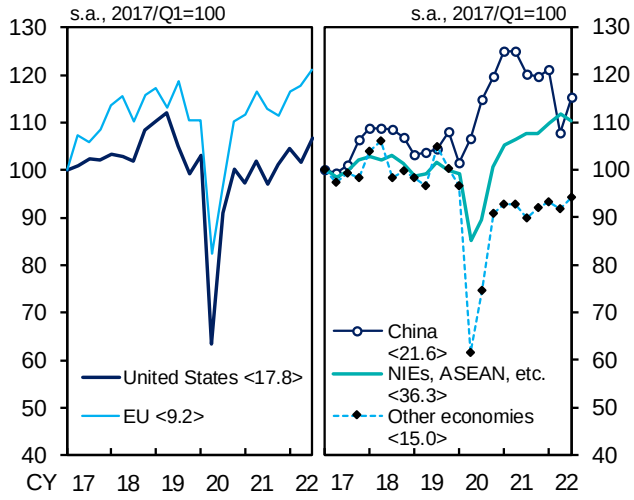
Exports have increased as a trend, with the effects of supply-side constraints waning (Chart 9). By region, exports to advanced economies have increased, mainly for automobile-related and capital goods, also with the effects of supply-side constraints waning (Chart 10). Those to emerging economies -- to China and to the NIEs and the ASEAN economies, for example -- have been weak for intermediate goods and some IT-related goods. By goods, exports of automobile-related goods have turned to a clear increase as the impact of lockdowns such as in Shanghai has generally dissipated, although global supply and demand conditions for semiconductors used in automobiles have continued to be tight, albeit with the tightness easing (Chart 11). Exports of capital goods have increased, supported by steady machinery investment on a global basis and by strong demand for semiconductor production equipment on the back of projections that digital-related demand will expand in the medium to long term. In contrast, some weakness has been observed in IT-related exports, mainly for

Chart 9: Real Exports and Imports



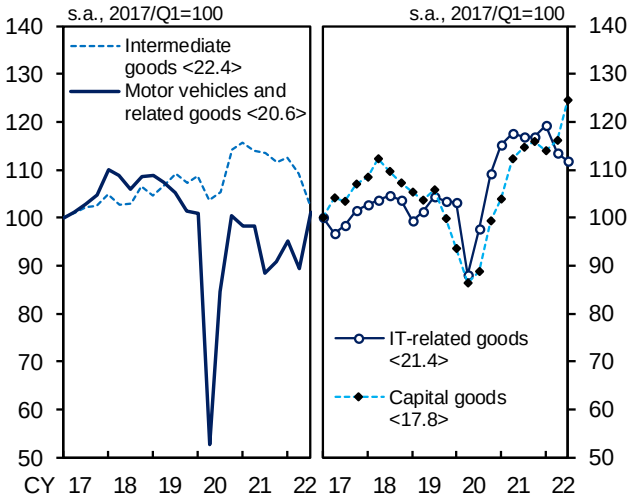
Sources: Bank of Japan; Ministry of Finance; Cabinet Office.
Note: Based on staff calculations.

Chart 10: Real Exports by Region



Sources: Bank of Japan; Ministry of Finance.
Notes: 1. Based on staff calculations. Figures in angular brackets show the share of each country or region in Japan's total exports in 2021.
2. Figures for the EU exclude those for the United Kingdom for the entire period.

Chart 11: Real Exports by Type of Goods



Sources: Bank of Japan; Ministry of Finance.
Note: Based on staff calculations. Figures in angular brackets show the share of each type of goods in Japan's total exports in 2021.

semiconductors for smartphones and for personal computers, reflecting a global slowdown in demand for these items, although demand related to automobiles and data centers has remained firm. Exports of intermediate goods have declined, mainly against the background of a decline in real estate investment in China.

Exports are likely to follow an uptrend toward the middle of the projection period, supported by the waning of supply-side constraints and high levels of order backlogs for automobiles and capital goods, although they are expected to be affected by the slowdowns in overseas economies.[10] Thereafter, as overseas economies pick up, exports are projected to increase moderately.

Meanwhile, Japan's share of exports in the world trade volume has declined recently (Chart 12). This is mainly because Japan's exports of automobiles have stayed at low levels due to the remaining effects of supply-side constraints. As such temporary factors dissipate, Japan's share of exports is likely to increase gradually.

Imports have continued on an uptrend, reflecting a pick-up in domestic demand (Chart 9). They are expected to follow a moderate uptrend on the back of developments in induced demand due to increases in domestic demand and exports.

Chart 12: Japan's Share of Exports in World Trade Volume

Source: CPB Netherlands Bureau for Economic Policy Analysis.
Note: Japan's share of exports in world trade volume is obtained by dividing Japan's real exports by world real imports (2010 prices). The figure for 2022/Q3 is the July-August average.

[10] Box 1 outlines the impact of slowdowns in overseas economies on Japan's economy.

External Balance

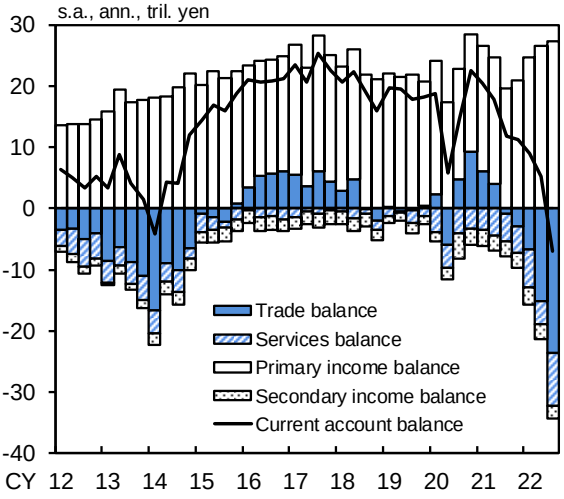
The nominal current account balance has registered a deficit lately, mainly reflecting the impact of high commodity prices (Chart 13). Looking at the breakdown, the nominal trade deficit has expanded recently, also mainly reflecting such commodity prices. The services balance has continued to register a deficit, mainly as the travel balance has been at a low level, due in particular to subdued inbound tourism demand (Chart 14). On the other hand, a surplus in the primary income balance has been on an expanding trend because receipts, mainly of dividends, have increased, reflecting the yen's depreciation and other factors.

The nominal current account balance is likely to follow a moderate improving trend. This is based on the projection that (1) the trade deficit will decline moderately due to factors such as an increase in goods exports, (2) the yen's depreciation will push up the primary income balance, and, (3) from a somewhat long-term perspective, the deficit in the services balance will decrease due to a gradual recovery in inbound tourism demand. In terms of the savings-investment balance, overall excess savings in Japan's economy are projected to remain at a low level in the short run but thereafter 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 15).

Industrial Production

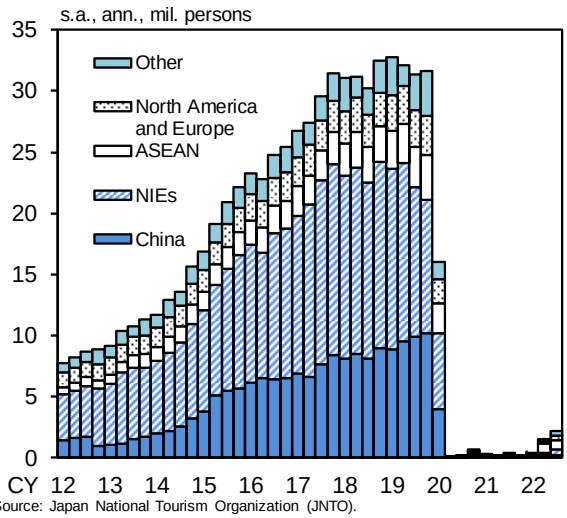
Industrial production has increased as a trend, with the effects of supply-side constraints waning

Chart 13: Current Account



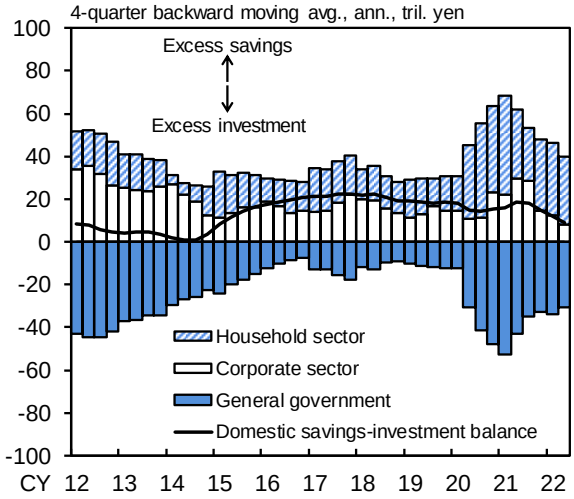
Source: Ministry of Finance and Bank of Japan.
Note: Figures for 2022/Q3 are July-August averages.

Chart 14: Number of Inbound Visitors



Source: Japan National Tourism Organization (JNTO).
Note: Figures for North America and Europe are those for the United States, Canada, the United Kingdom, France, and Germany.

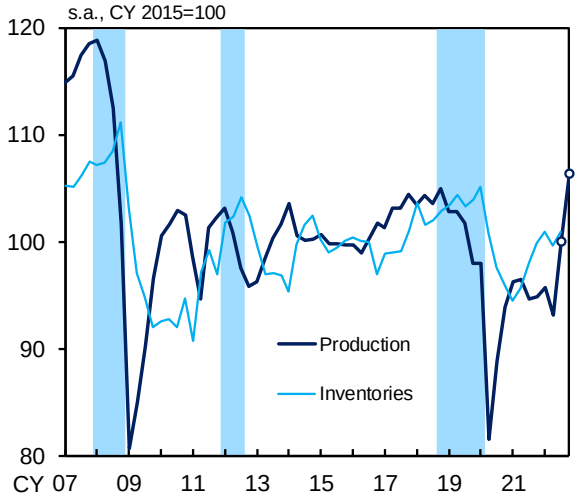
Chart 15: Savings-Investment Balance



Source: Bank of Japan.

(Chart 16). By major industry, production of "general-purpose, production, and business-oriented machinery" has increased, mainly for semiconductor production equipment and construction machinery, with the effects of supply-side constraints waning. Production of "transport equipment" has turned to an increase, mainly because production of automobiles has increased again as parts procurement difficulties due to lockdowns such as in Shanghai have generally dissipated, although global supply and demand conditions for semiconductors used in automobiles have continued to be tight, albeit with the tightness easing. Production of "electrical machinery, and information and communication electronics equipment" has also turned to an increase for household electrical appliances and "basic exchange for mobile customer premises equipment," with the effects of supply-side constraints waning. On the other hand, production of "electronic parts and devices" for smartphones and personal computers has decreased significantly, reflecting a global slowdown in demand for these items, although production for data centers and automobiles has been firm. Production of "chemicals (excluding medicine)" and "iron and steel" has been somewhat weak, partly because exports to China have seen some weakness while inventories of such items have been at relatively high levels.

Chart 16: Industrial Production



Source: Ministry of Economy, Trade and Industry (METI).
Notes: 1. Shaded areas denote recession periods.
2. Figures denoted by the round markers are calculated based on METI projections for September and October 2022. The inventories figure for 2022/Q3 is that for August.

Industrial production is likely to follow an uptrend toward the middle of the projection period, supported by the waning of supply-side constraints and high levels of order backlogs for automobiles and capital goods, although it is expected to be affected by the slowdowns in overseas economies. Thereafter, production is

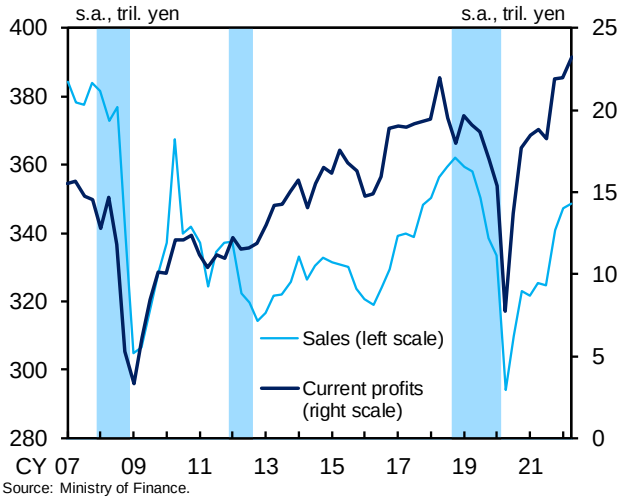
projected to increase moderately on the back of a rise in domestic and external demand.

Corporate Profits

Corporate profits have been at high levels on the whole. According to the *Financial Statements Statistics of Corporations by Industry, Quarterly* (FSSC), current profits for all industries and enterprises for the April-June quarter of 2022 increased from the previous quarter, exceeding the peak before the pandemic -- namely, that recorded in the April-June quarter of 2018 (Chart 17[1]). In detail, current profits have been pushed down by deterioration in the terms of trade resulting from raw material cost increases and by the effects of supply-side constraints (Chart 17[2]). However, they have been pushed up on the whole due to the following factors: (1) the impact of COVID-19 has waned in Japan; (2) the yen's depreciation has pushed up profits of large firms, mainly those in the manufacturing industry; and (3) profits of the wholesale and transportation industries have increased due to the rise in commodity prices and a strong shipping market. By industry and firm size, current profits of small and medium-sized manufacturers have declined due to deterioration in the terms of trade and the effects of supply-side constraints. Those of large manufacturers, however, have increased considerably, mainly as the yen's depreciation has led to improvement in profit margins and to foreign exchange gains. Current profits of small and medium-sized nonmanufacturers, despite being affected by deterioration in the terms of trade, have been more or less flat, reflecting an increase in private consumption with the impact of COVID-19 waning. In contrast, those of large nonmanufacturers have continued to increase for

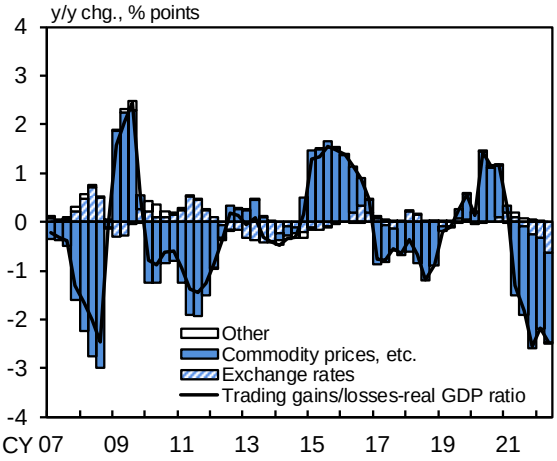
Chart 17: Indicators Related to Corporate Profits

1. Sales and Current Profits



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

2. Contribution to Changes in Trading Gains and Losses

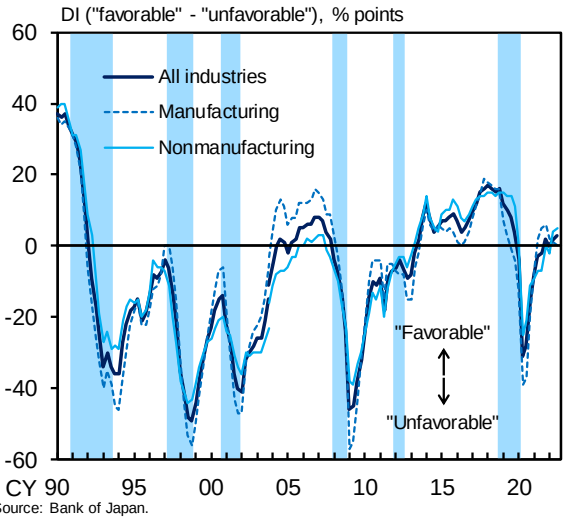


Sources: Cabinet Office; Bank of Japan.
Notes: 1. The contribution of commodity prices, etc. is calculated using changes in export/import price indexes on a contract currency basis. The contribution of exchange rates is calculated using the difference between export/import price indexes on a yen basis and those on a contract currency basis. "Other" is the contribution of other factors such as changes in quantities.
2. Trading gains/losses = (Nominal net exports / Weighted average of export and import deflators) – Real net exports

the wholesale and transportation industries, reflecting the rise in commodity prices and strong shipping market.

Business sentiment has been more or less unchanged on the whole. According to the *Tankan*, the DI for business conditions for all industries and enterprises was more or less flat for the September survey (Chart 18). By industry, the DI for manufacturing has been more or less flat because it has been affected by raw material cost increases despite the effects of supply-side constraints waning somewhat. The DI for the transportation machinery industry has improved as parts procurement difficulties due to lockdowns such as in Shanghai have generally dissipated. However, the degree of improvement has been only small, as global supply and demand conditions for semiconductors used in automobiles have continued to be tight, albeit with the tightness easing, and as raw material costs have risen. The DIs for industries such as production machinery and general-purpose machinery have remained at relatively high levels on the back of steady domestic and external demand for business fixed investment. The DI for overall nonmanufacturing has improved slightly; while the DIs for industries such as electric and gas utilities as well as retail have been affected by rises in input prices, firms -- such as in the goods rental and leasing industry and the transport and postal activities industry -- have been passing on cost increases to selling prices and the DIs for industries such as accommodations as well as eating and drinking services have improved somewhat despite the COVID-19 resurgence.

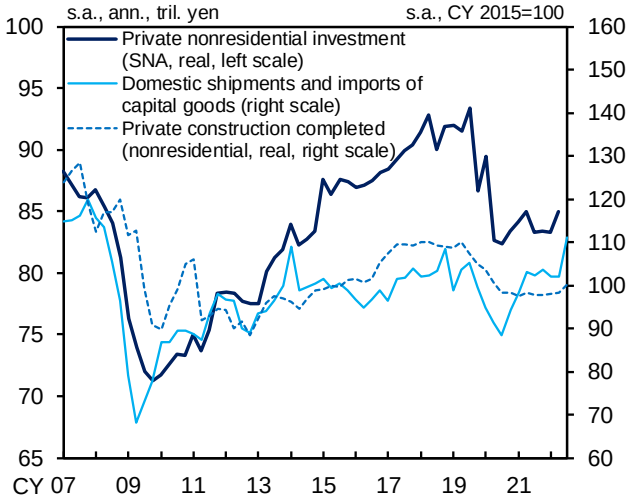
Chart 18: Business Conditions



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

Regarding the outlook for corporate profits, they are expected to remain at high levels but are highly likely to temporarily weaken somewhat from the current levels. This is mainly because the impact of high raw material costs stemming from factors such as high commodity prices and of the slowdowns in overseas economies is expected to materialize. Thereafter, as the effects of deterioration in the terms of trade stemming from the rise in commodity prices wane gradually, corporate profits are projected to improve again, reflecting a recovery in the level of economic activity.

Chart 19: Coincident Indicators of Business Fixed Investment



Sources: Cabinet Office; Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism.
Notes: 1. Figures for 2022/Q3 are July-August averages.
2. Figures for real private construction completed are based on staff calculations using the construction cost deflators.

Business Fixed Investment

Business fixed investment has picked up, although weakness has been seen in some industries (Chart 19). The aggregate supply of capital goods -- a coincident indicator of machinery investment -- has been on an uptrend with the effects of supply-side constraints waning, mainly led by digital- and labor saving-related investments, although investment in vehicles related to passenger transportation, for example, has remained at a low level. Private construction completed (nonresidential) -- a coincident indicator of construction investment -- has continued to increase moderately in nominal terms, mainly due to a rise in construction of logistics facilities on the back of an expansion in e-commerce and to progress in urban redevelopment projects. However, in real terms, it has been more or less flat due to a rapid rise in material prices.

Machinery orders -- a leading indicator of machinery investment -- have increased, albeit

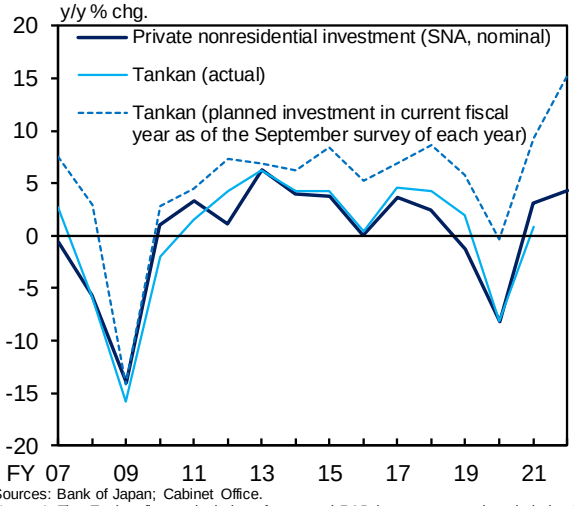
with fluctuations (Chart 20). By industry, orders by the manufacturing industry have been on an uptrend, mainly led by electrical machinery and "general-purpose, production, and business-oriented machinery," on the back of factors such as projections that digital-related demand will increase in the medium to long term. Orders by the nonmanufacturing industry have seen large fluctuations recently due to the increase and subsequent decline in orders relating to renewal of railway vehicles by the transportation industry; however, when fluctuations are smoothed out, they have been more or less flat, supported by progress in digital-related and labor-saving investments. Construction starts (in terms of planned expenses for private and nonresidential construction) -- a leading indicator of construction investment -- have increased, albeit with fluctuations. This is due to an uptrend in construction of logistics and other facilities and progress in urban redevelopment projects. Looking at the business fixed investment plan in the September *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) for fiscal 2022 shows a year-on-year rate of increase of 15.2 percent (Chart 21). As with the previous survey in June, business fixed investment is expected to clearly increase for both the manufacturing and nonmanufacturing industries.

With regard to the outlook, as corporate profits remain at high levels on the whole despite being pushed down by the impact of high commodity

Chart 20: 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 2022/Q3 are July-August averages.

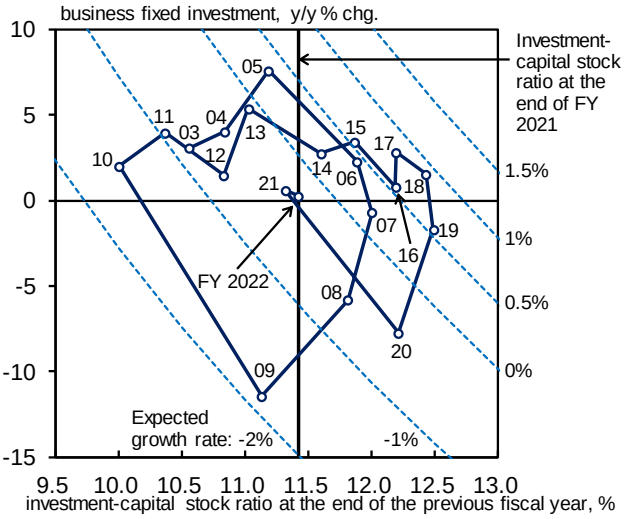
Chart 21: Planned and Actual Business Fixed Investment



Sources: Bank of Japan; Cabinet Office.
Notes: 1. The *Tankan* 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 2022 is that for 2022/Q2.

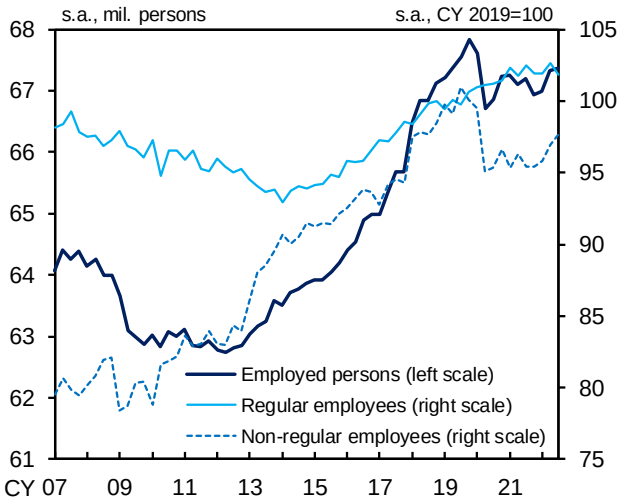
prices, an uptrend in business fixed investment is expected to become clear on the back of accommodative financial conditions and the waning of supply-side constraints. Toward the end of the projection period, business fixed investment is expected to continue increasing, partly due to an increase in medium- to long-term investment, although the pace of increase is projected to slow, reflecting cyclical adjustment pressure stemming from the accumulation of capital stock (Chart 22). Specifically, investment that is projected to be undertaken during the projection period includes (1) investment induced by the increase in domestic and external demand, (2) IT-related investment to address labor shortage and digitalize business activities, (3) construction investment in logistics facilities, resulting from the expanding e-commerce, and in offices and commercial facilities due to redevelopment projects, and (4) investment for growth areas and to address environmental issues, such as toward decarbonization.

Chart 22: 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 2022 is that for 2022/Q2.

Chart 23: 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*.

Employment and Income Situation

The employment and income situation has improved moderately on the whole.

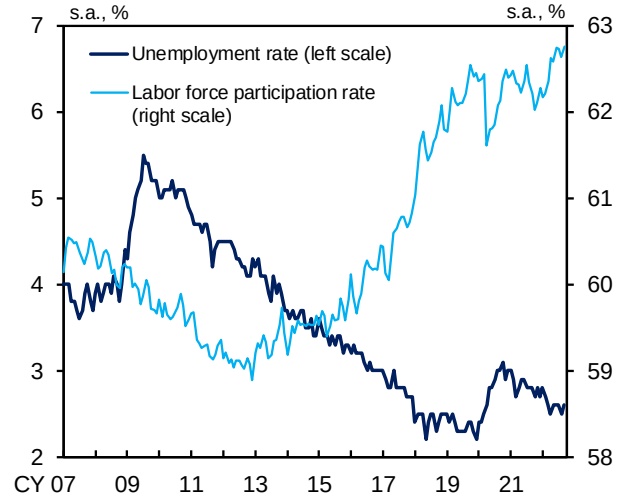
Regarding the number of employed persons, that of regular employees has continued to follow a moderate uptrend, mainly in the medical, healthcare, and welfare services industry as well as the information and communications industry, both of which have faced a severe labor shortage (Chart 23). The number of non-regular employees has increased moderately of late, including for the face-to-face services industry. The year-on-year rate of change in total hours worked per

employee has been more or less flat, albeit with fluctuations due to the number of weekdays. With regard to labor market conditions, the unemployment rate has declined at a moderate pace, albeit with fluctuations, registering around 2.5 percent recently (Chart 24). The active job openings-to-applicants ratio has risen moderately, as job openings for full-time employees in industries with labor shortage have been steady and those for part-time employees have increased, such as in the face-to-face services industry (Chart 25). Meanwhile, the labor force participation rate has increased moderately, particularly for women, when fluctuations are smoothed out (Chart 24).

With regard to the outlook for the number of employees, regular employees are likely to continue increasing, mainly in industries with labor shortage, such as medical, healthcare, and welfare services, information and communications, and construction. A rise in non-regular employees, such as in the face-to-face services industry, is likely to become further evident as the impact of COVID-19 wanes. Toward the end of the projection period, however, with the economic growth rate slowing, the pace of increase in the number of employees is projected to decelerate, partly because it will become more difficult for labor supply to increase, reflecting factors such as demographic changes. Under these circumstances, the unemployment rate is expected to follow a moderate declining trend on the back of a recovery in economic activity.

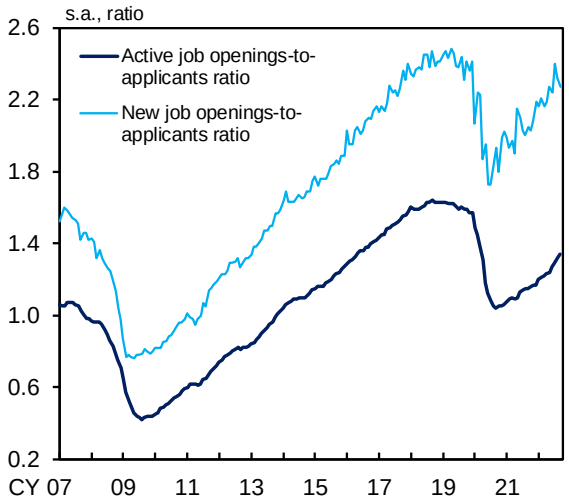
On the wage side, total cash earnings per employee have increased moderately, reflecting a

Chart 24: Unemployment Rate and Labor Force Participation Rate



Source: Ministry of Internal Affairs and Communications.

Chart 25: Job Openings-to-Applicants Ratio

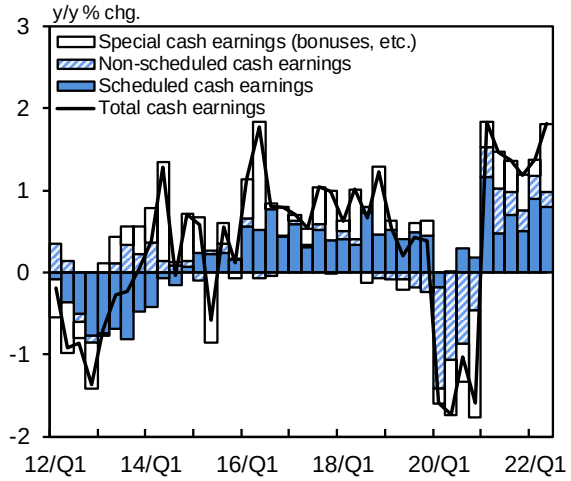


Source: Ministry of Health, Labour and Welfare.

pick-up in overall economic activity (Chart 26).[11] The year-on-year rate of change in scheduled cash earnings has continued to increase moderately (Chart 27). Looking at the breakdown, that for full-time employees has been in the range of 1.0-1.5 percent, with concern over labor shortage continuing. The year-on-year rate of change in hourly scheduled cash earnings for part-time employees has been at around 1 percent recently, with labor market conditions in the face-to-face services industry improving gradually. Non-scheduled cash earnings have increased in reflection of improvement in economic activity, and their year-on-year rate of change has registered a relatively large positive figure. The year-on-year rate of change in special cash earnings (bonuses) has been clearly positive at around 3 percent, reflecting high levels of corporate profits.

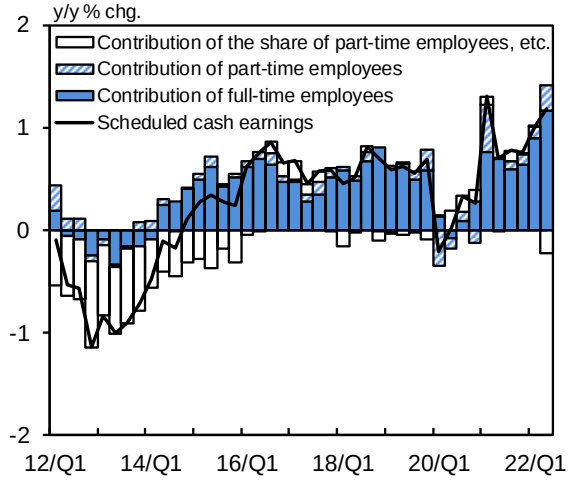
With regard to the outlook for wages, scheduled cash earnings are likely to continue increasing moderately for the time being, pushed up by improvement in labor market conditions and a rise in minimum wages. Thereafter, the rate of increase in scheduled cash earnings is expected to accelerate as there are likely to be higher wage increases resulting from labor-management wage negotiations, mainly on the back of a tightening of labor market conditions and a rise in inflation. Despite the declining trend in non-scheduled hours worked, mainly brought about by progress with working-style reforms, non-scheduled cash earnings are likely to increase moderately, reflecting improvement in economic activity.

Chart 26: Nominal Wages



Source: Ministry of Health, Labour and Welfare.
Notes: 1. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.
2. Figures from 2016/Q1 onward are based on continuing observations following the sample revisions.

Chart 27: Decomposition of Developments in Scheduled Cash Earnings



Source: Ministry of Health, Labour and Welfare.
Notes: 1. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.
2. Figures from 2016/Q1 onward are based on continuing observations following the sample revisions.

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

Special cash earnings (bonuses) are likely to increase, with corporate profits following an improving trend. Taking all of these factors into account, the rate of increase in total cash earnings per employee is projected to accelerate.

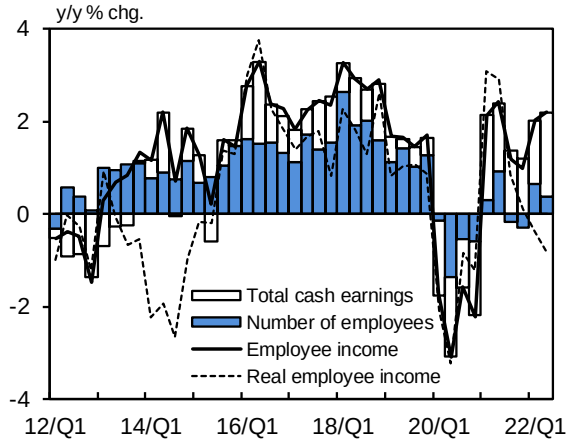
In light of the aforementioned employment and wage conditions, employee income has improved in nominal terms, but in real terms, its year-on-year rate of change has been slightly negative, reflecting price rises (Chart 28). With regard to the outlook, nominal employee income is likely to continue increasing along with economic improvement. In real terms, the year-on-year rate of change in employee income is projected to be negative toward the middle of the projection period, reflecting price rises, but thereafter is likely to increase moderately as wage growth accelerates.

Household Spending

Private consumption has increased moderately, despite being affected by COVID-19.[12]

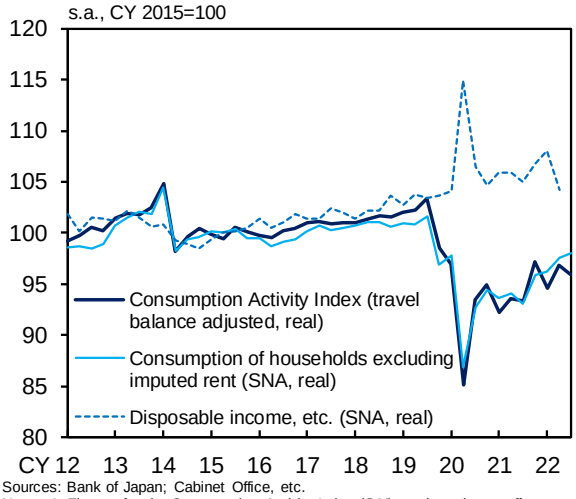
The Consumption Activity Index (CAI, travel balance adjusted) -- which is calculated by combining various sales and supply-side statistics from the viewpoint of gauging Japan's consumption activity in a comprehensive manner -- increased clearly for the April-June quarter (Chart 29).[13] It then saw a slight decline on the

Chart 28: 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).

Chart 29: Private Consumption



Sources: Bank of Japan; Cabinet Office, etc.
Notes: 1. Figures for the Consumption Activity Index (CAI) are based on staff calculations. The CAI figures (travel balance adjusted) exclude inbound tourism consumption and include outbound tourism consumption. The figure for 2022/Q3 is the July-August average.
2. The figure for consumption of households excluding imputed rent for 2022/Q3 is based on staff calculations using the Synthetic Consumption Index for July.
3. "Disposable income, etc." consists of disposable income and adjustment for the change in pension entitlements. Real values are obtained using the deflator of consumption of households.

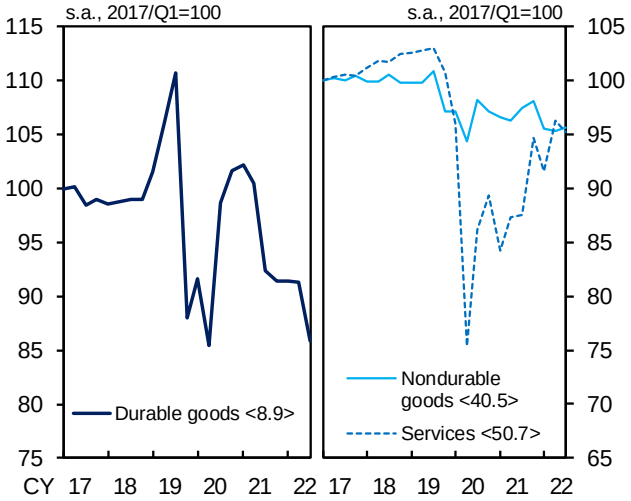
[12] Box 2 examines the recent relationship between COVID-19 and private consumption.

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

whole for the July-August period relative to the April-June quarter. This was because, while consumption of durable goods dropped, mainly for smartphones, that of nondurable goods increased, particularly for beverages and food, and the degree of decline in services consumption due to the COVID-19 resurgence turned out to be small (Chart 30). Based on various sources, such as high-frequency indicators, statistics published by industry organizations, and anecdotal information from firms, it seems that private consumption since September has increased moderately with the COVID-19 situation improving (Chart 31).

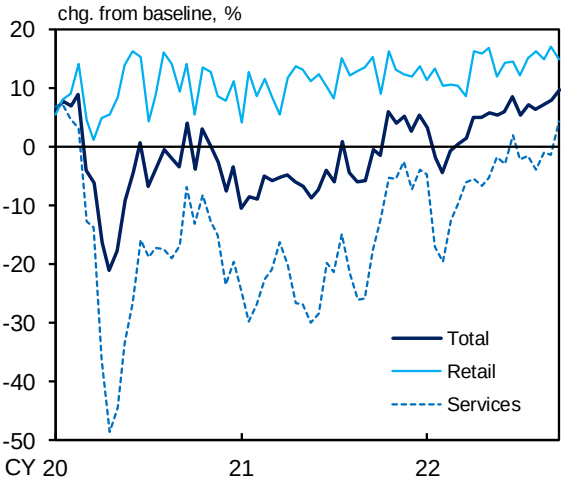
By type, consumption of durable goods declined for the July-August period despite being pushed up by the waning of supply-side constraints. However, such consumption seems to have been firm on the whole recently (Chart 32). Specifically, the number of new passenger car registrations has picked up moderately, albeit with fluctuations, as parts procurement difficulties due to lockdowns such as in Shanghai have generally dissipated, although it has continued to be affected by the tight global supply and demand conditions for semiconductors used in automobiles. Regarding sales of household electrical appliances for the July-August period, signs of some sluggishness were seen in demand for items that had increased during the pandemic, such as personal computers, and sales of smartphones declined. That said, it seems that overall sales of household electrical appliances have picked up recently, mainly due to the release of new smartphone models. Consumption of nondurable goods has been firm, mainly for beverages and food, on the back of a

Chart 30: Consumption Activity Index (CAI, Real)



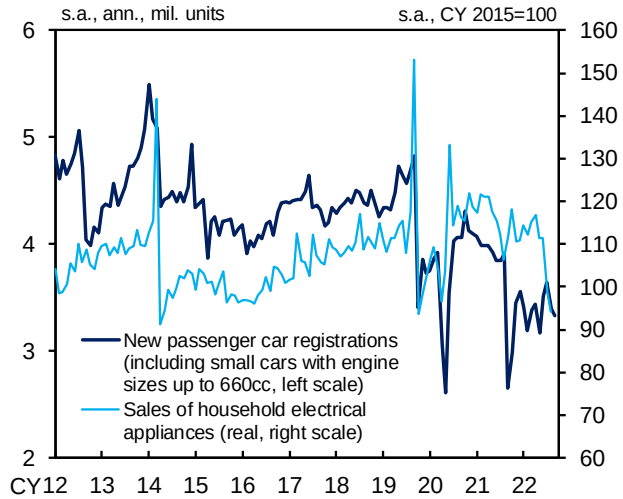
Sources: Bank of Japan, etc.
Notes: 1. Based on staff calculations. Figures in angular brackets show the weights in the CAI. Figures for 2022/Q3 are July-August averages.
2. Nondurable goods include goods classified as semi-durable goods in the SNA.

Chart 31: 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. Figures for the total and for services exclude telecommunications and are based on staff calculations.
2. The baseline is the average for the corresponding half of the month for fiscal 2016 through fiscal 2018.

Chart 32: Consumption of Durable Goods



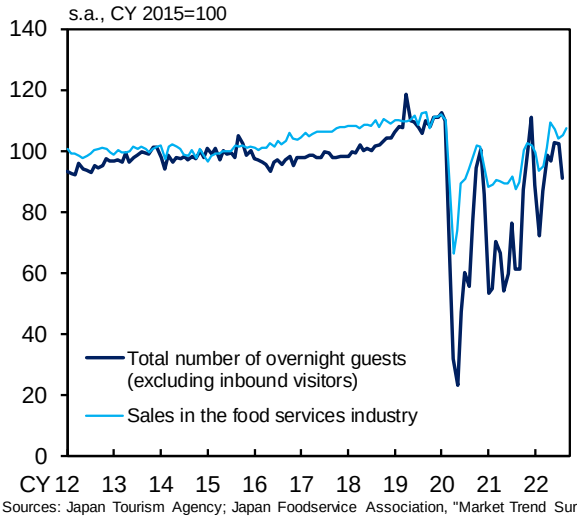
Sources: Japan Automobile Dealers Association; Japan Light Motor Vehicle and Motorcycle Association; Ministry of Economy, Trade and Industry; Ministry of Internal Affairs and Communications.
Note: Figures for real sales of household electrical appliances are based on staff calculations using the retail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

pick-up in people's willingness to go out and temperature rises.

Services consumption declined slightly for the July-August period due to the impact of the COVID-19 resurgence, but it seems to have increased moderately of late (Charts 31, 33, and 34). Dining-out decreased slightly for the July-September quarter, reflecting the resurgence, but it seems to have been on an uptrend thereafter with the COVID-19 situation improving (Chart 35). Domestic travel declined somewhat for the July-August period but subsequently seems to have been on a recovery trend. More recently, it also appears to have been pushed up by the government's domestic travel discount program. Although there continued to be almost no overseas travel, it has increased somewhat lately, mainly due to the relaxation of travel restrictions.

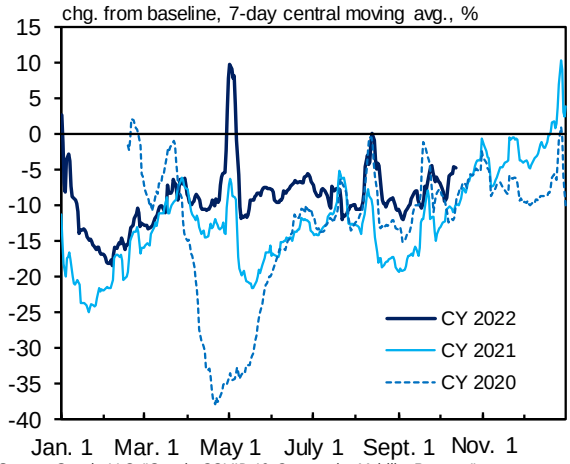
Looking at confidence indicators related to private consumption, the Consumer Confidence Index has remained at a low level, as consumer perception of, for example, "overall livelihood" -- which comprises part of the index -- has deteriorated, with attention being given to price rises (Chart 36). The current economic conditions DI (household activity-related) of the *Economy Watchers Survey* -- which asks firms for their views on the direction of the economy -- has risen with the COVID-19 situation improving, mainly for industries related to food and beverages and to services. While many survey respondents have continued to voice caution about the impact of high prices, some have had expectations that private consumption will be pushed up by the

Chart 33: Consumption of Services



Sources: Japan Tourism Agency; Japan Foodservice Association, "Market Trend Survey of the Food Services Industry."

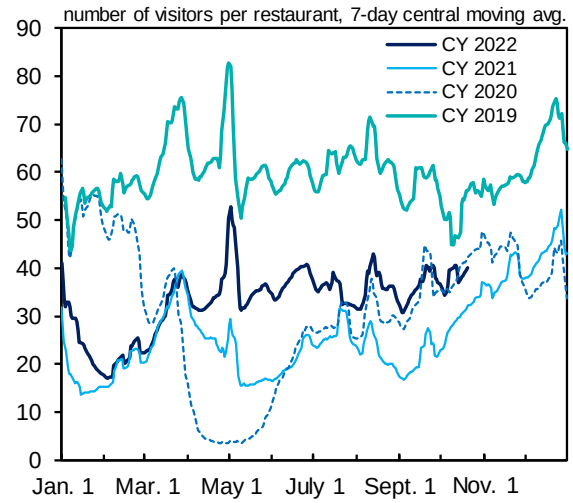
Chart 34: Mobility Trends Based on Location Data



Source: Google LLC *"Google COVID-19 Community Mobility Reports."* https://www.google.com/covid19/mobility/. Accessed: October 19, 2022.

Notes: 1. The baseline is the median on the corresponding day of the week during the 5-week period from January 3 to February 6, 2020.
2. Figures are mobility trends for places such as restaurants, shopping centers, and theme parks.
3. The latest figure is the average for October 9-15.

Chart 35: Number of Visitors to Restaurants



Source: TableCheck Inc.

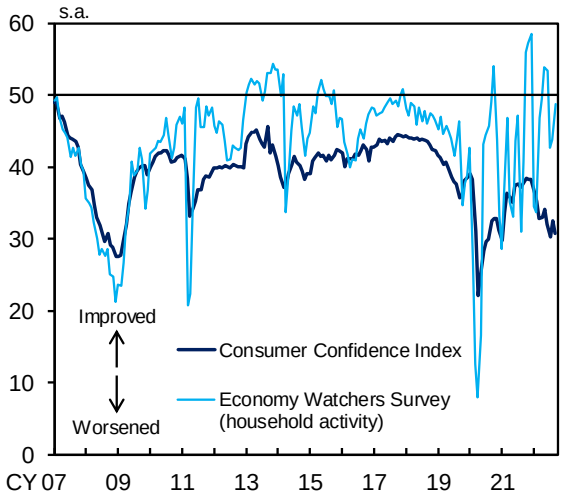
Notes: 1. Figures are for about 6,300 restaurants that use the reservation and customer management system for restaurants provided by TableCheck Inc.
2. The latest figure is the average for October 17-23.

government's domestic travel discount program and that inbound tourism demand will recover as COVID-19 border controls are eased.

Regarding the outlook, private consumption is expected to be affected by price rises. However, on the back of improvement in the employment situation, it is projected to continue increasing because pent-up demand is likely to materialize, supported by household savings that had accumulated as a result of pandemic-related restrictions, as the resumption of consumption activities progresses further while public health is being protected. Thereafter, although the materialization of pent-up demand is likely to be moderate in pace, private consumption is expected to continue increasing steadily as employee income keeps improving. The propensity to consume is likely to follow an uptrend with the impact of COVID-19 waning (Chart 37). Toward the end of the projection period, it is expected to somewhat exceed the average level seen prior to the pandemic, partly due to the withdrawals of household savings that had accumulated as a result of pandemic-related restrictions.

Housing investment has been relatively weak, mainly due to a peaking-out of pent-up demand (Chart 38). Specifically, the number of housing starts -- a leading indicator of housing investment -- has been somewhat weak recently, mainly for owned houses. Housing investment is likely to remain relatively weak toward the middle of the projection period. This is because, although accommodative financial conditions are expected to provide support, pent-up demand for housing

Chart 36: Confidence Indicators Related to Private Consumption

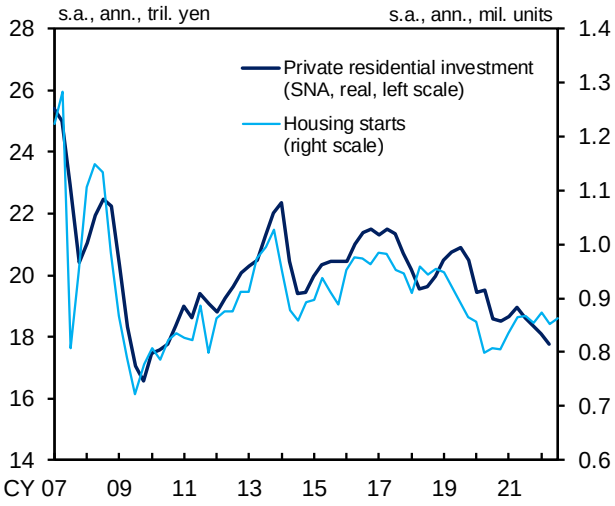


Source: Cabinet Office.
Note: Figures for the *Economy Watchers Survey* are those for the current economic conditions DI.

Chart 37: Average Propensity to Consume

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

Chart 38: Housing Investment



Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism.
Note: The figure for 2022/Q3 is the July-August average.

has peaked out and a rise in housing prices is projected to weigh on housing investment. Thereafter, it is expected to follow a moderate declining trend toward the end of the projection period, reflecting demographic developments.

II. Current Situation of Prices and Their Outlook

Developments in Prices

Reflecting developments in international commodity prices and foreign exchange rates, the quarter-on-quarter rate of change in the producer price index (PPI, adjusted for the effects of seasonal changes in electricity rates) has continued to be relatively high, although it has decelerated (Chart 39). The year-on-year rate of increase in the services producer price index (SPPI, excluding international transportation) has been at around 1.5 percent on the back of a pick-up in economic activity and a rise in personnel expenses, with the impact of COVID-19 waning.

The year-on-year rate of change in the CPI (all items less fresh food) has been at around 3 percent due to rises in prices of such items as energy, food, and durable goods (Chart 40). The rate of increase in the CPI (all items less fresh food and energy, excluding temporary factors such as the effects of the reduction in mobile phone charges) has accelerated, reflecting a pass-through of increases in raw material and other costs, and has been at around 2 percent recently (Chart 41).[14]

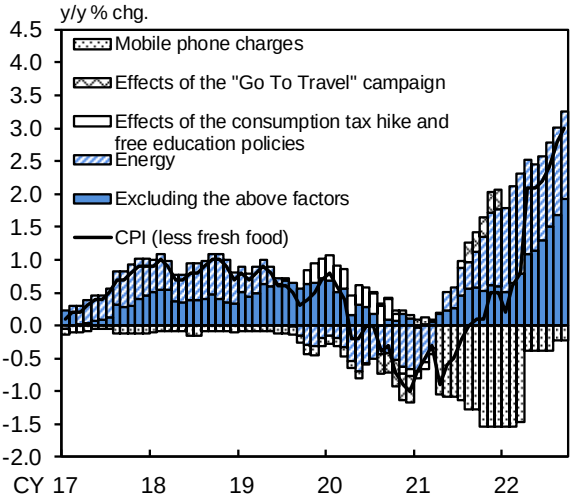
Chart 39: Inflation Indicators

y/y % chg.

	21/Q4	22/Q1	22/Q2	22/Q3
Consumer Price Index (CPI)				
Less fresh food	0.4	0.6	2.1	2.7
Adjusted figure	1.7	2.1	2.6	3.1
Less fresh food and energy	-0.7	-0.9	0.9	1.5
Adjusted figure	0.6	0.7	1.3	1.9
Producer Price Index (q/q % chg.)	2.6	2.0	2.8	1.7
Services Producer Price Index	0.9	0.9	1.3	1.5
GDP Deflator	-1.3	-0.5	-0.3	
Domestic demand deflator	1.1	1.8	2.6	

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. Adjusted figures are staff estimates and exclude mobile phone charges and the effects of the "Go To Travel" campaign, which covers a portion of domestic travel expenses.

Chart 40: CPI (Less Fresh Food)



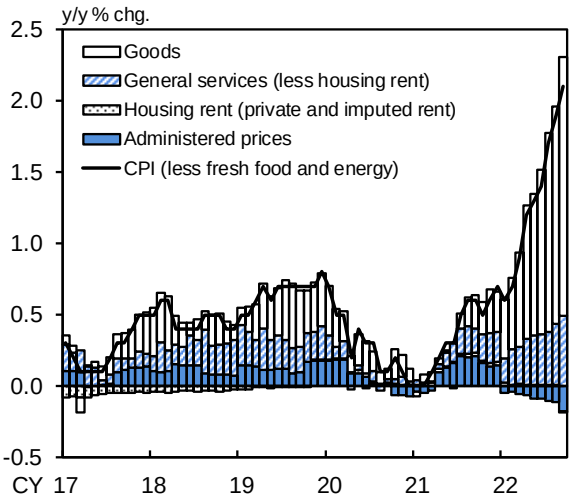
Source: Ministry of Internal Affairs and Communications.
Notes: 1. Figures for energy consist of those for petroleum products, electricity, and gas, manufactured & piped.
2. Figures for the "effects of the consumption tax hike and free education policies" from April 2020 onward are staff estimates and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

[14] The CPI figures that exclude "temporary factors such as the effects of the reduction in mobile phone charges" are calculated by excluding (1) the effects of the consumption tax hike and policies concerning the provision of free education, (2) the effects of the "Go To Travel" campaign, and (3) mobile phone charges from the CPI (all items less fresh food) and the CPI (all items less fresh food and energy), respectively.

Looking at the breakdown of developments in the year-on-year rate of change in the CPI (all items less fresh food and energy, excluding temporary factors such as the effects of the reduction in mobile phone charges), the rate of increase in goods prices has continued accelerating, and that in general services prices has also continued to accelerate moderately. The year-on-year rate of decline in administered prices has accelerated somewhat (Chart 41). Turning to goods prices, the rates of increase in food, daily necessities, and durable goods have continued to accelerate as the pass-through of cost increases has intensified. The rate of increase in general services has accelerated moderately due to an intensified pass-through of raw material costs, mainly for dining-out and housework-related services (e.g., services related to housing repairs and maintenance). Regarding administered prices, the year-on-year rates of change in auto insurance premiums and in water and sewerage charges for some local governments have declined somewhat.

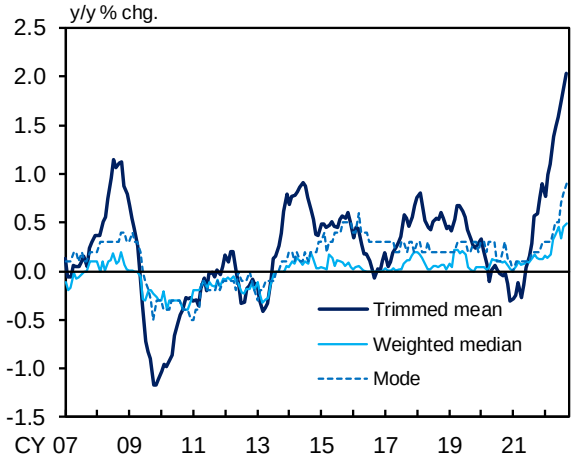
The indicators for capturing the underlying trend in the CPI have exhibited the following developments (Chart 42).[15] The trimmed mean of the year-on-year rate of change in the CPI has increased to around 2 percent due to price rises in

Chart 41: 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 the "Go To Travel" campaign, which covers a portion of domestic travel expenses.

Chart 42: Various Measures of Core Inflation



Sources: Bank of Japan; Ministry of Internal Affairs and Communications.
Note: Based on staff calculations using the CPI excluding the effects of the consumption tax hikes, policies concerning the provision of free education, and the "Go To Travel" campaign, which covers a portion of domestic travel expenses. The CPI figures from April 2020 onward are staff estimates and exclude the effects of measures such as free higher education introduced in April 2020.

[15] The trimmed mean is calculated by excluding items that belong to a certain percentage of the upper and lower tails of the price change distribution (10 percent of each tail) in order to eliminate the effects of large relative price changes. The mode is the inflation rate with the highest density in the price change distribution. The weighted median is the average of the inflation rates of the items at around the 50 percentile point of the cumulative distribution in terms of weight. All three indicators are calculated using data for each CPI item that excludes the effects of the consumption tax hikes, policies concerning the provision of free education, and the "Go To Travel" campaign.

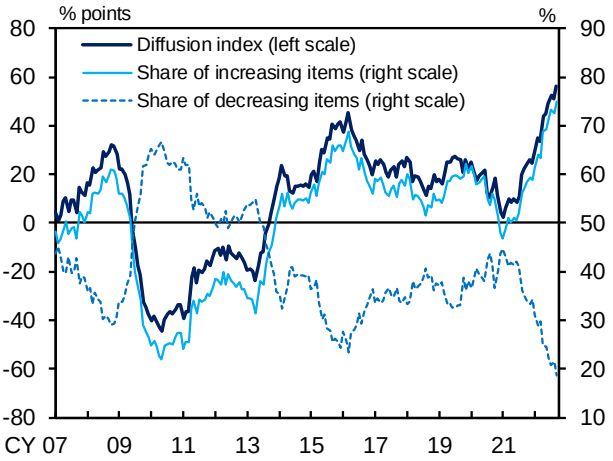
a wide range of items, such as food. The mode and the weighted median, which are less susceptible to developments in certain CPI items, have been on an uptrend; however, the rates of increase in these indicators have been marginal relative to the trimmed mean as there have been only small changes in prices of many items categorized under general services, including housing rent, and under administered prices, excluding energy. Looking at the year-on-year price changes across all CPI items (less fresh food), the share of price-increasing items minus the share of price-decreasing items has continued to increase in positive territory because costs such as of raw materials have been passed on to many goods and services prices (Chart 43).

Meanwhile, the year-on-year rate of change in the domestic demand deflator has been at around 2.5 percent (Chart 39). By component, the private consumption deflator has been in the range of 2.0-2.5 percent on a year-on-year basis, and deflators such as for business fixed investment and housing investment have increased clearly, reflecting rises in material and other prices. On the other hand, the year-on-year rate of change in the GDP deflator has been in the range of 0.0 to minus 0.5 percent, pushed down by an increase in the import deflator in reflection of developments in crude oil prices, for example.

Environment Surrounding Prices

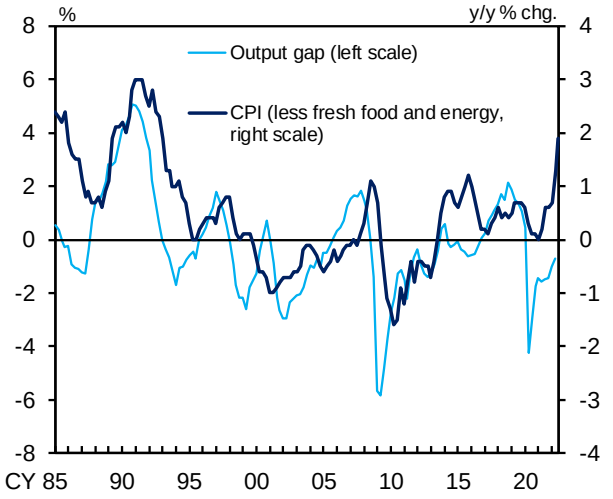
In the outlook for prices, the main factors that determine inflation rates are assessed as follows. First, the output gap is projected to turn positive around the second half of fiscal 2022 with the economy following a growth path that outpaces its

Chart 43: Diffusion Index of Price Changes



Sources: Bank of Japan; Ministry of Internal Affairs and Communications.
Note: The diffusion index is defined as the share of increasing items minus the share of decreasing items. The share of increasing/decreasing items is the share of items 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 the "Go To Travel" campaign, which covers a portion of domestic travel expenses. The CPI figures from April 2020 onward are staff estimates and exclude the effects of measures such as free higher education introduced in April 2020.

Chart 44: Inflation Rate and Output Gap



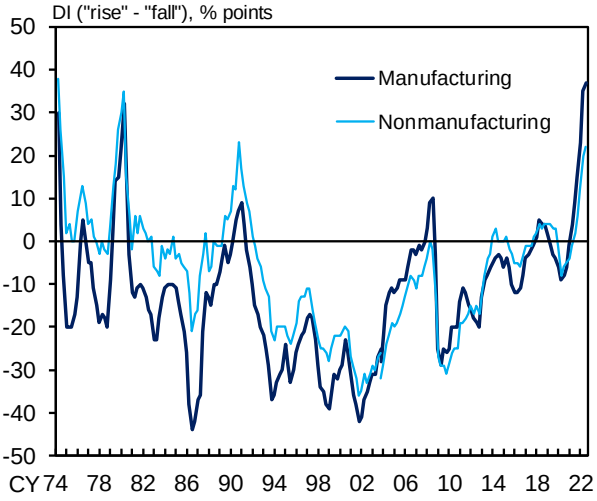
Sources: Ministry of Internal Affairs and Communications; Bank of Japan.
Notes: 1. The CPI figures are staff estimates and exclude mobile phone charges and the effects of the consumption tax hikes, policies concerning the provision of free education, and the "Go To Travel" campaign, which covers a portion of domestic travel expenses.
2. Figures for the output gap are staff estimates.

potential growth rate (Charts 2 and 44). Thereafter, the output gap is likely to continue to expand moderately.

Second, medium- to long-term inflation expectations have risen, albeit at a moderate pace relative to short-term ones. The September 2022 *Tankan* shows that the output prices DI has increased further (Chart 45). It also shows that firms' inflation outlook for general prices has been at a high level, not only for the short term but also for the medium to long term (Chart 46).[16] Given that the formation of inflation expectations in Japan is largely adaptive, an increase in actual inflation is expected to bring about a rise in households' and firms' medium- to long-term inflation expectations and, through changes in firms' price- and wage-setting behavior and in labor-management wage negotiations, lead to a sustained rise in prices accompanied by wage increases.

Third, import prices, such as crude oil prices in U.S. dollar terms, have turned to a decline, reflecting concern over a global economic slowdown (Chart 47). Nevertheless, past rises in import costs, the recent depreciation of the yen, and the resultant increase in the PPI have been

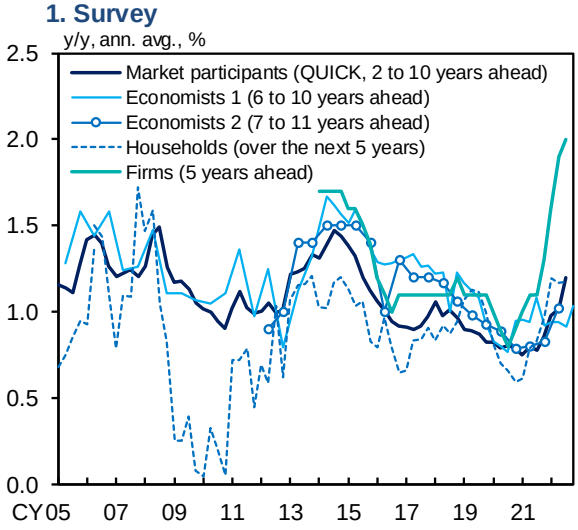
Chart 45: Output Prices



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

Chart 46: 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.

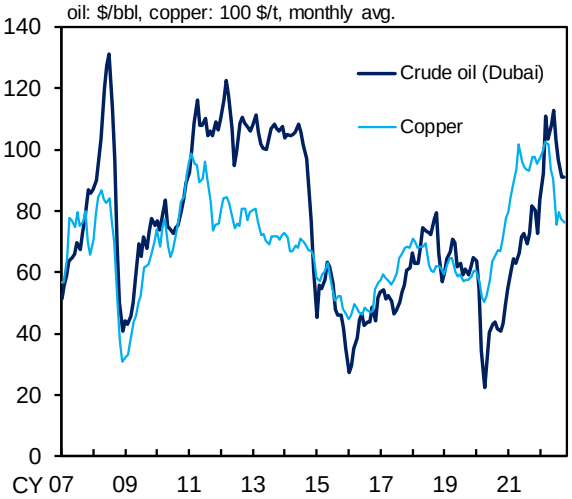
[16] In Chart 46, figures for households' inflation expectations are based on the *Opinion Survey on the General Public's Views and Behavior*. Specifically, they are calculated using the modified Carlson-Parkin method that employs information on the proportion of responses received for each answer to a survey question asking about the outlook for price levels over the next five years, with five choices: will go up significantly; will go up slightly; will remain almost unchanged; will go down slightly; and will go down significantly. For details, see "Effects of Inflation and Wage Expectations on Consumer Spending: Evidence from Micro Data," *Bank of Japan Working Paper Series*, no. 16-E-7, June 2016.

factors pushing up the CPI, with upstream cost increases gradually being passed downstream.[17] While being curbed by the effects of the government's gasoline subsidies and of upper limits on electricity charges under the fuel cost adjustment system, energy prices, such as for petroleum products, electricity charges, and manufactured and piped gas charges, have been at high levels.[18] However, the year-on-year rates of increase in these prices are projected to decelerate moderately. In this situation, for the time being, past cost increases are expected to continue to be passed on to goods prices, such as for food, and to services prices, including for dining-out and housework-related services. With regard to durable goods and other items, a rise in prices of imported products due to the yen's depreciation, in addition to raw material cost increases, is projected to feed through to consumer prices with a time lag.

Outlook for Prices

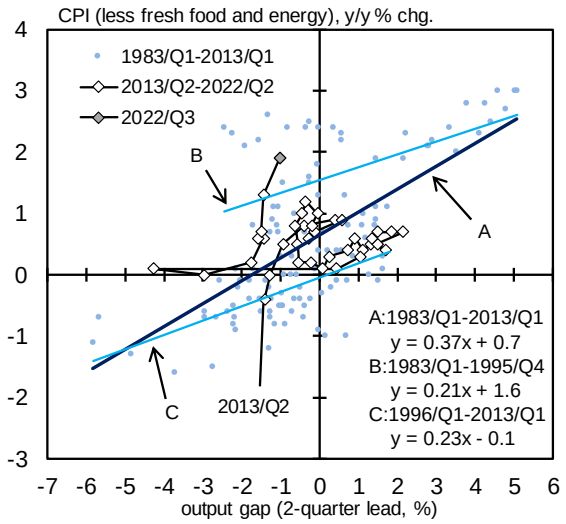
Based on this underlying scenario, the year-on-year rate of change in the CPI (all items less fresh food) is projected to increase toward the end of this year. This is based on the projection that (1) the rise in energy prices will continue to push up the rate, (2) cost increases will be further passed on to prices of items such as food, durable goods, and dining-out, and (3) the effects of last year's reduction in mobile phone charges will dissipate this October. The rate of

Chart 47: International Commodity Prices



Sources: Nikkei Inc.; Bloomberg.

Chart 48: 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 the "Go To Travel" campaign, which covers a portion of domestic travel expenses.
2. Figures for the output gap are staff estimates.

[17] Box 3 outlines firms' recent price-setting stance.

[18] The government has introduced a measure to provide subsidies to petroleum distributors and importers as funds to contain a sharp rise in their selling prices when gasoline prices are at high levels. For details on the government subsidies and the fuel cost adjustment system for electricity charges, see Box 2 in the April 2022 Outlook Report.

increase is then expected to decelerate toward the middle of fiscal 2023 because the contribution of these factors to this CPI is likely to wane. From the middle of that fiscal year, it is projected to accelerate again moderately on the back of improvement in the output gap and rises in medium- to long-term inflation expectations and in wage growth.

Meanwhile, reflecting price developments in such items as food and durable goods, the year-on-year rate of change in the CPI (all items less fresh food and energy) is likely to see similar developments to those in the rate of change in the CPI (all items less fresh food).

III. Financial Developments in Japan

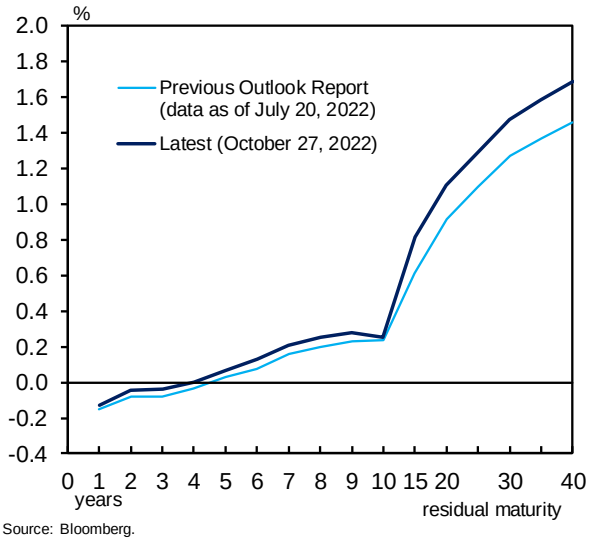
Financial Conditions

Financial conditions have been accommodative on the whole, although weakness in firms' financial positions has remained in some segments.

Under QQE with Yield Curve Control, the shape of the yield curve for Japanese government bonds (JGBs) has been consistent with the current guideline for market operations, in which the short-term policy interest rate is set at minus 0.1 percent and the target level of 10-year JGB yields is around zero percent (Chart 49). That is, the yields for relatively short maturities have been in slightly negative territory and the 10-year JGB yields have been in the range of around plus and minus 0.25 percent from 0 percent, as the Bank has purchased in a flexible manner a necessary amount of both JGBs and treasury discount bills (T-Bills) without setting upper limits, including through fixed-rate purchase operations for consecutive days. Meanwhile, the 20-year JGB yields have risen since the previous Outlook Report and have been in the range of 1.0-1.5 percent recently.

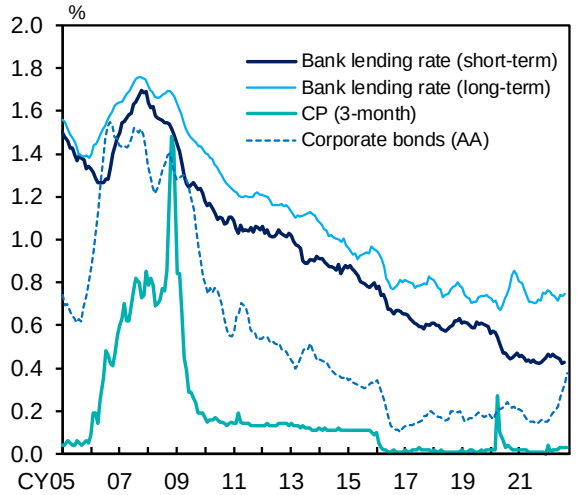
Firms' funding costs have been hovering at extremely low levels (Chart 50). Issuance rates for CP have been at extremely low levels as issuance conditions have remained favorable. The DI for issuance conditions for CP in the *Tankan* has continued to show net "easy" conditions, although the DI has declined due to an increase in demand for working capital in reflection of high commodity prices. In the

Chart 49: Yield Curves



Source: Bloomberg.

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



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

Notes: 1. Figures for issuance yields for CP up 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 and issuance yields for corporate bonds are 6-month backward moving averages.

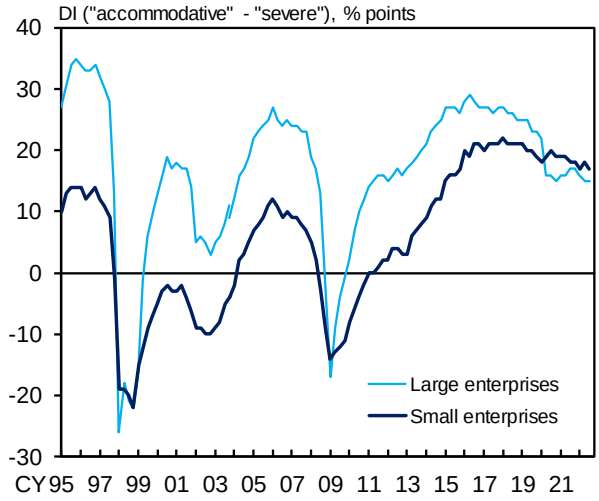
corporate bond market, issuance conditions have remained favorable on the whole and issuance rates have been at low levels. Meanwhile, lending rates (the average interest rates on new loans and discounts) have been at around historical low levels.

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 51). The DI for firms' financial positions in the *Tankan* suggests that, although weakness has remained in some segments, the positions have continued on an improving trend, including for small firms, on the back of a pick-up in the economy (Chart 52).

Regarding firms' demand for funds, demand for working capital has increased in reflection of the resumption of economic activity and raw material cost increases. In this situation, the aggregate amount outstanding of CP and corporate bonds has increased at a pace of around 7 percent on a year-on-year basis (Chart 53). In addition, the year-on-year rate of increase in the amount outstanding of bank lending has been at around 2.5 percent.

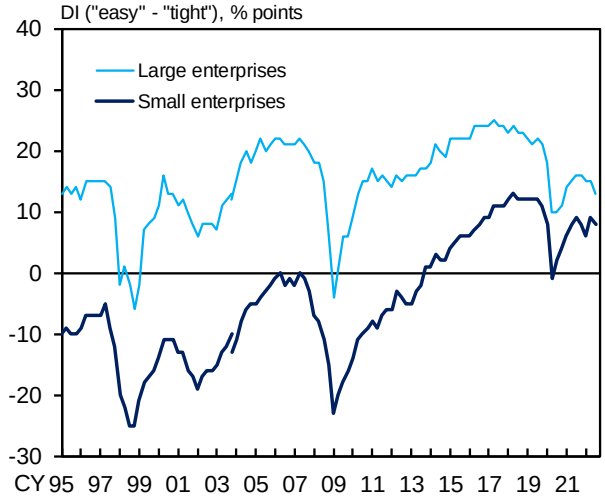
The year-on-year rate of change in the monetary base has been slightly negative of late due to a decline in the amount outstanding of funds provided through the Special Funds-Supplying Operations to Facilitate Financing in Response to the Novel Coronavirus (COVID-19). The amount outstanding of the monetary base was 618 trillion

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



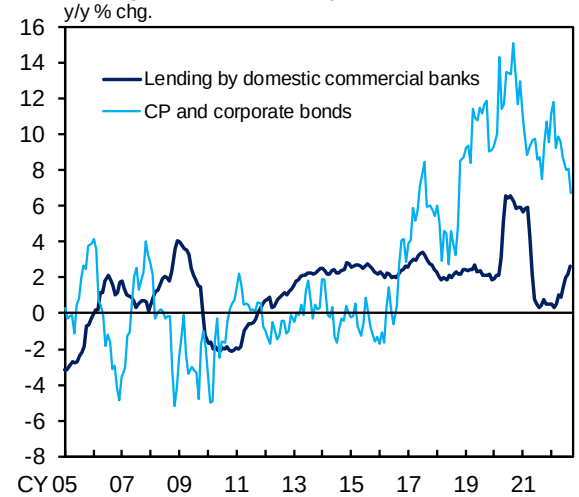
Source: Bank of Japan.
Note: Based on the *Tankan*. All industries. There is a discontinuity in the data for December 2003 due to a change in the survey framework.

Chart 52: Firms' Financial Position



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

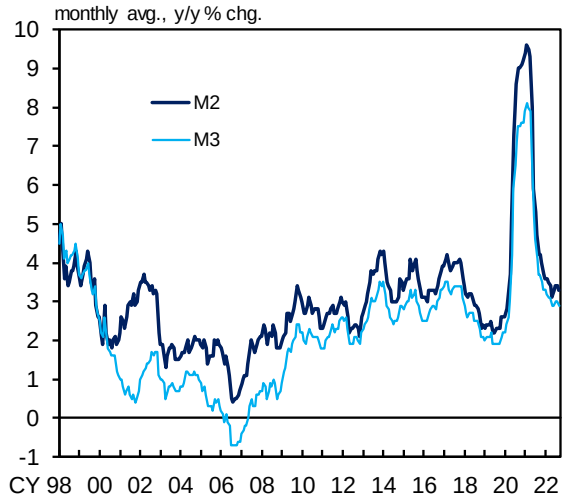
Chart 53: Amounts Outstanding of Bank Lending, CP, and Corporate Bonds



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.

yen, of which the ratio to nominal GDP was 113 percent.[19] The year-on-year rate of change in the money stock (M2) has been in the range of 3.0-3.5 percent, mainly because fiscal spending has pushed it up and the amount outstanding of bank lending has increased (Chart 54).

Chart 54: Money Stock



Source: Bank of Japan.

[19] The amount outstanding of the monetary base is as of end-September 2022. Nominal GDP is the figure for the April-June quarter of 2022.

Developments in Financial Markets

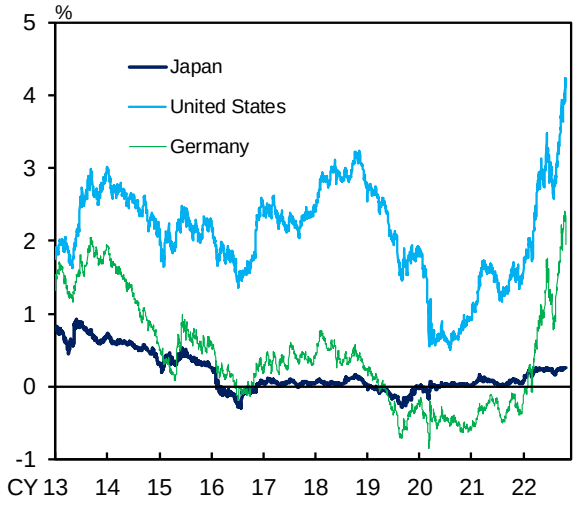
In global financial markets, market sentiment has been increasingly cautious, mainly because there has been growing concern over a slowdown in the global economy, with central banks, particularly in the United States and Europe, raising policy interest rates rapidly, reflecting continued high inflation on a global basis.

Yields on 10-year government bonds in the United States and Europe have risen, mainly because, with higher-than-expected inflation rates in both economies, market attention has been drawn again to the firm stance by the Federal Reserve and the European Central Bank to contain inflation (Chart 55).

Premiums for U.S. dollar funding through the dollar/yen foreign exchange swap market have expanded since the end of September, mainly due to transactions conducted in view of the year-end (Chart 56).

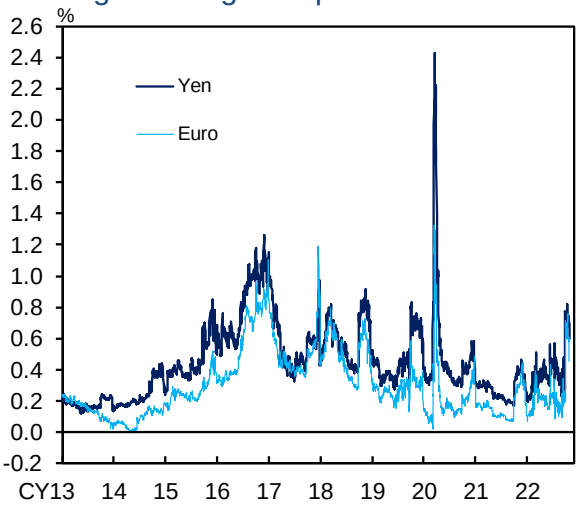
Stock prices in the United States and Europe declined due to an increase in long-term interest rates and to caution against economic slowdowns, and volatility in the market increased (Charts 57 and 58). Thereafter, they have risen at times, reflecting market expectations that the pace of policy interest rate hikes will slow. Stock prices in Japan have moved in line with those in the United States and Europe. Stock prices in emerging economies have declined, mainly due to rises in U.S. and European interest rates.

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



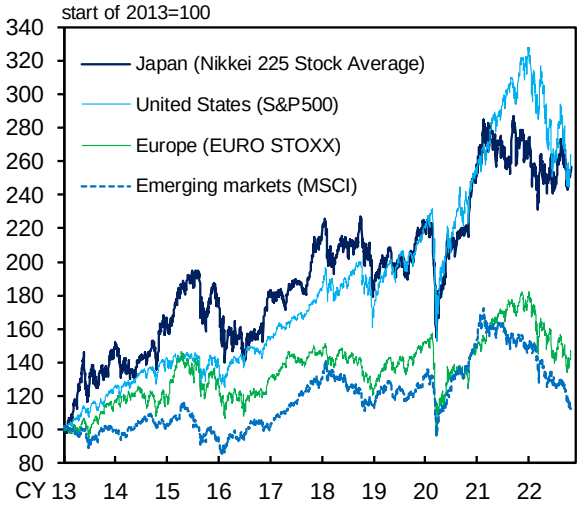
Source: Bloomberg.

Chart 56: Dollar Funding Premiums through Foreign Exchange Swaps



Source: Bloomberg.
Notes: 1. U.S. dollar funding premiums are calculated as the difference between U.S. dollar fundings rates (3-month) in the dollar/yen or euro/dollar foreign exchange swap market and those in the money market.
2. The interest rates used for the calculation are as follows: for the yen, the OIS rate; for the euro, the EONIA-referencing OIS rate before October 4, 2019, and the €STR-referencing OIS rate thereafter; for the U.S. dollar, the OIS rate before January 3, 2019, and the SOFR thereafter.

Chart 57: Selected Stock Price Indices

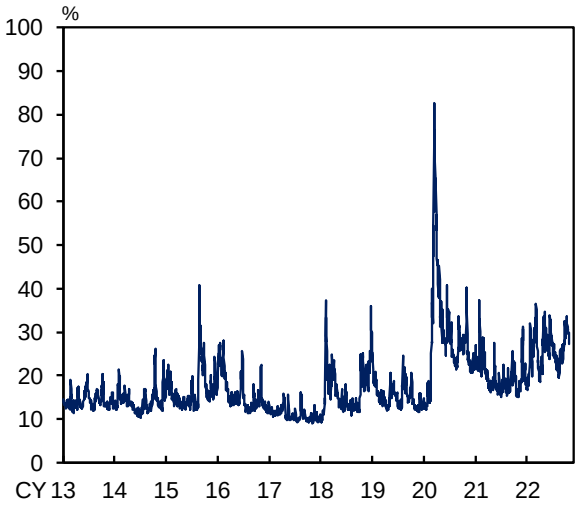


Source: Bloomberg.
Note: Figures for emerging markets are those for the MSCI Emerging Markets Index (local currency).

Prices of Japan real estate investment trusts (J-REITs) have declined, with U.S. REIT prices declining significantly due to the rise in U.S. long-term interest rates, although expectations for a resumption of economic activity, for example, have been viewed as underpinning J-REIT prices (Chart 59).

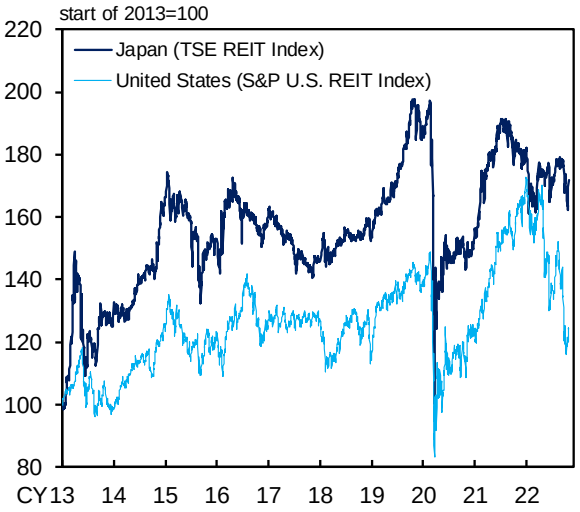
In foreign exchange markets, the yen has depreciated against the U.S. dollar, partly due to dollar purchasing by Japanese importers, with market attention on the differing direction of monetary policy between the two countries (Chart 60). Meanwhile, the yen has also depreciated against the euro.

Chart 58: Stock Market Volatility (VIX)



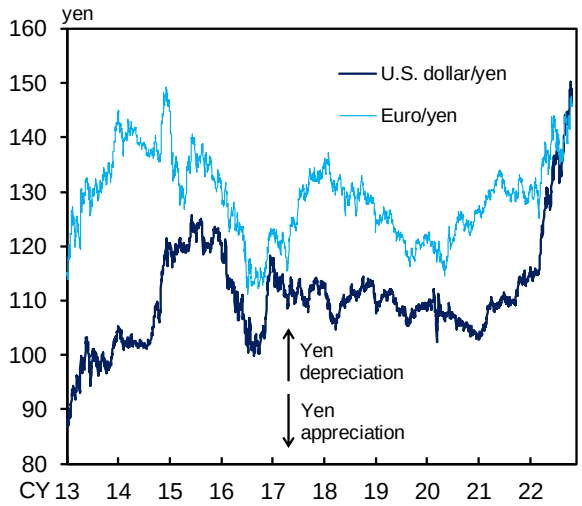
Source: Bloomberg.

Chart 59: Selected REIT Indices



Source: Bloomberg.

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

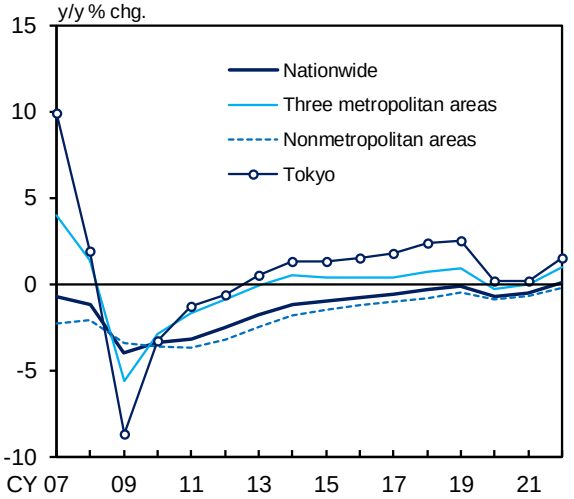


Source: Bloomberg.

Land Prices

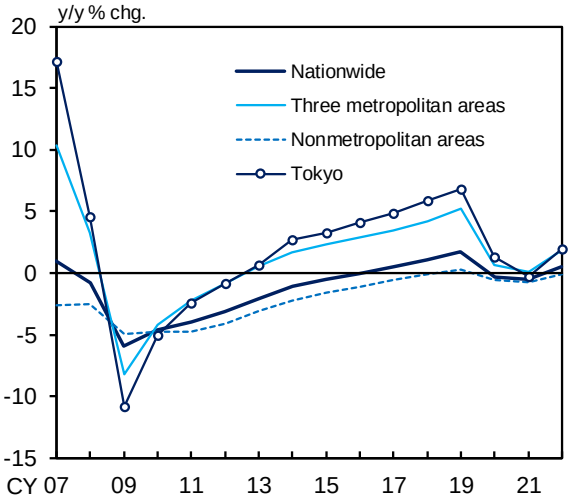
Land prices had decreased slightly due to the impact of COVID-19 but have turned to an increase recently, reflecting a pick-up in the economy. According to the *Land Price Research by Prefectural Governments* for 2022 (as of July 1), the year-on-year rates of change in both residential and commercial land prices have turned slightly positive (Charts 61 and 62). In the three major metropolitan areas (Tokyo, Osaka, and Nagoya), the year-on-year rate of change in residential land prices has turned positive after being flat, and the rate of increase in commercial land prices has accelerated. In nonmetropolitan areas, the year-on-year rates of decline in both residential and commercial land prices have decelerated.

Chart 61: Residential Land Prices



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

Chart 62: Commercial Land Prices



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

(Box 1) Slowdowns in Overseas Economies and Their Impact on Japan's Economy

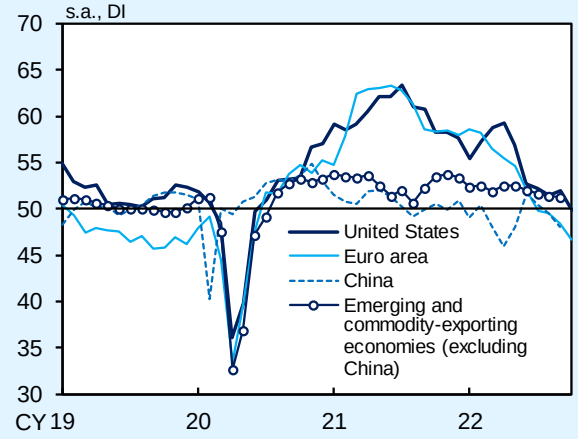
This box outlines the impact of slowdowns in overseas economies on Japan's economy.

An examination of business sentiment in the manufacturing industry to gauge global production activity shows slowdowns in advanced economies, particularly in the euro area. Looking at emerging economies, business sentiment has deteriorated in China due to the remaining impact of the spread of COVID-19 and a slowdown in export orders, while the pace of improvement in such sentiment in other emerging economies has decelerated somewhat, reflecting developments in advanced economies and the Chinese economy (Chart B1-1).

Two main reasons behind such developments are continued inflationary pressure in many economies, particularly on energy and food prices, which is partly attributable to the situation surrounding Ukraine, and the accompanying policy interest rate hikes (Chart B1-2). These factors gradually push down demand and production, mainly in advanced economies, and thereby trigger slowdowns in overseas economies. In fact, the latest economic outlooks by the International Monetary Fund (IMF) and by the Organisation for Economic Co-operation and Development (OECD) show that global economic growth is expected to slow next year.

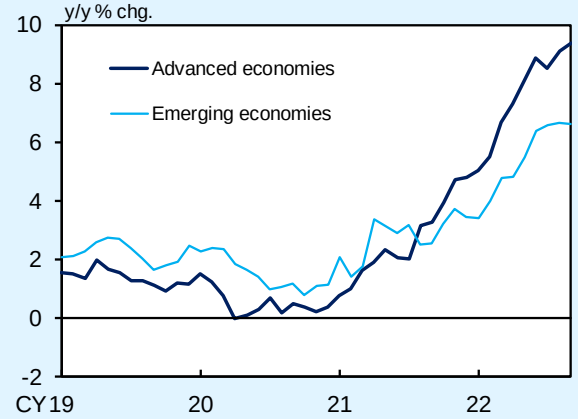
Such slowdowns in overseas economies put downward pressure on Japan's exports and

Chart B1-1: Manufacturing PMI



Sources: Copyright © 2022 by S&P Global Market Intelligence, a division of S&P Global Inc. All rights reserved.; Haver; IMF.
Notes: 1. Figures for China are the Caixin China PMI.
2. Figures for emerging and commodity-exporting economies (excluding China) are the weighted averages of the PMIs for 20 economies using their shares in global GDP obtained from the IMF as weights.

Chart B1-2: Inflation in Advanced and Emerging Economies

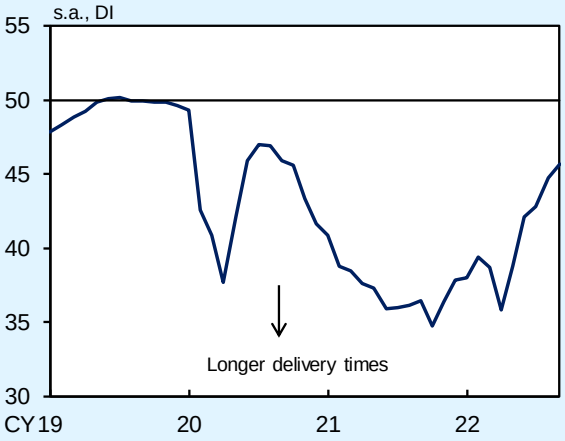


Sources: Haver; CEIC.
Note: Figures for advanced economies are the median year-on-year rates of change in consumer prices for 17 economies, including the United States and European countries. Figures for emerging economies are the median year-on-year rates of change in consumer prices for 12 economies in Asia (excluding China) and Latin America.

production. That said, for the time being, they are expected to follow an uptrend, especially for automobiles and capital goods. Sales of automobiles have been held back globally by shortages of semiconductors and other parts; if supply-side constraints wane, this is likely to boost such sales (Chart B1-3). Against this background, inventories of automobiles, which have been at low levels, particularly in the United States, are expected to recover (Chart B1-4). In addition, orders of capital goods have continued to considerably exceed their shipments, particularly for semiconductor production equipment, and order backlogs at Japanese firms have been at high levels (Chart B1-5). Such waning of supply-side constraints and the high levels of such order backlogs are likely to alleviate downward pressure on Japan's exports and production associated with the slowdowns in overseas economies.

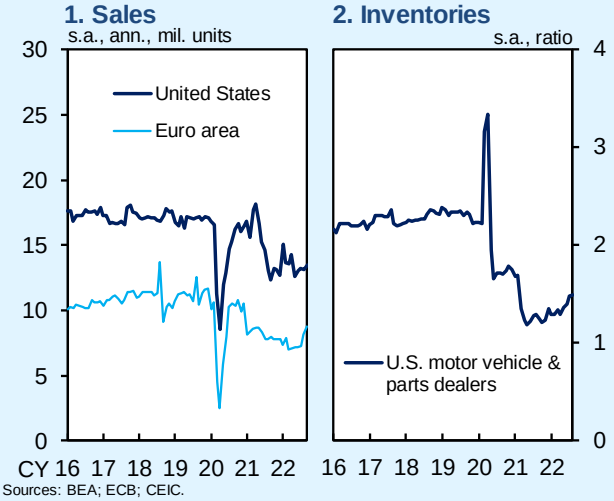
However, uncertainties regarding overseas economies are extremely high, and the risks surrounding Japan's exports and production are skewed to the downside for the time being. If the slowdowns in overseas economies intensify or the timing of their pick-up is delayed significantly, exports of automobiles and capital goods, both of which are currently firm, may decline rapidly due to such factors as order cancellations, and adjustments in IT-related goods, currently seen only in part, may become more widespread. Moreover, attention continues to be warranted on the possibility that, depending on the course of COVID-19 and developments in geopolitical risks, global supply-chain disruptions could intensify again and push down Japan's exports and production.

Chart B1-3: Suppliers' Delivery Times PMI



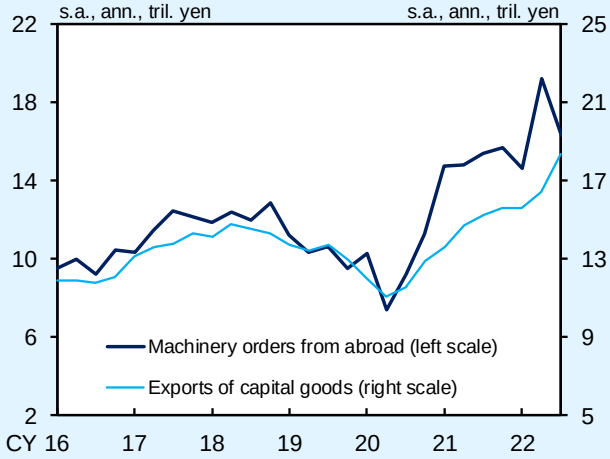
Source: Copyright © 2022 by S&P Global Market Intelligence, a division of S&P Global Inc. All rights reserved.
Note: The suppliers' delivery times PMI is the suppliers' delivery times index in the J.P.Morgan Global Manufacturing PMI.

Chart B1-4: Global Demand for Motor Vehicles



Sources: BEA; ECB; CEIC.
Notes: 1. Figures for sales in the United States are based on motor vehicle sales excluding heavy trucks. Those for sales in the euro area are based on new passenger car registrations.
2. Figures for inventories are the ratio to sales.

Chart B1-5: Machinery Orders from Abroad and Exports of Capital Goods

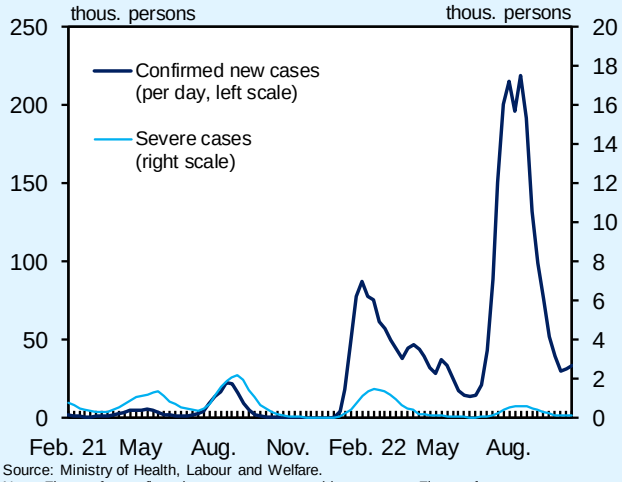


Sources: Cabinet Office; Ministry of Finance.
Note: Figures are nominal values. The figure for machinery orders for 2022/Q3 is the July-August average.

(Box 2) Recent Relationship between COVID-19 and Private Consumption

The number of confirmed new cases of COVID-19 increased significantly from the second half of July through the first half of August 2022, and this exerted downward pressure on services consumption such as travel and dining-out (Chart B2-1). However, the degree of decline in such consumption remained small relative to past phases of COVID-19 surges, as no substantial decline was observed in mobility (Charts B2-2, 33, 34, and 35).

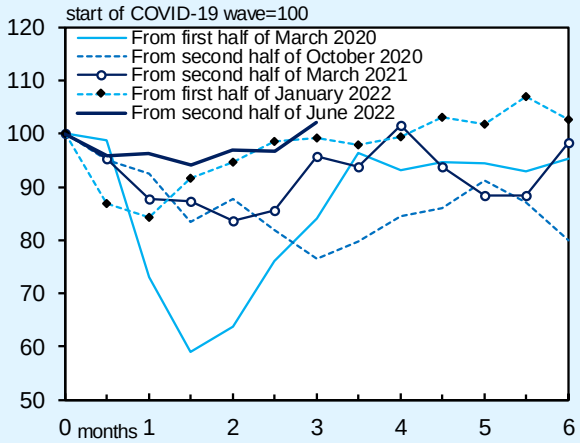
Chart B2-1: Confirmed New Cases and Severe Cases of COVID-19



Source: Ministry of Health, Labour and Welfare.
Note: Figures for confirmed new cases are weekly averages. Figures for severe cases are those at the end of the week.

Given that a rapid decline in mobility and private consumption was avoided even as COVID-19 resurged, and that the number of confirmed new cases has been on a decreasing trend since late August, it is likely that the resumption of consumption activities has progressed in Japan while public health has been protected.

Chart B2-2: Services Consumption

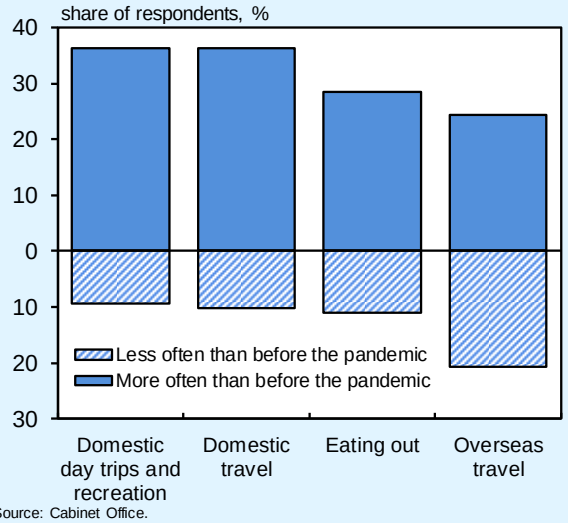


Source: Nowcast Inc./ JCB, Co., Ltd., "JCB Consumption NOW."
Notes: 1. Figures are from the reference series in *JCB Consumption NOW*, which take changes in the number of consumers into account. Figures exclude telecommunications and are based on staff calculations.
2. The chart shows services consumption during each wave of COVID-19 relative to the reference value (the average of services consumption during the corresponding half of the month for fiscal 2016 through fiscal 2018). Figures are indexed to 100 at the start of a particular wave. Month 0 represents the month in which each wave started.

Regarding the outlook, private consumption is expected to be affected by price rises. However, on the back of improvement in the employment and income situation, pent-up demand is likely to materialize, supported by household savings that had accumulated as a result of pandemic-related restrictions, as the resumption of consumption activities progresses further while public health is being protected. Potential demand that has been held back during the pandemic, such as for travel and dining-out, seems to have been strong, and the government's demand stimulus measures are likely to support the materialization of such demand (Chart B2-3). That said, depending on the course of COVID-19, vigilance against it could

persist, mainly among seniors. Taking also into account the recent price rises, it should be noted that there are high uncertainties over the timing and the extent of materialization of pent-up demand.

Chart B2-3: Consumption Intentions Once COVID-19 Pandemic Has Subsided



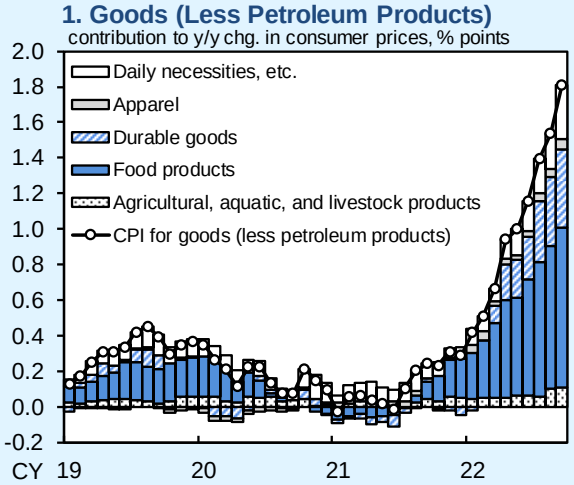
Source: Cabinet Office.
Note: The survey period was from June 1 to 9, 2022.

(Box 3) Developments in Firms' Price-Setting Stance

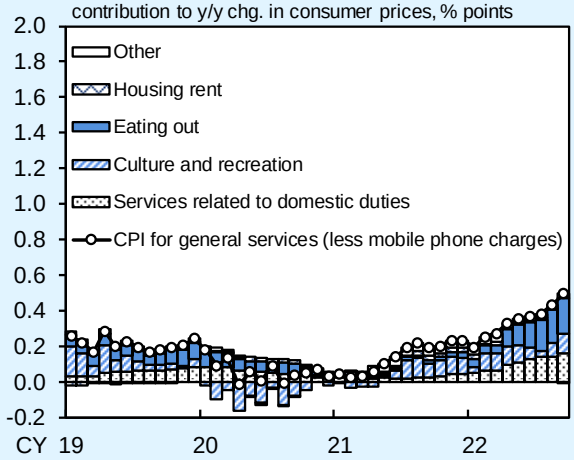
Recent developments in the CPI show that the year-on-year rates of increase have accelerated for both goods and services. In addition, the trimmed mean of the rate of change in the CPI and the diffusion index (DI) for the share of price-increasing items minus the share of price-decreasing items have risen to their highest levels since the first half of the 1990s. Such recent price rises are significantly attributable to increased upward pressure of costs led by a rise in import prices due to high commodity prices and the yen's depreciation. Examining the CPI (all items less fresh food and energy) in detail, for goods, prices of food products, as well as those of durable goods, for which the share of imported goods is high, have risen significantly. For services, the rates of change in prices have remained high for dining-out and housework-related services (e.g., services related to housing repairs and maintenance), which have a high share of material costs in their overall costs (Chart B3-1).

Chart B3-1: Consumer Prices for Goods and Services

1. Goods (Less Petroleum Products)



2. General Services (Less Mobile Phone Charges)



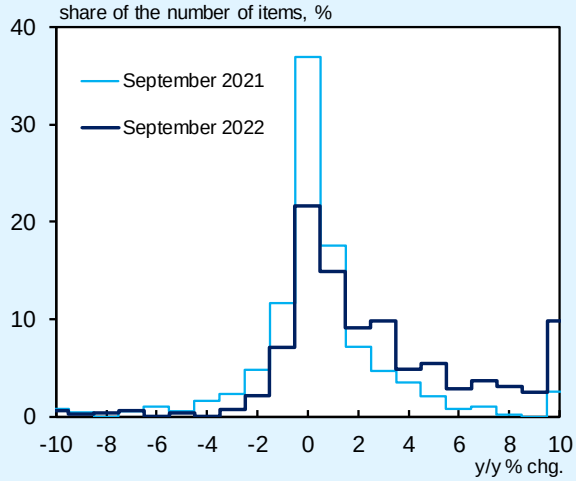
Source: Ministry of Internal Affairs and Communications.
Notes: 1. Figures are the contribution to changes in the CPI (less fresh food and energy). Figures are staff estimates and exclude mobile phone charges and the effects of the consumption tax hike, policies concerning the provision of free education, and the "Go To Travel" campaign, which covers a portion of domestic travel expenses.
2. Figures for services related to domestic duties include services related to housing repairs and maintenance.

Firms' moves to reflect the rise in costs such as of raw materials in selling prices have intensified and become widespread recently. The price change distribution for the CPI items shows that, although its peak has continued to be around 0 percent, the thickness of its right tail has increased clearly, indicating an increase in the number of items for which prices have risen (Chart B3-2). The following examines such price-setting stance of firms in detail using microdata from the *Tankan* surveys.

First, the output prices DIs for consumption-related industries in the *Tankan* are classified into 37 categories based on their more detailed industry classification (e.g., supermarkets and convenience stores) and firm size and then reaggregated (Chart B3-3). The reaggregated DIs for the September survey were at or above 0 percentage point for all categories. This suggests that an increasing number of firms, regardless of industry and firm size, have raised prices recently, even more so than during the inflationary phase around 2008, when the DIs registered a net "fall" for quite a few categories. Next, the output prices DIs for firms that were cautious about changing their selling prices -- selected based on their answers to the *Tankan* surveys -- are aggregated (Chart B3-4). Developments in the aggregated DI show that it has risen clearly in the current phase, indicating that even such firms have begun to raise prices.

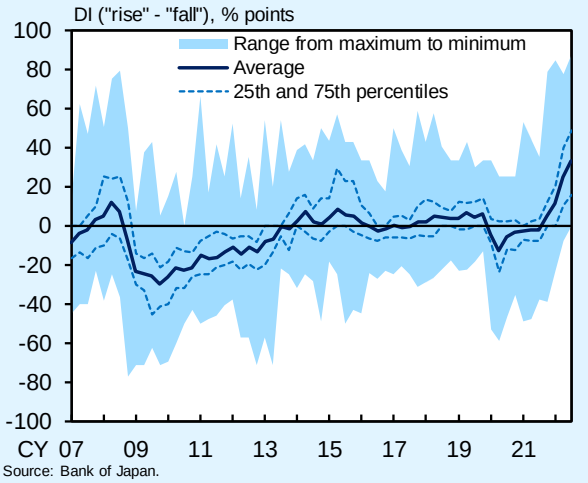
It seems that individual firms have taken into account their competitors' behavior when changing their price-setting stance. In this regard, each firm's behavior regarding the pass-through of cost increases given its competitors' price setting in the previous quarter is examined.[20] The results indicate that, when input prices rise, there seems to be a relationship in which the number of firms passing on cost increases goes up in a nonlinear fashion as more competitors raise their selling prices. Such a relationship has also been seen recently, and this suggests that the fact that many competitors have begun to raise prices has

Chart B3-2: Price Change Distribution (CPI)



Source: Ministry of Internal Affairs and Communications.
Notes: 1. The CPI figures are staff estimates and exclude the effects of the "Go To Travel" campaign, which covers a portion of domestic travel expenses. Figures exclude fresh food and energy.
2. The left-most bin includes items with a price decrease of more than 9.5 percent, while the right-most bin includes items with a price increase of 9.5 percent or more.

Chart B3-3: Output Prices in Consumption-Related Sectors



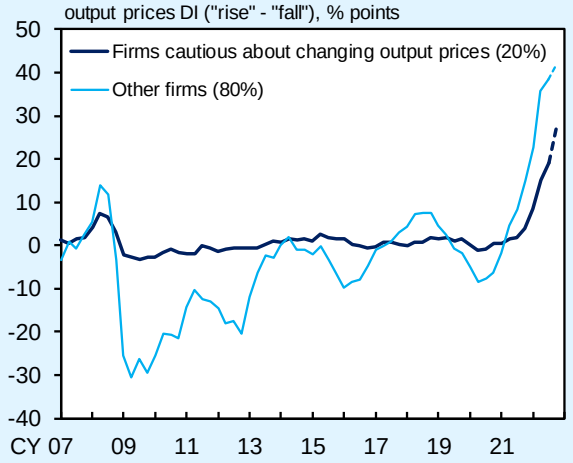
Source: Bank of Japan.
Note: Based on the *Tankan*. In compiling these figures, consumption-related firms (firms in "retailing," "services for individuals," and "accommodations, eating & drinking services") were classified into 37 categories based on their detailed industry classification and size, and the output prices DIs for these 37 categories were then reaggregated.

[20] Firms' behavior regarding the pass-through of cost increases is represented by the vertical axis in Chart B3-5 while competitors' price setting is represented by the horizontal axis.

driven firms to lean more toward passing on higher input prices to selling prices (Chart B3-5).

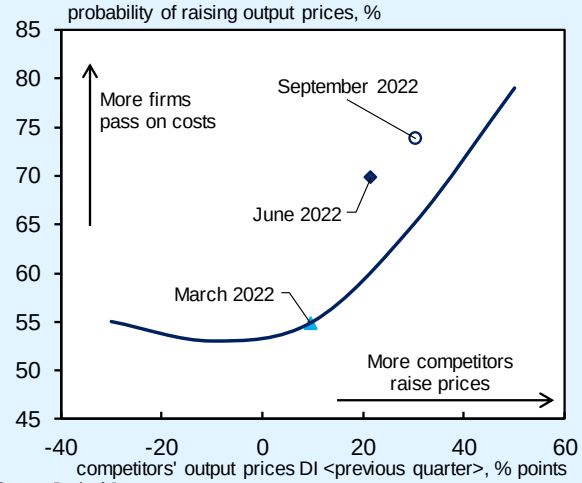
In sum, firms have leaned more toward passing on the rise in raw material costs to selling prices while taking competitors' price setting into consideration. As pointed out in the previous Outlook Report released in July, there seem to be three basic reasons behind such developments: (1) the recent upward pressure of costs has been greater than in the past; (2) Japan's economy is currently on its way to recovery from a significant downturn caused by COVID-19; and (3) supply and demand conditions for some individual goods have been tight, partly due to a surge in global demand and the impact of supply-chain disruptions.[21]

Chart B3-4: Change in Firms' Price-Setting Stance



Source: Bank of Japan.
Note: Based on the *Tankan* (all industries and enterprises). Figures for "firms cautious about changing output prices" are for firms that for at least about 95 percent of the period from 1991 to 2019 replied that their output prices were "unchanged." The dots at the end of the lines are forecasts from the September 2022 survey.

Chart B3-5: Output Prices of Firms and Their Competitors



Source: Bank of Japan.
Notes: 1. Based on the *Tankan*. Figures are for 10 sectors in the retailing industry from 1991 to 2022.
2. The competitors' output prices DI denotes the output prices DI for firms' competitors defined as other firms in the same sector.
3. The probability of raising output prices denotes the share of firms that raised their output prices in a certain quarter among those that saw an increase in their input prices in the same period. The curved line in the chart approximately represents the median of the probability for each level of the competitors' output prices DI.

[21] For details, see Box 3 in the July 2022 Outlook Report.