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Outlook for Economic

Activity and Prices

July 2022



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# **Outlook for Economic Activity and Prices (July 2022)**

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

# 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 a rise in commodity prices due to factors such as the situation surrounding Ukraine. 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. Thereafter, the rate of increase is expected to decelerate because the positive contribution of the rise in energy prices to the CPI is likely to wane. Meanwhile, in terms of inflation excluding energy, for which prices fluctuate significantly, the year-on-year rate of change in the CPI (all items less fresh food and energy) is expected to increase moderately in positive territory 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 rate for fiscal 2022 is lower due to the effects of such factors as a slowdown in overseas economies and intensification of supply-side constraints. However, the projected growth rates thereafter are somewhat higher, partly owing to a rebound from the lower projection for fiscal 2022. The projected rates of increase in the CPI are higher, mainly for the near term, reflecting the impact of a rise in import prices and of a pass-through of that rise to consumer prices.
- Concerning risks to the outlook, there remain extremely high uncertainties for Japan's economy, including the course of COVID-19 at home and abroad and its impact, developments in the situation surrounding Ukraine, and developments in commodity prices and in overseas economic activity and prices. 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 for the time being but are generally balanced thereafter. Risks to prices are skewed to the upside for the time being but are generally balanced thereafter.

<sup>&</sup>lt;sup>1</sup> "The Bank's View" was decided by the Policy Board at the Monetary Policy Meeting held on July 20 and 21, 2022.

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

Japan's economy has picked up with the impact of COVID-19 waning, despite being affected by factors such as a rise in commodity prices. Overseas economies have recovered on the whole, albeit with some weakness seen in part. Exports have continued to increase as a trend, but they have been affected by supply-side constraints, and industrial production has been under strong downward pressure due to the effects of such constraints. 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, although some weakness has been seen in part. Private consumption has increased moderately, particularly for services consumption, with the impact of COVID-19 waning. Housing investment has been more or less flat. Public investment has been relatively weak. 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 2 percent, mainly due to rises in energy and food prices. 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

<u>Toward the middle of the projection period</u>, Japan's economy is likely to recover, with the impact of COVID-19 and supply-side constraints waning and with support from an increase in external demand, accommodative financial conditions, and the government's economic measures, although it is expected to be under downward pressure stemming from the rise in commodity prices.

Prices of commodities, such as crude oil, natural gas, coal, and grains (e.g., wheat), have remained high, mainly reflecting heightened supply concerns as a result of Russia's invasion of Ukraine. Since Japan relies on imports for most of these commodities, rises in these prices bring about an outflow of income from Japan (i.e., trading losses), and put downward pressure on households' real income and corporate profits through rises in energy and food prices. That said, with the government's various measures mitigating the negative impact on income, a self-sustaining increase in demand, including pent-up demand, is projected to continue on the back of a waning of the impact of COVID-19 and supply-side constraints. For this reason, the economy is likely to recover. In the household sector, employee income is projected to continue increasing moderately on the back of a rise in the number of non-regular employees associated with a recovery in the face-to-face services sector and of an increase in wage growth that reflects improvement in labor market conditions. 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 have accumulated as a result of pandemic-related restrictions, as the resumption of consumption activities progresses while public health is being protected. In the corporate sector, exports and production are likely to increase, mainly for automobile- and digital-related goods, due in part to a waning of the effects of supply-side constraints. This is based on the projection that overseas economies will continue recovering on the whole, despite downward pressure from factors such as the situation surrounding Ukraine. Although raw material cost increases 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, on the back of an increase in domestic and external demand and partly also of 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, government spending is expected to be more or less flat on the whole.

<u>From the middle of the projection period</u>, 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 positive 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 continue increasing moderately because it is projected that the effects of supply-side constraints, such as on semiconductors, will dissipate, with overseas economies continuing to grow at a moderate pace. Inbound tourism demand, which is categorized under services exports, is expected to increase. Corporate profits are likely to follow an improving trend since domestic and external demand is expected to keep increasing and downward pressure stemming from raw material cost increases 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.<sup>2</sup> 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.<sup>3</sup> This is mainly because productivity is likely to increase due to advances in digitalization and investment in human capital, and because capital stock growth is projected to accelerate due to a rise in business fixed investment. These developments are likely to be encouraged by the government's various measures and by accommodative financial conditions.

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

The year-on-year rate of 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. Thereafter, the rate of increase is expected to decelerate because the positive contribution of the rise in energy prices to the CPI is likely to wane. Meanwhile, in terms of inflation excluding energy, for which prices fluctuate significantly, the year-on-year rate of change in the CPI (all items less fresh food and energy) is expected to increase moderately in positive territory on the back of improvement in the output gap and rises in medium- to long-term inflation expectations and in wage growth.

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 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 June 2022 *Tankan* (Short-Term Economic Survey of Enterprises in Japan) shows that the diffusion index (DI) for output prices has increased clearly of late 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

<sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> 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.

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 stance 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 course of COVID-19 at home and abroad and its impact, developments in the situation surrounding Ukraine, and developments in commodity prices and in overseas economic activity and prices. Specifically, it is necessary to pay attention to the following upside and downside risks.

The first is how COVID-19 at home and abroad will affect private consumption and firms' export and production activities. If vigilance against COVID-19 persists in Japan, particularly among seniors, there is a risk that upward pressure from pent-up demand will weaken by more than expected and private consumption will deviate downward from the baseline scenario. On the other hand, if vigilance against COVID-19 lessens significantly, household savings that have 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, if COVID-19 resurges at home and abroad while the global semiconductor shortage continues, this could lead supply-side constraints to become prolonged and amplified 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 second factor is <u>developments in the situation surrounding Ukraine and the associated developments in prices of commodities, including grains</u>. Depending on the course of this situation, overseas economies, particularly the euro area, could deviate downward from the baseline scenario. In addition, there is a risk that prices of commodities, including grains, will rise or remain high for a prolonged period. 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. For this reason, if prices of commodities, including grains, remain high and this results in prolonged deterioration in the terms of trade, wage increases will not catch up with overall price rises and Japan's economy could deviate downward from the baseline scenario. On the other hand, if these prices decline significantly, the economy could deviate upward. On this point, in the baseline scenario, commodity prices are assumed to decline moderately on the whole from the recent high levels 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 <u>developments in overseas economic activity and prices and in global financial and capital markets</u>. Amid a continued rise in inflation, mainly in advanced economies, central banks have accelerated the pace of interest rate hikes, and moves to tighten monetary policy, including a reduction in monetary accommodation, are projected to continue for the time being. While it is expected in the baseline scenario that inflation rates will decline and overseas economies will continue to grow at a moderate pace, there is concern in global financial and capital markets over whether it is possible to contain inflation and maintain economic growth simultaneously. Under these circumstances, 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 fourth factor considered from a somewhat long-term perspective is <u>firms' and households' medium- to long-term growth expectations</u>. 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 <u>firms' price- and wage-setting behavior</u>, which could exert either upward or downward pressure on prices. Depending on the degree of upward pressure from raw material costs and on developments in firms' inflation expectations, the pass-through of cost increases could accelerate by more than expected and lead prices to deviate upward from the baseline scenario. 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 <u>future developments in foreign exchange rates and international commodity prices</u>, as well as the extent to which such developments will spread to import <u>prices and domestic prices</u>. 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 globally elevated inflation rates and sharp fluctuations in foreign exchange markets have been observed. 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.<sup>4</sup>

The <u>first perspective</u> 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 course of COVID-19 at home and abroad and its impact, developments in the situation surrounding Ukraine, and developments in commodity prices and in overseas economic activity and prices. 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 for the time being but are generally balanced thereafter. Risks to prices are skewed to the upside for the time being but are generally balanced thereafter. 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. Even in the case of an adjustment in the real economy and global financial markets, the financial system is likely to remain highly robust on the whole, 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

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

these circumstances, the vulnerability of the financial system could increase, mainly due to the search for yield behavior. Although these risks are judged as not significant at this point, it is necessary to pay close attention to future developments.

As for the <u>conduct of monetary policy</u>, 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.

(Appendix)

# **Forecasts of the Majority of the Policy Board Members**

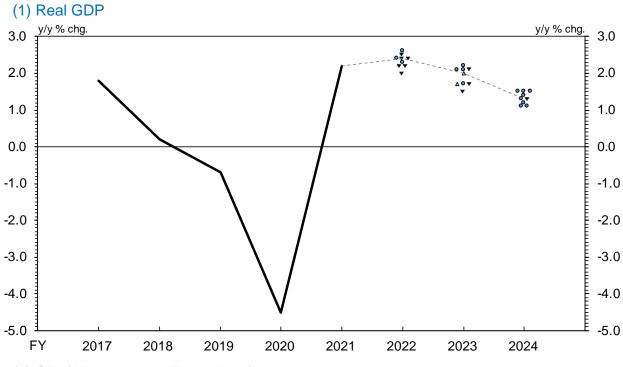
y/y % chg.

		Real GDP	CPI (all items less fresh food)	(Reference) CPI (all items less fresh food and energy)
	Fiscal 2022	+2.2 to +2.5 [+2.4]	+2.2 to +2.4 [+2.3]	+1.2 to +1.4 [+1.3]
	Forecasts made in April 2022	+2.6 to +3.0 [+2.9]	+1.8 to +2.0 [+1.9]	+0.8 to +1.0 [+0.9]
	Fiscal 2023	+1.7 to +2.1 [+2.0]	+1.2 to +1.5 [+1.4]	+1.2 to +1.4 [+1.4]
	Forecasts made in April 2022	+1.5 to +2.1 [+1.9]	+0.9 to +1.3 [+1.1]	+1.1 to +1.3 [+1.2]
	Fiscal 2024	+1.1 to +1.5 [+1.3]	+1.1 to +1.5 [+1.3]	+1.4 to +1.7 [+1.5]
	Forecasts made in April 2022	+1.1 to +1.3 [+1.1]	+1.0 to +1.3 [+1.1]	+1.2 to +1.5 [+1.5]

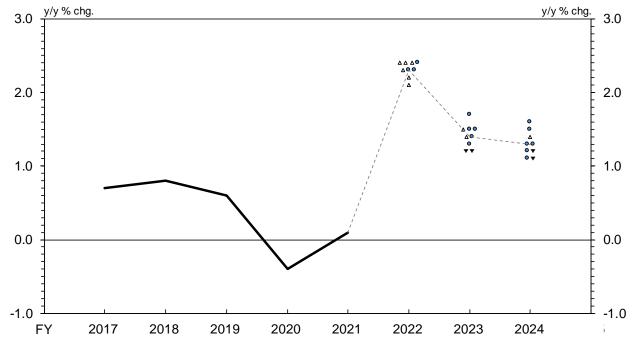
Notes: 1. Figures in brackets indicate the medians of the Policy Board members' forecasts (point estimates).

- 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**



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



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

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

# The Background<sup>5</sup>

# I. Current Situation of Economic Activity and Its Outlook

# A. Economic Developments

Japan's economy has picked up with the impact of COVID-19 waning, despite being affected by factors such as a rise in commodity prices.

After increasing for the October-December quarter of 2021, real GDP was more or less unchanged for the January-March quarter of 2022, registering minus 0.1 percent quarter-on-quarter basis and minus 0.5 percent on an annualized basis (Chart 1). Looking at the breakdown, private consumption was flat, partly because the spread of the Omicron variant put downward pressure on services consumption. Business fixed investment declined slightly, mainly due to the effects of supply-side constraints, but exports saw a small increase. In this situation, the output gap -- which captures the utilization of labor and capital -- for the January-March quarter was more unchanged from the previous quarter (Chart 2).

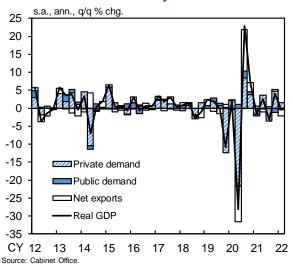
Monthly indicators and high-frequency data since then suggest that Japan's economy has picked up with the impact of COVID-19 waning, although it has been affected by a rise in commodity prices and lockdowns such as in Shanghai. Specifically, in the corporate sector, exports have continued to increase as a trend, but lately there have been

# Chart 1: Real GDP





#### 2. Annualized Quarterly Growth Rate

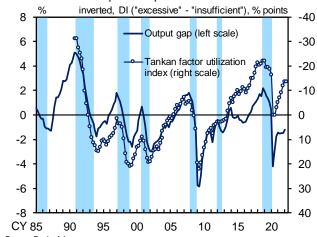


<sup>5 &</sup>quot;The Background" provides explanations of "The Bank's View" decided by the Policy Board at the Monetary Policy Meeting held on July 20 and 21, 2022.

effects of the semiconductor shortage supply-side constraints due to lockdowns such as in Shanghai. Business sentiment has been more or less unchanged on the whole; while sentiment of the manufacturing industry has deteriorated due to the effects of supply-side constraints and material prices, that high raw nonmanufacturing industry has improved, mainly for services. Corporate profits have remained at high levels, despite being affected by the rise in commodity prices. In this situation, business fixed investment has continued to pick up, and the business fixed investment plan for fiscal 2022 in the June 2022 Tankan indicates that investment is expected to increase clearly. In the household sector, private consumption has increased moderately, particularly for services consumption, with the impact of COVID-19 waning.

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 an increase in external demand, accommodative financial conditions, and the government's economic measures, although it is expected to be under downward pressure stemming from the rise in commodity prices.<sup>6</sup> 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





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.

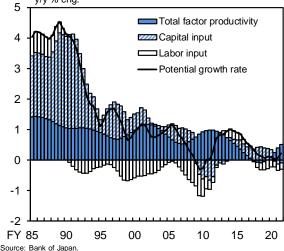
<sup>&</sup>lt;sup>6</sup> On November 19, 2021, the Cabinet decided on the Economic Measures for Overcoming Coronavirus Infections and Opening Up a New Era, with a project size of around 78.9 trillion yen and fiscal spending of around 55.7 trillion yen. The government also formulated the Comprehensive Emergency Measures to Counter Soaring Crude Oil and Other Prices in April 2022. The implementation of the budget based on the two measures is expected to mainly push up government consumption and private consumption, and thereby support economic activity.

economy. That said, the pace of growth is highly likely to decelerate gradually because the positive 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 for fiscal 2022 with the impact of COVID-19 and supply-side constraints waning and with support from an increase in external demand, accommodative financial conditions, and the government's economic measures, although domestic demand is expected to be under downward pressure stemming from the rise in commodity prices. For fiscal 2023, the growth rate is projected to remain relatively high, supported by an increase in external demand and accommodative financial conditions, although it is likely to decelerate somewhat, mainly due to slower materialization of pent-up demand and a waning of the effects of the government's economic measures. 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 rate for fiscal 2022 is lower due to the effects of such factors as a slowdown in overseas economies and intensification of supply-side constraints. However, the projected growth rates thereafter are somewhat higher, partly owing to a rebound from the lower projection for fiscal 2022.

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,

#### Chart 3: Potential Growth Rate



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 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 fiscal 2022, Japan's economy is likely to recover. This is because, although domestic demand, such as business fixed investment and private consumption, is expected to be under downward pressure stemming from rises in

commodity prices through deterioration in the terms of trade, it is projected that the impact of COVID-19 on services consumption will wane and the effects of supply-side constraints, which intensified again reflecting lockdowns such as in Shanghai, will ease gradually. Another reason is that an increase in external demand. accommodative financial conditions, and the government's economic measures are likely to provide support. Specifically, goods exports, in the short run, are expected to continue to be affected by, for example, disruptions in distribution networks due to lockdowns such as in Shanghai. Thereafter, however, they are likely to increase since it is projected that overseas economies will continue recovering on the whole and that the effects of supply-side constraints will wane gradually. Private consumption is expected to be pushed down by deterioration in real income due to rises in prices, mainly of energy and food. 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 have accumulated as a result of pandemic-related restrictions, as the resumption of consumption activities progresses while public health is being protected. An uptrend in business fixed investment is expected to become clear. This is based on the projection that corporate profits will remain at high levels on the whole, despite downward pressure from commodity price rises, the effects of supply-side constraints will wane gradually, and the level of economic activity will rise. Overall government spending is projected to be more or less flat because expenditure related to COVID-19 is expected to continue and public investment is projected to level off.

In fiscal 2023, the growth rate of Japan's economy is projected to remain relatively high, supported by an increase in external demand and accommodative financial conditions. However, it is likely to decelerate somewhat, mainly due to 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 continue increasing as overseas economies keep growing moderately and as the effects of supply-side constraints, such as on semiconductors, dissipate. Inbound tourism demand, which is categorized under services exports, is projected to increase. Business fixed investment is expected to continue increasing, including investment to address labor shortage, digital-related investment, and R&D investment for growth areas and to address environmental issues. Private consumption is 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 the waning of pent-up demand, Japan's economy is expected to continue growing at a pace above its potential growth rate, with external demand continuing to increase and accommodative financial conditions being maintained. Goods exports are likely to continue increasing

moderately. Inbound tourism demand, which is categorized under services exports, is projected to keep increasing. Business fixed investment is 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 moderately 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.

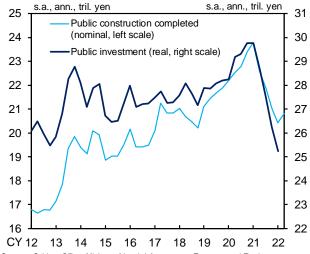
# B. Developments in Major Expenditure Items and Their Background

# **Government Spending**

Public investment has been relatively weak (Chart 4). The amount of public construction completed, which is a coincident indicator, has been relatively weak recently, mainly reflecting a decline in construction related restoration reconstruction following natural disasters. although construction related to building national resilience has been more or less flat, albeit with fluctuations. Orders received for public construction, which is a leading indicator, have been more or less flat on average, as orders associated with the government's economic measures are being placed, mainly construction related to building national resilience. The value of public works contracted has been more or less flat on average.

As for the outlook, it is projected that public investment will be more or less flat, with expenditure related to building national resilience continuing. Government consumption is likely to remain at a high level as a result of expenditure related to COVID-19. Thereafter, it is projected to see a temporary lowering in its level due to the reduction in such expenditure. Toward the end of the projection period, however, government consumption is likely to return to an increasing

# Chart 4: Public Investment 5. \_s.a., ann., tril. yen



Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism Note: The figure for 2022/Q2 is the April-May average.

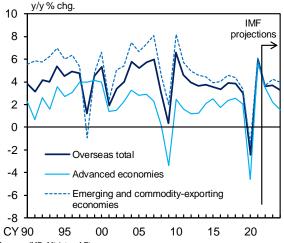
<sup>&</sup>lt;sup>7</sup> The five-year acceleration measures for building national resilience with a project size of about 15 trillion yen were decided by the Cabinet in December 2020. In these measures, public investment projects for disaster prevention, disaster mitigation, and building national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

trend, reflecting an uptrend in healthcare and nursing care expenditures.

#### **Overseas Economies**

Overseas economies have recovered on the whole, albeit with some weakness seen in part (Chart 5). By region, the U.S. economy has recovered, particularly for private consumption, with savings accumulated to date withdrawn and pent-up demand materializing. European economies have recovered as a trend on the back of continued resumption of economic activity, although they have decelerated due to such factors as the impact of a rise in energy prices. The Chinese economy has started picking up from the state of being pushed down as the impact of strict public health measures to address the spread of COVID-19 has waned. Emerging and commodity-exporting economies other than China have picked up on the whole, although some economies have been pushed down by the impact of the situation surrounding Ukraine. Among those in Asia, which is closely related to Japan's economy, the NIEs and the ASEAN economies have recovered because exports have continued to increase on the whole, despite some weakness being seen in exports to China, and domestic demand has improved due to a resumption of economic activity. Looking at the Global PMI to see the current situation for the global economy, figures both the for manufacturing and services industries have declined somewhat but have been above 50, the break-even point between improvement and deterioration in business conditions (Chart 6). The world trade volume has increased on the whole, led by demand for digital-related goods, despite being affected by the situation surrounding

#### 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 April 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.

#### 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

Ukraine and lockdowns such as in Shanghai (Chart 7).8

As for the outlook, although overseas economies are expected to be under downward pressure, mainly from the situation surrounding Ukraine, they are likely to continue growing moderately on the whole as the impact of COVID-19 wanes.9 By region, the U.S. economy is expected to continue recovering, partly owing to the effects of the government's past economic measures, but its growth rate is projected to decelerate gradually due to the impact of interest rate hikes. As the resumption of economic activity becomes full-fledged, European economies are likely to continue improving as a trend, partly due to the effects of aggressive fiscal policy. However, it is expected that continued high energy prices and a reduction in trade, particularly with Russia, resulting from the situation surrounding Ukraine, will weigh on the economies. The Chinese economy is projected to moderately return to a steady growth path, due in part to the effects of fiscal stimulus measures, including infrastructure investment, although the impact of strict public health measures such as lockdowns is likely to remain for the time being. Emerging and commodity-exporting economies other than China are likely to follow an improving trend on the whole as the resumption of economic activity becomes full-fledged, albeit with variation across countries and regions due to such factors as the

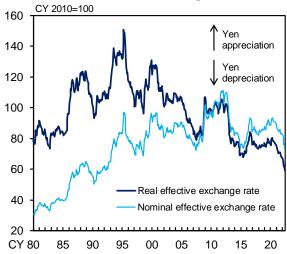
# Chart 7: World Trade Volume



Source: CPB Netnerlands Bureau for Economic Policy Analysis.

Note: Figures for the world trade volume are those for world real imports. The figure for 2022/Q2 is that for April.

#### 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.

<sup>&</sup>lt;sup>8</sup> The world trade volume is calculated by adding up real imports in each country.

<sup>&</sup>lt;sup>9</sup> Box 1 summarizes how Japan's economy has been affected by the production and logistics disruptions in China due to the spread of COVID-19.

effects of rises in prices of commodities, including grains.

With regard to the outlook for the world trade volume, sluggishness is expected to be seen in the short run due to the remaining effects of supply-side constraints and the impact of the situation surrounding Ukraine. However, the volume is projected to increase moderately thereafter in line with growth in overseas economies.

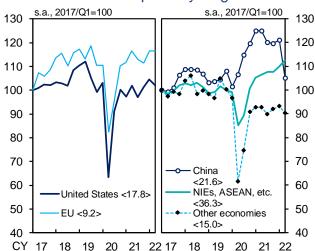
# **Exports and Imports**

Exports have continued to increase as a trend on the back of a recovery in overseas economies, but they have been affected by supply-side constraints lately (Chart 9). By region, exports to advanced economies have continued to increase as a trend due to the recovery in those economies and the expansion in demand for digital-related goods, but the effects of supply-side constraints have been seen recently on automobile-related goods in particular (Chart 10). Regarding exports to emerging economies, although those to the NIEs and the ASEAN economies, for example, have continued to increase, those to Russia have decreased significantly and those to China have been pushed down clearly due to the remaining impact of lockdowns such as in Shanghai. By goods, IT-related exports have recently been affected by constraints on shipments to China caused by lockdowns, although demand for semiconductors seems to have been firm (Chart 11). Exports of intermediate goods have declined slightly, mainly those of chemicals to China. The level of exports of automobile-related goods has decreased, affected by parts procurement

# Chart 9: Real Exports and Imports



# Chart 10: Real Exports by Region

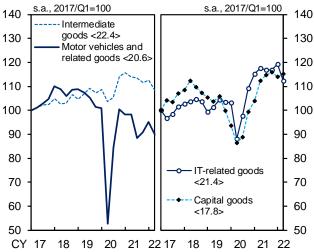


Sources: Bank of Japan; Ministry of Finance.

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. Figures for 2022/Q2 are April-May averages.

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. Figures for 2022/Q2 are April-May

difficulties due to lockdowns such as in Shanghai, in addition to the tight global supply and demand conditions for semiconductors. In contrast, exports of capital goods -- despite declining for those to China -- have been at high levels, supported by steady machinery investment on a global basis and by strong demand for semiconductor production equipment that reflects the expansion in demand for digital-related goods.

Exports are likely to increase, mainly for automobile-related goods, for which supply-side constraints likely are to wane, and digital-related goods, which have seen expansion in global demand. This is based on the projection that overseas economies will continue growing at a moderate pace on the whole. In addition, high levels of order backlogs, particularly for the goods mentioned above, are expected to support an increase in exports. However, it is highly likely that exports will remain susceptible to supply-side constraints in the short run, mainly because the semiconductor shortage disruptions in distribution networks due to lockdowns such as in Shanghai are projected to continue having an impact.

Meanwhile, Japan's share of exports in the world trade volume has declined recently, affected by the production decline in automobiles, of which Japan accounts for a large share within world exports (Chart 12). As for the outlook, mainly reflecting changes in the trade volume of automobile-related goods, Japan's share of exports is likely to continue fluctuating for the time being. Thereafter, however, it is projected to

# **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/Q2 is that for April.

converge toward a level that is around the average seen before the pandemic.

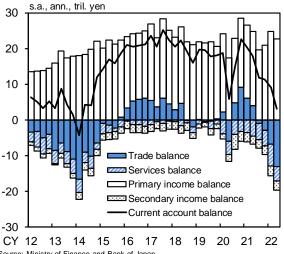
Imports have continued to increase as a trend, reflecting a pick-up in domestic demand, although they have recently been affected by a decline in imports, especially of vaccines, and by supply-side constraints (Chart 9). Imports are expected to follow a moderate uptrend on the back of developments in induced demand due to increases in domestic demand and exports.

#### **External Balance**

The nominal current account surplus has decreased markedly, mainly reflecting the impact of a rise in commodity prices (Chart 13). Looking at the breakdown, the nominal trade deficit has expanded recently, mainly reflecting rises in international commodity prices, such as crude oil prices. The services balance has continued to register a deficit, mainly against the background of deterioration in the travel balance, which is due 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 to date and a recovery in overseas economies.

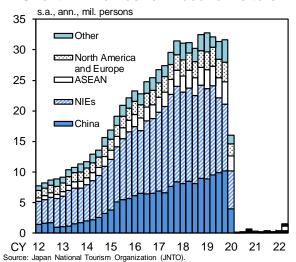
The nominal current account surplus is expected to remain at a low level for the time being, mainly due to the effects of supply-side constraints on goods exports and to a rise in import prices associated with high commodity prices. Thereafter, it is likely to follow a moderate expanding trend because it is projected that (1)

#### Chart 13: Current Account



Source: Ministry of Finance and Bank of Japan. Note: Figures for 2022/Q2 are April-May averages.

#### Chart 14: Number of Inbound Visitors



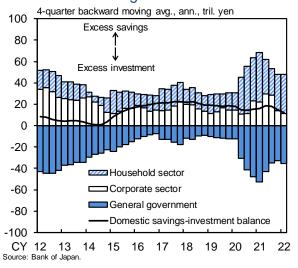
Note: Figures for North America and Europe are those for the United States, Canada, the United Kingdom, France, and Germany.

goods exports will increase, mainly as supply-side constraints wane, (2) the surplus in the primary income balance will expand due to the recovery in overseas economies, and (3) a deficit in the services balance will decrease improvement 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 for the time being 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 been under strong downward pressure due to the effects of supply-side constraints (Chart 16). By major industry, production of "electronic parts and devices" has decreased recently, mainly reflecting stagnant shipments to China and the spillover effects of the production decline in automobiles, although demand for semiconductors seems to have been firm. Production of "general-purpose, production, and business-oriented machinery" has been on a moderate uptrend on the back of steady machinery investment at home and abroad. However. production such construction machinery has been affected by intensified parts procurement difficulties recently. The level of production of "transport equipment" has declined, affected by parts procurement difficulties due to lockdowns such as in Shanghai, in addition to the tight global supply and demand conditions for semiconductors. Production of "electrical machinery, and information communication electronics equipment" has been at a low level on the whole because production of

# Chart 15: Savings-Investment Balance



#### Chart 16: Industrial Production



Notes: 1. Shaded areas denote recession periods.

2. Figures denoted by the round markers are calculated based on METI projections for June and July 2022. The inventories figure for 2022/Q2 is that for

household electrical appliances and "basic exchange mobile customer premises equipment" has decreased as parts procurement difficulties have intensified.

Industrial production is likely to increase, mainly automobile-related goods, for which supply-side constraints are likely to wane, and for digital-related goods, which have seen an expansion in global demand, as domestic and external demand continues to increase. However, it is highly likely that industrial production, as with exports, will remain susceptible to supply-side constraints in the short run, mainly because the semiconductor shortage and disruptions in distribution networks due to lockdowns such as in Shanghai are projected to continue having an impact.

# **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 were more or less flat at high levels for the January-March quarter of 2022 (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 impact of a resurgence of COVID-19 (Chart 17[2]). However, they have been supported by the following factors: (1) profits of manufacturers, mainly large ones, have been pushed up due to steady external demand, the yen's depreciation, and other factors, and (2) profits of some nonmanufacturers (e.g., wholesale and shipping industries) have been pushed up significantly by

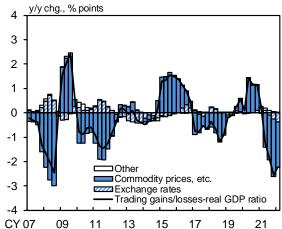
# Chart 17: Indicators Related to Corporate



Notes: 1. Based on the Financial Statements Statistics of Corporations by Industry.

- Quarterly. Excluding "finance and insurance."
  Figures from 2009/Q2 onward exclude pure holding companies.
- 3. Shaded areas denote recession periods

#### 2. Contribution to Changes in Trading Gains and Losses



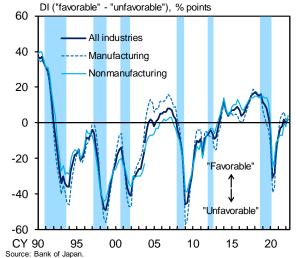
Sources: Cabinet Office; Bank of Japan. Notes: 1. The contribution of commodity prices, etc. is calculated using changes export/import price indexes on a contract currency basis. The contribution of exchange rates is calculated using the difference between export/import price indexes on a yen basis and those on a contract currency basis. "Other" is the contribution of other factors such as changes in quantities

Trading gains/losses = (Nominal net exports / Weighted average of export and import deflators) – Real net exports

rises in commodity prices and container freight addition, corporate profits continued to be pushed up by firms' ongoing moves to contain advertising and business travel expenses since the outbreak of COVID-19 and by various measures to support firms, such as employment adjustment subsidies. By industry and firm size, deterioration in the terms of trade has exerted downward pressure on current profits of manufacturers. That said, such profits have increased for a wide range of manufacturers, particularly large ones, mainly pushed up by an increase in exports to meet digital-related demand and by foreign exchange gains from the yen's depreciation. As for nonmanufacturers, current profits have continued to increase for large firms, mainly in the wholesale and transportation industries. On the other hand, current profits of small and medium-sized nonmanufacturers have declined for a wide range of industries due to deterioration in the terms of trade and weakness in private consumption reflecting the resurgence of COVID-19.

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 deteriorated slightly for the March survey but has improved slightly for the June survey (Chart 18). With regard to manufacturing, the DI has deteriorated for two consecutive quarters but has remained higher than the level registered in the December 2019 survey conducted before the pandemic. Specifically, the DIs for industries such as production machinery and electrical machinery have remained at relatively high levels on the back of steady global demand for digital-related goods and business

#### **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.

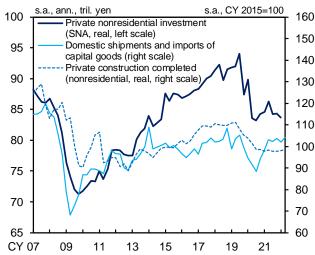
fixed investment; nonetheless, business sentiment of a wide range of manufacturers has been affected by raw material cost increases and has been pushed down by supply-side constraints due to lockdowns such as in Shanghai and the spillover effects of the production decline in automobiles -- which partly reflects the constraints -- on related industries. On the other hand, the DI for overall nonmanufacturing has improved; while the DI for construction has deteriorated due to the impact of raw material cost increases, the DIs for industries such as services for individuals, accommodations as well as eating and drinking services, and transport and postal activities have improved clearly with the impact of COVID-19 waning.

Regarding the outlook for corporate profits, it is highly likely that they will temporarily decline from the current high levels, mainly because the impact of a rise in commodity prices is expected to materialize. Thereafter, although the effects of various measures to support firms are expected to dissipate, corporate profits are projected to improve again, reflecting a recovery in the level of economic activity and a rise in product prices.

#### **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, mainly led by digital- and labor saving-related investments, although the effects of supply-side constraints have been seen, for example, in construction machinery. Private construction

# **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/Q2 are April-May averages.
2. Figures for real private construction completed are based on staff calculations using the construction cost deflators.

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 increased, mainly led by electrical machinery and "general-purpose, production, and business-oriented machinery," on the back of steady digital-related demand in particular. Orders by the nonmanufacturing industry have been more or less flat on the whole, supported by progress in digital-related and labor-saving investments, although orders bγ the transportation industry (e.g., for railway vehicles), which was strongly affected by COVID-19, have remained relatively weak. Construction starts (in terms of planned expenses for private and nonresidential construction) -- a leading indicator of construction investment -- have increased when fluctuations are smoothed out. 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 June 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

# **Chart 20:** Leading Indicators of Business Fixed Investment



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

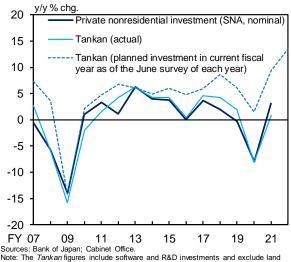
Notes: 1. Volatile orders are orders for ships and orders from electric power companies.

2. Figures for 2022/Q2 are April-May averages.

fiscal 2021 shows a year-on-year rate of increase of 0.9 percent (Chart 21). The figure was only slightly positive, mainly due to supply-side constraints on capital goods and the impact of COVID-19. On the other hand, the plan for fiscal 2022 shows that the year-on-year rate of increase in business fixed investment is expected to be 13.5 percent, clearly increasing for both the manufacturing and nonmanufacturing industries.

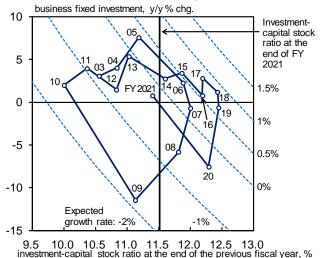
With regard to the outlook, as corporate profits remain at high levels on the whole despite being pushed down by the impact of the rise in commodity prices, an uptrend in business fixed investment is expected to become clear on the back of accommodative financial conditions and the waning of supply-side constraints. Toward the end of the projection period, the pace of increase in business fixed investment is projected to slow, reflecting cyclical adjustment pressure stemming from the accumulation of capital stock, but the moderate uptrend is expected to be maintained, partly due to an increase in medium- to long-term investment (Chart 22). Specifically, investment that is projected to be undertaken throughout 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 redevelopment projects, and (4) R&D investment for growth areas and to address environmental issues, such as toward decarbonization.

# Chart 21: Planned and Actual Business Fixed Investment



Note: 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.

# Chart 22: Capital Stock Cycles



investment-capital stock ratio at the end of the previous fiscal year, % 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.

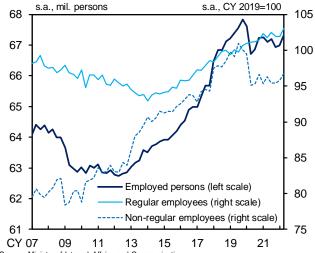
# **Employment and Income Situation**

The employment and income situation has improved moderately on the whole, although some weakness has been seen in part.

Regarding the number of employed persons, that of non-regular employees has remained at a relatively low level, mainly in the face-to-face services industry, albeit increasing moderately (Chart 23). However, the number of regular employees has increased moderately, mainly in the medical, healthcare, and welfare services industry as well as the information communications industry, both of which have faced a severe labor shortage. 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 labor force participation rate has remained more or less flat when fluctuations are smoothed out (Chart 24). The unemployment rate has declined at a moderate albeit with fluctuations, pace, registering around 2.5 percent recently. The active job openings-to-applicants ratio has risen moderately, mainly due to steady job openings for full-time employees in industries with labor shortage (Chart 25).

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, construction. well as An increase non-regular employees, such as in the face-to-face services industry, is likely to become

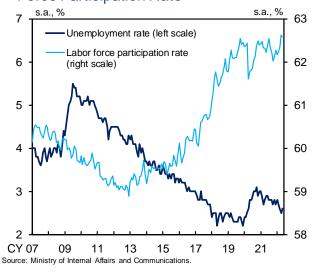
# Chart 23: Number of Employed Persons



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*. Figures for 2022/Q2 are April-May averages.

# **Chart 24:** Unemployment Rate and Labor Force Participation Rate



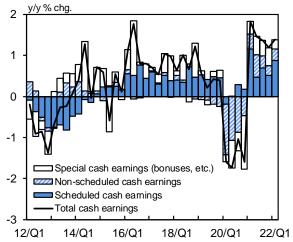
# **Chart 25:** Job Openings-to-Applicants Ratio



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 pick-up in overall economic activity (Chart 26).10 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 at around 1 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 heading gradually toward improvement. Non-scheduled cash earnings have increased for a wide range of industries, including face-to-face services, in reflection of improvement in economic activity. Special cash earnings (bonuses) have increased moderately, reflecting improvement in business performance.

# Chart 26: Nominal Wages

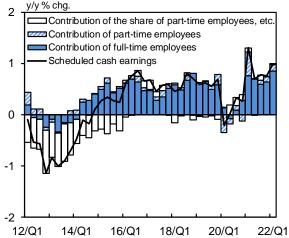


Source: Ministry of Health, Labour and Welfare.

- 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

# Chart 27: Decomposition of Developments in Scheduled Cash Earnings



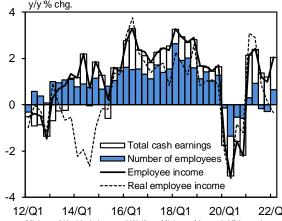
- Source: Ministry of Health, Labour and Welfare. Notes: 1. Q1 = March-May, Q2 = June-August, Q3 = September-November,
  - Q4 = December-February.
  - 2. Figures from 2016/Q1 onward are based on continuing observations following the sample revisions

<sup>&</sup>lt;sup>10</sup> The year-on-year rate of increase in wages in the Monthly Labour Survey is assessed on the basis of continuing observations, which are less susceptible to fluctuations due to sample revisions.

With regard to the outlook for wages, scheduled cash earnings are likely to continue increasing moderately for the time being. This is because wages of full-time and part-time employees are expected to be pushed up by a rise in wage increases resulting from the annual spring labor-management wage negotiations and by improvement in labor market conditions. Thereafter, the rate of increase in scheduled cash earnings is expected to accelerate 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. For the time being, special cash earnings (bonuses) are expected to see a firm increase, mainly in the manufacturing industry, in reflection of improvement in corporate profits for the previous fiscal year. Thereafter, such earnings are likely to increase steadily, 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 moderately in nominal terms, but in real terms, its year-on-year rate of change has turned slightly negative reflecting rises in prices, mainly of energy and food (Chart 28). With regard to the outlook, nominal employee income is likely to increase along with economic improvement. In real terms, the year-on-year rate of change in such income is projected to be negative for the time being, reflecting price rises, but thereafter is

# Chart 28: Employee Income



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

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

- 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).

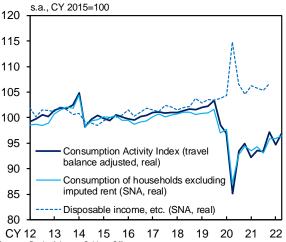
likely to increase moderately as wage growth accelerates.

# **Household Spending**

Private consumption has increased moderately, particularly for services consumption, with the impact of COVID-19 waning.

The Consumption Activity Index (CAI, travel balance adjusted) -- which is calculated by combining various sales and supply-side statistics viewpoint of gauging consumption activity in a comprehensive manner -- increased by 2.3 percent for the April-May period relative to the January-March quarter -mainly led by services consumption -- with the impact COVID-19 waning. consumption of durable goods declined slightly owing to the effects of supply-side constraints and that of nondurable goods was at a low level due to a waning of stay-at-home demand (Charts 29 and 30). 11 Based on various sources, such as high-frequency indicators, statistics published by industry organizations, and anecdotal information from firms, it seems that goods consumption has improved thereafter as effects some of supply-side constraints due to lockdowns such as in Shanghai have started to wane (Chart 31). So far, services consumption seems to have continued on an uptrend on the back of an increase in the number of people going out. However, some firms have expressed concern

# Chart 29: Private Consumption

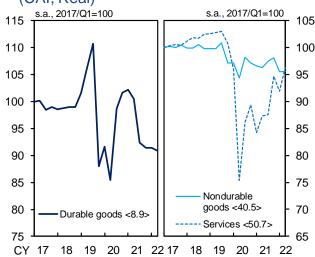


Sources: Bank of Japan; Cabinet Office, etc.

- 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/Q2 is the April-May average.

    The figure for consumption of households excluding imputed rent for 2022/Q2 is based on staff calculations using the Synthetic Consumption Index (April).
  - "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.

### Chart 30: Consumption Activity Index (CAI, Real)

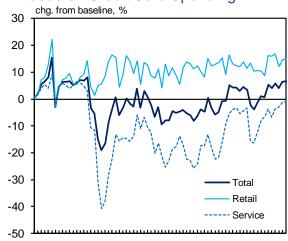


Sources: Bank of Japan, etc.

Notes: 1. Based on staff calculations. Figures in angular brackets show the weights in the CAI. Figures for 2022/Q2 are April-May averages.

2. Nondurable goods include goods classified as semi-durable goods in the SNA.

# Chart 31: Consumption Developments Based on Credit Card Spending



- July 19 Jan. 20 July Jan. 21 July Jan. 22
  Source: Nowcast Inc./ JCB, Co., Ltd., "JCB Consumption NOW."
  Notes: 1. Figures are from the reference series in *JCB Consumption NOW*, which take changes in the number of consumers into account.
  - 2. The baseline is the average for the corresponding half of the month for fiscal 2016 through fiscal 2018.

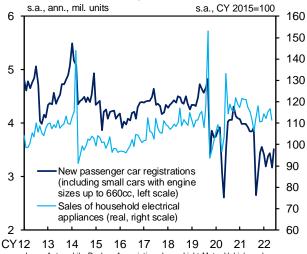
<sup>11</sup> Regarding the CAI, see the Bank's research paper "Revision of the Consumption Activity Index to Capture Recent Changes in Consumption Patterns" released in July 2021.

over the impact on private consumption of the recent situation with COVID-19.

By type, consumption of durable goods has been at a somewhat low level due to downward pressure from supply-side constraints (Chart 32). Specifically, the number of new passenger car registrations has been at a low level because the global supply and demand conditions semiconductors have been tight and parts procurement difficulties have intensified due to lockdowns such as in Shanghai. Sales of household electrical appliances declined for May, reflecting a growing shortage of some products due to supply-side constraints. However, recent developments suggest that automobile sales have turned to an increase and that, for sales of household electrical appliances, some effects of product shortages have started to wane. Consumption of nondurable goods seems to have improved moderately on the whole recently; although food has been affected by a waning of stay-at-home demand, clothes and personal effects have increased reflecting a pick-up in people's willingness to go out.

Services consumption has been on an uptrend with the impact of COVID-19 waning (Charts 31, 33, and 34). Dining-out, including at izakaya (Japanese-style bars), has been on an uptrend, mainly led by dining-out in small groups (Chart 35). Domestic travel also has increased for short-distance travel in particular, partly pushed up by measures to support tourism. Meanwhile, there is still almost no overseas travel due to the effects of travel restrictions.

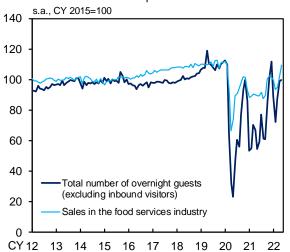
# Chart 32: Consumption of Durable Goods



Sources: Japan Automobile Dealers Association; Japan Light Motor Vehicle and Motorcycle Association; Ministry of Economy, Trade and Industry; Ministry of Internal Affairs and Communications

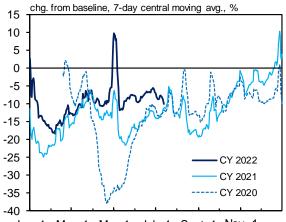
Note: Figures for real sales of household electrical appliances are based on staff calculations using the retail sales index of machinery and equipment in the *Current Survey of Commerce* and the price index of related items in the CPI.

#### Chart 33: Consumption of Services



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

#### Chart 34: Mobility Trends Based on **Location Data**



Jan. 1 Mar. 1 May 1 July 1 Sept. 1 Nov. 1 Source: Google LLC "Google COVID-19 Community Mobility Reports."

https://www.google.com/covid19/mobility/. Accessed: July 20, 2022.

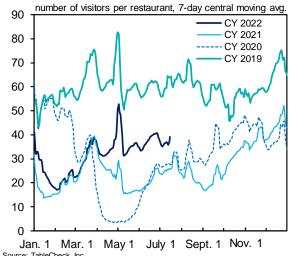
Notes: 1. The baseline is the median on the corresponding day of the week during the 5-week period from January 3 to February 6, 2020.

- 2. Figures are mobility trends for places such as restaurants, shopping centers,
- 3. The latest figure is the average for July 10-16.

Looking at confidence indicators related to private consumption, the Consumer Confidence Index has declined, partly because consumer perception of "overall livelihood" -- which comprises part of the index -- has deteriorated, reflecting price rises (Chart 36).12 On the other hand, the current economic conditions (household activity-related) of the Economy Watchers Survey -- which asks firms for their views on the direction of the economy -- has remained at a high level. While an increasing number of survey respondents have voiced caution about the impact of high prices, the survey results suggest that the positive effects of the waning impact of COVID-19 have pushed up the overall DI for current economic conditions.

Regarding the outlook, private consumption is expected to be affected by rises in prices, mainly of energy and food. 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 have accumulated as a result of pandemic-related restrictions, as the resumption of consumption activities progresses gradually 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 moderately as employee income keeps improving. The propensity to consume is likely to follow an uptrend with the impact of COVID-19 waning; toward the end of the projection period, it is expected to somewhat exceed the average level

### **Chart 35:** Number of Visitors to Restaurants

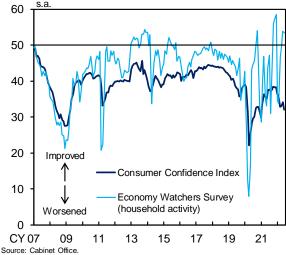


Source: TableCheck Inc.

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 July 12-18.

### **Chart 36:** Confidence Indicators Related to Private Consumption



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

<sup>&</sup>lt;sup>12</sup> Box 2 examines differences in the inflation rates faced by households across attributes and household sentiment amid rising inflation.

seen prior to the pandemic, partly due to the withdrawals of household savings that have accumulated as a result of pandemic-related restrictions (Chart 37).

Housing investment has been more or less flat (Chart 38). Specifically, the number of housing starts -- a leading indicator of housing investment -- has been more or less unchanged, albeit with fluctuations. For the time being, housing investment is likely to be more or less flat. Thereafter, it is expected to follow a moderate declining trend toward the end of the projection period, reflecting demographic developments.

### Chart 37: Average Propensity to Consume



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/Q2 is the April-May average.

### II. Current Situation of Prices and Their **Outlook**

### **Developments in Prices**

The rate of change in the producer price index (PPI, adjusted for the effects of seasonal changes in electricity rates) has remained clearly positive quarter-on-quarter basis, reflecting developments in international commodity prices and foreign exchange rates (Chart 39). The year-on-year rate of increase in the services index (SPPI, producer price excluding international transportation) has been at around 1 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 2 percent, mainly due to rises in energy and food prices (Chart 40). That 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 increased in positive territory, reflecting a pass-through of increases in raw material and other costs, and has been in the range of 1.0-1.5 percent recently (Charts 39 and  $41).^{13}$ 

Looking at the breakdown of developments in the year-on-year rate of change in the CPI (all items

Chart 39: Inflation Indicators

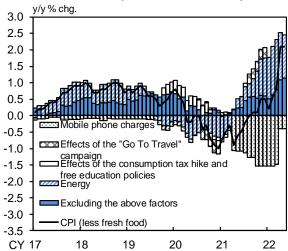
		y/y % chg.		
	21/Q3	21/Q4	22/Q1	22/Q2
Consumer Price Index (CPI)				
Less fresh food	0.0	0.4	0.6	2.1
Adjusted figure	1.0	1.7	2.1	2.5
Less fresh food and energy	-0.5	-0.7	-0.9	8.0
Adjusted figure	0.6	0.6	0.7	1.2
Producer Price Index (q/q % chg.)	1.9	2.5	2.1	2.6
Services Producer Price Index	0.8	0.8	0.9	1.2
GDP Deflator	-1.2	-1.3	-0.5	-
Domestic demand deflator	0.6	1.1	1.7	

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 consumption tax hike, policies concerning the provision of free education, and the "Go To Travel" campaign, which covers a portion of
- domestic travel expenses.

  3. Figures for the CPI and the SPPI for 2022/Q2 are April-May averages

### Chart 40: CPI (Less Fresh Food)



Source: Ministry of Internal Affairs and Communications

1. Figures for energy consist of those for petroleum products, electricity, and gas, manufactured & piped.

Figures for the "effects of the consumption tax hike and free education policies"

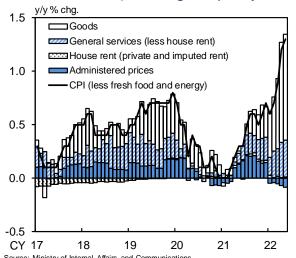
<sup>&</sup>lt;sup>13</sup> The CPI figures that exclude "temporary factors such as the effects of the reduction in mobile phone charges" are calculated by excluding (1) the effects of the consumption tax hike and policies concerning the provision of free education, (2) the effects of the "Go To Travel" 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.

from April 2020 onward are staff estimates and include the effects of measures such as free higher education introduced in April 2020.

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 the rate of change in general services prices has continued to increase moderately in positive territory. In contrast, the year-on-year rate of change in administered prices has been slightly negative (Chart 41). With increased upward pressure from raw material and other costs, the rate of change in goods prices has continued increasing in positive territory, mainly due to a pass-through of cost increases to food products, daily necessities, and durable goods. General services have seen a pass-through of raw material costs, mainly for dining-out housework-related services (e.g., services related to housing repairs and maintenance). The rate of change in administered prices has been slightly negative on a year-on-year basis, mainly due to a reduction in auto insurance premiums.

The indicators for capturing the underlying trend in the CPI have exhibited the following developments (Chart 42).<sup>14</sup> The trimmed mean of the year-on-year rate of change in the CPI has increased to around 1.5 percent due to price rises in a wide range of food products. The weighted median and the mode, which is less susceptible

### Chart 41: CPI (Excluding Temporary Factors)



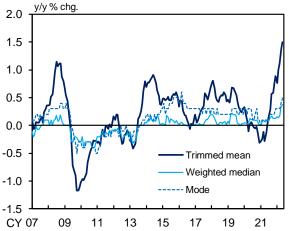
Source: Ministry of Internal Affairs and Communications.

Notes: 1. Administered prices (less energy) consist of "public services" and "water charges"

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.

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.

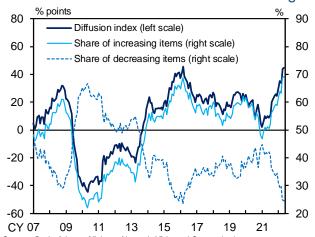
to developments in certain CPI items, also have risen; however, the rates of increase in these indicators have been marginal relative to the trimmed mean as there have been only small changes in prices of many items categorized under general services, including housing rent, and under administered prices, 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 increasing in positive territory because the number of price-increasing items has risen for food products and daily necessities, which have seen strong upward pressure from costs (Chart 43).

Meanwhile, the year-on-year rate of change in the domestic demand deflator has been in the range of 1.5-2.0 percent (Chart 39). By component, the private consumption deflator has been at around 0.5 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 at around 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 returning to a growth path that outpaces its potential growth rate (Charts 2 and 44).

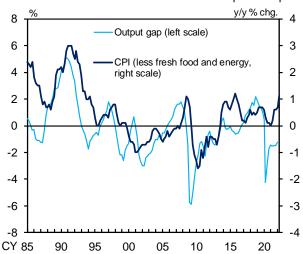
### Chart 43: Diffusion Index of Price Changes



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. The figure for 2022/Q2 is the April-May average.

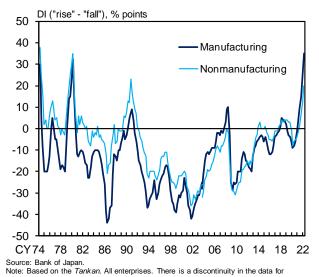
2. Figures for the output gap are staff estimates.

Thereafter, the output gap is likely to continue to expand moderately.

Second, mediumto long-term inflation expectations have risen, albeit at a moderate pace relative to short-term ones. The June 2022 Tankan shows that the output prices DI has increased clearly of late 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 (Charts 45 and 46). 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' pricewage-setting stance and in labor-management wage negotiations, lead to a sustained rise in prices accompanied by wage increases.

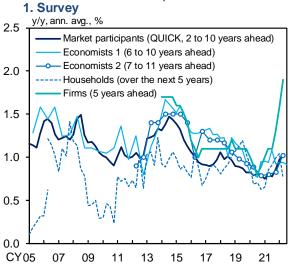
Third, import prices have increased significantly because prices of international commodities, such as crude oil and liquefied natural gas (LNG), have risen or remained high, and also because of the yen's depreciation (Chart 47). The rise in import costs and the resultant increase in the PPI seen recently have made a positive contribution to the CPI, with upstream cost increases gradually being passed downstream. 15 For the time being, the year-on-year rates of increase in energy prices, such as for petroleum products, electricity charges, and manufactured and piped gas charges, are projected to be at high levels, although they are likely to be curbed by the

### Chart 45: Output Prices



December 2003 due to a change in the survey framework

### Chart 46: Inflation Expectations



 Figures for households are from the Opinion Survey on the General Public's Views and Behavior, estimated using the modified Carlson-Parkin method.
 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.

<sup>&</sup>lt;sup>15</sup> Box 3 outlines the impact on the CPI of increased upward pressure of costs due to higher import prices, which reflect high commodity prices and the yen's depreciation.

effects of the government's gasoline subsidies and of upper limits on electricity charges under the fuel cost adjustment system. 16 In addition, cost increases, such as rises in prices of grains, metals, and energy, are expected to be passed on to goods prices, such as for food, and to services dining-out prices, including for 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.

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### Chart 47: International Commodity Prices



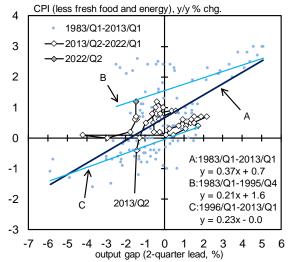
#### **Outlook for Prices**

Based this underlying scenario, 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. This is based on the projection that (1) the rise in energy prices will continue to make a positive contribution to the rate, (2) cost increases will be passed on to such items as food and durable goods, and (3) the effects of an additional reduction in mobile phone charges seen through around autumn 2021 will dissipate gradually. Thereafter, the rate of increase is expected to decelerate because the positive contribution of the rise in energy prices to the CPI is likely to wane.

<sup>&</sup>lt;sup>16</sup> 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.

Meanwhile, the year-on-year rate of change in the CPI (all items less fresh food and energy) is expected to increase moderately in positive territory on the back of improvement in the output gap and rises in medium- to long-term inflation expectations and in wage growth (Chart 48).

### 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. The figure for 2022/Q2 is the April-May average.

2. Figures for the output gap are staff estimates.

### III. Financial Developments in Japan

#### **Financial Conditions**

Financial conditions have been accommodative on the whole, although weakness in firms' financial positions has remained 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 slightly less than 1 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 suggests that the conditions have remained accommodative, although the DI has declined due to an increase in demand for working capital in reflection of high commodity

Chart 49: Yield Curves

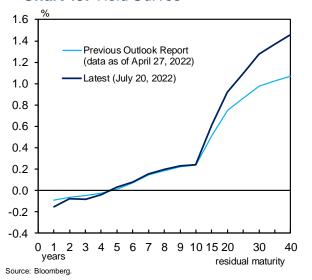
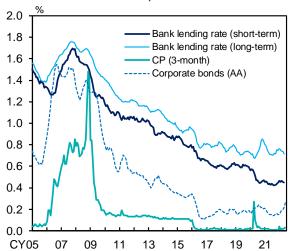


Chart 50: Bank Lending Rates and Issuance Yields for CP and Corporate Bonds



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.
- Figures for bank lending rates and issuance yields for corporate bonds are 6-month backward moving averages.

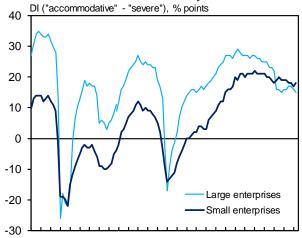
prices. In the corporate bond market, issuance conditions have remained favorable on the whole and issuance rates have been at extremely low levels. Meanwhile, lending rates (the average interest rates on new loans and discounts) have been at around historical low levels.

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, the aggregate amount outstanding of CP and corporate bonds has increased at a pace of around 9 percent on a year-on-year basis as the issuance of CP has risen due to an increase in demand for working capital in reflection of raw material cost increases (Chart 53). On the other hand, the year-on-year rate of increase in the amount outstanding of bank lending has continued to be lower than a while ago, as demand for funds related to COVID-19 has subsided, although an increase in demand for working capital in reflection of raw material cost increases has been seen among some firms.

The year-on-year rate of increase in the monetary base has decelerated compared with a while ago and has been at around 4 percent recently. Its

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



CY95 97 99 01 03 05 07 09 11 13 15 17 19 21

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.

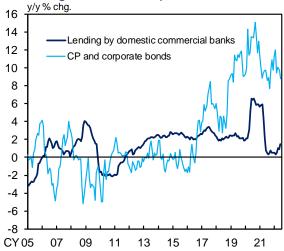
#### Chart 52: Firms' Financial Position



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. amount outstanding was 677 trillion yen, of which the ratio to nominal GDP was 125 percent.<sup>17</sup> The year-on-year rate of change in the money stock (M2) has been in the range of 3.0-3.5 percent, as the rate of increase in the amount outstanding of bank lending, for example, has stopped decelerating and growth in fiscal spending has remained high (Chart 54).

### Chart 54: Money Stock monthly avg., y/y % chg. 10 9 M2 8 МЗ 7 6 5 4 3 2 1 0 CY 98 00 02 04 06 08 10 12 14 16 18 20 22 Source: Bank of Japan.

 $<sup>^{17}</sup>$  The amount outstanding of the monetary base is as of end-June 2022. Nominal GDP is the figure for the January-March quarter of 2022.

### **Developments in Financial Markets**

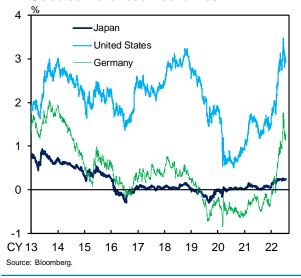
In global financial markets, market sentiment has remained cautious because there has been growing concern over a slowdown in the global with attention economy, being given acceleration in the pace of reduction in monetary accommodation, mainly in the United States and Europe, reflecting continued high inflation globally.

Yields on 10-year government bonds in the United States and Europe rose with market attention being given to acceleration in the pace of reduction in monetary accommodation by the Federal Reserve and the European Central Bank (ECB) (Chart 55). However, the yields have declined somewhat lately, partly due to rising concern over an economic slowdown.

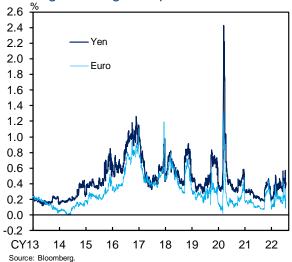
Premiums for U.S. dollar funding through the dollar/yen foreign exchange swap market have increased somewhat with heightened uncertainties over future developments in U.S. interest rates but have been at low levels from a somewhat long-term perspective (Chart 56).

Stock prices in the United States and Europe have declined, while fluctuating more widely, due to caution against acceleration in the pace of reduction in monetary accommodation and against an economic slowdown (Charts 57 and 58). Stock prices in Japan declined temporarily in line with those in the United States and Europe but have been comparatively firm, reflecting market attention on such factors as the yen's depreciation. Stock prices in emerging economies

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



**Chart 56:** Dollar Funding Premiums through Foreign Exchange Swaps



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

2. The interest rates used for the calculation are as follows: for the yen, the OIS rate; for the euro, the EONIA-referencing OIS rate before October 4, 2019, and the SSTR-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).

have declined, mainly due to rises in U.S. and European interest rates.

Prices of Japan real estate investment trusts (J-REITs) declined temporarily along with U.S. REIT prices, but they have been firm compared with those in the United States as Japanese long-term interest rates have been stable at low levels (Chart 59).

In foreign exchange markets, the yen has depreciated against the U.S. dollar, mainly against the background of the differentiating direction of monetary policy between the two countries and of dollar purchasing by Japanese importers (Chart 60). The yen has also depreciated against the euro, reflecting a rise in interest rates in European economies.

Chart 58: Stock Market Volatility (VIX)

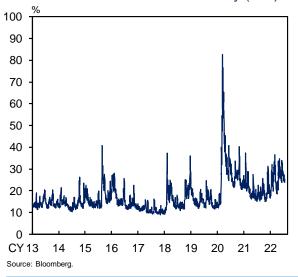


Chart 59: Selected REIT Indices



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



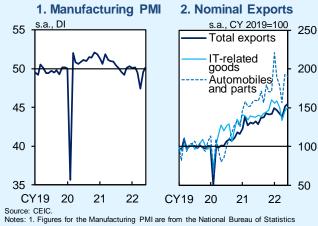
### (Box 1) Impact on Japan's Economy of Disruptions in Production and Logistics in China Due to the Spread of COVID-19

In China, the rapid spread of COVID-19 from March to April of this year led to strict public health measures, including lockdowns in some cities such as Shanghai, which resulted in a contraction in business activities and logistics. This contraction in Chinese production and logistics has not only brought about a decline in exports from Japan to China but has also put downward pressure on production in Japan through reduced supplies from China (Chart 10). This box outlines the impact of the production and logistics disruptions in China, focusing mainly on the impact of reduced supplies on Japan's economy.

China's exports and production declined clearly for April, mainly as a result of the contraction in business activities due to lockdowns and other public health measures (Chart B1-1). In particular, exports and production of automobile- and IT-related aoods declined significantly, consequently intensifying global supply-side constraints once again.

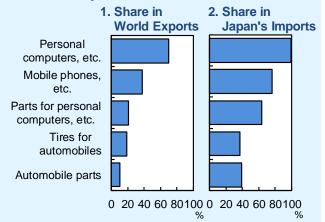
Since China accounts for a large share of global exports of IT-related goods and automobile parts, and Japan also is dependent on imports from China for these goods, production and logistics disruptions in China have affected Japan's economy through the intensification supply-side constraints (Chart B1-2).

### Chart B1-1: China's Manufacturing PMI and Exports



### Chart B1-2: China's Export Share by Commodity

2. Figures for nominal exports are in U.S. dollar terms

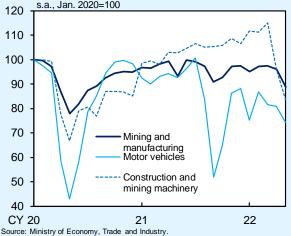


Source: Trade Map, International Trade Centre, https://marketanalysis.intracen.org. Note: Figures are based on trade values as of 2021.

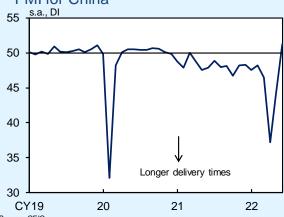
In fact, Japan's imports from China declined clearly for April, and it seems that procurement from China has become difficult for a wide range of goods such as electronic components and automobile parts. Under these circumstances, developments in Japan's industrial production suggest that many items, including automobiles and construction machinery, have been affected by supply-side constraints (Chart B1-3). The effects have spread to domestic consumption, such as automobile sales, in addition to exports.

Since May, with the number of COVID-19 cases generally being contained and lockdowns and other public health measures being eased, Chinese exports and production have gradually normalized, and the logistics situation has also improved (Chart B1-4). However, normalization, especially in land transportation, is expected to take more time, and if strict public health measures such as lockdowns are reinstated due to a resurgence of COVID-19, supply-side constraints could become prolonged and expand. Given that -- amid the ongoing global shortage of products such as semiconductors -- supply-chain disruptions caused by the spread of COVID-19 at home and abroad have repeatedly had a significant impact on production in Japan, developments continue to warrant attention.

## Chart B1-3: Japan's Industrial Production (by Industry) 20 \_\_\_\_s.a., Jan. 2020=100



### **Chart B1-4:** Suppliers' Delivery Times PMI for China



Source: CEIC.

Note: The suppliers' delivery times PMI is the suppliers' delivery times index in the Manufacturing PMI from the National Bureau of Statistics of China.

### (Box 2) Differences in Inflation Rates Faced by Households across Attributes

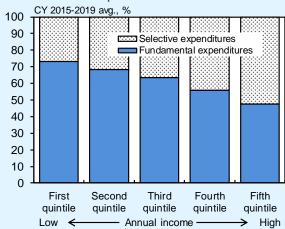
The inflation rate has risen recently, particularly for energy and food. Households have various attributes, such as income and age, and the inflation rates that they face differ depending on these attributes.

Expenditure by income group in the Family Income and Expenditure Survey shows that the lower the income of households, the higher the share of fundamental expenditures in overall consumption expenditure (Chart B2-1). Since many energy and food items are included in fundamental expenditures and their prices have increased considerably of late, the inflation rates that lower-income households face have been higher (Chart B2-2).

Therefore, the recent price rises seem to have exerted greater downward pressure on real income of relatively low-income households. Looking at the Cabinet Office's Consumer Confidence Survey to examine households' perception of "overall livelihood" by income group, the recent results show that the lower the income of households, the more cautious they become in their perception (Chart B2-3). While various factors may have affected the difference in households' perception in this regard, one factor seems to be the aforementioned difference in the inflation rates that they face.

Given these circumstances, the government formulated in April 2022 the Comprehensive

### Chart B2-1: Consumption Shares by Income Group



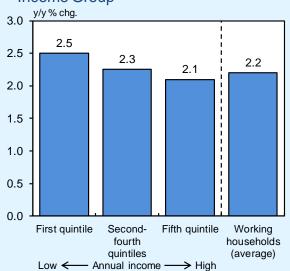
Source: Ministry of Internal Affairs and Communications.

Notes: 1. Figures are for all households by annual income quintile.

2. Expenditures are classified based on each item's spending elasticity (i.e., the percentage change in spending on the item when overall spending changes by 1 percent). Selective expenditures consist of expenditures on items with a

spending elasticity of 1 or above, while fundamental expenditures consist of expenditures on items with a spending elasticity of less than 1.

#### Chart B2-2: Consumer Price Inflation by Income Group



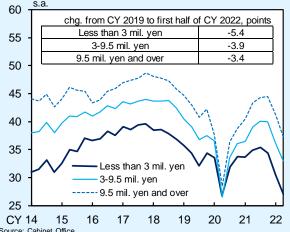
Source: Ministry of Internal Affairs and Communications.

Note: Figures are for working households by annual income quintile and are for May 2022.

Emergency Measures to Counter Soaring Crude Oil and Other Prices and has been implementing them since then. The measures include an expansion of gasoline subsidies and an extension of the period during which they are provided, as well as benefit payments to child-rearing households with low incomes. Such measures are likely to alleviate the impact of price rises on households.

It is necessary to continue to carefully examine the impact of price rises on households' behavior and sentiment, taking into account the differences in the impact across household attributes.

### **Chart B2-3:** Perception of Overall Livelihood by Income Group



Source: Cabinet Office.

Note: The chart shows developments in the index for consumer perception of overall livelihood. Figures are for all households in a particular income group and are the weighted averages of perception of overall livelihood in each income group using the number of households as weights.

### (Box 3) Pass-Through of the Upward Pressure of Costs to the CPI

Import prices have risen, reflecting an increase in commodity prices and the yen's depreciation since early 2022 (Chart B3-1). This box summarizes the issues regarding the degree to which the upward pressure of costs due to such import price rises will spill over (be passed on) to the CPI for all items less fresh food and energy.

Intermediate input costs for the production of various consumer goods and services have continued to increase, with import prices rising, and moves to pass on such cost increases to selling prices have put upward pressure on the CPI (Chart B3-2).18 The pass-through of rises in commodity and other prices from the upstream to downstream of the production process is examined using the Bank's Final Demand-Intermediate Demand price indexes (FD-ID price indexes), which have been released starting from June 2022 as satellite series for the corporate goods price index (CGPI) and the services producer price index (SPPI) (Chart B3-3). Developments in the FD-ID price indexes show that, at the ID stage, price rises have been most significant at stage 1, which is the most upstream stage in the production process. They also suggest that price fluctuations become smaller from the midstream to downstream, because the share of raw material inputs for each item becomes lower and some cost increases are

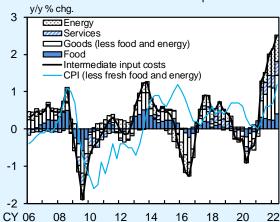
# <sup>18</sup> To measure the intermediate input costs for the production of consumer goods and services, excluding fresh food and energy, the intermediate input cost index is estimated here based on the transaction structure in the input-output tables. For details, see Box 3 in the April 2022 Outlook Report.

### Chart B3-1: Developments in Import Prices



Note: The contribution of commodity prices, etc. is calculated using changes in import price index on a contract currency basis. The contribution of exchange rates is calculated using the difference between import price index on a yen basis and that on a contract currency basis.

### Chart B3-2: Intermediate Input Costs



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

Note: The CPI figures are staff estimates and exclude mobile phone charges and the effects of the consumption tax hikes, policies concerning the provision of free education, and the "Go To Travel" campaign, which covers a portion of domestic travel expenses. Intermediate input costs are calculated by multiplying the intermediate input ratio of each sector in the 2015 Input-Output Tables for Japan by price data from the corporate goods price index (CGPI) or the services producer price index (SPPI) and then taking the weighted average using consumption expenditure shares as weights. Figures for 2022/Q2 are April-May averages.

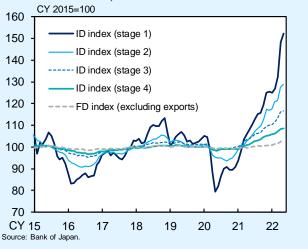
absorbed during the production process. That said, in the current phase, the indexes for stages 2 to 4 of the ID -- which are the midstream stages -- have risen significantly compared with the past. Under these circumstances, the index for the FD stage, which includes the consumption stage, has also risen.

Looking at the CPI (all items less fresh food and energy) by item to examine the pass-through of cost increases, although price rises had been seen for food products in particular until the early spring of 2022, prices such as of durable goods, for which the share of imported goods is high, have also risen recently. For services, the rates of change in prices have been increasing for dining-out and housework-related services (e.g., services related housing to repairs maintenance), which have a high share of material costs in their overall costs (Chart B3-4).

There are two reasons behind the pass-through of such recent upward pressure of costs to the CPI.

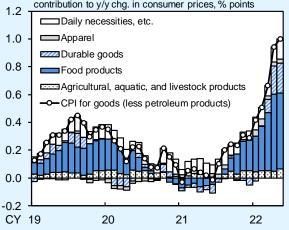
First, the recent upward pressure of costs has been greater than in the past, and Japan's economy is on its way to recovery from a significant downturn caused by COVID-19. In this regard, studies abroad show that, when cost increases are significant, firms are more likely to pass on such increases to selling prices, while they also indicate that the cost pass-through rate

### Chart B3-3: FD-ID Price Indexes (All Commodities)

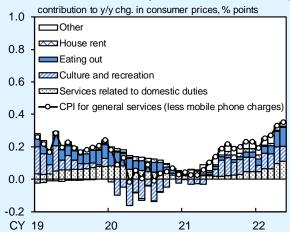


### **Chart B3-4:** Consumer Prices for Goods and Services

#### Goods (Less Petroleum Products) contribution to y/y chg. in consumer prices, % points



#### 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.

Figures for services related to domestic duties include services related to housing repairs and maintenance. tends to rise when the economy is improving.19

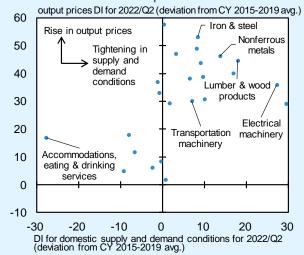
Second, supply and demand conditions for some goods have been extremely tight, partly due to a surge in global demand and the impact of supply-chain disruptions. Although the output gap, which is measured based on the labor and capital utilization rates, appears to have remained negative in Japan, supply and demand conditions for quite a few individual goods have been tight. industries related **Among** the to private consumption, supply and demand conditions for face-to-face services -- which have continued to be affected by COVID-19 -- have eased, whereas such conditions for retail goods have tightened clearly, partly due to the impact of supply-side constraints (Chart B3-5). Looking at other industries, many of those in manufacturing have pointed out that supply and demand conditions have been tighter than the average pre-pandemic levels, and it seems that these industries have tended to raise selling prices (Chart B3-6). Given these points, it is possible that the pass-through rate will rise for items with significantly tightened supply demand conditions.

### **Chart B3-5:** Domestic Supply and Demand Conditions in Consumption-Related Sectors



Note: Figures are based on the *Tankan* and are for all enterprises. Figures for face-to-face services are the weighted averages of the DIs for services for individuals and for accommodations, eating & drinking services.

### **Chart B3-6:** Domestic Supply and Demand Conditions and Output Prices



Source: Bank of Japan.
Note: Figures are based on the *Tankan* and are for all enterprises.

<sup>&</sup>lt;sup>19</sup> For details, see, for example, Colavecchio, R. and Rubene, I., "Non-linear Exchange Rate Pass-Through to Euro Area Inflation: A Local Projection Approach," *ECB Working Paper Series*, no. 2362 (January 2020); and Ben Cheikh, N. et al., "Nonlinear Exchange Rate Pass-Through: Does Business Cycle Matter?" *Journal of Economic Integration* 33, no. 2 (June 2018): 1234-61.

