

## Section 2

# THE JAPANESE ECONOMY: RECENT DEVELOPMENTS AND SHORT-TERM FORECASTS

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## 1. Recent Developments in the Japanese economy: FY 2022 through mid-FY 2023

### (1) Global trade will take some time to recover

World trade is increasingly showing signs of stagnation: according to the CPB World Trade Monitor, world trade (in volume terms, 2010=100) increased MoM +0.7% in September 2023, marking the second consecutive month of growth. Although on a monthly basis there are signs of recovery, on a quarterly basis that is not the case. World trade in Q3 2023 declined by -0.4% QoQ, marking the fourth consecutive quarterly decline. It will take some time for global trade to bottom out. Compared to the previous quarter, trade in advanced economies declined -0.4% in Q3, the fourth consecutive quarterly decline, while trade in emerging economies fell -0.4%, marking the first decline in three quarters (Figure 2-2-1). The reason behind the stagnation of trade in advanced economies is the decline in industrial production.

According to the CPB, the global industrial production index rose +0.8% QoQ in Q3, marking the first increase in two quarters. Therein, industrial production

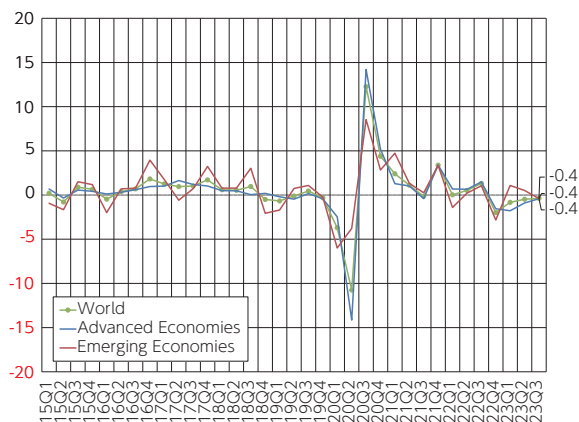


Figure 2-2-1

QoQ changes in world trade volume (2010=100, %).

in advanced economies declined -0.1% QoQ for the fourth consecutive quarter, while it rose +1.5% QoQ in emerging economies, marking the first increase in two quarters. Industrial production in advanced economies kept declining from Q4 2022 to Q3 2023, and the situation remains difficult for the Japanese economy, which depends heavily on exports to other advanced economies.

According to the IMF (World Economic Outlook -Navigating Global Divergences-, October 2023), the global economy in 2023-24 will be “resilient, with a moderate recovery but widening growth gaps.” The forecast for the global economy has been revised downward by -0.1 %pt for 2023 and -0.1 %pt for 2023-24, respectively. The U.S. economy is projected to grow +2.1% in 2022 and 2023, and to accelerate to +1.5% in 2024, while the EU economy is expected to slump from +3.6% in 2022 to +0.7% in 2023 and then recover slightly to +1.5% in 2024. Meanwhile, the Chinese economy is projected to recover from +3.0% in 2022 to +5.0% in 2023, but then to slow to +4.2% in 2024. While the U.S. forecast has been revised upward from the previous forecast, China and the EU have been revised downward. Interest rate hikes by central banks as a counter-inflationary measure continue to be a drag on economic activity. As a result, a slowdown in world trade volume (goods and services) in 2023 (+0.9%) is inevitable. However, a reversal is likely in 2024 (+3.5%).

According to the Global Semiconductor Market Statistics, global semiconductor sales in September (3-month moving average) fell -4.5% YoY, marking the 14th consecutive monthly decline, although the decline margin has been decelerating for five consecutive months after bottoming out in June (-21.3% YoY). By region, sales in Asia were down 7.7% YoY, marking the 14th consecutive monthly decline. Those in the U.S. were down 2.0% YoY, marking the first decline in two months. Although the decline in semiconductor demand has bottomed out, it will take some time before it recovers to the previous peak level (Figure 2-2-2).

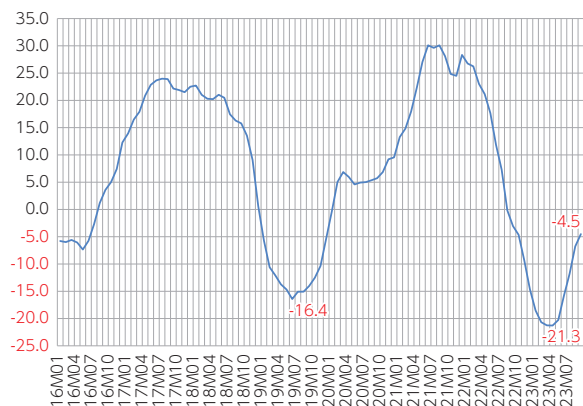
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## (2) The current state of the Japanese economy

### Second Preliminary Estimate of Q3 2023 GDP

According to the second official advance GDP estimate for Q3 2023, released on December 8, Japan’s real GDP growth was -0.7% QoQ, or an annualized -2.9%. This represents a downward revision from the first advance estimate (-0.5% QoQ, or an annualized -2.1%). However, since Q1 2023 growth was revised upward to positive growth, Q3 2023 effectively marked the first negative quarterly growth in four quarters.

Past values were revised retroactively due to seasonal adjustments and revisions in basic statistics. Comparing previous second versus first advance estimates, the growth rate for Q1 2021 was revised upward by +2.2 %pt, the one



**Figure 2-2-2** Global Semiconductor Sales: 3-month moving average (YoY, %)

Source: World Semiconductor Trade Statistics, September 2023

for Q4 2022 by +1.2 %pt, and the one for Q1 2023 by +1.3 %pt. All of these are substantial upward revisions. On an annual basis, real GDP growth for FY 2022 was revised upward from +1.3% to +1.5%, and from +2.6% to +2.8% for FY 2021.

Looking at contributions to real GDP growth (-0.7% QoQ) in Q3 2023, domestic demand made a negative contribution for the second consecutive quarter at -0.6%pt. Therein, private demand made a negative contribution for the second consecutive quarter (-0.6%pt). Household final consumption expenditure, private residential investment, private non-residential investment, and changes in private inventories all declined. Public demand made a negligible positive contribution for the sixth consecutive quarter (+0.0 %pt). Net exports made a slight negative contribution for the first time in two quarters, (-0.1%pt).

Real gross domestic income (GDI) growth, which includes GDP plus trading gains resulting from changes in the terms of trade, was -0.4% QoQ, exceeding real GDP growth for the fourth consecutive quarter. This was due to the terms of trade improving for the fourth consecutive quarter. Income outflows from households and firms to foreign countries have decelerated (Table 2-2-1).

### Trends in GDP components in Q3 2023

Household final consumption expenditure fell for the second consecutive quarter in 2023 (-0.2% QoQ), and while spending on face-to-face services continued to recover with the end of the pandemic, spending on goods remained sluggish due to a decline in real income caused by inflation.

Looking at the components of household final consumption expenditure (-0.3% QoQ), spending on durable goods, such as passenger cars and household

Table 2-2-1

QoQ changes in real GDP and its demand-side components  
(units: %, % points)

	Annualized GDP	GDP	Domestic demand	Private demand	Private final consumption expenditure	Private residential investment	Private non-residential investment	Private inventory changes	Public demand	Government final consumption expenditure	Public investment	Public inventory changes	Net exports	Exports	Imports	GDI
			Contribution	Contribution				Contribution	Contribution			Contribution	Contribution			
19Q4	-10.6	-2.7	-2.9	-3.0	-3.5	-2.0	-7.2	0.2	0.1	0.3	-0.1	0.0	0.1	-1.6	-2.3	-2.6
20Q1	2.1	0.5	0.6	0.6	0.9	-4.7	4.5	-0.4	0.0	0.0	0.1	0.0	-0.1	-4.4	-3.8	0.6
20Q2	-27.6	-7.8	-4.9	-5.2	-8.1	0.1	-6.9	0.4	0.3	0.2	4.5	0.0	-2.8	-17.3	-0.5	-6.8
20Q3	24.0	5.5	2.7	2.1	5.3	-4.8	0.0	-0.6	0.5	2.3	-0.4	0.0	2.9	9.9	-7.4	5.4
20Q4	7.6	1.9	1.3	1.2	1.7	0.0	1.8	-0.1	0.2	0.8	1.3	0.0	0.5	9.1	5.5	1.9
21Q1	1.1	0.3	0.2	0.2	-1.3	1.7	1.1	0.6	0.0	-0.1	-0.1	0.0	0.1	3.0	2.3	-0.5
21Q2	1.5	0.4	0.6	0.3	0.3	1.7	1.2	-0.1	0.3	1.7	-1.3	0.0	-0.3	3.3	5.1	-0.1
21Q3	-1.7	-0.4	-0.7	-0.7	-1.2	-1.1	-1.7	0.2	0.1	1.3	-3.3	0.0	0.2	-0.5	-1.9	-1.1
21Q4	4.6	1.1	1.1	1.5	2.9	-0.8	0.3	0.0	-0.4	-1.2	-3.3	0.0	0.0	0.0	-0.3	0.5
22Q1	-2.4	-0.6	-0.1	0.0	-1.1	-1.2	0.0	0.6	-0.1	0.7	-4.5	0.0	-0.5	1.5	4.3	-1.0
22Q2	4.4	1.1	1.0	0.9	2.0	-2.6	2.1	-0.4	0.1	0.7	-2.0	0.0	0.1	2.2	1.5	0.2
22Q3	-0.4	-0.1	0.4	0.4	0.1	0.4	1.8	0.0	0.0	0.2	1.1	-0.1	-0.5	2.2	4.9	-0.7
22Q4	1.0	0.2	-0.2	-0.4	0.0	0.7	-0.8	-0.2	0.2	0.5	-0.1	0.1	0.4	1.5	-0.7	0.7
23Q1	5.0	1.2	1.6	1.5	0.9	0.3	1.8	0.7	0.1	0.2	1.9	0.0	-0.4	-3.6	-1.5	1.8
23Q2	3.6	0.9	-0.7	-0.8	-0.6	1.7	-1.3	-0.3	0.0	-0.1	1.5	0.0	1.6	3.8	-3.3	1.6
23Q3	-2.9	-0.7	-0.6	-0.6	-0.2	-0.5	-0.4	-0.5	0.0	0.3	-0.8	0.0	-0.1	0.4	0.8	-0.4

Note: Domestic demand, private demand, private inventory change, public demand and net exports are contributions. Others are QoQ changes.

Source: National Accounts, Economic and Social Research Institute, Cabinet Office; \*Preliminary Quarterly GDP Estimate for Q3 2023 (2nd Preliminary Figures)

durables, declined for the second consecutive quarter (-2.9% QoQ). Spending on semi-durable goods, such as clothing, fell for the first time in two quarters (-3.2% QoQ). Spending on non-durable goods, such as food, also declined for the second consecutive quarter (-0.3% QoQ), partly due to inflation. Meanwhile, spending on services increased for the sixth consecutive quarter (+0.4% QoQ), but growth remained sluggish (less than 1%) for the third consecutive quarter.

Within fixed capital formation, real private residential investment fell for the first time in five quarters (-0.5% QoQ). Real private non-residential investment fell for the second consecutive quarter (-0.4% QoQ). The BOJ's short-term economic survey of Japan (Tankan) shows that companies have a strong appetite for capital investment, but the recovery has been moderate over the past three quarters (January-September).

The contribution of real private inventory changes to real GDP growth was -0.5%pt QoQ, marking the second consecutive quarter of negative growth.

Within public demand, real government final consumption expenditure increased for the first time in two quarters (+0.3% QoQ). Real public fixed capital formation declined for the first time in three quarters (-0.8% QoQ). This is due

to the impact of the round of the national land consolidation and supplementary budgets.

The real exports of goods and services increased +0.4% QoQ, marking the second consecutive quarter of positive growth. Therein, the exports of goods increased +0.5% QoQ, marking the second consecutive quarter of positive growth, but the underlying tone was weak. On the other hand, services exports (including direct domestic purchases by non-resident households) fell for the first time in six quarters (-0.3% QoQ). Demand by inbound tourism, i.e. direct domestic purchases by non-resident households, fell -5.0% QoQ, marking the first decline in five quarters. On the other hand, the real imports of goods and services increased for the first time in three quarters, +0.8% QoQ. Therein, goods imports fell for the third consecutive quarter (-0.4% QoQ). On the other hand, the imports of services (including direct purchases abroad by resident households) increased +5.1% QoQ, marking the third consecutive quarterly increase.

Looking at deflators, the domestic demand deflator increased for the 11th consecutive quarter (+0.3% QoQ). Therein, the household final consumption expenditure deflator rose for the 11th consecutive quarter at +0.5%, accelerating somewhat from the previous quarter. The effect of high consumer prices continues to be felt. The private non-residential investment deflator also rose for the 11th consecutive quarter (+0.9%). On the other hand, the private residential investment deflator fell for the fourth consecutive quarter (-0.2%). In terms of external demand deflators, the deflator for exports of goods and services rose for the second consecutive quarter (+2.8%), while the deflator for imports of goods and services rose for the first time in four quarters (+1.9%). The terms of trade improved for the fourth consecutive quarter, but the extent of improvement decelerated. Overall, the GDP deflator rose for the fourth consecutive quarter (+0.5%).

As a result, although real GDP fell -0.7% QoQ (or annualized -2.9% QoQ), while nominal GDP fell by a negligible -0.0% QoQ (or annualized -0.2% QoQ), marking the first decline in four quarters.

### Three consecutive quarters above the pre-pandemic peak

The second official advance estimate of Japan's GDP is characterized by a significant upward revision of the growth rate for the second half of FY2022. As a result, real GDP (JPY 557.4 trillion) in Q1 2023 recovered its pre-pandemic peak (JPY 557.3 trillion in Q3 2019) for the first time, and it has exceeded that peak for three consecutive quarters. Nominal GDP also exceeded its pre-pandemic peak (JPY 561.5 trillion) for the fourth consecutive quarter (Table 2-2-2).

Household final consumption expenditure (-2.3%) and private investment (-4.5%) are still lagging behind, but service exports (+6.7%) have exceeded their pre-pandemic peak for the third consecutive quarter, partly due to a sharp recovery in demand by inbound tourism. Meanwhile, goods imports (-0.9%) fell below their peak for the second consecutive quarter, reflecting weak domestic demand (Table 2-2-2). Although a recovery in household final consumption expenditure is expected, driven by service consumption and the normalization of socioeconomic activities, the real compensation of employees (non-seasonally adjusted) has declined for eight consecutive quarters (YoY), partly due to persistently high inflation. A recovery in consumption will require a turnaround in real wages.

Table 2-2-2

Adjustment process from the COVID-19 pandemic: Real GDP and its components (pre-pandemic peak=100)

	GDP	Goods imports	Services imports	Private final consumption expenditure	Private investment	Government spending	Goods exports	Services exports	Nominal GDP
<b>19Q3</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
19Q4	97.3	98.2	96.1	96.5	94.9	100.2	97.9	100.3	98.0
20Q1	97.7	93.7	94.7	97.4	95.4	100.3	95.6	88.7	98.7
20Q2	90.2	94.8	89.4	89.5	91.8	101.3	78.1	76.7	91.5
20Q3	95.1	87.2	84.7	94.2	88.5	103.1	88.9	73.3	96.3
20Q4	96.9	93.7	84.3	95.9	89.4	103.9	98.3	75.1	97.8
21Q1	97.2	96.1	85.4	94.6	93.7	103.8	100.8	79.1	98.1
21Q2	97.5	99.4	94.6	95.0	94.4	105.0	104.7	79.7	98.6
21Q3	97.1	98.3	90.7	93.9	93.8	105.4	103.9	80.6	98.1
21Q4	98.2	98.1	90.0	96.6	93.7	103.8	103.9	80.3	98.9
22Q1	97.6	102.7	92.3	95.6	96.3	103.5	106.4	78.3	98.8
22Q2	98.7	105.0	91.6	97.5	95.6	103.8	107.8	83.3	99.7
22Q3	98.6	106.6	107.6	97.6	97.2	103.9	109.4	88.1	99.3
22Q4	98.8	107.2	102.3	97.6	95.6	104.6	109.3	95.5	101.0
23Q1	100.0	103.8	107.7	98.4	99.9	105.1	102.9	101.1	103.3
23Q2	100.9	99.5	107.8	97.8	98.0	105.2	106.3	107.0	106.0
23Q3	100.2	99.1	113.3	97.7	95.5	105.4	106.8	106.7	106.0

Source: Authors' calculations based on the National Accounts, Economic and Social Research Institute, Cabinet Office, Government of Japan, and the "Preliminary Estimate of Quarterly GDP (Second Preliminary Estimate) for Q3 2023.

## 2. Forecasts for Japan's Economy: FY 2023-2025

### (1) Assumption about exogenous variables

Regarding our assumptions about domestic policy (exogenous variables),

we estimate that real public fixed capital formation in Q3 2023 declined -0.8% QoQ, the first decline in three quarters. Based on data by the Ministry of Land, Infrastructure, Transport and Tourism's General Construction Statistics (volume basis), we estimate that public works in September (seasonally adjusted) increased for the first time in two months(+0.4% MoM). As a result, Q3 is estimated to have seen a small but consecutive three-quarter increase of +0.3% QoQ. In view of these trends, we assume real public fixed capital formation growth of +3.0% in FY 2023, +1.7% in FY 2024, and +0.9% in FY 2025.

On November 10, 2023, the Cabinet approved the FY 2023 supplementary budget. Reflecting these and other current developments, we assume that real government consumption expenditures will grow by +0.9% in FY 2023, +0.3% in FY 2024, and +0.2% in FY 2025.

Of the overseas environment (exogenous variables), the most important are the assumptions concerning crude oil prices, world trade, and exchange rates. The crude oil price (average price of WTI, Dubai, and North Sea Brent) peaked in the Q2 2022 (\$109.41) and then declined to \$76.54 in the Q2 2023. We expect the price to reach \$80.58 in Q1 2024, \$73.08 in Q1 2025, and \$78.30 in Q1 2026. The annual average is assumed to be \$82.15 in FY 2023, \$81.48 in FY 2024, and \$75.77 in FY 2025.

The outlook for real world trade is based on S&P Global's Global Economic Outlook, November 2023. In real terms, global exports of goods and services will slow sharply from +6.7% in 2022 to +0.9% in 2023 and will recover to +3.7% in 2024 and +4.5% in 2025.

The U.S. central bank (the Fed) shifted to a tighter monetary stance after March 2022, and maintained its tightening bias at the November 2023 FOMC meeting, although the policy rate range was not raised from the previous meeting to 5.25-5.50%. Investors reacted by assuming that the tightening cycle was over, resulting in lower interest rates and a rebound in equity prices. Meanwhile, at the July Monetary Policy Meeting, the BOJ maintained its current accommodative monetary policy (YCC) but made the long-term interest rate range more flexible, raising the cap to 1.0%. Furthermore, it decided to make another revision in October, but this has not had any impact on the JPY exchange rate. The difference in the monetary policy stance between Japan and the U.S. is likely to keep the JPY weak in the short term. However, the JPY is likely to appreciate gradually. Therefore, we assume exchange rates of 144.0 JPY/USD for FY 2023, 139.8 JPY/USD for FY 2024, and 132.3 JPY/USD for FY 2025 (Table 2-2-3).

Table 2-2-3

## Summary of APIR's Forecast Results

	2022	2023	2024	2025
Real GDP (%)	1.5	1.7	1.4	1.1
Private demand (contribution)	2.0	-0.0	0.9	0.9
Private final consumption expenditure (%)	2.7	0.0	0.9	0.8
Private residential investment (%)	-3.4	2.5	1.6	0.3
Private non-residential investment (%)	3.4	-0.1	2.1	2.9
Private inventory changes (contribution)	0.1	-0.3	0.1	0.0
Public demand (contribution)	0.0	0.4	0.1	0.1
Government final consumption expenditure (%)	1.4	0.9	0.3	0.2
Public investment expenditure (%)	-6.1	3.0	1.7	0.9
Public inventory changes (contribution)	0.0	-0.0	0.0	0.0
External demand (contribution)	-0.5	1.4	0.4	0.1
Exports of goods and services (%)	4.7	4.1	3.8	2.4
Imports of goods and services (%)	7.1	-2.7	1.9	1.9
Nominal GDP (%)	2.3	5.1	1.8	2.3
GDP deflator (%)	0.8	3.3	0.4	1.2
Domestic corporate price index (%)	9.5	2.1	-0.5	-0.0
Core consumer price index (%)	3.1	2.8	2.0	1.4
Industrial production index (%)	-0.3	-0.5	1.1	1.6
New housing starts (%)	-0.6	-5.7	0.1	-0.1
Unemployment rate (%)	2.6	2.6	2.5	2.4
Current account balance (JPY trillion)	8.3	23.6	24.3	25.2
% of nominal GDP	1.5	4.0	4.0	4.1
Crude oil price (USD/barrel)	92.5	82.2	81.5	75.8
USD/JPY exchange rate	135.4	144.0	139.8	132.3
USA real GDP (% , calendar year)	1.9	2.5	1.5	1.5

Note: % change from the previous year, others are notes.

## (2) Projected real GDP growth rate: +1.7% in FY 2023, +1.4% in FY 2024, +1.1% in FY 2025

We have revised our outlook for the Japanese economy, incorporating the second official advance GDP estimate for 2023 Q3 as well as our new assumptions concerning exogenous variables (fiscal and monetary policy and variables related to overseas economies). We now forecast real GDP growth of +1.7% in FY 2023, +1.4% in FY 2024, and +1.1% in FY 2025 (Table 2-2-3). On a calendar-year basis, this translates to +2.1% in 2023, +1.3% in 2024, and +1.2% in 2025.

Looking at the contributions to real growth by GDP components, the contribution of private demand will slow down significantly to -0.0%pt in FY 2023 from +2.0%pt in FY 2022. The contribution of public demand, on the other hand,



will accelerate to +0.4%pt from -0.0%pt in the previous year. In FY 2024, private demand, public demand, and net exports will prop up the economy by +0.9%pts, +0.1%pts, and +0.4%pts, respectively. In FY 2025, private demand, public demand, and net exports will contribute +0.9%pt, +0.1%pt, and +0.1%pt, respectively (Figure 2-2-3).

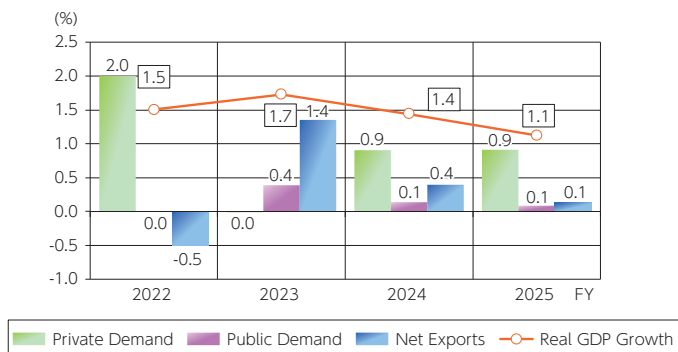


Figure 2-2-3

Real GDP Growth Rate and Contribution by Item: %.

Looking at private demand, in FY 2023, real private final consumption expenditure and real private residential investment are expected to make small positive contributions of +0.0%pt and +0.1%pt, respectively. In contrast, real private non-residential investment and real private inventory changes are expected to make negative contributions of -0.0%pt and -0.3%pt. In FY 2024, real household final consumption expenditure, real private residential investment, real private non-residential investment, and real private inventory changes will all make positive contributions of +0.5%pt, +0.1%pt, +0.3%pt, and 0.1%pt, respectively. In FY 2025, real private final consumption expenditure will contribute +0.4 %pt, real private residential investment +0.0%pt, real private non-residential investment +0.5 %pt, and real private inventory changes +0.0%pt (Figure 2-2-4).

In the second official advance estimate, the second half of FY 2022 was revised upward, and the carry-over effect in the growth rate for FY 2023 was raised. Therefore, looking at real GDP (actual and forecast) on a quarterly basis, the level will be raised, but the growth rate pattern will not change significantly compared to the previous forecast (Figure 2-2-5).

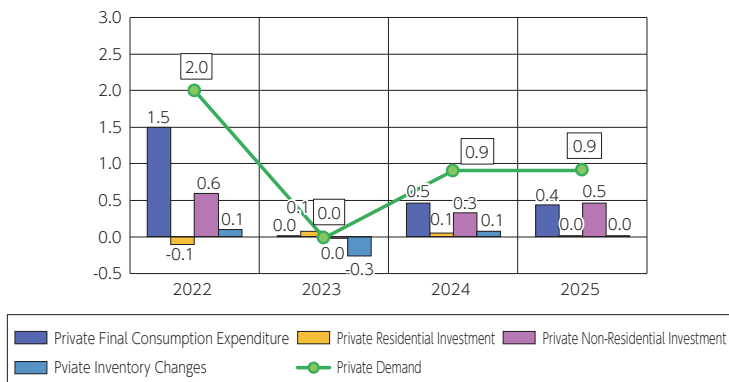


Figure 2-2-4

Contributions to GDP growth by the components of private demand (units: %pt).

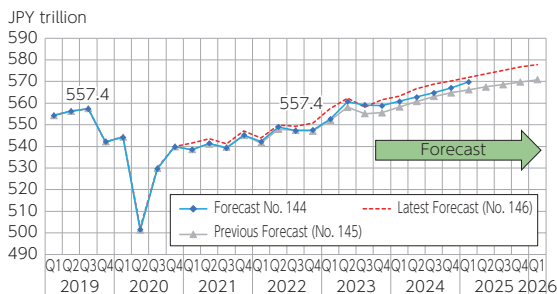


Figure 2-2-5

Quarterly GDP: Actual and Forecast (units: JPY trillion)

Note: Actual figures through Q3 2023, projected figures thereafter.

### (3) Household Sector: Zero growth in FY 2023 household consumption due to delayed growth in real wages.

With the normalization of socioeconomic activities, the forced savings accumulated during the COVID-19 pandemic were gradually directed toward service consumption expenditures. However, the acceleration and elevation of CPI inflation suppresses the growth of real disposable income, making spending on goods consumption selective. In fact, real household final consumption expenditure declined for the second consecutive quarter in Q3 2023. Growth in real disposable income is essential for a sustained recovery in household consumption.

According to the Monthly Labor Survey by the Ministry of Health, Labor and Welfare's (final, all industries, establishments of 5 or more employees),

nominal wages in October increased YoY for the 22nd consecutive month (+1.5%). However, real wages declined for the 19th consecutive month, falling -2.3% YoY (Figure 2-2-6). As a result, nominal wages in Q3 increased +0.9% YoY for the 10th consecutive quarter, while real wages declined -2.8% YoY for the 6th consecutive quarter.

In the wage hikes resulting from the 2023 annual wage negotiations was +3.60% (+2.20% in 2022), the highest since 1993 (+3.90%) (Ministry of Health, Labor and Welfare’s “Status of Spring Wage Increase Demands and Compromises by Major Private Corporations”). Although wage hikes exceeding this level are expected next year, on an all-industry and all-size basis, scheduled salaries have grown in the 1% YoY range since May 2023.

Since consumer price inflation will slow only moderately from the second half of FY 2023 onward, a positive reversal in real wage growth is not expected until FY 2025 or later. As a result of these trends, we forecast that real household final consumption expenditure will grow +0.0% in FY 2023, +0.9% in FY2024, and +0.9% in FY 2025.

According to the Ministry of Land, Infrastructure, Transport and Tourism, new housing starts in September decreased by -6.8% YoY, marking the fourth consecutive monthly decline. The seasonally adjusted figure was -1.5% MoM, the first decline in two months. As a result, Q3 starts fell -2.2% QoQ for the second consecutive quarter. On the other hand, planned construction expenditure (1 x residential construction + 0.7 x combined residential-industrial construction), which well explains GDP-based private residential investment, increased YoY by 3.1% in September, marking the fifth consecutive month of growth. The seasonally adjusted figure (APIR estimate) was -3.1% MoM, the first decline in two

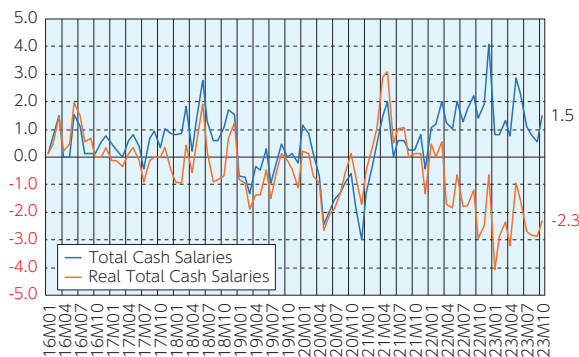


Figure 2-2-6

Total Wages: % change from the same month last year

months. As a result, the Q3 figure is likely to have decreased -1.2% QoQ, the first decline in three quarters.

Reflecting the current peak-out of housing construction cost inflation, real private residential investment in FY2023 will turn positive at +2.5% but will not recover from the previous year's decline (-3.4%). We forecast a moderate recovery at +1.6% in FY2024 and +0.3% in FY2025.

#### (4) Corporate Sector: Despite strong potential for investment growth, actual growth likely to be moderate due to supply constraints

According to the Ministry of Economy, Trade and Industry's (METI), the Index of Industrial Production (seasonally adjusted; 2020=100) rose +1.3% MoM in October, reaching 104.9, and marking the second consecutive month of increase (Figure 2-2-7). As a result, the October value rose +1.4% over the Q3 average. METI maintained the underlying tone of production at "steady" for the third consecutive month. According to the Survey of Production Forecasts for Manufacturers (preliminary basis), manufacturing output in November is expected to decline -0.3% MoM, but it is expected to rise +3.2% MoM in December. If the forecast is accurate, Q4 production will rise +1.9% QoQ.

Factoring in these current conditions, we forecast the Index of Industrial Production for FY 2023 to decline -0.5% YoY, and then to increase +1.1% in FY 2024, and +1.6% in FY 2025.

The Tertiary Industry Activity Index (seasonally adjusted, 2015 average=100) fell for the second consecutive month in October to -0.8% MoM. As a result, in October the index was -1.3% lower than the Q3 average (Q3: +0.8% QoQ). METI revised its assessment of the economy downward from the

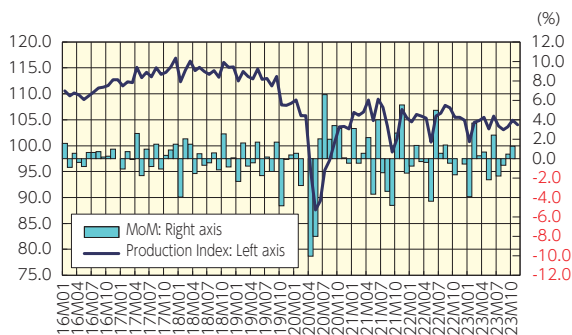


Figure 2-2-7

Indices of Industrial Production (seasonally adjusted, 2020=100)

Source: "Indices of Industrial Production," Ministry of Economy, Trade and Industry

previous month, stating that the economy “appears to have stalled” (Figure 2-2-8). Therein, the index for the face-to-face service industry (2015 average=100) fell -0.5% MoM in October, marking the third consecutive monthly decline. As a result, in October the index was -2.6% lower than the Q3 average (Q3: +3.7% QoQ).

According to the Q2 2023 Survey of Corporate Business Enterprises released by the Ministry of Finance, ordinary profits (seasonally adjusted, excluding the financial and insurance sectors) for all industries increased by 9.5% QoQ for the second consecutive quarter (Q1: +7.4% QoQ). This was the record-high profits. In the manufacturing sector, the increase was +12.5% QoQ, the second consecutive quarterly increase. In the non-manufacturing, it was +8.0%, the third consecutive quarterly increase.

Corporate earnings remain at high levels, and there is strong potential for expansion, especially in response to labor shortages and investment in digital technologies (DX). Downside risks are the growing uncertainty about the economic outlook due to the slowdown in overseas economies and supply constraints for capital goods.

Looking at investment-related indicators, the capital goods shipments index rose for the second consecutive month in October, by +3.7% MoM (Figure 2-2-9). As a result, October saw an increase of +3.0% over the Q3 average.

According to the Cabinet Office, Core Machinery Orders (private demand excluding ships and power: seasonally adjusted), a leading indicator of private

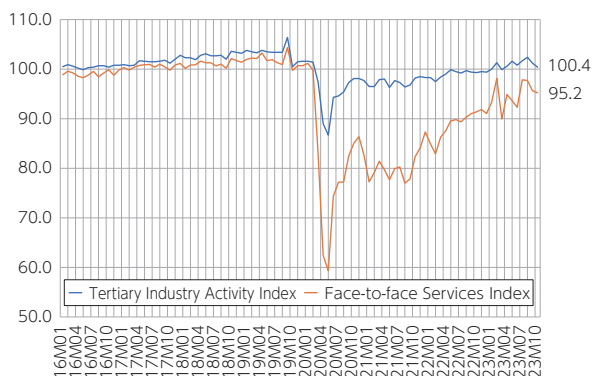


Figure 2-2-8

### Face-to-face Services vs. Tertiary Industry Activity Index (2015=100)

Note: The face-to-face services index is a weighted average of the transportation, accommodation, restaurants, food services, other lifestyle-related services, and entertainment industry indexes; the tourism-related index is a weighted average of the tourism-related index of the face-to-face services index. 2015 average =100.

Source: Tertiary Industry Activity Index, Ministry of Economy, Trade and Industry

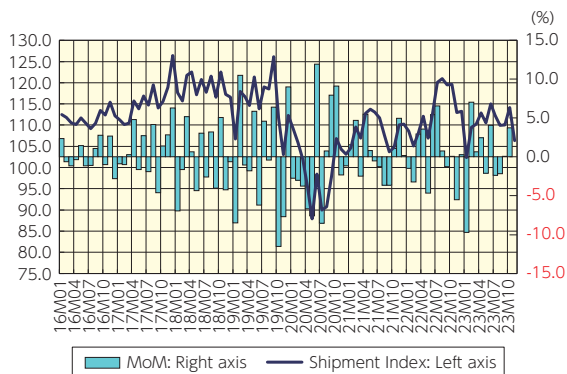


Figure 2-2-9

Capital Goods Shipment Index (seasonally adjusted, 2020=100)

Source: "Indices of Industrial Production," Ministry of Economy, Trade and Industry

capital investment, increased for the second consecutive month in October (+0.7% MoM). As a result, October saw an increase of +1.5% over the Q3 average (Q3: -1.8% QoQ).

According to the outlook survey conducted at the end of Q3, private-sector demand for Q4 is expected to decrease for the first time in two quarters (-4.7% QoQ). Public-sector demand (+7.6% QoQ) and demand by public-sector agencies (+1.5% QoQ) are expected to increase, while external demand is expected to decline for the first time in three quarters (-3.8% QoQ). Potential investment demand is strong, but the actual state of current capital investment is highly uncertain.

Real private non-residential investment in FY 2023 is projected to decline -0.1% YoY, but to then recover by +2.1% in FY 2024 and +2.9% in FY 2025.

### (5) External Sector: FY 2023 net exports revised upward due to improved terms of trade and recovery of inbound tourism demand

According to preliminary Trade Statistics released by the Ministry of Finance, the November trade balance was -776.9 billion yen, a deficit for the second consecutive month despite a contraction of -62.2% YoY over last year's deficit. The seasonally adjusted figure was -408.9 billion yen, the 30th consecutive monthly deficit, although the deficit margin narrowed by -18.4% MoM (the first negative figure in two months). As a result, the October-November average trade deficit contracted by -12.6% from the Q3 average.

Exports (seasonally adjusted) in November fell by -1.8% MoM for the second consecutive month, while imports (seasonally adjusted) shrank by -2.7% MoM,

also for the second consecutive month. Comparing the October-November average with the Q3 average, however, both exports and imports increased by +1.2% and +0.4%, respectively.

On a volume basis (seasonally adjusted, APIR estimates), the export volume index fell for the second consecutive month in November (-4.2% MoM), while the import volume index declined for the first time in three months (-3.4% MoM). Compared to the Q3 average, the October-November average of the export volume index fell by -4.4% and the import volume index fell by -0.1%. The October-November average contribution of real net goods exports of to GDP growth was negative.

By region, November exports (seasonally adjusted by APIR) to Asia shrank by -2.8% MoM, to China by -0.4% MoM, to the U.S. by -5.1% MoM, and to the EU by -9.6% MoM. Comparing the October-November average to the Q3 average, the decline rate was -5.1% to Asia, -1.6% to China, -3.3% to the US, and -7.9% to the EU. Exports to the U.S. have been strong so far due to the pickup in the U.S. economy, but exports to key regions are in a general decline at present (Figure 2-2-11). On the other hand, in November, imports from Asia declined by -4.6%, from China by -5.7%, from the U.S. by -3.7%, and from the EU by -0.7% MoM. Compared to the Q3 average, the October-November average was -1.7% lower for imports from Asia, but +3.1% higher for imports from China, +2.8% higher for imports from the U.S., and +5.3% higher for imports from the EU (Figure 2-2-10).

Considering these factors, real exports of goods and services in FY2023 are projected to grow by +4.1% YoY in FY 2023, by +3.8% YoY in FY 2024, and by +2.4 YoY in FY2025. Real imports of goods and services are projected to decline by

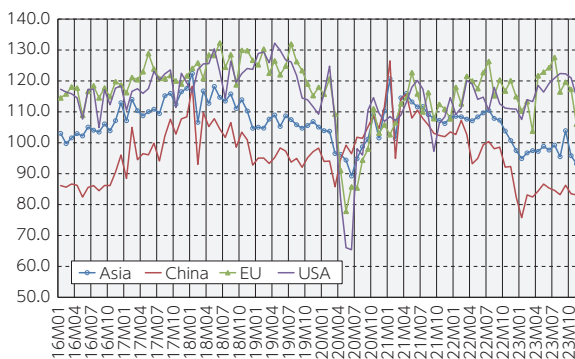


Figure 2-2-10

Export Volume Index by Region (2020=100)

Source: Trade Statistics, Ministry of Finance; seasonally adjusted values are APIR estimates.

-2.7% YoY in FY 2023, but then to increase by +1.9% YoY in FY 2024, and by +1.9% YoY in FY 2025.

In value terms, the trade deficit margin is likely to narrow as the terms of trade improve. A sharp recovery in inbound tourism demand will contribute to a narrowing of the deficit margin in the services balance. As the primary income balance is expected to remain positive and large, the current account balance is projected to be +JPY 23.6 trillion in FY 2023, +JPY 24.3 trillion in FY 2024, and +JPY 25.2 trillion in FY 2025,

### (6) Price trends: Goods prices down, services prices up

According to the Bank of Japan, the domestic corporate goods price index (2020 average=100) rose YoY for the 33rd consecutive month in November (+0.3%) but has slowed for 11 consecutive months. The figure remained below 1% for the second consecutive month (Figure 2-2-11).

The dollar-yen exchange rate (monthly average) for November was 149.83 yen, up 5.2% YoY, marking the 33rd consecutive month of yen depreciation. As a result, the JPY-based export price index (2020 average=100) rose +4.7% YoY, marking for the fourth consecutive month of increase. The JPY-based import price index (2020 average=100) fell -6.1%, marking the eighth consecutive month of decline. As a result, the terms of trade index (export price index/import price index\*100) stood at 81.7 (2020 average=100) in November, up 8.4 points from the same month last year, marking the eighth consecutive month of improvement (Figure 2-2-12).

According to the Ministry of Internal Affairs and Communications, the

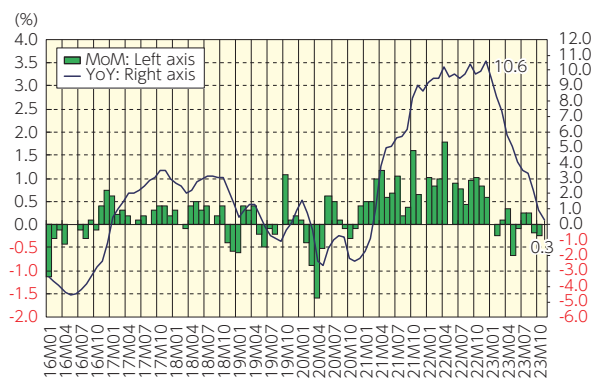


Figure 2-2-11

Domestic Corporate Goods Price Index (2020=100)

Source: Bank of Japan, Domestic corporate goods price index



National Consumer Price Index (2020 average=100) rose YoY for the 27th consecutive month in November (+2.8%). The core index excluding volatile fresh food rose for the 27th consecutive month (+2.5%), and inflation remained in the 2% range for the third consecutive month. The core-core index excluding fresh food and energy rose for the 20th consecutive month (+3.8%). Inflation also slowed for the third consecutive month (Figure 2-2-13).

Looking at the components of the National Consumer Price Index in November YoY, energy prices declined YoY for the 10th consecutive month, falling -10.1%. Their contribution to the index was -0.87%. This is due to government measures to curb electricity and gas prices, as a result of which electricity bills

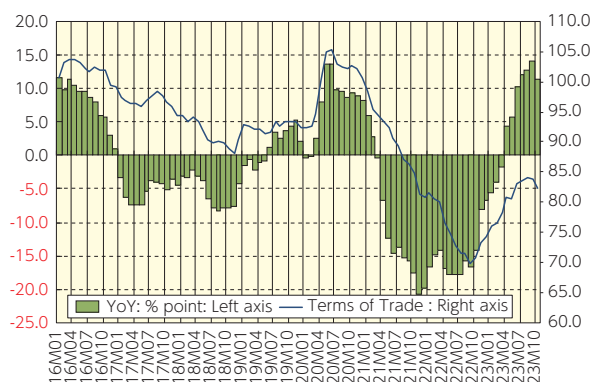


Figure 2-2-12 Terms of Trade (2020=100)

Source: Authors' calculations based on Bank of Japan, Domestic corporate goods price index.

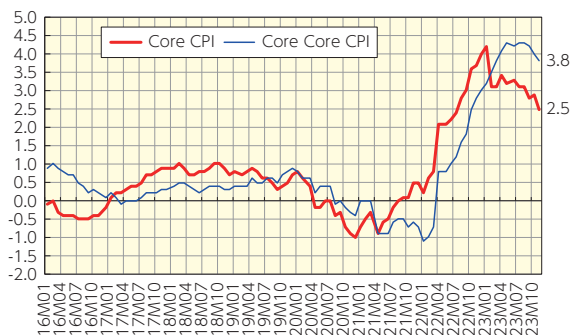


Figure 2-2-13 National Consumer Price Index (2020=100; % change from the same month last year)

Source: Authors' calculations based on "National Consumer Price Index," Ministry of Internal Affairs and Communications

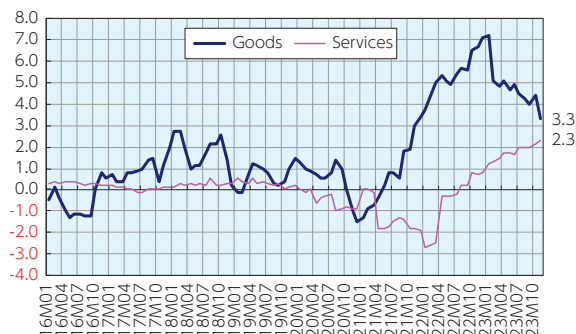


Figure 2-2-14

## National Consumer Price Index by Category (% change from the same month last year)

Source: Authors' calculations based on "National Consumer Price Index," Ministry of Internal Affairs and Communications

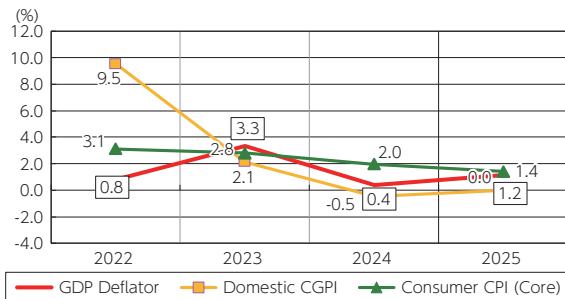
fell for the 10th consecutive month (-18.1% YoY), and gas bills in urban areas fell for the sixth consecutive month (-16.8% YoY). According to the Ministry of Internal Affairs and Communications, the impact (contribution) of the "sudden fluctuations in electricity and gas prices" was -0.49%. Non-energy prices increased for the 20th consecutive month at +4.1%. The contribution to overall CPI inflation was +3.67%. Therein, food prices (excluding fresh food) rose for the 29th consecutive month (+6.7%). Food inflation, however, decelerated for the third consecutive month. Its contribution to overall CPI inflation was +1.56%.

By category, goods prices increased YoY for the 31st consecutive month (+3.3%). The contribution of goods prices to total inflation was 1.76%. Goods prices peaked in January 2023 (+7.2% YoY) and have been on a decelerating trend. Services prices rose for the 16<sup>th</sup> consecutive month (+2.3%). The contribution to total inflation was +1.08%. Among service expenditures, the increase in hotel rates was impressive (+62.9% YoY). Hotel rates kept rising for the eighth consecutive months due to strong inbound travel. The contribution to total inflation was +0.45%.

Considering the current situation, the domestic corporate goods price index is projected to increase by +2.1% in FY 2023, but then decline by -0.5% in FY 2024, and -0.0% in FY 2025.

Although goods prices turned to a downtrend due to the fall in import prices, due to the rise in service prices, consumer price inflation is expected to remain high, in the 3% range, in the first half of FY 2023 but it is likely to decelerate in the second half of the year. As a result, we forecast core CPI inflation to be +2.8% in FY 2023, +2.0% in FY 2024, and +1.4% in FY 2025.

The GDP deflator is projected to be +3.3% in FY 2023, +0.4% in FY 2024,



**Figure 2-2-15** Trends in Prices (% change from the previous year)

and +1.2% in FY 2025, with a slowdown in FY 2024-25 as the terms of trade are expected to improve (Figure 2-2-15).