Section 3
The Japanese Economy: Recent Developments and Short-Term Forecasts

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1. A Retrospective Overview of the Japanese Economy in FY2020

(1) Recovery in world trade in Q3 will be paused

According to the CPB World Trade Monitor, world trade (in volume terms: 2010=100) declined for the first time in two months in September 2021, by -0.8% MoM, resulting in a decline of -1.1% QoQ in 2021 Q3. Global trade, which had been expanding for four consecutive quarters since 2020 Q3, temporarily lost its upward momentum. In Q3, both advanced economies and emerging economies saw their trade levels decline, by -0.8% QoQ and -1.8% QoQ, respectively, for the first time in five quarters (Figure 2-3-1).

Looking at another export statistic, we can see that in Q3 Japan's machinery orders from overseas increased for the fifth consecutive quarter (+3.2%), although they slowed somewhat from Q2 (+3.6%). The outlook for Q4 is an in-

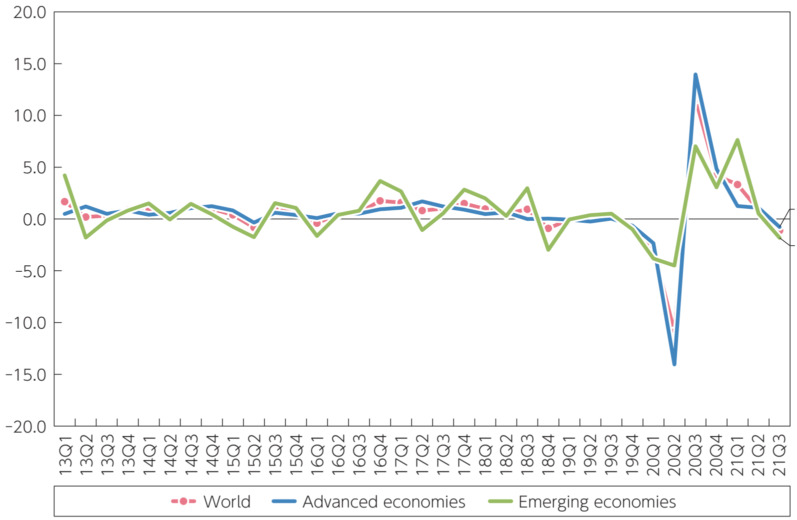

Figure 2-3-1 Dynamics of World Trade

Source: CPB World Trade Monitor, 25 September 2021 crease for the sixth consecutive quarter, by +18.7%. Japan's capital goods exports are expected to grow steadily. According to the Global Semiconductor Market Statistics, global semiconductor sales (3-month moving average) in September rose +27.6% YoY, the 20th consecutive month of growth. Although somewhat slowing down from the peak (+30.4% in June), sales are still growing at a high rate amid the global shortage of semiconductors.

(2) Current state of the economy

According to the second advance GDP estimate for 2021 Q3, released on December 8, the real GDP growth rate in Q3 was -0.9% QoQ, or -3.6% if annualized, a downward revision from the first advance estimate (-0.8% QoQ, or -3.0% if annualized) (Table 2-3-1). It should be noted that the second advance estimate shows that the historical peak of the GDP was in 2019 Q2, as opposed to the previous estimate, which placed the peak of the GDP in 2019 Q3, just before the consumption tax hike.

2021 Q3 featured the fourth declaration of a state of emergency, and supply constraints had a strong impact on automobile purchases. As a result, the eco-

Table 2-3-1 Real GDP and its components (demand-side): QoQ % changes

	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
18Q2	1.3	0.3	0.2	0.2	0.1	-3.1	1.1	0.1	0.1	0.1	2.1	0.0	0.1	0.7	0.3	0.1
18Q3	-3.1	-0.8	-0.5	-0.5	-0.2	0.2	-2.7	0.1	-0.1	0.0	-1.3	0.0	-0.3	-1.8	-0.4	-1.1
18Q4	0.1	0.0	0.5	0.5	0.0	1.6	2.0	0.2	0.0	0.5	-1.8	0.0	-0.5	1.4	4.5	-0.2
19Q1	1.6	0.4	0.1	0.0	0.2	2.6	0.3	-0.3	0.2	0.4	2.0	0.0	0.3	-1.9	-3.4	1.0
19Q2	1.7	0.4	0.6	0.4	0.0	1.4	0.2	0.3	0.2	0.9	0.4	0.0	-0.2	0.1	1.1	0.2
19Q3	-0.5	-0.1	0.3	0.1	0.4	0.7	2.3	-0.6	0.2	0.7	1.4	0.0	-0.4	0.2	2.4	0.0
19Q4	-9.2	-2.4	-2.8	-2.9	-3.2	-1.8	-7.0	0.1	0.0	0.1	0.0	0.0	0.5	-0.2	-2.6	-2.4
20Q1	1.2	0.3	0.5	0.5	0.6	-4.9	2.7	0.0	0.0	0.1	-1.0	0.0	-0.2	-4.6	-3.5	0.5
20Q2	-28.5	-8.0	-5.3	-5.5	-8.7	-0.1	-7.0	0.4	0.3	0.4	4.3	0.0	-2.8	-18.1	-1.6	-7.0
20Q3	22.1	5.1	2.6	2.0	5.0	-4.8	-0.4	-0.5	0.6	2.1	1.6	0.0	2.5	8.7	-6.7	5.0
20Q4	9.6	2.3	1.4	1.2	2.3	0.0	1.2	-0.2	0.2	0.8	0.6	0.0	0.9	11.1	5.0	2.3
21Q1	-2.9	-0.7	-0.6	-0.4	-1.1	0.9	0.4	0.1	-0.2	-0.6	-1.5	0.0	-0.1	2.3	3.2	-1.3
21Q2	2.0	0.5	0.7	0.7	0.6	1.0	2.0	0.0	0.0	0.7	-2.6	0.0	-0.2	2.5	3.9	0.0
21Q3	-3.6	-0.9	-0.9	-1.0	-1.3	-1.6	-2.3	0.1	0.1	1.0	-2.0	0.0	0.0	-0.9	-1.0	-1.5

Note: Figures for domestic demand, private demand, private inventory changes, public demand, and net exports are contributions. Other figures are QoQ changes.
Source: "Second advance quarterly GDP estimate for Q3 2021" by the Cabinet Office.

nomic performance centering on private consumption was weak.

In terms of the contribution to real GDP growth, domestic demand suppressed growth for the first time in two quarters, by -0.9 %pt QoQ. Therein, public demand contributed by +0.1 %pt, supporting growth for the second consecutive quarter, while private demand contributed a negative -1.0 %pt, suppressing growth for the first time in two quarters. The headline indicators (private final consumption expenditure, private housing, and private business equipment) all fell sharply. External demand (net exports) made a positive contribution for the first time in three quarters, but it was almost negligible (0.0%pt). While the exports of goods and services declined, the imports of goods and services declined even more, reflecting weak domestic demand. This can be attributed to supply constraints, including the prolonged state of emergency as well as semiconductor shortages.

Looking at trends in demand components, private final consumption expenditure declined for the first time in two quarters, down -1.3% QoQ. By type, spending on real durable goods, such as passenger cars and household durable goods, fell for the first time in two quarters, down -16.3% QoQ. Spending on real semi-durable goods, such as clothing, fell for the first time in two quarters, down -3.7% QoQ. Real spending on services also fell for the first time in two quarters, down -0.2% QoQ. On the other hand, spending on non-durable goods, such as food, increased by +1.1% QoQ for the third consecutive quarter.

Within fixed capital formation, real private housing declined for the first time in four quarters, down -1.6% QoQ. Nominal private-sector housing increased by +1.4%, for the third consecutive quarter, but real private-sector housing growth was negative due to a large increase in the private-sector housing deflator (+3.1%) caused by the wood supply shock. Real private-sector investment in business equipment declined for the first time in four quarters, by -2.3% QoQ.

The contribution of real private-sector inventory change to real GDP growth was +0.1 %pt QoQ, the third consecutive quarter of positive contribution.

Within real public demand, real government final consumption expenditure rose for the second consecutive quarter, by +1.0% QoQ. Vaccination has boosted government consumption expenditure (due to increased medical expenditure). However, real public fixed capital formation declined for the third consecutive quarter, by -2.0% QoQ.

Real exports of goods and services fell for the first time in five quarters, -0.9% QoQ. Goods exports declined for the first time in five quarters, by -1.2% QoQ, while services exports increased for the fourth consecutive quarter, by + 0.6% QoQ. Meanwhile, the real imports of goods and services declined for the first time in four quarters, by -0.7% QoQ. Therein, goods imports of goods

Table 2-3-2 Adjustment to the COVID-19 pandemic: Real GDP and its components (demand side, peak=100)

	GDP	Goods imports	Services imports	Private final consumption expenditure	Private invest-ment	Govern-ment spending	Goods exports	Services exports
19Q2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
19Q3	99.9	101.5	105.5	100.4	99.3	100.8	100.6	98.8
19Q4	97.5	99.5	100.5	97.2	93.9	101.0	100.3	98.7
20Q1	97.8	95.2	99.9	97.8	94.8	100.9	98.1	85.8
20Q2	89.9	95.6	92.1	89.3	91.2	102.0	79.3	74.0
20Q3	94.5	88.3	88.6	93.8	88.0	104.0	89.0	70.5
20Q4	96.7	94.3	88.0	95.9	87.9	104.8	100.4	73.2
21Q1	96.0	97.5	90.3	94.9	88.9	104.0	102.6	75.1
21Q2	96.5	100.4	96.6	95.4	90.6	104.0	105.0	77.5
21Q3	95.6	99.7	94.7	94.2	89.1	104.4	103.7	78.0

Source: Authors' calculations based on "the second advance quarterly GDP estimate for Q3 2021" by the Cabinet Office.

declined by -0.7% QoQ, for the first time in four quarters. Services imports declined for the first time in three quarters, by -2.0% QoQ.

Looking at deflators, the domestic demand deflator rose +0.5% QoQ, for the third consecutive quarter. Therein, the private final consumption expenditure deflator rose +0.3%, for the first time in two quarters. In terms of external demand deflators, the export deflator for goods and services rose by +2.1% (for the fifth consecutive quarter), and the import deflator rose by +5.6% (for the fifth consecutive quarter). As the latter exceeded the former, the terms of trade deteriorated for the fifth consecutive quarter. As a result, the GDP deflator remained negative for the fourth consecutive quarter, -0.1%.

As the terms of trade deteriorated for the fifth consecutive quarter, the real Gross Domestic Income (GDI), which takes into account changes in gains from trade, declined by -1.5% QoQ, or -6.0% if annualized. Nominal GDP declined for the first time in two quarters to -1.0% QoQ, or -4.1% if annualized.

Assuming that the peak of the real GDP (557.3 trillion JPY in 2019 Q2) is 100, the pandemic caused a major bottom in Q2 2020, at 89.9 (501.1 trillion JPY). Although the GDP recovered for two consecutive quarters in Q3 and Q4 2020, the recovery temporarily stopped in Q1 2021. While it recovered somewhat in Q2 2021, it remained stagnant at 95.6 (538.2 trillion JPY) in Q3. With the prolonged declaration of the state of emergency, the current GDP level is still 4.4% (JPY 24.5 trillion) below the peak (Table 2-3-2).

Looking at the adjustment process by GDP component, only government spending (104.4) and goods exports (103.7) exceeded their peaks in 2021 Q3. On the other hand, the recovery in goods imports (99.7), services imports

(94.7), private final consumption expenditure (94.2), and private capital formation (89.1) has been sluggish. In particular, the recovery in services exports (78.0) is lagging by a large margin.

2. Forecasts for the Japanese Economy: FY2021-FY2023

(1) Assumption about exogenous variables

According to the Ministry of Land, Infrastructure, Transport and Tourism, public works in September decreased for the third consecutive month on a volume basis, down -6.9% YoY. The seasonally adjusted figure (APIR estimate) was -2.1% MoM, a decline for the third consecutive month. As a result, the Q3 change was -2.7% QoQ, the third consecutive quarter decline. Due in part to the effects of the pandemic, the shortage of labor in the construction industry may have become a supply constraint. It will take until 2022 for the FY2021 supplementary budget, including disaster recovery and land reinforcement projects, to take effect and for public works projects to start increasing. As a result, real public fixed capital formation is forecast to shrink by -3.3% in FY2021, before expanding by +2.4% in FY2022, and by +2.0% in FY2023.

The vaccination rate has accelerated since May. As a result, real government spending has increased for two consecutive quarters in Q2 and Q3. Assuming that the third round of vaccinations will begin in 2022 Q1, we have raised our forecast for real government spending in FY2021 to +2.7%, and are forecasting further growth of +1.8% in FY2022 and +0.9% in FY2023.

The most important factor in our assumptions for the overseas environment is the price of crude oil. Crude oil prices (average of WTI, Dubai, and North Sea Brent prices per barrel) plummeted to $21.96 in April 2020 due to the rapid slowdown of the global economy and evaporation of demand caused by COVID-19. Since then, due to economic recovery and sustained crude supply constraints, the price of crude oil has been on an upward trend, soaring to $82.15 in October 2021, the highest since October 2014 ($86.13). In our current forecast, crude oil prices are expected to continue to soar through 2021 Q4, but are expected to decline gradually from 2022 through 2024 Q1. For this reason, we have assumed a price of 71.9 dollars for FY2021, 73.7 dollars for FY2022, and 69.7 dollars for FY2023.

(2) Forecast for real GDP growth: +2.7% in FY2021, +2.6% in FY2022, and +1.7% in FY2023

We have revised our forecast for the Japanese economy for FY2021-2023, reflecting the second official advance GDP estimate for 2021 Q3, and incorporating

Table 2-3-3 Forecast summary

	Latest forecast(2021/12/20)			
	2020	2021	2022	2023
Real GDP (%)	▲ 4.5	2.7	2.6	1.7
Private demand (contribution)	▲ 4.7	1.7	1.8	1.0
Private final consumption expenditure (%)	▲ 5.5	2.5	2.3	0.8
Private residential investment (%)	▲ 7.8	▲ 0.6	▲ 0.8	1.2
Private non-residential investment (%)	▲ 7.5	1.7	3.4	3.8
Private inventory changes (contribution)	▲ 0.2	0.1	0.1	▲ 0.0
Public demand (contirbution)	0.8	0.2	0.5	0.3
Government final consumption expenditure (%)	2.5	2.3	1.5	0.9
Public investment expenditure (%)	5.1	▲ 5.7	2.9	1.9
Public inventory changes (contribution)	0.0	▲ 0.0	0.0	▲ 0.0
External demand (contribution)	▲ 0.7	0.9	0.4	0.4
Exports of goods and services (%)	▲ 10.5	11.6	4.6	5.5
Imports of goods and services (%)	▲ 6.6	6.3	2.6	3.5
Nominal GDP (%)	▲ 3.9	1.8	3.1	2.2
GDP deflator (%)	0.7	▲ 0.9	0.5	0.4
Domestic corporate price index (%)	▲ 1.4	6.5	2.1	0.7
Core consumer price index (%)	▲ 0.4	0.0	0.9	0.6
Industrial production index (%)	▲ 9.5	6.1	3.5	2.4
New housing starts (%)	▲ 8.1	6.7	▲ 3.2	0.3
Unemployment rate (%)	2.9	2.8	2.8	2.6
Current account balance (JPY trillion)	16.3	13.2	11.4	13.8
% of nominal GDP	3.0	2.4	2.0	2.4
Crude oil price (USD/barrel)	44.1	71.9	73.7	69.7
USD/JPY exchange rate	106.0	112.2	115.2	116.5
USA real GDP (%, calendar year)	▲ 3.4	5.6	4.3	2.6

Note: Percentages are YoY figures, others are annotated.

some new assumptions concerning exogenous variables (fiscal and monetary policies, and variables related to the global economy). We forecast real GDP growth rate of +2.7% in FY2021, +2.6% in FY2022, and +1.7% in FY2023 (Table 2-3-3). On a calendar year basis, the growth rates are +1.5% in 2021, +2.7% in 2022, and +2.0% in 2023.

Looking at the contribution to real GDP growth by major component, in FY2021, the contribution of private demand (+1.7 %pt) and net exports (+0.9 %pt) will both turn positive. And public demand will also continue to support the economy with +0.2%pt. In FY2022, the contribution of private demand is expect-

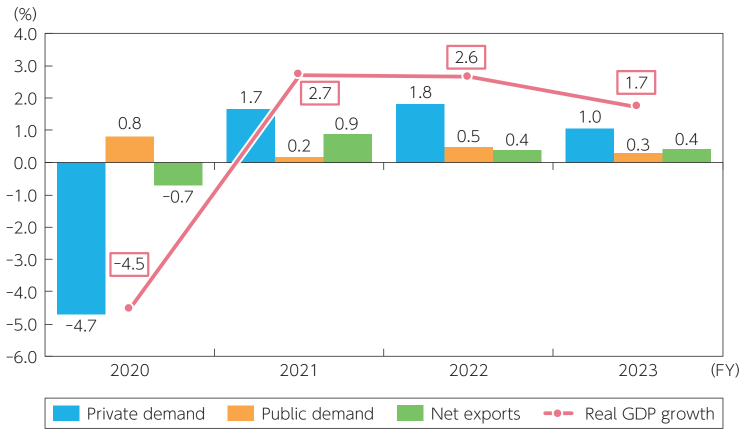

Figure 2-3-2 Real GDP growth rate and contribution by major component: %.

ed to be +1.8 %pt, that of public demand +0.5 %pt, and that of net exports +0.4%pt. In FY2023, the contribution of private demand, public demand and net exports will decline to +1.0%pt, +0.3%pt, and +0.4%pt, respectively. (Figure 2-3-2).

Looking at the content of private demand, in FY2021, real private-sector final consumption expenditure will contribute to growth by + 1.4 %pt, real private-sector housing by -0.0 %pt, real private non-residential investment by + 0.3 %pt, and real private-sector inventory changes by + 0.1 %pt. All components are expected to make positive contributions, with the exception of private housing investment. In FY2022, real private final consumption expenditure will contribute by +1.2 %pt, real private housing investment by -0.0 %pt, real private non-residential investment by +0.5 %pt, and real private inventory changes by +0.1 %pt. In FY2023, real private final consumption expenditure will contribute by +0.4 %pt, real private housing by +0.0 %pt, real private non-residential investment by +0.6 %pt, and real private inventory changes by -0.0 %pt. With the exception of private inventory changes, private demand components will contribute positively but modestly (Figure 2-3-3).

In terms of the quarterly real GDP growth forecast, 2021 Q3 saw the first negative growth in two quarters due to the reemergence of COVID-19 (the 5th wave) as well as the fourth declaration of an emergency state. In Q4, the easing of the COVID-19 pandemic is expected to lead to a rapid expansion of private final consumption expenditure, which will boost the growth rate. The pace of growth will continue to exceed the potential growth rate from 2022 onward, and the real GDP will exceed its pre-pandemic level (543.3 trillion JPY in 2019 Q4) in 2022 Q1, and its pre-pandemic peak (557.3 trillion JPY in 2019 Q2) in 2023 Q1.

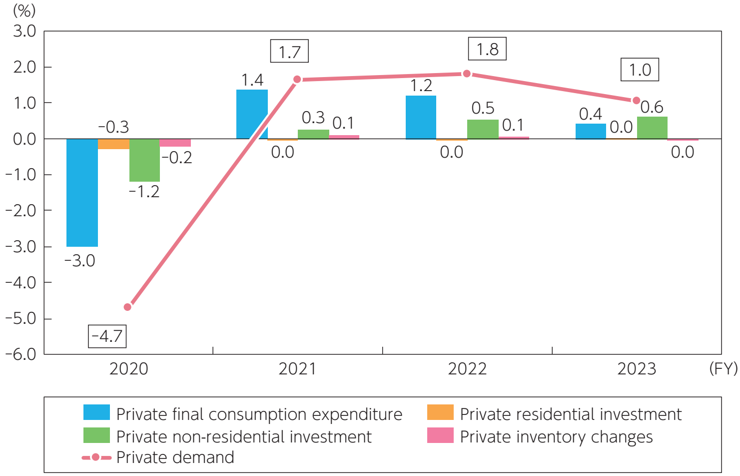

Figure 2-3-3 Contributions to growth by private-demand components: %.

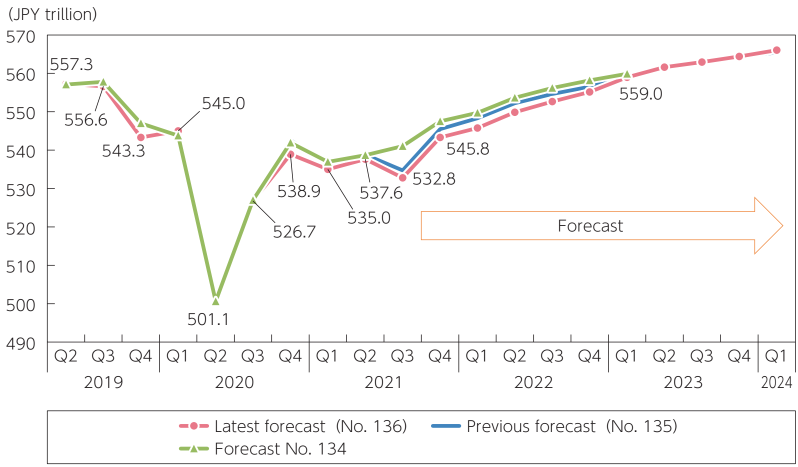

Figure 2-3-4 Quarterly GDP: Actual and Forecast (JPY trillion)

Note: Actual figures through Q3 2021, forecast figures thereafter.

Due to the negative growth in 2021 Q3, it will take one quarter longer than we had previously expected for the GDP to exceed the pre-pandemic peak (Figure 2-3-4).

(3) Household sector: forced savings and revenge consumption

According to the Ministry of Internal Affairs and Communications (MIC), the unemployment rate (seasonally adjusted) was 2.8% in September, remaining unchanged for two consecutive months. The number of working people (seasonally adjusted) declined by 280,000 to 66.48 million, shrinking for the second consecutive month. Therein, the number of employed people (seasonally adjusted) increased by 20,000 to 59.69 million, the first increase in two months, and the number of people on administrative leave (due to temporarily closed businesses), jumped to 5.97 million (9.0%, non-adjusted figure) in April 2020. It improved thereafter, but it remains relatively high at 2.08 million (3.1%) as of September 2021. The unemployment rate has not increased, but that is mostly due to the high number of people on administrative leave.

Although the labor market is gradually recovering due to the resumption of production and policy support, households' income environment is not improving. As a result, household consumption has been sluggish. According to MIC, the total consumption index (2020=100, seasonally adjusted), which estimates changes in total household consumption expenditures, rose +0.8% MoM in real terms in September, logging the first increase in three months. However, on a quarterly basis it fell -1.5% QoQ in Q3, marking the first decline in two quarters. Private consumption has stagnated due to the three emergency states declared throughout 2021.

As the latest state of emergency was lifted at the end of September, the flow of people has been recovering, and a sharp recovery in consumer sentiment is expected. As a result, we expect private final consumption expenditure to rebound in Q4 (see Box: Forced Saving and Revenge Consumption). As a result, we forecast that real private final consumption expenditure will increase by +2.5% YoY in FY2021, by +2.3% in FY2022, and by +0.8% in FY2023.

Box Forced saving and revenge consumption

Based on the quarterly preliminary report on household disposable income and household savings rate (Q2 2021) by the Cabinet Office, we describe the trends before the COVID-19 pandemic (Q1 1994 to Q4 2019) and thereafter (Q1 2020 to Q2 2021). First, Figure 2-3-5 (seasonally adjusted, annualized figures) shows that employment compensation hardly increased before the COVID-19 pandemic, and that household disposable income (after adjusting for changes in pension entitlements) increased only by about JPY 10 trillion before the COVID-19 pandemic.

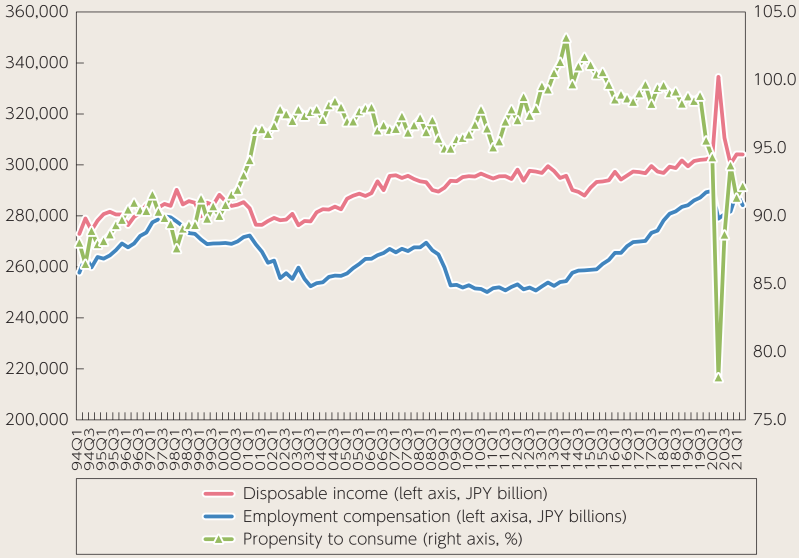

Figure 2-3-5 **Employment compensation, disposable income, and propensity to consume (GDP basis)**

Source: Authors' calculations based on "preliminary figures of household disposable income and household savings rate", Cabinet Office.

Household final consumption expenditure rose from 262.0 trillion JPY in 1994 Q1 to a peak at the time of the consumption tax hike, but is currently only around 280 trillion JPY. Despite the lack of growth in disposable income, the average propensity to consume rose, from an average of 94.8% in 1994-2014 to an average of 99.0% in 2015-2019, while the savings rate fell from 5.2% to 1.0% during this period. In 2020 Q2, employee compensation decreased by about JPY 11 trillion QoQ (from JPY 289.8 trillion to JPY 278.9 trillion), but disposable income increased by about JPY 31 trillion QoQ (from JPY 309.2 trillion to JPY 340.1 trillion), partly due to the effect of the one-off stimulus payment (JPY 100 thousand per person) by the government. The disposable income re mained high at JPY 315.2 trillion in 2020 Q3, and then returned to the average level of the year 2019 in 2021 Q2 (JPY 306.0 trillion).

Since the COVID-19 pandemic caused households to miss out on consumption opportunities, they gave up consumption that they would have otherwise been able to realize and saved (forced saving). In fact, the propensity to consume fell by 16.2 %pt from 94.3% in 2020 Q1 to 78.1% in 2020 Q2. It then returned to 92.2% in 2021 Q2, but has yet to recover to the average propensity to consume in the 2015-2019 period (99.0%).

Assuming that the recent average propensity to consume (2015-2019) of 99.0% is maintained, we estimated disposable income in the absence of the impact of COVID-19 (adjusted for one-off stimulus payment by the government). We then deducted the actual household final consumption expenditure from the estimated disposable income in order to calculate the magnitude of forced savings. Our calculations show that forced savings for the five quarters from Q2 2020 to Q2 2021 amounted to about JPY 27.3 trillion. If the decline in the number of COVID-19 infections continues (i.e., if the pandemic comes to an end), we can expect an increase in consumption ("revenge consumption") of about JPY 30 trillion thanks to those forced savings (Figure 2-3-6).

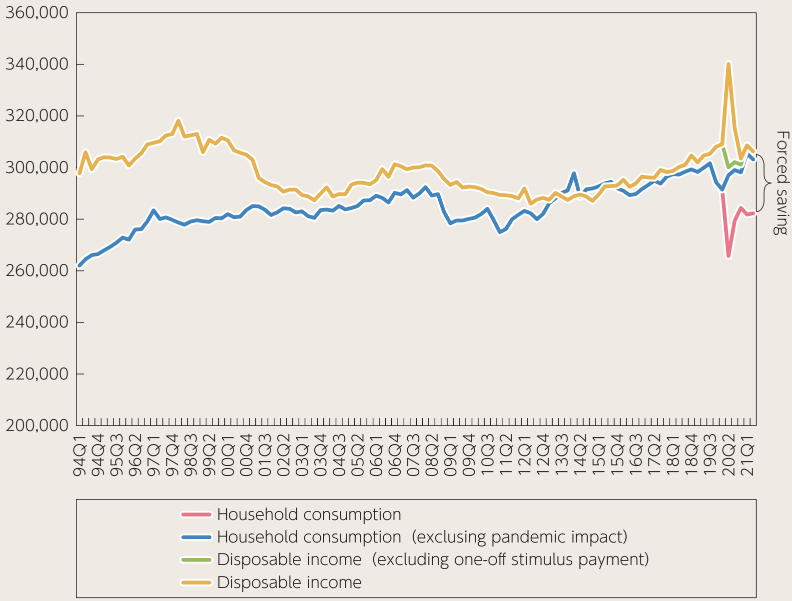

Figure 2-3-6 Infections and forced saving (JPY billion)

Source: Authors' calculations based "on preliminary figures of household disposable income and household savings rate", by the Cabinet Office.
Reference: Box 3 of "Outlook for Economic activity and prices," April 2021, Bank of Japan.

Part I
Part II
Part III
Part IV

According to the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), the number of new housing starts in September (seasonally adjusted) fell for the second consecutive month, down -1.2% MoM, marking the third consecutive quarter increase. By type, owner-occupied housing increased by +6.5% for the third consecutive quarter, while housing for rent and sale declined by -2.1% and -3.8%, respectively, for the first time in three quarters.

Planned construction expenditure (residential + 0.7× combined residential-industrial), a good indicator of GDP-based private housing investment, fell for the first time in three months in September (seasonally adjusted, APIR estimate), down -6.4% MoM. As a result, although Q3 saw the third consecutive quarter increase, it was a modest +0.7% QoQ.

Reflecting the current slowdown in planned construction, we forecast that private housing will decline by -0.6% YoY in FY 2021 and -0.8% YoY in FY 2022, before recovering by +1.2% YoY in FY 2023.

(4) Corporate sector: Downside risk is prolonged production stagnation due to supply constraints

According to the Ministry of Economy, Trade and Industry (METI), the Industrial Production Index (seasonally adjusted: 2015=100, official report) fell for the third consecutive month in September, down -5.4% MoM. On a quarterly basis, in Q3 the index fell for the first time in five quarters, by -3.7% QoQ (Figure 2-3-7). In September, METI left its assessment unchanged MoM, stating that the economy was at a standstill.

According to the Manufacturing Production Forecast Survey, manufacturing production in October is expected to increase by +6.4% MoM and by +5.7% in November. If the forecasts are correct, the October-November average will rise by +4.1% from the Q3 average, reaching 97.9. However, it will fail to reach its pre-pandemic level of 98.0 in 2020 Q1.

According to METI, the index of tertiary industrial activity (seasonaly adjusted: 2015 average = 100) rose for the first time in three months by +0.5% MoM (August: -1.1% MoM) (Figure 2-3-8). As a result, Q3 saw a decline (-0.8% YoY) for the third consecutive quarter. The level for the same period (96.0) is 5.2 points lower than the pre-pandemic level (101.2 in Q4 2019). Therein, the face-to-face services index for Q3 was 77.3, down -1.5% QoQ, marking the third consecutive quarter of decline. The index is 23.1 points lower than its pre-pandemic level (100.4).

The recovery in the production of goods (industrial production) and services (tertiary industry) seems to have come to a halt due to supply constraints and the prolonged state of emergency. Therefore, we forecast that the industrial

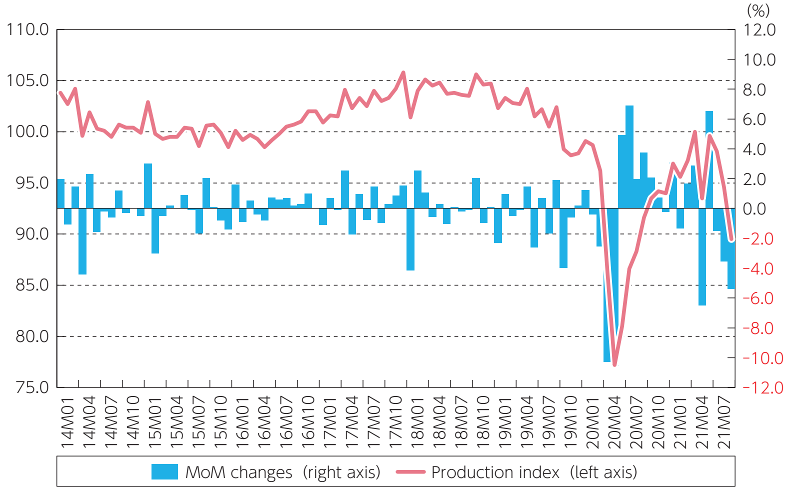

Figure 2-3-7 Index of Industrial Production

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

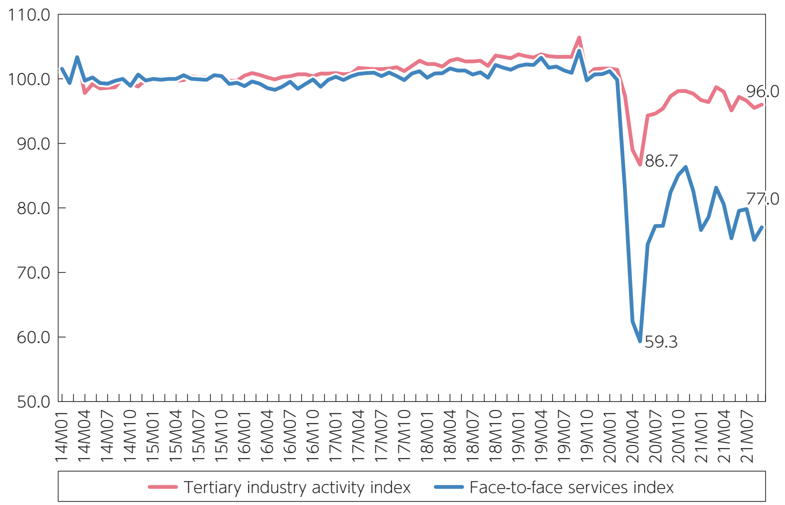

Figure 2-3-8 Face-to-face services vs. the tertiary industry

Source: "Tertiary Industry Activity Index", Ministry of Economy, Trade and Industry.
Note: The face-to-face service industry index is the weighted average of the indexes for transportation, accommodation, restaurant, food services, entertainment and other lifestyle-related services (2015 average = 100).

production index will increase by +6.1% YoY in FY2021, by +3.5% YoY in FY2022 to be, and by +2.4% YoY in FY2023.

According to Financial Statements Statistics of Corporations 2021 Q3, profit for all industries (seasonally adjusted, excluding the financial and insurance sectors) declined for the first time in five quarters, down -7.4% YoY. Therein, the manufacturing sector declined for the first time in five quarters, down -8.2% YoY, and the non-manufacturing sector declined for the second consecutive quarters, down -6.8% YoY. In Q3, the profits of both the manufacturing and the non-manufacturing industries were low due to sluggish exports, deteriorating terms of trade, and the declaration of a fourth state of emergency.

Looking at investment-related indicators, the capital goods shipment index declined for the second consecutive month in September, down -5.7% MoM. As a result, the Q3 figure fell for the first time in four quarters, down -2.4% QoQ. Core machinery orders, a leading indicator of private-sector capital investment (private sector demand excluding ships and electric power), declined -0.0% MoM in September, the second consecutive monthly decline. As a result, the Cabinet Office left its assessment unchanged from the previous month, stating that the recovery trend has stalled. Q3 machinery orders increased slightly, up +0.7% QoQ, marking the second consecutive quarterly increase. The outlook for Q4 is for a further increase of +3.1%. Since the improvement in the corporate earnings environment is slow, our forecast for private non-residential investment in FY2021 is +1.7% YoY, the first increase in three years, but only a modest recovery, followed by a steady recovery of +3.4% YoY in FY2022 and +3.8% YoY in FY2023.

(5) External sector: Goods trade temporarily stagnant due to supply constraints

GDP statistics show that in Q3, goods exports declined for the first time in five quarters, and goods imports fell for the first time in four quarters, reflecting weak domestic demand. As a result, the expansion of trade in goods (exports plus imports) came to a temporary halt.

According to the Ministry of Finance the export volume index increased by +0.0% MoM in October, the first increase in three months. While, the import volume index decreased by -9.1% MoM, up for the second consecitve month. Comparing October with the Q3 average, the export volume index declined by -3.8%. The import volume index fell sharply by -8.2%. As a result, the growth contribution of net exports was positive in October (Figure 2-3-9).

In Q3, the exports of services increased for the fourth consecutive quarter QoQ. Service imports declined for the first time in three quarters. Service imports and exports remain at low levels, mainly due to the slump in inbound and

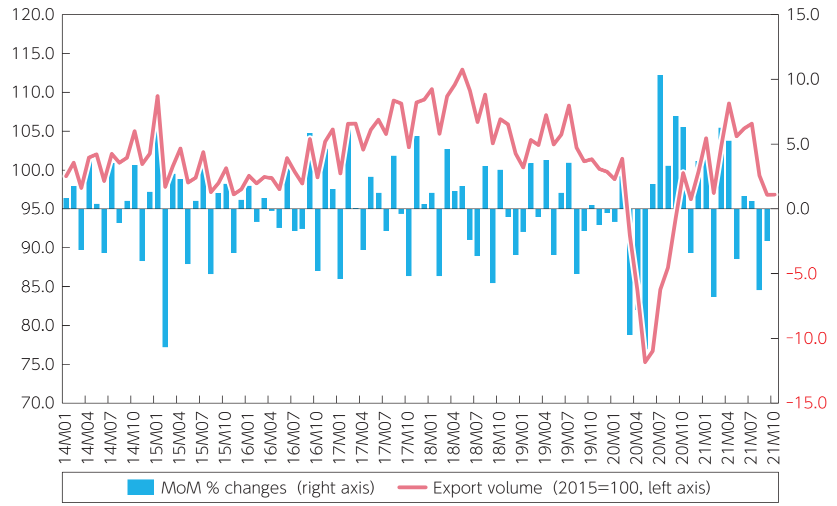

Figure 2-3-9 Export Volume Index

Source: Trade Statistics, Ministry of Finance

outbound tourism.

Taking these factors into account, we forecast that the real exports of goods and services will increase by +11.6% YoY in FY2021, by +4.6% YoY in FY2022, and by +5.5% YoY in FY2023. On the other hand, the real imports of goods and services are expected to increase by +6.3% in FY2021, by +2.6% in FY2022, and by +3.5% in FY2023. As the terms of trade are deteriorating, we expect that the trade balance will turn into a deficit in 2022 and 2023. The deficit in the services balance is likely to increase in FY2021 and FY2022, but then it is likely to start shrinking in FY2023.

On the other hand, since the primary income balance will likely remain high, the current account balance is projected to remain positive at 13.2 trillion JPY in FY2021, 11.4 trillion JPY in FY2022, and 13.8 trillion JPY in FY2023.

(6) Price trends: Energy prices rise, but consumer price trend not expected to increase

According to the Bank of Japan, the domestic corporate goods price index (2015 average=100) rose for the 11th consecutive month in October 2021, up +1.2% MoM. On a YoY basis, the index rose for the eighth consecutive month, by +8.0%. The increase is the largest since January 1981 (+8.1%), and the impact of the sharp rise in resource prices, especially crude oil, and the depreciation of the Japanese yen is conspicuous.

A breakdown shows that the prices of raw materials rose for the eighth consecutive month in October 2021, up +63.0% from a year earlier. Intermediate goods prices rose +14.3%, increasing for the eighth consecutive month. Prices of final goods rose +3.8%, increasing for the eighth consecutive month. From these figures it is clear that there has been no apparent pass-through to final goods prices.

In JPY terms, the Export Price Index in October 2021 rose for the ninth consecutive month, by +13.7% YoY. The Import Price Index rose for the eighth consecutive month, by +38.0% YoY. This is the highest increase since 1981 (the year comparable data became available). As a result, the terms of trade index (Export Price Index/Import Price Index*100) in October was at its lowest level since November 2014. The October index fell 19.2 points YoY, marking the eighth consecutive month of deterioration. It was also the sixth consecutive month of double-digit deterioration.

According to MIC, the National Consumer Price Index (2020 average=100) rose for the second consecutive month in October 2021, up +0.1% YoY. However, the core index (which excludes fresh food, whose prices fluctuate sharply) declined for the seventh consecutive month (-0.7% YoY).

A breakdown shows that energy prices (petroleum products, electricity, and city gas) rose +11.3% YoY, increasing for the sixth consecutive month. Their contribution to the overall index was a positive +0.79%pt. On the other hand, non-energy prices declined for the eighth consecutive month, falling -0.7% YoY. Their contribution to the overall index was a negative -0.70%pt. Therein, food prices (excluding fresh food) rose for the fourth consecutive month (+0.7% YoY, a contribution of +0.17%pt). Accommodation prices rose for the fifth consecutive month (+59.1% YoY, a contribution of +0.35%pt), reflecting a rebound from the large decline caused by the “Go To” campaign in October last year. Lastly, communication charges (cell phones) declined for the seventh consecutive month (-53.6% YoY, a contribution of -1.47%pt).

As the rate of increase in energy prices accelerated toward the end of 2021, the core CPI is expected to rise to the upper zero percent range. The core CPI will accelerate again as the impact of the sharp decline in telecom charges fades away in FY2022. For some time to come, accommodation and communication charges will keep disrupting the basic CPI trend, and should therefore be excluded when analyzing the underlying CPI trend. Although the supply-demand gap is expected to narrow in the future, downward pressure on prices will remain strong, and the upward pressure exerted by non-energy prices (excluding accommodation and communication) is likely to be weak considering the stagnation of wages. Therefore, we expect that the underlying CPI trend will remain weak.

In consideration of the above, our inflation forecast is as follows. The domestic corporate goods price index is projected to increase by +6.5% in FY2021, +2.1% in FY2022, and +0.7% in FY2023. The national CPI core index is forecast to be 0.0% in FY2021, +0.9% in FY2022, and +0.6% in FY2023. The GDP deflator is forecast to be -0.9% in FY2021, +0.5% in FY2022, and +0.4% in FY2023 (Figure 2-3-10).

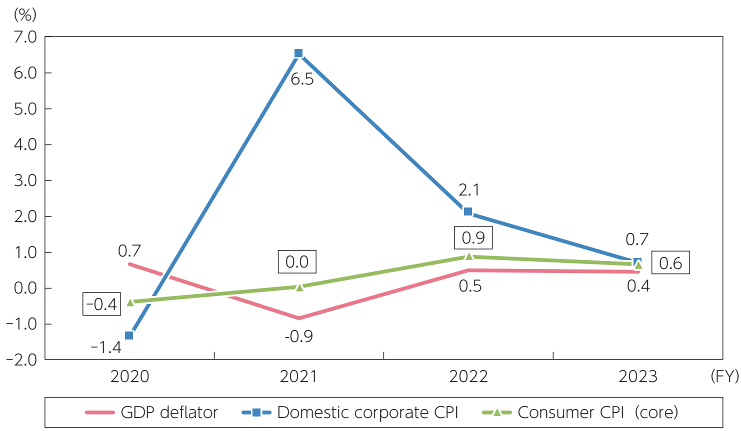

Figure 2-3-10 Inflation Dynamics (YoY % changes)