

Section 4

KANSAI'S ECONOMY: RECENT DEVELOPMENTS AND SHORT-TERM FORECASTS

IRIE, Hiroaki; INADA, Yoshihisa

1. A Retrospective Overview of Kansai's Economy in FY2020

In FY2020, Kansai's economy deteriorated rapidly due to the spread of COVID-19. After the first state of emergency was lifted (May 2020), the economy has been recovering, but the pace of recovery has generally been sluggish. Many economic indicators have not yet returned to their pre-pandemic levels.

Looking at the economy by sector, the household sector reached its lowest point in May 2008 and has been recovering gradually since then, but has yet to reach a full-fledged recovery. In the corporate sector, the impact of COVID-19 differs by industry and firm size, with the pace of recovery being polarized (a so-called "K-shaped" recovery). In the external sector, the "two exports" that supported Kansai's economy before the pandemic have faced a transformation. While the exports of goods have picked up significantly as China's economy recovered, inbound tourism demand (i.e., the export of services), has been non-existent due to restrictions on the entry of people from overseas into Japan for tourism purposes.

Therefore, the COVID-19 disaster had a serious impact on the Kansai economy in FY2020. However, a look at the situation before the pandemic reveals that domestic demand and employment had already peaked out. One reason for that was the October 2019 consumption tax hike, as a result of which real incomes and household consumption declined. In addition, exports had been falling year on year since the second half of fiscal 2018 due to the slowdown of the Chinese economy caused by the intensifying trade conflict between the US and China. The Cabinet Office's Business Climate Index Study Group has tentatively determined that the Japan's economy entered a recession in October 2018. In addition to this, the unprecedented COVID-19 shock plunged Kansai's economy into a recession of historic proportions in FY2020.

One of the reasons for the slow pace of recovery is thought to be the fact that both emergency states and other measures to prevent the spread of the virus were enacted several times, in response to the rising number of infections. For example, in Osaka Prefecture, a state of emergency was imposed four times, in April 2020, January 2021, April 2021, and August 2021, and other measures

to prevent the spread of the disease were enacted in April 2021 and July 2021. Specific measures included requests for restaurants to stop serving alcoholic beverages and shorten their business hours, for large commercial facilities to close or shorten business hours, and for events to be postponed or cancelled. These measures inevitably had a negative impact on consumer spending and businesses as most of the social and economic activities were restricted.

Figure 2-4-1 shows the economic share of the regions under a state of emergency both in the Japan as a whole and in Kansai from April 2020 onward. The percentages in this figure are calculated based on the nominal Gross Regional Product (GRP) of the prefectural accounts for FY2018.

For example, when Japan's first state of emergency was declared on April 7, 2020, the target areas were Saitama, Chiba, Tokyo, Kanagawa, Osaka, Hyogo, and Fukuoka prefectures. The share of these five prefectures is 47.4% of the national GDP. In the Kansai region, Osaka and Hyogo prefectures account for 71.3% of the total Kansai economy. Then, on April 16 of the same year, the target

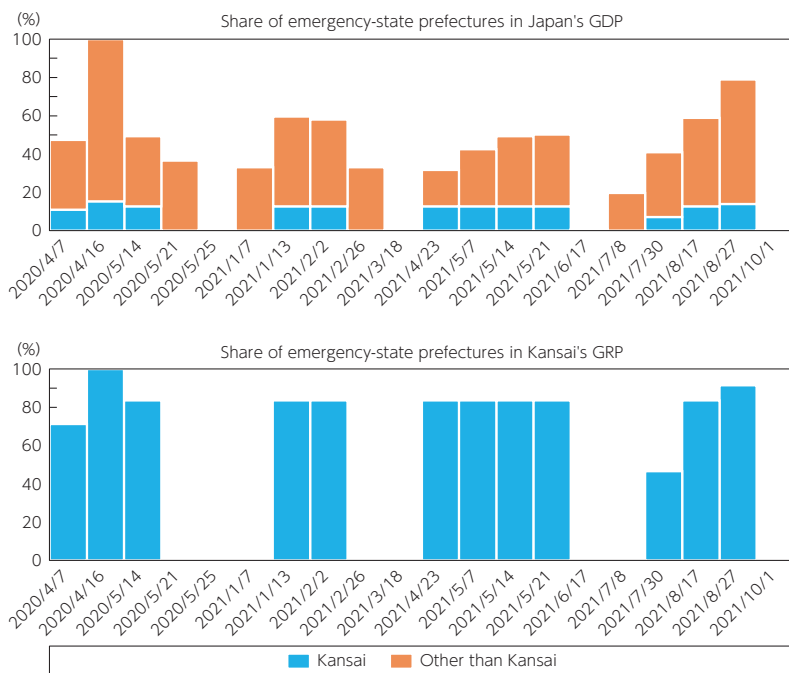


Figure 2-4-1

Economic share of regions under a state of emergency

Note: GRPs for each prefecture are nominal values for FY2018.

Source: Prepared by the authors based on "Prefectural Accounts" by the Cabinet Office.

regions were expanded to all 47 prefectures. At that time, the economic share of the targeted areas was 100%, both in Japan and in Kansai. Since states of emergency tend to be issued in urban areas, such as Osaka and Hyogo prefectures, the impact of the state of emergency is expected to be greater in Kansai than in other regions, at least from the perspective of economic share.

The following is a retrospective overview of the Kansai economy in fiscal 2020 and beyond, focusing on monthly economic indicators.

(1) Household sector: Moderate recovery, but noticeably weaker than the national economy

In FY2020, the household sector in Kansai cooled down sharply due to the spread of COVID-19 and the resulting state of emergency. Many economic indicators bottomed out in May 2020 and have been recovering since the beginning of FY2021. However, the pace of recovery has been slow. Sentiment is fluctuating in tandem with the spread of COVID-19. The income environment and employment have been weaker than in Japan as a whole.

Consumer sentiment worsened significantly (Figure 2-4-2), with the Consumer Confidence Index for the full FY2020 at 29.7, lower than the 30.2 level of FY2008, during the Global Financial Crisis. This was a 7.7 point drop from the previous year and the third consecutive year of deterioration. In particular, April 2020, when the state of emergency was declared, recorded the largest month-on-month decline (-10.6 points) and the lowest level on record (20.0). It recovered to its pre-pandemic level in June 2021, but has since leveled off.



Figure 2-4-2 Consumer Confidence Index

Note: Seasonally adjusted figures are APIR estimates.
Source: Survey of Consumer Sentiment, Cabinet Office

The income environment is picking up from the bottom, but the pace of recovery is slow (Figure 2-4-3). In FY2020, the average monthly wage (cash earnings) in Kansai (APIR estimate) was JPY 309,870, a decrease of 2.2% YoY, marking the second consecutive year of YoY decline. Although in FY2021 the figure rose compared to FY2020, this was simply due to a rebound, suggesting that the income environment remains severe.

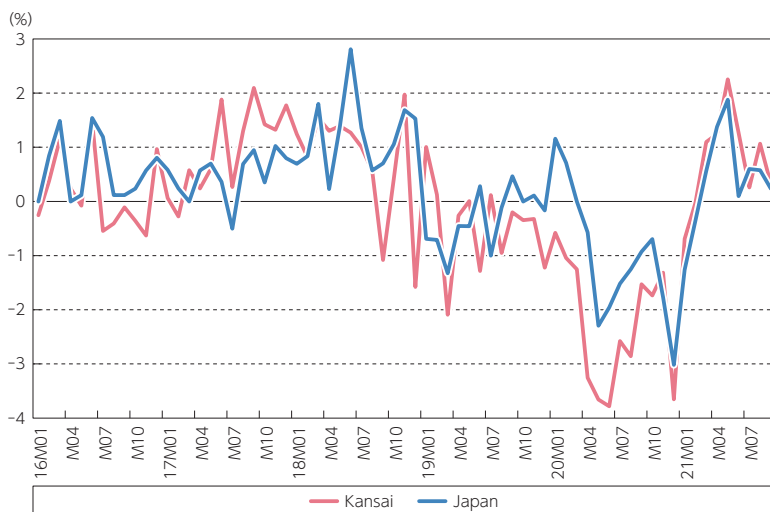


Figure 2-4-3 Total Cash Earnings (YoY changes, %)

Note: Calculated as a weighted average of total cash earnings in each prefecture, based on the number of permanent workers.

Source: Monthly Labor Statistics Survey, Ministry of Health, Labour and Welfare

The employment environment deteriorated rapidly in the first half of FY2020 (Figure 2-4-4). The effective job offers-to-applicants ratio in the Kansai region in FY2020 was 1.08, a sharp decline of 0.49 points from the previous year, marking the second consecutive year of deterioration in the employment environment.

In FY2020, the sales of large retailers in the Kansai region (the total sales of department stores and supermarkets) totaled JPY 3,436 billion, a decrease of 10.4% from the FY2019, marking the third consecutive year of decline.

A breakdown shows that department store sales totaled JPY 1,110.0 billion, down -25.5% from the previous year, marking the third consecutive year of decline (Figure 2-4-5). In April, when the first state of emergency was declared, sales plummeted to -74.9% YoY, the largest decline on record. Although there

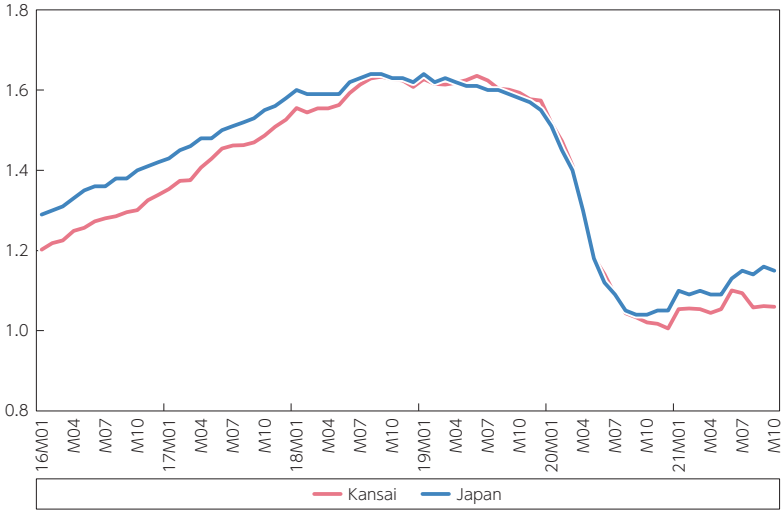


Figure 2-4-4 Effective job offers-to-applicants ratio (seasonally adjusted)

Source: "General Employment Placement Situation", Ministry of Health, Labour and Welfare.

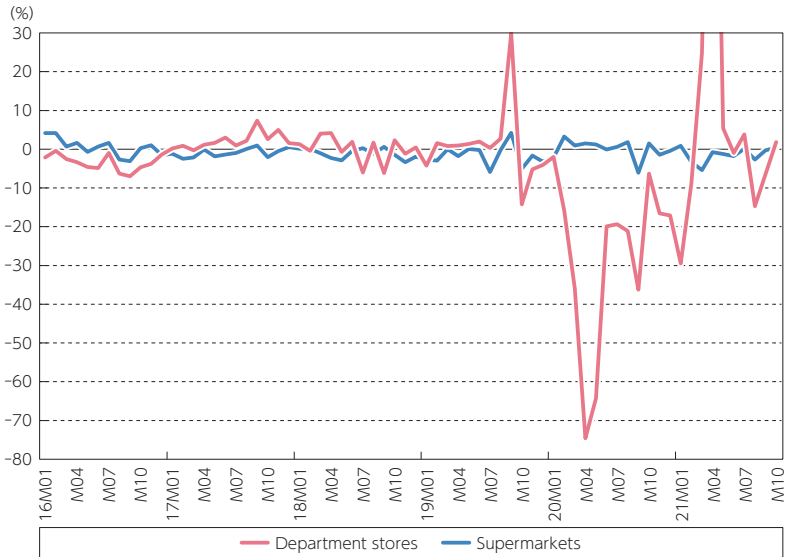


Figure 2-4-5 Department Store and Supermarket Sales (YoY changes, %)

Note: Based on all stores; 150.4% in April 2009.

Source: "Sales of Department Stores and Supermarkets", Kinki Bureau of Economy, Trade and Industry

has been a rebound from the previous year since the beginning of FY2021, it has not been a remarkable recovery due to the fact that a state of emergency was declared several times. Meanwhile, supermarket sales totaled JPY 2.326 trillion. This was the fifth consecutive year of decline, down -0.9% YoY. The decline was smaller than that in department store sales due to an increase in demand for food and beverage products for in-house consumption as people refrained from going out due to the state of emergency, and restaurants closed or shortened their hours.

(2) Corporate sector: recovering after the decline in the first half of FY2020, but the pace of recovery remains sluggish

The corporate sector in Kansai deteriorated rapidly in FY2020 due to the spread of COVID-19 and the declaration of a state of emergency. Although the corporate sector has since bottomed out and is now recovering, the pace of recovery has diverged among firms, depending on firm size, type of industry, and other factors – a phenomenon known as a “K-shaped recovery”. In 2021, the recovery is generally moderate as the number of COVID-19 infections remains low, and economic activities normalize. However, the manufacturing sector is at a standstill due to the global shortage of semiconductors.

The business sentiment has been deteriorating since its peak in the December 2018 survey (Figure 2-4-6). In particular, the June 2020 survey was the first significant deterioration since the March 2009 survey during the Global Financial Crisis. In the December 2021 survey, the Diffusion Index (DI) for business conditions in Kansai (firms of all sizes in all industries) was +5, returning to positive territory for the first time in eight quarters. The recovery was particularly rapid for large manufacturing companies, whose DI had been in positive territory since the March 2021 survey, staying positive for four consecutive quarters. The non-manufacturing sector is also on a recovery trend in general, although there are still some difficulties in accommodation and food services, retail and other face-to-face services.

Industrial production has bottomed out after a sharp decline in the first half of 2020, but the pace of recovery is slow and growth is sluggish (Figure 2-4-7). The production index (2015=100) for FY2020 was 91.1, down -8.2% from the previous year, marking the third consecutive year of decline in production, as both domestic and foreign demand declined due to the spread of COVID-19. Although it had been gradually recovering thanks to the normalization of economic activities, the growth has been sluggish since the beginning of FY2021 due to the global shortage of semiconductors.

Capital investment was stagnant in FY2020 due to the impact of COVID-19,

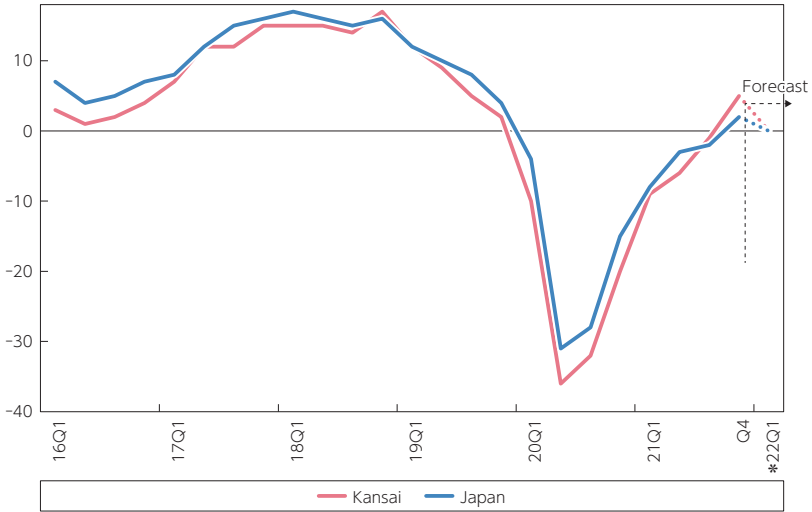


Figure 2-4-6

DI for business conditions (Bank of Japan's Tankan survey, firms of all sizes in all industries)

Note: * denotes outlook.

Source: "Short-term Economic Survey of Corporations", Bank of Japan, Osaka Branch



Figure 2-4-7

Index of industrial production (seasonally adjusted, 2015=100)

Source: "Kinki Region Industrial Production Trends", Kinki Bureau of Economy, Trade and Industry

but is expected to increase significantly in FY2021. According to the Bank of Japan's Tankan survey conducted in December 2021, Kansai firms' planned capital investment in FY2021 (firms of all sizes in all industries) are expected to increase by +9.2% YoY (Table 2-4-1). By industry, it is expected to increase by +11.3% in the manufacturing sector, and by +7.9% in the non-manufacturing sector. The actual figure for FY 2020 was -0.2%, the first time in five years that planned capital investment in Kansai declined YoY. However, compared to the -8.5% decline in Japan as a whole, Kansai's economy fared better.

Table 2-4-1 Planned Capital Investment (Bank of Japan Tankan Survey)

	Kansai			Japan		
	All industries	Manufacturing	Non-manufacturing	All industries	Manufacturing	Non-manufacturing
FY 2020	-0.2	-1.3	0.6	-8.5	-10.0	-7.5
FY 2021	9.2	11.3	7.9	7.9	11.6	5.7

Source: "Nationwide Survey of Enterprises and the Short-Term Economic Outlook for the Kansai Region", Bank of Japan, Osaka Branch.)

(3) External sector: Exports and imports of goods are recovering after deteriorating in FY2020, but inbound tourism demand remains non-existent

In FY2020, the external sector of the Kansai region showed a weak trend. Both the exports and imports of goods contracted. However, the decline was moderate compared to the rest of Japan due to the strong performance of exports to China. Since the beginning of FY2021, economic activity in Europe and the United States has normalized, so trade is recovering. On the other hand, the exports of services (i.e., inbound tourism demand), remains non-existent.

Looking at the status of Kansai's international trade in FY2020, both exports and imports shrank (Figure 2-4-8). Exports totaled JPY 15,711.3 billion, down -2.7% from the previous year, marking the third consecutive year of decline. Although the exports of electronic components, such as semiconductors increased, the decline in the exports of mineral fuels and steel had a significant negative impact. Imports totaled JPY 13,249.7 billion, down -8.0% from the previous year, marking the second consecutive year of decline. The import of crude oil, natural gas and manufactured gas decreased. Pharmaceutical products increased due to the import of vaccines. The trade balance, i.e. exports minus imports, was JPY +2,489.8 billion, logging a surplus for the seventh year in a row. Compared to Japan as a whole (exports down -8.4%, imports down -10.0%), the decline in Kansai was moderate. This is because China is normalizing its

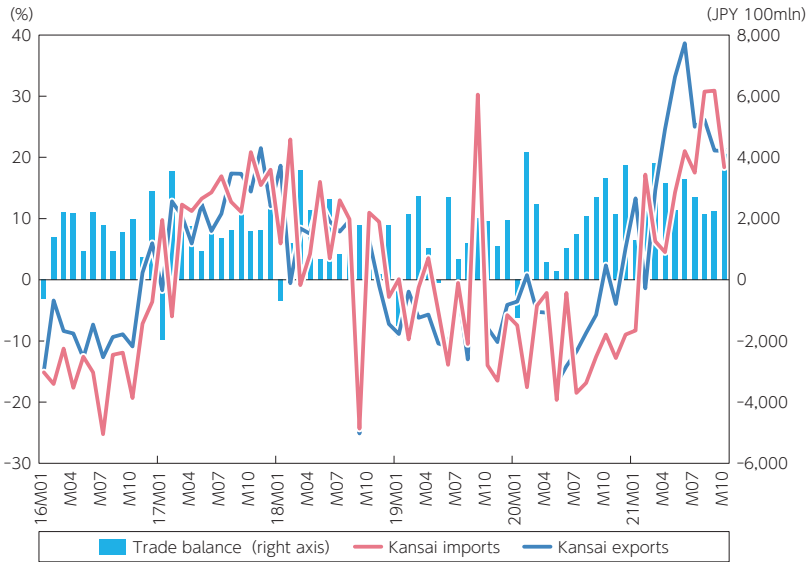


Figure 2-4-8

Exports, Imports and Trade Balance

Source: "Trade in the Kansai Region", Osaka Customs

economic activities ahead of Europe and the U.S., and Kansai's share of trade with China is larger than that of Japan as a whole.

In this regard, we take a closer look at exports by region. Exports to the U.S. fell by -11.7% YoY and those to the EU by -6.5%, both declining for the second year in a row, while those to Asia rose for the first time in three years, by +1.9% YoY (Figure 2-4-9). In particular, exports to China grew at a high rate of +9.9%. China-bound exports began to recover ahead of those to Europe and the U.S., surpassing the previous year's level in June 2020 and growing since then (as of November 2021).

Next, we look at service exports. Inbound tourism demand has almost disappeared. According to the Ministry of Justice's "Immigration Statistics," the number of foreign visitors to Japan in FY2020 was 324,000. Of this number, 53,000 entered Japan through Kansai International Airport (Figure 2-4-10). As of December 2021, the global COVID-19 scourge has not been halted, and new variants (Omicron) are spreading. Therefore, there is no prospect of resumption of travel for tourism purposes within FY 2021.

Similar to the number of foreign visitors to Japan, duty-free sales also faced a difficult situation in FY2020 (Figure 2-4-11). According to the Osaka Branch of the Bank of Japan, duty-free sales in department stores in Kansai in FY2020

decreased by -87.3% YoY, marking the second consecutive year of decline. The level is extremely low, and there are still no prospects for recovery.

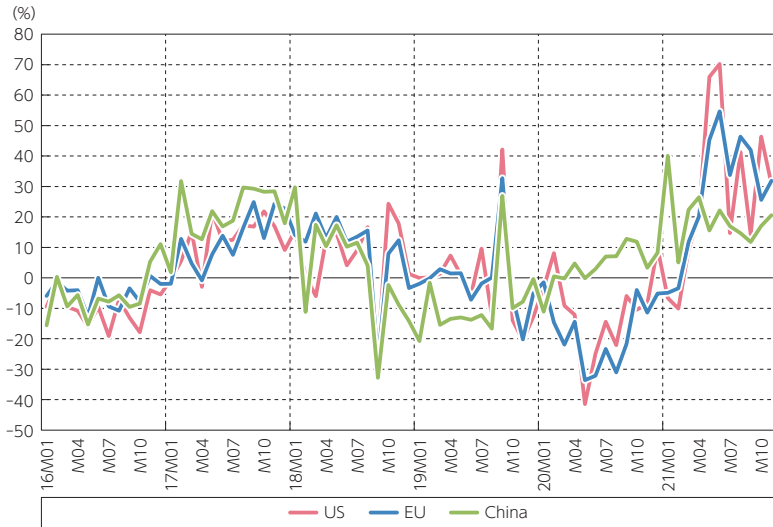


Figure 2-4-9 Exports by region (year-on-year change)

Source: Osaka Customs



Figure 2-4-10 Number of international visitors to Japan (persons)

Source: "Immigration Statistics," Ministry of Justice



Figure 2-4-11 Department Store Duty Free Sales (April 2013=100)

Source: "Department Store Duty Free Sales (Kansai Region)," Bank of Japan, Osaka Branch

(4) Public sector: Public works steady in FY2020, decline in FY2021

The value of public works contracts remained stable in FY2020 (Figure 2-4-12). The contract amount for public works was JPY 1,713.1 billion, an increase of +6.2% YoY, marking the second consecutive year of growth.

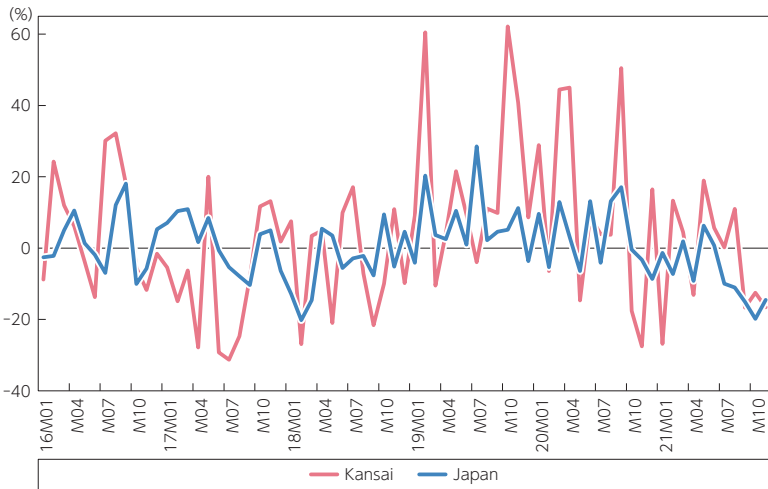


Figure 2-4-12 Contract amount of public works (YoY)

Source: Statistics on Public Works Advance Payment Guarantees, East Japan Construction Guarantee Co.

2. Forecasts for Kansai's Economy: FY 2021-2023

Here, we present our economic forecast for the Kansai region for FY2020 through FY2023 (Table 2-4-2 and Figure 2-4-13). This forecast is based on the latest economic indicators in and outside the Kansai region, including the second advance GDP estimate for 2021 Q3, and our forecast for the Japanese economy presented in Section 3.

Table 2-4-2

APIR's Forecast for Kansai's Economy

FY	Kansai					Japan				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Private final consumption expenditure	▲ 1.0	▲ 5.9	2.0	2.2	1.1	▲ 1.0	▲ 5.5	2.5	2.3	0.8
Private residential investment	▲ 0.9	▲ 1.8	0.2	0.5	1.3	2.6	▲ 7.8	▲ 0.6	▲ 0.8	1.2
private non-residential investment	0.5	▲ 5.0	1.1	3.2	2.3	▲ 0.6	▲ 7.5	1.7	3.4	3.8
Government final consumption expenditure	1.6	3.0	2.8	1.8	0.9	2.1	2.5	2.3	1.5	0.9
Public investment	1.2	4.7	1.0	2.8	2.5	1.6	5.1	▲ 5.7	2.9	1.9
Exports	0.6	▲ 2.9	7.9	5.7	4.9	▲ 2.2	▲ 10.5	11.6	4.6	5.5
Imports	0.3	▲ 1.7	4.9	4.8	4.3	0.2	▲ 6.6	6.3	2.6	3.5
Real GRP/GDP	▲ 0.2	▲ 3.9	2.8	2.8	1.8	▲ 0.7	▲ 4.5	2.7	2.6	1.7
Private demand (contribution)	▲ 0.7	▲ 4.4	1.2	1.7	1.1	▲ 0.7	▲ 4.7	1.7	1.8	1.0
Public demand (contribution)	0.4	0.7	0.6	0.5	0.3	0.5	0.8	0.2	0.5	0.3
Net exports (contribution)	0.1	▲ 0.3	1.1	0.6	0.4	▲ 0.4	▲ 0.7	0.9	0.4	0.4
Nominal GRP/GDP	0.8	▲ 3.2	2.1	3.3	2.4	0.2	▲ 3.9	1.8	3.1	2.2
GRP/GDP deflator	1.0	0.7	▲ 0.7	0.5	0.6	0.8	0.7	▲ 0.9	0.5	0.4
Consumer price index	0.6	▲ 0.2	0.0	0.8	0.7	0.6	▲ 0.4	0.0	0.9	0.6
Indices of Industrial Production	▲ 4.5	▲ 8.2	6.3	3.5	3.0	▲ 3.8	▲ 9.5	6.1	3.5	2.4
Unemployment rate	2.6	3.1	3.1	3.1	3.0	2.3	2.9	2.8	2.8	2.6

Note: Unit= %. Figures for all components except 'Total unemployment rate' are growth rates.

Source: Compiled by the authors.

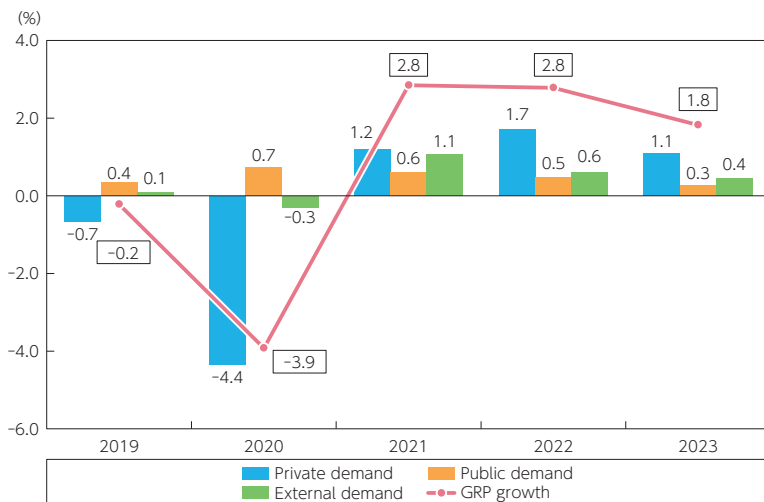


Figure 2-4-13 GRP forecast and contributions to growth

Note: FY2019-2020 are actual forecasts; FY2021-2023 are forecasts.

(1) Real GRP growth forecast: +2.8% in FY2021, +2.8% in FY2022, +1.8% in FY2023

After two consecutive years of contraction in FY2019 and FY2020, Kansai's economy will begin to recover in FY2021. However, the recovery will be modest compared to the large decline in FY2020, due to the sluggish growth in consumption caused by the prolonged state of emergency. The pre-pandemic level will not be achieved until FY2022.

Look at the contributions to the GRP growth rate (Figure 2-4-13). In FY2021, private demand will contribute to growth for the first time in four years, by +1.2pt, while public demand and external demand will support growth by +0.6pt and +1.1pt, respectively. Similarly, in FY2022, all three components will contribute to growth, private demand by +1.7pt, public demand by +0.5pt, and external demand by +0.6pt. In FY2023, the contributions of all three components will remain positive, but they will be smaller: +1.1pt by private demand, +0.3pt by public demand, and +0.4pt by external demand.

Comparing the forecasts for Kansai and Japan (Figure 2-4-14), Kansai's economy is expected to outperform the nation as a whole from FY2021 onward. In FY2021, the contribution of private demand will be smaller than that of Japan, as the economic share of the regions under a state of emergency in Kansai was higher than the nationwide share. On the other hand, the contribution of public



Figure 2-4-14 Economic Growth Rates in Kansai and in Japan

Source: Compiled by the authors

demand and external demand will be somewhat larger in Kansai. The contribution of external demand in FY2022 and that of private demand in FY2023 is expected to be larger in Kansai than in Japan as a whole.

(2) Key points by sector

(2-1) Private sector: First positive contribution to growth in four years in FY2021

The contribution of private demand to GRP growth will be 1.2%pt in FY2021, 1.7%pt in FY2022, and 1.1%pt in FY2023, marking the first positive contribution in four years in FY2021, followed by three consecutive years of growth.

Therein, the household sector consists of real private final consumption expenditure and real private residential investment. Growth in real private final consumption expenditure is forecast to be +2.0% in FY2021, +2.2% in FY22, and +1.1% in FY2023. Private consumption has declined for three consecutive years since FY2018, but in FY2021 it will exceed the previous year's level for the first time in four years. However, this is a rather low growth rate for a recovery, considering the large decline in the previous year. Real private residential investment growth is forecast to be +0.2% in FY2021, +0.5% in FY2022, and +1.3% in FY2023.

Concerning the corporate sector, we forecast that real private non-resi-

dential investment will grow by +1.1% in FY2021, +3.2% in FY2022, and +2.3% in FY2023.

(2-2) Public sector: contribution to growth through expenditures related to COVID-19 measures.

The contribution of public demand to real GRP growth will be +0.6%pt in FY2021, +0.5%pt in FY2022, and +0.3%pt in FY2023. The public sector will provide solid support to growth.

Real government final consumption expenditure growth is expected to increase by +2.8% in FY2021, +1.8% in FY2022, and +0.9% in FY2023. It will be boosted by spending related to COVID-19 measures. Real public investment is expected to grow by +1.0% in FY2021, +2.8% in FY2022, and +2.5% in FY2023. In our forecast of the Japanese economy, public investment is expected to slow down to -5.7% in FY2021. However, in consideration of the current trends, our forecast for Kansai assumes a slight increase.

(2-3) External sector: both exports and imports expected to grow steadily, with net exports contributing to growth.

The external sector consists of international trade (exports minus imports) and the extra-regional trade (economic transactions with other regions in Japan). The contribution of external demand to real GRP growth will be +1.1%pt in FY2021, +0.6%pt in FY2022, and +0.4%pt in FY2023.

In terms of international transactions, we forecast that real exports will grow by +7.9% in FY2021, +5.7% in FY2022, and +4.9% in FY2023. In FY2021, exports will increase for the first time in two years. Real import growth is forecast to be +4.9% in FY2021, +4.8% in FY2022, and +4.3% in FY2023. As a result, the contribution of net international exports to Kansai's real GRP growth will be +1.0%pt in FY2021, +0.5%pt in FY2022, and +0.4%pt in FY2023. On the other hand, the contribution of real net domestic exports, which are transactions with other regions in Japan, is forecast to be +0.1%pt in FY2021, +0.1%pt in FY2022, and +0.1%pt in FY2023.

(2-4) Employment environment: unemployment will hover around 3%, higher than the pre-pandemic level

The employment environment is expected to remain severe for some time due to the rapid deterioration of the economy and restrictions on social and economic activities caused by the state of emergency. The unemployment rate, which had remained in the 2% range until FY2019, worsened to 3.1% in FY2020. It is forecasted to remain 3.1% in FY2021 and FY2022, before improving slightly to

3.0% in FY2023.

3. Estimates of Kansai prefectures' GRPs: FY2019-2020

The release of the GRP figures ("Prefectural Accounts") for each prefecture is usually delayed by about two years compared to the release of the national GDP. In consideration of that, APIR has been making its own early estimates of the actual GRPs for the six Kansai prefectures for the fiscal years for which data is not yet available. In this section, we present our estimations up to FY2020.

Table 2-4-3 summarizes our estimates. The total real GRP of the six Kansai prefectures is estimated at JPY 83.51 trillion in FY2019 and JPY 80.23 trillion in FY2020. The real GRP growth rate is respectively -0.2% in FY2019 and -3.9% in FY2020. FY2019 was the first negative growth in five years, as was the case with Japan as a whole (-0.7%), and FY2020 was the second consecutive year of negative growth, although the decline rate was somewhat smaller than that of the Japanese economy as a whole (-4.5%).

Table 2-4-3 Summary of Advance Estimates and Very Short-Term Forecasts

	Osaka	Hyogo	Kyoto	Shiga	Nara	Wakayama	Kansai	Japan
Goodness of fit								
Adjusted R-square	0.93	0.95	0.80	0.67	0.75	0.77	-	-
GRP level MAPE(%)	0.39	0.36	1.08	1.84	0.77	0.88	-	-
GRP growth MAPE(%)	0.71	0.68	1.72	2.06	1.13	1.49	-	-
Durbin-Watson statistic	2.47	3.07	2.41	1.52	1.93	2.80	-	-
Real GRP(JPY trillion)								
FY2018 (actual value)	38.98	20.61	10.36	6.61	3.64	2.44	83.64	554.35
FY2019 (estimate)	39.24	20.56	10.17	6.59	3.60	3.35	83.51	551.47
FY2020 (estimate)	37.73	19.67	9.85	6.28	3.54	3.16	80.23	525.85
Real GRP growth rate (%)								
FY2018 (actual value)	0.1	-0.4	-0.6	1.2	1.6	3.5	0.2	0.2
FY2019 (estimate)	0.7	-0.3	-1.8	-0.4	-1.1	-2.6	-0.2	-0.7
FY2020 (estimate)	-3.9	-4.3	-3.2	-4.6	-1.7	-5.6	-3.9	-4.5
Contribution to real GRP growth(%)								
FY2018 (actual value)	0.1	-0.1	-0.1	0.1	0.1	0.1	0.2	-
FY2019 (estimate)	0.3	-0.1	-0.2	0.0	0.0	-0.1	-0.2	-
FY2020 (estimate)	-1.8	-1.1	-0.4	-0.4	-0.1	-0.2	-3.9	-

Note: MAPE stands for Mean Absolute Percentage Error.

Source: Compiled by the author

The growth rate of Kansai's economy (calculated by summing up the real GRPs of its prefecture) in FY2008 and FY2009, the period of recession caused by the Global Financial Crisis, was -3.1% and -4.2% respectively. On a single-year basis, the impact of COVID-19 in FY2020 is comparable to that of the Global Financial Crisis.

A look at the contribution of each prefecture to Kansai's economy as a whole (Figure 2-4-15) shows that while the real GDP growth rate of the Japanese economy slowed to -0.7% in FY2019, Osaka Prefecture was the only prefecture in Kansai to maintain positive growth. However, Kansai prefectures other than Osaka likely posted negative growth. Hyogo and Kyoto prefectures experienced negative growth for three consecutive years starting in FY2018.

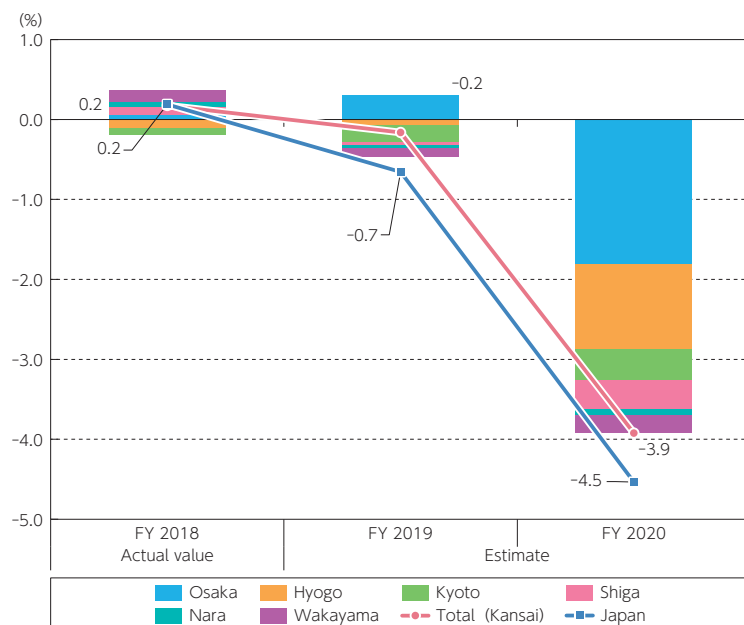


Figure 2-4-15 Contributions by Prefectures to Kansai's real GDP growth

Source: Compiled by the author