Chapter 2

The Economies of Japan and Kansai: A Retrospective and Outlook

Section 1
The COVID-19 Pandemic and Household Responses: People's Flow and Household Consumption

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Sections 1 and 2 of this chapter describe in detail the adjustment process of households and businesses from the COVID-19 disaster. In the first half of Sections 3 and 4, we outline the current state of the Economies of Japan and Kansai, respectively, and in the second half we present our economic forecasts for FY2021 through FY2023.

Two years have passed since the outbreak of the COVID-19 pandemic, and as we approach the end of 2021, the movement of people is returning to its pre-pandemic level, basking in a temporary sense of freedom from the COVID-19 pandemic, while being acutely aware of the risk of a sixth wave of infections and prolonged supply constraints. Japan's economic recovery from the pandemic has not been smooth, and the degree of recovery has been slower than that of other major countries.

As the possibility of a new variant (Omicron) pandemic increases, countries around the world are rushing to provide booster vaccines. Based on the experience so far, even if the rapid spread of the new variant is inevitable, both the number of deaths and the condition of those infected are likely to be considerably less severe. This assumption is reflected in our forecasts for the economies of Japan and Kansai. Other important assumption in our forecast is the rapid increase in consumption due to the accumulation of forced savings by households, as well as the impact of supply constraints on production by companies. Our forecasts were made while paying special attention to these factors.

1. Insights from high-frequency data

Two years have passed since the start of the COVID-19 pandemic, and people's lifestyles have changed significantly. During this period, household consumption behavior has also changed significantly because people have been forced to avoid the Three Cs (crowded places, close contact settings, and closed spaces) to ensure thorough social distancing. Figure 2-1-1 shows the number of new infections for COVID-19, people's flow trends by purpose (retail and recreation, groceries and pharmacies), and changes in daily consumption. In particular, under the first state of emergency in April 2020, individual consumption decreased because people's flow was sharply curtailed alongside the increase in the number of new infections. During the second and subsequent states of emergency, there still seemed to be a close relationship between the number of new infections, people's flow, and individual consumption, although it was not as clear as during the first state of emergency.

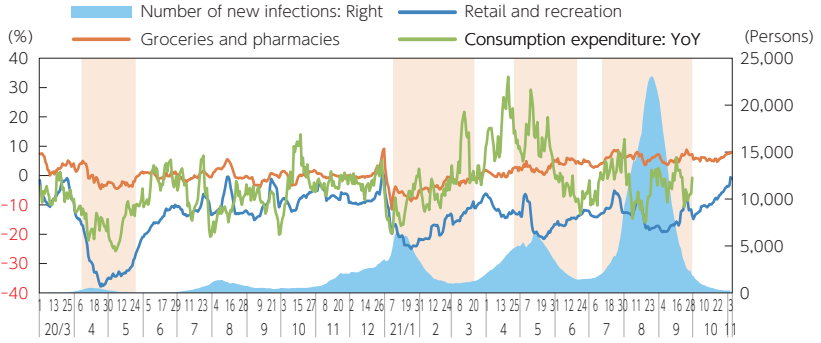

Figure 2-1-1 Infection situation and changes in people's flow and consumption expenditure

Note: shows seven-day moving average. Shaded areas indicate periods of a state of emergency.
Source: Open data by MHLW, the Family Income and Expenditure Survey by MIC and the Community Mobility Report by Google LLC

The relationship between people's flow and consumption has so far been analyzed in terms of transportation policies and trade area analysis for companies, but the scope has been limited. After the start of the COVID-19 pandemic, statistical data became available as open data, so in this section, we analyze trends in people's flow and household consumption by using people's flow and other data in the COVID-19 Community Mobility Report by Google and high-frequency data, such as on daily consumption, in the Family Income and Expenditure Survey by the Ministry of Internal Affairs and Communications (MIC).

The structure of this section is as follows. Subsection 2 summarizes all of the four states of emergency that have been declared so far to confirm people's flow characteristics by purpose and time slot during these declaration periods. In subsection 3, based on the analysis in the preceding subsection, household consumption trends are discussed by item by dividing the pandemic period into three phases. Of particular interest is household consumption trends during the states of emergency. Subsection 4 estimates how much the GRP in the Kansai region's six prefectures decreased due to the decline in household consumption during the periods of the first and second states of emergency. In addition, to mitigate the impact of the pandemic, the Go To Campaign project was implemented from late July 2020 with the aim of stimulating tourism demand, and subsection 5 confirms the movements of related items in daily consumption. Lastly, Subsection 6 describes the outlook for the future.

2. Declarations of a state of emergency and people's flow

(1) Declarations of a state of emergency

Following the start of the COVID-19 pandemic, various infection prevention measures have been taken to reduce contact between people. The pillars of the measures are as follows: 1) requests for commercial facilities (restaurants, department stores, theaters, etc.) and public facilities to suspend operations or shorten business hours, 2) requests for people to refrain from going out unnecessarily, expecting them to exhibit voluntary restraint for outings, and 3) encouragement of teleworking and staggered work hours.

Table 2-1-1 summarizes the restrictions imposed by the declarations of state of emergency. The first declaration of a state of emergency was issued for seven prefectures on April 7, 2020, which was expanded to all prefectures on April 16. On entering May, it was decided to extend the declaration period to the end of May, but in prefectures where the infection situation had calmed down, the declaration was lifted on May 14 and it was lifted nationwide on May 25. Following the resurgence of the infections (the third wave) from November, the second declaration of a state of emergency was issued for Tokyo and three other prefectures on January 8, 2021, and seven prefectures were added on January 14. Then the declaration was gradually lifted, and finally the Tokyo metropolitan area's state of emergency was lifted on March 21.

However, after lifting the second declaration of a state of emergency, the number of new infections increased again (the fourth wave) at a faster pace than the third wave. As the situation in the medical care provision system became

Table 2-1-1 State of emergency periods and restriction details

	Period	April 7–May 25, 2020	January 8–March 21, 2021	April 25–June 20, 2021	July 12–September 30, 2021
Restrictions	Request to close schools	○	×	×	×
	Request to suspend operations	Entertainment facilities, athletic and amusement facilities, theaters, commercial facilities, etc.	×	Entertainment facilities, athletic and amusement facilities, theaters, commercial facilities, restaurants serving alcoholic beverages, etc.	Entertainment facilities, athletic and amusement facilities, theaters, commercial facilities, restaurants serving alcoholic beverages, etc.
	Request to shorten business hours	Restaurants (until 8 p.m.) (Serving alcoholic beverages: until 7 p.m.)	Restaurants (until 8 p.m.) (Serving alcoholic beverages: until 7 p.m.)	Restaurants not serving alcoholic beverages (until 8 p.m.)	Restaurants not serving alcoholic beverages (until 8 p.m.)
	Encouragement to shorten business hours	×	Entertainment facilities, athletic and amusement facilities, theaters, commercial facilities, etc. (until 8 p.m.)	×	Entertainment facilities, athletic and amusement facilities, theaters, commercial facilities, etc. (until 8 p.m.)
	Request to refrain from holding events	○	× (Strict requirements must be met to hold events)	×	× (Strict requirements must be met to hold events)
	Self-restraint on going out	Going out unnecessarily	Going out unnecessarily (Strictly refraining from going out after 8 p.m.)	Going out unnecessarily (Strictly refraining from going out after 8 p.m.)	Going out unnecessarily (Strictly refraining from going out after 8 p.m.)
	Restrictions on commuting to work	Encouragement of teleworking and staggered work hours (70% teleworking target)	Encouragement of teleworking and staggered work hours (70% teleworking target)	Encouragement of teleworking and staggered work hours (70% teleworking target)	Encouragement of teleworking and staggered work hours (70% teleworking target)

Source: Compiled by the author.

tighter, the third declaration of a state of emergency was issued on April 25. In the third declaration, stronger measures were applied compared to the second declaration, such as requests to large-scale commercial facilities, entertainment facilities, and restaurants, including those serving alcoholic beverages, to suspend operations. As a result, the number of new infections decreased, and the fourth wave moved toward convergence (Figure 2-1-1). So the government lifted the third declaration of a state of emergency for nine prefectures excluding Okinawa Prefecture on June 20. The state of emergency in seven prefectures

such as Tokyo and Osaka was changed to the Priority Measures for Prevention of Infection Spread for the period from June 21 to July 11[1)].

After that, to address the resurgence of infections (the fifth wave) by highly infectious variants (the alpha and delta variants) and to secure the medical care provision system, the fourth declaration of a state of emergency was issued in Tokyo on July 12. In addition, it was decided to extend the period of the Priority Measures for the Prevention of Infection Spread for the four prefectures (Saitama, Chiba, Kanagawa, and Osaka Prefectures) until August 22. Even so, the spread of infections did not stop, and the government additionally designated seven prefectures as the target areas for the state of emergency for the period from August 20 to the originally scheduled expiry of September 12, which was later extended to September 30.

(2) Declarations of a state of emergency and people's flow

Have the declarations of a state of emergency affected people's flow? Next, we will confirm changes in people's flow during the periods of the declarations of a state of emergency by dividing people's flow data into two types: i) by purpose and ii) by time slot.

i) Changes in people's flow by purpose

The COVID-19 Community Mobility Report by Google announced people's flow trends in six categories (retail and recreation, groceries and pharmacies, parks, transit stations, workplaces, and residential) (Table 2-1-2). The report shows how visits (and lengths of stay) at these six places changed compared to the baselines (the median values for the corresponding day of the week during the 5-week period Jan 3–Feb 6, 2020) using high-frequency daily data.

People's flow trends change depending on calendar holidays (Golden Week, summer vacation, consecutive autumn holidays, year-end and new year holidays, etc.), but the trends are also greatly affected by the infection situation and the anti-infection measures (Figure 2-1-2).

As shown in Table 2-1-2, the places in the six categories above, except for parks with substantial people's flow fluctuations, can be divided into the three types: 1) places with decreased people's flow due to the COVID-19 pandemic, 2)

1) When infections surged once again after the second state of emergency was lifted, the Act on Special Measures against Novel Influenza, etc. was partially amended on February 3, 2021, and the Priority Measures for Prevention of Infection Spread were newly implemented. The first issuance was on April 1 for Miyagi Prefecture, Osaka Prefecture, and Hyogo prefectures, and each prefectural government designated the target municipalities and requested that the relevant businesses suspend operations and limit alcohol service hours.

Table 2-1-2 Place categories and target places

Category	
Retail and recreation	Restaurants, cafes, shopping centers, theme parks, museums, libraries, movie theatres, etc.
Groceries and pharmacies	Grocery stores, food wholesalers, fruit and vegetable markets, luxury grocery stores, drug stores, pharmacies, etc.
Parks	Local parks, national parks, public beaches, marinas, dog parks, plazas, gardens, etc.
Transit stations	Public transportation bases (eg subway, bus, train stations), transfer stations, etc.
Workplaces	Workplaces
Residential	Residences

Source: the Community Mobility Report by Google LLC

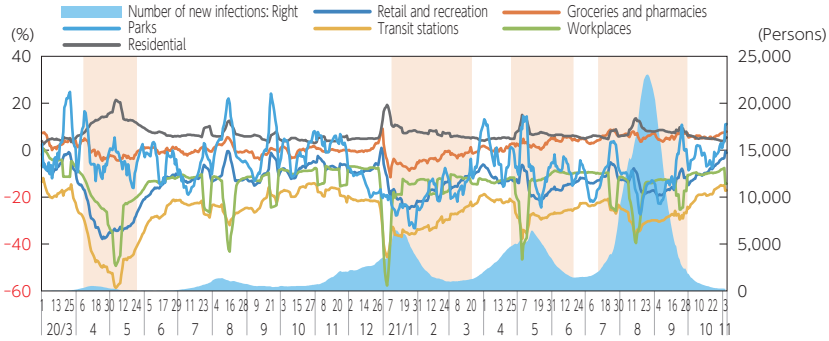

Figure 2-1-2 Changes in the number of new infections and people's flow by purpose

Note: shows seven-day moving average. Shaded areas indicate periods of a state of emergency.
Source: the Community Mobility Report by Google LLC

places with no significant change in people's flow, and 3) places with increased people's flow. Retail and recreation, transit stations, and workplaces fall under type 1), groceries and pharmacies under type 2), and residential under type 3).

Figure 2-1-3 shows the average people's flow trends during each declaration period for the above three types. Looking at this figure, retail and recreation, transit stations, and workplaces categorized as type 1 (places with decreased people's flow) showed a significant drop in people's flow under the first state of emergency, but the decline rate gradually declined during the second and subsequent states of emergency, alongside the diminished effects of restraint on going out as people became accustomed to the pandemic and the states of emergency.

Next, groceries and pharmacies categorized as type 2 (places with no

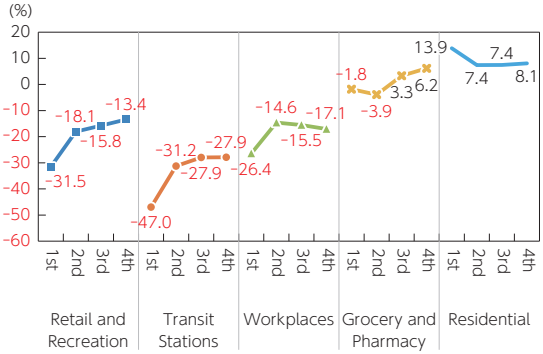

Figure 2-1-3 Changes in people's flow during each state of emergency period

Source: the Community Mobility Report by Google LLC

change) experienced no significant change in people's flow under the first state of emergency, while people's flow decreased under the second state of emergency. It is considered that consumers hoarded medical supplies due to product shortages during the first state of emergency, but since the supply shortages were resolved thereafter to some extent, people refrained from going out during the second period. The effects of the restraint on going out diminished during the third and fourth emergencies.

Lastly, residential categorized as type 3 (people's flow increase) saw an increase in people's flow (length of stay) to places of residence during the first period because people in households refrained from going out. People's flow to places of residence also increased during the second and third periods, but the flow of people's rate was lower compared to in the first period as people started to go out more. The number of new infections hit a record high due to the highly infectious delta variant during the fourth emergency period. Compared to the second and third periods, people's flow to places of residence somewhat increased as people in households refrained from going out, fearing the risk of infection.

Summarizing the above, it can be said that the effects of refraining from going out were generally large during the first state of emergency, but the effects gradually diminished from the second state of emergency onwards.

ii) Changes in people's flow by time slot

Next, we will confirm the mobile population by time slot. Figure 2-1-4 and Figure 2-1-5 show the percentage changes in the mobile population by time slot compared to in the same week of 2019 nationwide and in the Kansai region's six

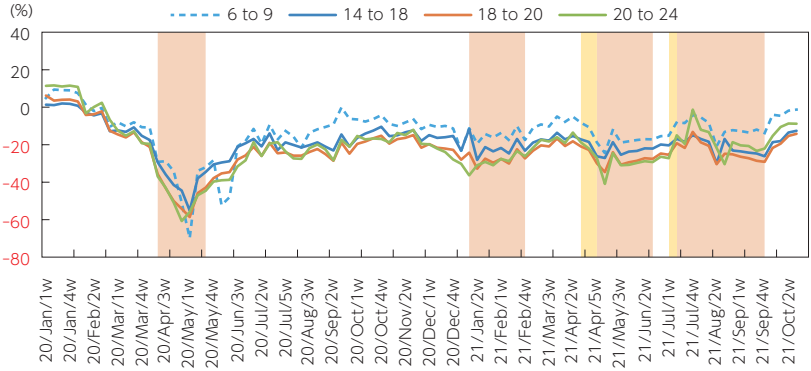

Figure 2-1-4 Changes in the mobile population nationwide by time slots

Note: Orange shaded areas indicate periods of a state of emergency. Yellow shaded areas indicate periods of designated areas for pre-emergency measures.
Source: V-RESAS by Cabinet Office

prefectures.

When looking at nationwide trends in Figure 2-1-4, people's flow was reduced in all time slots under the first state of emergency. On the other hand, during the second state of emergency, although people's flow after 18:00 was reduced, the reduction effect in the early morning and daytime time slots was diminished. This is because as seen in Table 2-1-1, unlike the first declaration when requests to suspend operations were widely made for entertainment facilities, schools, etc., measures under the second state of emergency were mainly to restrict the nighttime operations of restaurants with a high infection risk, while entertainment facilities where a large number of people gather in the daytime were only requested to shorten their business hours. In addition, people's flow between 6:00 and 9:00 (the commuting time slot) also increased from the first declaration, which shows that the people's flow reduction effect was diminished[2)]. In the third declaration, people's flow after 20:00 somewhat decreased compared to the second declaration as a result of the strict restrictions, including requests for restaurants serving alcoholic beverages to suspend operations and requests for facilities such as department stores and theaters to shorten their business hours, but no significant change was seen in other time

2) According to the Worker Awareness Survey by the Japan Productivity Center, the teleworking rate of companies has been declining: 31.5% (May 2020), 20.2% (July 2020), 18.9% (October 2020), 22.0% (January 2021), 19.2% (April 2021), and 20.4% (July 2021). Thus, people's flow reduction effects on companies have diminished.

slots. From late July, people's flow after 20:00 increased compared to during the third state of emergency, and there were concerns about resurgence of infections. In the fourth state of emergency, people's flow gradually decreased due to the measures taken, such as requests to refrain from visiting crowded places in target areas and limits on the number of people permitted at large-scale commercial facilities where clusters (groups of infected people) occurred frequently.

Next, we will check people's flow in the Kansai region's six prefectures (Figure 2-1-5). This figure shows that people's flow decreased in the same way as nationwide people's flow in all time slots during the first state of emergency, but the rate of decline after 18:00 was smaller than the national rate. The same phenomenon was observed during the second state of emergency. During the third state of emergency, people's flow decreased to the same level as national people's flow[3]. After that, the Priority Measures for Prevention of Infection Spread were implemented but the effects were limited, and people's flow increased again. However, in the fourth emergency, people's flow decreased significantly compared to the national level, partly because Osaka Prefecture requested that department stores halve the number of visitors to the basement food floor.

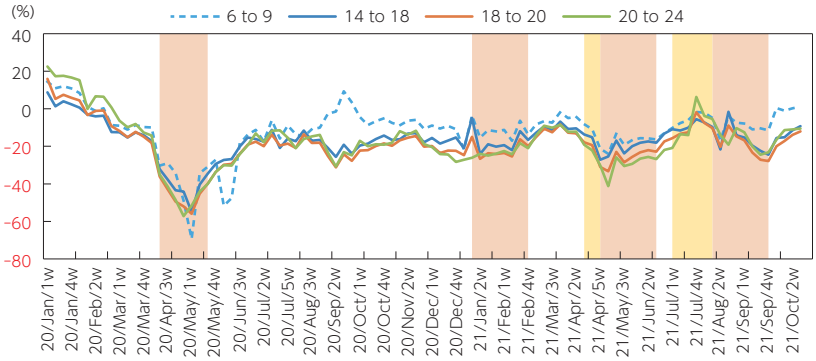

Figure 2-1-5 Changes in the mobile population in the Kansai region's six prefectures

Note: Orange shaded areas indicate periods of a state of emergency. Yellow shaded areas indicate periods of designated areas for pre-emergency measures.
Source: V-RESAS by Cabinet Office

3) The Ministry of Health, Labour and Welfare's COVID-19 Advisory Board Data Analysis Team (2021) reported that in Osaka Prefecture, the second state of emergency and priority measures did not reduce the de-facto population, but the third state of emergency contributed to the reduction in the de-facto population in all time slots. In addition, Komaki (2021) showed that during the third state of emergency, the effects of the restraint on going out were higher in metropolitan areas where stronger requests were made.

3. Declarations of a state of emergency and household consumption

As seen in Figure 2-1-1, changes in people's flow to commercial facilities, such as retail and recreation and groceries and pharmacies, are closely related to people's consumption trends. Next, we will discuss changes in household consumption and characteristic expenditure items by dividing the COVID-19 pandemic period into three phases—the initial outbreak and the declaration of a state of emergency period (January–June 2020), the recovery period after hitting bottom (July–December 2020), and the resurgence period (January–September 2021)—based on the daily household consumption data from the Family Income and Expenditure Survey by the MIC, while taking into account the analysis of the people's flow data in the preceding subsection (Figure 2-1-6, Figure 2-1-7)[4].

(1) The initial outbreak and the declaration of a state of emergency period: January–June 2020

Looking at Figure 2-1-6, we see that in March 2020 when the number of new infections of COVID-19 increased, services expenditure, such as on food (mainly dining out) and package tours, decreased significantly because many people started to stay at home (decrease in face-to-face services expenditure). Expendi-

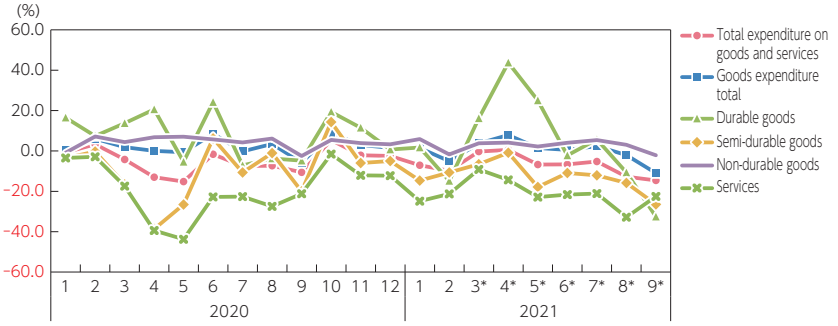

Figure 2-1-6 Changes in expenditures by category (nationwide)

Note: *relative to the same period of 2019.
Source: the Family Income and Expenditure Survey by MIC

4) Consumption expenditures in the Family Income and Expenditure Survey include pocket money (of which, the detailed uses are unknown), social expenses, and remittance. The analysis here was made based on expenditures on goods and services excluding these items.

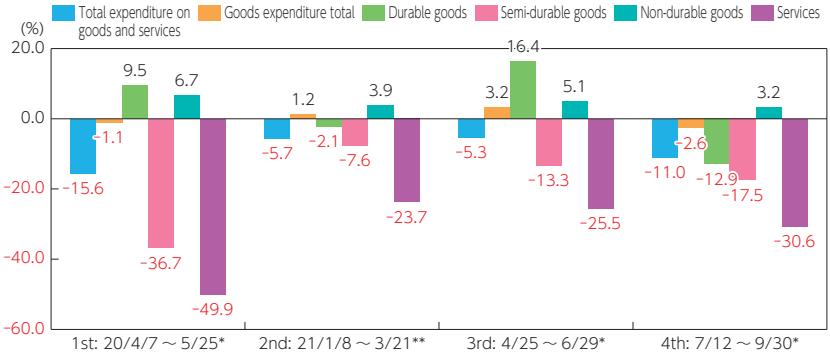

Figure 2-1-7 Changes in expenditures by category during the periods of the declarations of a state of emergency (nationwide)

Note: *relative to the same period of 2019. **relative to 2020/1/8-2/28, 19/3/1-21.
Source: the Family Income and Expenditure Survey by MIC

ture on semi-durable goods such as clothes also decreased. On the other hand, due to rising demand from people staying at home, expenditure on durable goods such as game consoles and software increased.

Goods and services expenditures decreased by 15.6% year-on-year since the first declaration of a state of emergency on April 7 (Figure 2-1-7). While goods expenditure showed only a slight decrease by 1.1% year-on-year, services expenditure significantly dropped by 49.9% year-on-year. Expenditure on non-durable goods increased by 6.7% year-on-year due to an increase in demand for home-cooked meals, but expenditure on semi-durable goods, consisting mainly of non-essential items such as clothes, significantly decreased by 36.7% year-on-year. Also, a noteworthy characteristic is that expenditure on durable goods such as TVs and personal computers increased by 9.5% year-on-year due to increased demand from people staying at home and teleworking.

In June, the rate of decline of goods and services expenditures decreased. This can be attributed to the normalization of economic activities following the lifting of the declaration of a state of emergency on May 25 nationwide and the pent-up demand generated by special cash payments and the last-minute demand before the expiry of the cashless consumer return project that boosted consumption. When looking at expenditures by item, a characteristic is that expenditure on durable goods increased significantly due to the provision of special cash payments.

(2) Recovery period from the bottom: July–December 2020

Next, we confirm the amount of expenditure on goods and services for July–De-

cember 2020 (Figure 2-1-6). This period is positioned as the recovery period after the first state of emergency.

In July, the decline rate of household consumption increased from the previous month due to the end of the pent-up demand generated by special cash payments and the reactionary decline in demand following the expiry of the cashless consumer return project. In August, the decline rate of services expenditure, such as recreation and dining out, slightly increased from the previous month due to people's restraint on going out amid an increase in the number of new infection cases (the second wave of infections).

It is difficult to judge the results for September and October because there was last-minute demand in September 2019 prior to the consumption tax hike and a reactionary decline in October 2019. Looking at Figure 2-1-2 above, it seems that people's flow recovered with the improvement in the infection situation, which somewhat mitigated the consumption decline. Also, thanks to the policy support, such as the Go To Campaign project, services expenditure, whose recovery was delayed compared to goods expenditure, showed some signs of picking-up[5].

Since mid-November, semi-durable goods and services expenditures declined due to people's restraint on going out with the resurgence of infections. The decline rate of services expenditure increased in December.

(3) Resurgence period: January–September 2021

Finally, we will look at the consumption trends from January to September 2021 (Figure 2-1-6).

In January, services expenditure decreased, impacted by the shortened business hours due to the reissue of the state of emergency and the suspension of the Go To Travel Campaign. Although still under the state of emergency, in February people's flow increased as the number of new infections decreased. Although the impact of restraint on going out seemed to have been mitigated, the decline rate of consumption was larger compared to in February 2020 that had one more day as it was a leap year.

The data for March and subsequent months were compared to the data of two years ago when there was no negative impact of COVID-19. The decline rate in services expenditure was mitigated in March and April with an increase in people's flow, but the decline became larger again in May and June due to the declaration of the third state of emergency on April 25. Goods consumption

5) According to the Additional Table for MIC's Family Income and Expenditure Survey, hotel charges in October 2020 increased by 31.8% year-on-year.

showed a relative recovery, but service consumption remained weak, as it faced strong downward pressure due to the fourth declaration of a state of emergency on July 12.

We will also look at the trends in goods and services consumption expenditures during the three state of emergency periods (Figure 2-1-7). Total goods and services expenditure decreased by -15.6% year on year during the first state of emergency, but the impact remained relatively minor at -5.7% during the second and -5.3% during the third state of emergency. Then during the fourth state of emergency when the number of infections increased sharply, the decline rate of total goods and services expenditure increased to -11.0%. Services expenditure recorded a large decline of -30.6%, though not as large as during the first state of emergency.

4. Estimating economic losses caused by the declarations of a state of emergency

In the previous subsection, we estimated the impacts of the states of emergency on household consumption based on daily data. During this period, households were forced to reduce non-essential consumption among their consumption expenditure items by refraining from going out, etc. In this subsection, we will look at the calculations of the impacts on household consumption in each prefecture in the Kansai region caused by the declarations of a state of emergency by focusing on non-essential consumption.

Below, we will first confirm the declines in household consumption during the two state of emergency periods based on the non-essential consumption decline estimation flow in Inada, Kinoshita, and Nomura (2021). Then, based on that information, the levels of consumption decline in each prefecture in Kansai will be estimated.

(1) Consumption decline estimation flow

As described in Figure 2-1-8 Non-essential consumption decline estimation flow, the ultimate decline in non-essential consumption is estimated by multiplying the base household consumption as the benchmark by the three parameters of (1) non-essential consumption ratio, (2) decline rate, and (3) period[6]. These three parameters are explained below.

6) See Inada, Kinoshita, and Nomura (2021) for detailed estimation methods.

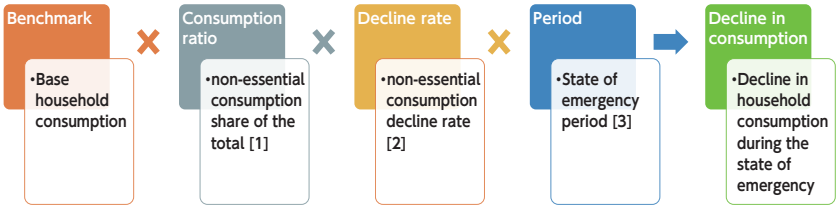

Figure 2-1-8 Non-essential consumption decline estimation flow

Source: Compiled by the author.

(2) Non-essential consumption and parameter explanations

The Family Income and Expenditure Survey by the MIC classifies expenditure items into basic expenditures and selective expenditures[7]. Under the states of emergency, it is assumed households reduce non-essential consumption among their selective expenditures.

The share of non-essential consumption (full year 2019) to the total goods and services expenditure (the first parameter) was 29.3%. The point to focus on here is how much non-essential consumption, which accounts for less than 30% of household consumption expenditure, was actually reduced by the declaration of a state of emergency.

Table 2-1-3 shows the decline rates of non-essential household consumption (the second parameter) from the daily data of consumption expenditure from the Family Income and Expenditure Survey.

The total decline rate during the first state of emergency was -41.1%, but the decline rates were very high for some items, such as public services (-91.8%), entertainment (-73.1%), and dining out (-68.0%). While semi-durable goods also showed a decline of about 40%, expenses for durable goods increased (+9.4%) probably due to demand from people staying at home. During the second state of emergency, the total decline was -19.7%, a reduction by half from the first time. Above all, expenditure on durable goods turned to a decline, which is consistent with the people's flow trends (residential) (see Figure 2-1-3 above).

Finally, the state of emergency periods as the third parameter assume people in the three prefectures in the Kansai region, and the estimations were made for the first period of 44 days from April 7 to May 21, 2020, and the second period

7) Basic expenditures here are regarded as daily necessities, mainly including food, rent, utilities, and health and medical services. Selective expenditures are regarded as expenditures on luxury goods, including household appliances, durable goods for education and recreation, clothing, monthly fees, etc.

Table 2-1-3 Non-essential consumption decline rate comparison

(Unit: JPY, %)

Item	Item of expense	First SoE (20/4/7～5/25)		Second SoE (21/1/8～3/21)	
		Expenditure	YoY change	Expenditure	YoY change
Durable goods	Cars, household electric appliances, furniture, etc.	18,574	9.4	30,937	-2.1
Semi-durable goods	Clothes, bags, jewelry, etc.	17,983	-41.3	37,161	-11.2
Non-durable goods	Food, consumables, etc.	10,013	-3.4	13,592	-1.1
Public services	Rail fares, highway fares, etc.	392	-91.8	1,890	-65.4
Dining out	Dining out	6,247	-68.0	15,642	-39.5
Entertainment	Travel fees, facility admission materials, monthly fees, etc.	5,972	-73.1	14,733	-41.8
Others	Parking fees, rent-a-car fees, etc.	6,081	-5.1	9,927	-5.3
Total		65,263	-41.1	123,882	-19.7

Source: Estimated by the author.

of 45 days from January 14 to February 28, 2021.

The benchmarks for the consumption decline estimations are nominal private household final consumption expenditures for FY 2019 in Kansai taken from Prefectural Economic Calculations (Cabinet Office). Since the FY 2018 figures are the most recent, advanced estimations of real gross regional products (GRP) in Kansai prefectures by APIR were used to estimate the FY 2019 nominal private household final consumption expenditures[8)].

(3) Consumption decline estimations in Kansai

Based on the three parameters examined above and the benchmark household consumption expenditures, household consumption declines in the Kansai region's six prefectures during the two states of emergency were estimated (Table 2-1-4).

The household consumption decline in the Kansai region's six prefectures due to the first state of emergency was JPY 714 billion and the ratio relative to nominal GRP was 0.9%. The household consumption decline due to the second state of emergency is estimated to be JPY 350 billion and the ratio relative to nominal GRP 0.4%.

8) See Section 4 in this chapter for advanced estimations for the Kansai prefectures.

Table 2-1-4 Consumption decline due to the state of emergency

(Unit: JPY 100 million, %)

Period	Item	Osaka	Hyogo	Kyoto	Kansai (3 pref.)	Shiga	Nara	Wakayama	Kansai (6 pref.)
First SoE (20/4/7 ~5/21)	Consumption decline	3,193	1,877	888	5,959	455	450	276	7,140
	Composition ratio	44.7	26.3	12.4	83.5	6.4	6.3	3.9	100.0
	Relative to nominal GRP (FY2020)	0.8	0.9	0.9	0.9	0.7	1.2	0.8	0.9
Second SoE (21/1/14 ~2/28)	Consumption decline	1,565	920	435	2,921	223	221	135	3,500
	Composition ratio	44.7	26.3	12.4	83.5	6.4	6.3	3.9	100.0
	Relative to nominal GRP (FY2020)	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.4

Note: nominal GRP for FY2020-estimations by APIR
Source: based on Prefectural Economic Calculations (Cabinet Office) & KEIQNo.54(APIR)

5. The Go To Campaign and household consumption

In Japan, the number of new COVID-19 infections increased from March 2020, and the movement to refrain from going out spread, which reduced household consumption. In particular, the first state of emergency had the most serious impact on expenditure on recreational services, including accommodation and package tour fees. Therefore, the government implemented the Go To Campaign project in late July with the aim of supporting the travel, tourism, event, entertainment, restaurant, and other related industries, whose sales had dropped sharply due to the COVID-19 pandemic[9].

In this subsection, we will confirm expenditures for major expense items related to the Go To Travel Campaign that is part of the Go To Campaign project. Since the economic spillover effects of the Go To Travel Campaign are discussed in Chapter 4, Section 5, the main expense items from the Family Income and Expenditure Survey by the MIC are confirmed here.

Figure 2-1-9 shows the year-on-year changes in the total expenditure on goods and services, expenditure on recreational services[10], and travel expenditure consisting of accommodation and domestic package tour fees in the Family Income and Expenditure Survey.

This figure shows that the decreases in recreation services expenditure

9) The contents of the Go To Travel Campaign project are described in detail in Chapter 4, Section 1.
10) Recreational services expenditure includes accommodation and package tour fees, as well as admission fees to cultural establishments and amusement parks.

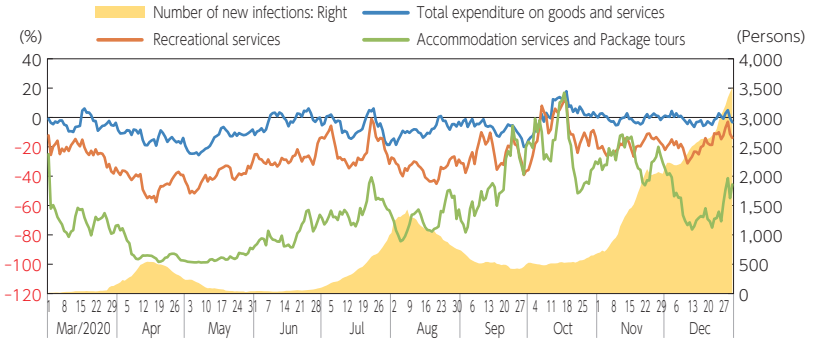

Figure 2-1-9 Number of new infections and Accommodation services and Package tours

Note: shows the seven-day moving average
Source: Open data by MHLW, the Family Income and Expenditure Survey by MIC

and travel expenditure were greater than that of total expenditure on goods and services, but that the rates of decrease gradually declined after the end of July when the Go To Travel Campaign started, and finally turned positive on a year-on-year basis in late October. In the background to this is the fact that from October 1, the Campaign started to cover trips to and from Tokyo and to issue regional common coupons that can be used at travel destinations. Since the Go To Travel Campaign offers a 35% discount on accommodation fees charged by accommodation facilities, a characteristic is that travel expenditure, consisting of accommodation and domestic package tour fees, showed a larger growth rate. After that, the Go To Travel Campaign was suspended due to the increase in the number of new infections. Although the Campaign partially supported service consumption, its effect seems to have been limited except for in the first half of October.

6. Future household consumption

When considering future household consumption trends, the following two points need to be taken into consideration: vaccination status and wage trends.

With regard to the vaccine rollout in Japan, advance vaccinations for medical professionals were started on February 17, 2021, and priority vaccinations for people aged 65 and older were started on April 12, 2021. After that, large-scale vaccination programs in urban areas and occupational vaccination programs accelerated the vaccination speed. As of the time of writing this report in November 17, 2021, Japan had surpassed Canada and reached the highest vaccination rate among the G7 countries of 78.7% for the first dose and 75.5%

for the second dose[11]. Vaccination is expected to increase the people's flow and promote consumption, leading to economic recovery. In particular, consumption expenditures mainly in the consumption of face-to-face services, such as recreation, dining out, accommodation services, and package tours, as well as semi-durable goods, such as clothes, that have been suppressed so far are expected to increase.

On the other hand, possible risk factors include the resurgence of infections (the sixth wave) of COVID-19, wage trends, and rising prices of daily necessities. The spread of infections has placed strong downward pressure on both wages and employment, especially for women working in face-to-face services or irregular jobs, leading to a severe household income environment. As described in Section 2 of this chapter, corporate performance is recovering mainly in the manufacturing industries, but it continues to deteriorate in the non-manufacturing industries. In the 2021 spring wage negotiations, many companies decided not to raise basic wages due to the deterioration of corporate performance in the previous year. Although companies with improved business performance are expected to raise basic wages, it may be difficult for companies and industries with poor business performance to do so. If the pace of wage increases slows, the pace of recovery of individual consumption will remain modest. In the current environment where prices of daily necessities such as gasoline keep on rising while wage increases are delayed, there is a concern that cost-push inflation will spread and adversely affect the purchasing power of households.

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