

Section 5

IMPACT OF THE COVID-19 PANDEMIC ON TOURISM INDUSTRY AND THE EFFECT OF POLICIES TO GENERATE DEMAND

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1. Impact of the COVID-19 Pandemic on Tourism Consumption

In this section, we will conduct an input-output analysis of the COVID-19 pandemic, which impacted the tourism industry significantly in 2020. In particular, we will analyze not only the negative impact on consumption by foreigners visiting Japan and domestic tourism consumption, but also the effect of the Go To Campaign as an economic policy.

Total tourism consumption mainly consists of three items (a) Japanese domestic travel consumption, (b) Japanese international travel consumption (domestic consumption), and (c) travel consumption by foreigners visiting Japan. Table 4-5-1 outlines the impact of the COVID-19 pandemic on tourism consumption assumed in this section.

Table 4-5-1

Impact of travel consumption by COVID-19

	(JPY trillion)		
	2019	2020	19-20
(a) Japanese Domestic travel	21.9	10.0	-11.9
(b) Japanese International travel(domestic consumption)	1.2	0.3	-0.9
(c) Consumption expenditure of foreigners	4.8	0.7	-4.1
(d) Driving consumer demand by "Go to Travel Campaign"		1.1	1.1
The impact of declining by COVID-19=(a-d)+b+c			-18.0

Source: Travel and Tourism Consumption Trend Survey and Survey on the consumption trends of foreign visitors by Japan Tourism Agency

In 2020, with the flow of people suppressed due to the declaration of a state of emergency, (a) Japanese domestic travel consumption (overnight/one-day total) was approximately JPY 10.0 trillion, a significant decrease of JPY 11.9 trillion compared to the previous year when the COVID-19 pandemic had no impact. Next, (b) Japanese international travel consumption (domestic consumption) was JPY 0.3 trillion in 2020, dropping JPY 0.9 trillion from JPY 1.2 trillion in the previous year due to countries imposing entry restrictions. (c) Travel consumption by foreigners visiting Japan was JPY 0.7 trillion in 2020, decreasing JPY

4.1 trillion from JPY 4.8 trillion in the previous year due to entry restrictions imposed by the Japanese government.

The government was by no means being a bystander under these circumstances. It implemented the Go To Campaign project in late July as a demand stimulus plan to recover the lost domestic travel demand and local tourism-related consumption, while thoroughly implementing measures to prevent the spread of infection¹⁾. According to the Japan Tourism Agency’s “White Paper on Tourism in Japan, 2021,” the Go To Travel project applies between July 22 and December 28 (checkout by this date), and the discount on accommodation and travel costs was estimated at approximately JPY 408.2 billion. Since the Go To Travel project gives a 35% discount on accommodation costs at accommodation facilities, by calculating back from the discount (JPY 408.2 billion), we can assume that the demand generated was around JPY 1.1 trillion (see [Table 4-5-1](#)).

However, the (a) Japanese domestic travel consumption for 2020 includes the effect of the Go To Travel project. The impact of the COVID-19 pandemic on tourism consumption without the policy is, (a) Japanese domestic travel consumption minus (d) demand stimulated by Go To Travel project plus (b) Japanese international travel consumption (domestic consumption) and (c) travel consumption by foreigners visiting Japan, or $(a - d) + b + c$. In this section, we will analyze the economic ripple effect of the COVID-19 pandemic on the tourism industry, focusing on three key items (a), (c), and (d) as the impact of COVID-19, using input-output tables (2017 Extended Input-Output Tables and 2015 Regional Input-Output Table).

2. Estimation of Tourism Consumption Final Demand

In this subsection, we will estimate the tourism consumption by expense item (final demand) before performing an input-output analysis of (a) Japanese domestic travel consumption, (c) travel consumption by foreigners visiting Japan, and (d) demand stimulated by Go To Travel project impacted by the COVID-19 pandemic.

[Table 4-5-2](#) prorates domestic travel consumption nationwide and in three Kansai prefectures by expense item based on the national tourism consumption by expense item in the 2020 Travel and Tourism Consumption Trend Survey by Japan Tourism Agency.

For the nationwide travel consumption by foreigners visiting Japan in 2020, the total was allocated based on expenditure pattern by expense item in 2019.

1) See Chapter 4 Section 1 of this book for details on the Go To Travel project.

Table 4-5-2 Impact of the COVID-19 pandemic on tourism consumption

[Declining of domestic tourism expenditure]

(JPY 100million)

	Tourism expenditure	Spending						
		Package tour	Accommodation	Restaurant, fast food, café etc.	Transport	Service costs, including entertainment	Shopping	Other
Nationwide	-107,911	-7,908	-22,767	-17,136	-34,358	-7,210	-17,746	-787
Kyoto	-6,693	-947	-1,255	-1,470	-1,315	-381	-1,262	-63
Osaka	-8,187	-559	-1,546	-1,697	-1,466	-1,054	-1,822	-42
Hyogo	-7,286	-439	-1,653	-1,425	-1,527	-702	-1,505	-34

[Declining of Inbound tourism expenditure]

(JPY 100million)

	Tourism expenditure	Spending						
		Package tour	Accommodation	Restaurant, fast food, café etc.	Transport	Service costs, including entertainment	Shopping	Other
Nationwide	-40,689	-	-11,946	-8,789	-4,215	-1,613	-14,108	-19

[Go to Travel Campaign]

(JPY 100million)

	Tourism expenditure	Spending						
		Package tour	Accommodation	Restaurant, fast food, café etc.	Transport	Service costs, including entertainment	Shopping	Other
Nationwide	11,663	855	2,461	1,852	3,713	779	1,918	85
Kyoto	723	102	136	159	142	41	136	7
Osaka	885	60	167	183	158	114	197	5
Hyogo	787	47	179	154	165	76	163	4

Note: "Domestic travel consumption" includes income at the destination which is included in group/package tour fares. "Travel consumption" by prefecture does not include inter-prefectural transportation costs.
Source: Travel and Tourism Consumption Trend Survey and Survey on the consumption trends of foreign visitors by Japan Tourism Agency

Additionally, we excluded the three Kansai prefectures, since regional information for 2020 is not available.

3. COVID-19 Pandemic and the Effect of Measures to Generate Demand

In this subsection, we estimate the economic ripple effect nationwide (Table 4-5-3) and in the three Kansai prefectures (Table 4-5-4) based on the tourism consumption final demand presented in the previous subsection. Since it is difficult to grasp the tourism consumption pattern of foreigners visiting Japan in each region, we limit the analysis to declining of Japanese domestic travel con-

Table 4-5-3 The economic ripple effect of spending by tourists (Nationwide)

[Declining of domestic tourism expenditure]

(JPY 100million, persons)

	Direct effect	Total	Primary ripple effect	Secondary ripple effect
Production	-104,690	-217,517	-180,866	-36,652
Value added	-52,998	-114,697	-92,877	-21,820
Employment	-1,066,231	-1,872,447	-1,609,327	-263,120

[Declining of Inbound tourism expenditure]

(JPY 100million, persons)

	Direct effect	Total	Primary ripple effect	Secondary ripple effect
Production	-40,689	-88,411	-73,699	-14,712
Value added	-18,788	-44,200	-35,442	-8,758
Employment	-491,877	-843,937	-738,321	-105,615

[Go to Travel Campaign]

(JPY 100million, persons)

	Direct effect	Total	Primary ripple effect	Secondary ripple effect
Production	11,315	23,509	19,548	3,961
Value added	5,728	12,396	10,038	2,358
Employment	115,236	202,371	173,933	28,438

Source: Estimations by the author

Table 4-5-4 The economic ripple effect of spending by tourists (Kyoto, Osaka, Hyogo)

■ Kyoto ■

[Declining of domestic tourism expenditure]

(JPY 100million, persons)

	Direct effect	Total	Primary ripple effect	Secondary ripple effect
Production	-4,976	-7,893	-6,600	-1,293
Value added	-2,614	-4,281	-3,413	-869
Employment	-79,585	-100,635	-90,719	-9,916

[Go to Travel Campaign]

(JPY 100million, persons)

	Direct effect	Total	Primary ripple effect	Secondary ripple effect
Production	538	853	713	140
Value added	283	463	369	94
Employment	8,601	10,876	9,805	1,072

■ Osaka ■

[Declining of domestic tourism expenditure]

(JPY 100million, persons)

	Direct effect	Total	Primary ripple effect	Secondary ripple effect
Production	-6,328	-9,666	-8,292	-1,374
Value added	-3,581	-5,598	-4,690	-908
Employment	-67,078	-87,934	-78,768	-9,166

[Go to Travel Campaign]

(JPY 100million, persons)

	Direct effect	Total	Primary ripple effect	Secondary ripple effect
Production	684	1,045	896	149
Value added	387	605	507	98
Employment	7,250	9,504	8,513	991

■ Hyogo ■

[Declining of domestic tourism expenditure]

(JPY 100million, persons)

	Direct effect	Total	Primary ripple effect	Secondary ripple effect
Production	-5,351	-8,502	-6,903	-1,599
Value added	-2,919	-4,735	-3,740	-995
Employment	-52,366	-72,722	-61,716	-11,005

[Go to Travel Campaign]

(JPY 100million, persons)

	Direct effect	Total	Primary ripple effect	Secondary ripple effect
Production	578	919	746	173
Value added	315	512	404	108
Employment	5,660	7,860	6,670	1,189

Source: Estimations by the author

sumption and the effect of the Go To Travel project. Additionally, for the three Kansai prefectures, we look at the impact of the declining of Japanese domestic travel consumption (Table 4-5-5) and effect analysis of the Go To Travel project (Table 4-5-6) by industry.

Table 4-5-5

The economic ripple effect by Declining of domestic tourism expenditure (by sector)

[Declining of domestic tourism expenditure]

(JPY 100 million, persons)

Industries	[Kyoto]			[Osaka]			[Hyogo]		
	Production	Value added	Employment	Production	Value added	Employment	Production	Value added	Employment
Agriculture, forestry and fisheries	-50	-24	-347	-21	-13	-635	-89	-48	-435
Mining	-0	-0	0	-0	-0	-0	0	0	0
Manufacturing	-609	-255	-3,411	-404	-169	-1,967	-662	-228	-2,787
Construction	-33	-15	-327	-40	-18	-266	-23	-10	-154
Electricity, gas, heat supply and water	-472	-166	-534	-277	-113	-314	-338	-117	-289
Commerce	-542	-378	-7,838	-1,144	-804	-11,827	-437	-299	-6,406
Finance and insurance	-179	-124	-1,205	-237	-163	-1,418	-174	-117	-760
Real estate	-378	-331	-1,135	-429	-355	-638	-423	-358	-575
Transport and postal activities	-1,262	-840	-10,120	-1,467	-1,001	-11,843	-1,389	-1,002	-11,324
Information and communications	-134	-68	-284	-186	-96	-514	-104	-54	-300
Government, except elsewhere classified	-13	-10	-99	-18	-12	-85	-12	-8	-63
Services	-4,186	-2,056	-75,328	-5,403	-2,841	-58,419	-4,822	-2,479	-49,622
Industries unable to classify	-35	-15	-7	-39	-15	-8	-30	-13	-7
Total	-7,893	-4,281	-100,635	-9,666	-5,598	-87,934	-8,502	-4,735	-72,722

Source: Estimations by the author

Table 4-5-6

The economic ripple effect by "Go to Travel Campaign" (by sector)

[Go to Travel Campaign]

(JPY 100 million, persons)

Industries	[Kyoto]			[Osaka]			[Hyogo]		
	Production	Value added	Employment	Production	Value added	Employment	Production	Value added	Employment
Agriculture, forestry and fisheries	5	3	38	2	1	69	10	5	47
Mining	0	0	0	0	0	0	-0	-0	0
Manufacturing	66	28	369	44	18	213	72	25	301
Construction	4	2	35	4	2	29	3	1	17
Electricity, gas, heat supply and water	51	18	58	30	12	34	37	13	31
Commerce	59	41	847	124	87	1,278	47	32	692
Finance and insurance	19	13	130	26	18	153	19	13	82
Real estate	41	36	123	46	38	69	46	39	62
Transport and postal activities	136	91	1,094	159	108	1,280	150	108	1,224
Information and communications	14	7	31	20	10	56	11	6	32
Government, except elsewhere classified	1	1	11	2	1	9	1	1	7
Services	452	222	8,141	584	307	6,314	521	268	5,363
Industries unable to classify	4	2	1	4	2	1	3	1	1
Total	853	463	10,876	1,045	605	9,504	919	512	7,860

Source: Estimations by the author

(1) Impact Nationwide

Using the national input-output tables, we examine the impact of the three cases by sorting them into direct effect and ripple effect.

The direct effect of the declining of Japanese domestic travel consumption was JPY -10.469 trillion in induced production value, JPY -5.2998 trillion in induced value added, and -1,066,231 in employment inducement. Looking at the ripple effect (total of primary and secondary ripple effects), induced production value was JPY -21.7517 trillion, induced value added was JPY -11.4697 trillion, and employment inducement was -1,872,447 persons.

The direct impact of the declining of travel consumption by foreigners visiting Japan was JPY -4.0689 trillion in induced production value, JPY -1.8788 trillion in induced value added, and -491,877 persons in employment inducement. Looking at the ripple effect, induced production value was JPY -8.8411 trillion, induced value added was JPY -4.42 trillion, and employment inducement was -843,937 persons.

Meanwhile, the direct impact of the Go To Travel project was JPY 1.1315 trillion in induced production value, JPY 572.8 billion in induced value added, and 115,236 persons in employment inducement. Looking at the ripple effect, induced production value was JPY 2.3509 trillion, induced value added was JPY 1.2396 trillion, and employment inducement was 202,371 persons.

We looked at how much of the negative impact of the declining of Japanese domestic travel consumption and travel consumption by foreigners visiting Japan was mitigated by the economic policy (Go To Travel project). In terms of the total ripple effect, induced production value was 7.7%, induced value added was 7.8%, and employment inducement was 7.5%. The policy effect was a little under 8%.

(2) Impact in Kansai

Next, we estimate the impact of the declining of Japanese domestic travel consumption and the Go To Travel project using the input-output tables (2015 tables) for Kyoto, Osaka, and Hyogo.

In Kyoto, the direct effect of the declining of Japanese domestic travel consumption was JPY -497.6 billion in induced production value, JPY -261.4 billion in induced value added, and -79,585 in employment inducement. Looking at the ripple effect (total of primary and secondary ripple effects), induced production value was JPY -789.3 billion, induced value added was JPY -428.1 billion, and employment inducement was -100,635 persons. The direct impact of the Go To Travel project was JPY 53.8 billion in induced production value, JPY 28.3 billion in induced value added, and 8,601 in employment inducement. Looking at the

ripple effect, induced production value was JPY 85.3 billion, induced value added was JPY 46.3 billion, and employment inducement was 10,876 persons.

In Osaka, the direct effect of the declining of Japanese domestic travel consumption was JPY -632.8 billion in induced production value, JPY -358.1 billion in induced value added, and -67,078 in employment inducement. Looking at the ripple effect (total of primary and secondary ripple effects), induced production value was JPY -966.6 billion, induced value added was JPY -559.8 billion, and employment inducement was -87,934 persons. The direct impact of the Go To Travel project was JPY 68.4 billion in induced production value, JPY 38.7 billion in induced value added, and 7,250 in employment inducement. Looking at the ripple effect, induced production value was JPY 104.5 billion, induced value added was JPY 60.5 billion, and employment inducement was 9,504 persons.

In Hyogo, the direct effect of the declining of Japanese domestic travel consumption was JPY -535.1 billion in induced production value, JPY -291.9 billion in induced value added, and -52,366 persons in employment inducement. Looking at the ripple effect (total of primary and secondary ripple effects), induced production value was JPY -850.2 billion, induced value added was JPY -473.5 billion, and employment inducement was -72,722 persons. The direct impact of the Go To Travel project was JPY 57.8 billion in induced production value, JPY 31.5 billion in induced value added, and 5,660 persons in employment inducement. Looking at the ripple effect, induced production value was JPY 91.9 billion, induced value added was JPY 51.2 billion, and employment inducement was 7,860 persons.

Looking at how much of the negative impact of the declining of Japanese domestic travel consumption was mitigated by the economic policy (Go To Travel project), in terms of the total ripple effect, all prefectures were around 10.8% for induced production value, induced value added, as well as employment inducement²⁾.

Next, [Table 4-5-5](#) and [Table 4-5-6](#) look at the industrial ripple effect of the declining of Japanese domestic travel consumption and the Go To Travel project in three key Kansai prefectures. We narrowed down to three industries with the highest impact in employment inducement in each prefecture and focused on the decrease and share (value in parentheses below).

By prefecture, in Kyoto, in the case of the declining of Japanese domestic

2) As shown earlier, the degree of mitigation of the declining of Japanese domestic travel consumption and travel consumption by foreigners visiting Japan by the economic policy (Go To Travel project) nationwide was a little under 8%. The degree of mitigation of the declining of Japanese domestic travel consumption by the Go To Travel project was similar to that of the three key Kansai prefectures using the regional input-output table.

travel consumption, Services was -75,328 (74.9%), Transport and postal activities was -10,120 (10.1%), followed by -7,838 (7.8%) in Commerce. In Osaka, in the case of the declining of Japanese domestic travel consumption, Services was -58,419 (66.4%), Transport and postal activities was -11,843 (13.5%), followed by -11,827 (13.5%) in Commerce. In Hyogo, in the case of the declining of Japanese domestic travel consumption, Services was 49,622 (68.2%), Transport and postal activities was -11,324 (15.6%), followed by -6,406 (8.8%) in Commerce.

Impact on employment reflects the industrial structure of each prefecture. In Kyoto, Services, in Osaka, Commerce, and in Hyogo, Transport and postal activities was impacted more significantly compared to other prefectures. The impact of the Go To Travel project on industries followed a similar pattern and thus, an explanation is omitted.

4. Conclusion

In this section, we analyzed the ripple effect of the declining of tourism consumption and measures to generate demand using the national input-output tables (2017 Extended Tables) and regional input-output tables (2015 tables).

Looking at how much of the total of the decrease in Japanese domestic travel consumption and decrease in travel consumption by foreigners visiting Japan was mitigated by the economic policy (Go To Travel project), in terms of the total ripple effect, induced production value was 7.7%, induced value added was 7.8%, and employment inducement was 7.5%. We can say that the negative impact was mitigated by the government economic policy by a little under 8%.

Next, looking at the impact of the decrease in Japanese domestic travel consumption using the regional input-output tables for Kyoto, Osaka, and Hyogo, by industry, the negative impact was great in the order of Services, Transport and postal activities, and Commerce. In particular, in Kyoto, Services, in Osaka, Commerce, and in Hyogo, Transport and postal activities was impacted more significantly compared to other prefectures. These reflected the industrial structure of each prefecture.