Chapter 5

Toward the Sustainable Development of the Kansai Economy: Taking Advantage of the Osaka-Kansai Expo

Section 1

The Economic Ripple Effects of the Osaka-Kansai Expo: The Economic Impact of the Greater EXPO and Estimates Based on the Latest Data

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Introduction

The purpose of this section is to present an estimate of the economic ripple effects of the Osaka-Kansai Expo based on the latest data and to argue for the importance of turning the Expo into an expanded event, which we call a 'Greater Expo'.

In the past, Expos have been a place to showcase industrial development and technological innovation internationally, but recently they have become a place to propose solutions to issues common to the entire humankind[1)]. For that reason, we believe that the Expo is a unique opportunity to turn around the Kansai economy and, by extension, the Japanese economy, and that there is great historical significance in this[2)].

We would like to emphasize the importance of turning the Expo into an expanded event, which we call a 'Greater Expo'. This is a new concept that was not seen at the 1970 Osaka Expo. The idea of the expansion of the expo refers to an effort to expand the concept of the Expo's theme, time axis, and spatial axis, thereby turning the entire Kansai region into a virtual pavilion, and to develop

1) The theme of the Milan Expo was "Feeding the Planet, Energy for Life," the theme of the Dubai Expo was "Connecting Minds, Creating the Future," and the theme of the Osaka-Kansai Expo is "Designing Future Society for Our Lives".
2) The Kansai economy needs increased investment to turn around, and the Expo can be used as an opportunity to do so. See Inada (2022) for details.

various economic activities, including projects that are difficult to implement in the Expo itself.

The rest of this section is organized as follows: in Subsection 1.1, we present a re-estimation of final demand generated by the Osaka-Kansai Expo based on the latest data; in Subsection 1.2, we present the estimated results of its economic ripple effects (the baseline scenario and the Greater Expo scenario); in Subsection 1.3, we summarize our analysis and its implications.

1. Re-Estimating the Final Demand Generated by the Expo

Final demand generated by Expo can be roughly divided into two categories: (1) Expo-related expenses incurred by organizers and exhibitors (e.g., venue construction costs, operating costs, and related infrastructure), and (2) consumption expenditures by visitors.

(1) Changes in Expo-Related Expenses

Table 5-1-1 is a comparison of our previous estimate[3] of final demand and our current estimate. The current estimate is features the incorporation of municipal expenditures for Expo preparations into venue construction, operating costs, and related infrastructure. The following subsection provides an explanation of the changes in expenditures between the previous year and the current year by major category.

[Construction cost of venue (organizer/exhibitor)[4]]

With regard to construction costs, the total amount for the organizers is JPY 235.0 billion, representing an increase of JPY 50.3 billion from the previous total of JPY 184.7 billion[5]. Among all categories, the increase of JPY 47.6 billion in the cost of pavilion and service facilities (up from JPY 110.3 billion in the previous report) is the most notable. This is due in part to the effects of inflation and rising supply constraints.

The total expenditure of exhibitors was JPY 102.4 billion, representing an increase of JPY 37.4 billion from the previous total of JPY 65.0 billion. The costs associated with pavilion facilities and service facilities have increased by JPY 28.5 billion.

3) See Inada, Irie, Shimoyama, and Nomura (2023) for previous estimates.
4) The following documents were consulted for the figures used for calculating the final demand for construction costs of venue. Organizer: Japan Association for the International Exposition, 2025 (2023a), p. 7; Exhibitor: Deloitte Touche Tohmatsu LLC (2018), p. 11.
5) In addition to the overall construction cost, a contingency fund (JPY 13 billion) is included in the total construction cost of venue (by the organizers).

Table 5-1-1 Comparison of Expo-related project expenses

Unit: JPY 100 million

	Previous assumption	Current assumption	Difference
1-1. Venue construction expenses (organizer)			
Infrastructure development (civil engineering construction, pavement, landscaping, etc.)	130	132	2
Infrastructure development (electricity, water supply and drainage, etc.)	285	278	-7
Parking lot, entrance	171	174	3
Pavilion facilities, service facilities	1,103	1,579	476
Rendering at the venue	50	57	-101
Other (research and design expenses, administrative expenses)	108		
Total	1,847	2,350	503
1-2. Venue construction expenses (exhibitors)			
Pavilion facilities, service facilities	495	779	285
Rendering at the venue	49	77	28
Other (research and design expenses, administrative expenses)	106	167	61
Total	650	1,024	374
2-1. Operating expenses (organizer)			
Planning business, transportation business, etc.	129	143	14
Venue management, administrative personnel expenses, etc.	446	767	321
Expenses to ensure all possible safety precautions in the venue	-	199	199
Advertising, promotion, etc.	83	95	12
Planning, project coordination, etc.	151	155	4
Total	809	1,359	550
2-2. Operating expenses (exhibitors)			
Venue management, administrative personnel expenses, etc.	876	1,248	372
Advertising, promotion, etc.	350	499	149
Planning, project coordination, etc.	234	333	99
Total	1,460	2,080	620
3. Related infrastructure development			
Railroad development, etc. (extension of the subway Chuo Line and expansion of the transportation capacity)	610	47	-563
Road improvements, etc. (widening of Konohana Bridge and Yumemai Bridge, etc.)	250	199	-51
Additional construction costs for south area reclamation	89	21	-68
Other	179	38	-141
Total	1,128	306	-822
4. Municipal expenses for hosting Expo			
Participation Promotion	-	40	40
Fostering momentum, etc.	-	39	39
Expenses incurred in attracting	-	4	4
Events to foster momentum for the Expo, etc.	-	47	47
Events, etc. at the Expo	-	12	12
Foster momentum and improve hospitality by taking advantage of regional characteristics, etc.	-	24	24
Investing in the Future Society	-	4	4
Osaka Healthcare Pavilion Project Cost	-	20	20
Deductible item (free children's expenses)	-	-34	-34
Total	-	156	156
Total final demand for Expo related project expenses	5,894	7,275	1,381

Source: 2025 Japan International Expo Association (2023a and b); Osaka Expo Promotion Bureau (2023); Secretariat of the Headquarters for Promoting International Expositions, Cabinet Office, Ministry of Economy, Trade and Industry, Commerce and Services Group (2023); and Deloitte Touche Tohmatsu LLC (2018).

[Operating expenses (organizer/exhibitor)[6)]]

With regard to operating expenses, the total amount for the organizers is JPY 135.9 billion, representing an increase of JPY 55.0 billion from the previous total of JPY 80.9 billion. In addition, JPY 19.9 billion was allocated for expenses to ensure safety at venues[7)], which was not included in the previous report.

The total amount for exhibitors was JPY 208.0 billion, representing an increase of JPY 62.0 billion from the previous total of JPY 146.0 billion.

[Related infrastructure development]

The total amount of related infrastructure development decreased by JPY 82.2 billion – from JPY 112.8 billion to JPY 30.6 billion. The reason for this significant decrease is that the previous report included all expenses related to infrastructure development, whereas this time, only the project expenses that are incurred in hosting the Expo are included in the total.

[Municipal expenses for hosting Expo]

The recently approved expenditures are municipal expenses related to the hosting of the Expo. The total amount is JPY 15.6 billion, with the majority allocated to projects to be carried out by Osaka Prefecture and the City of Osaka[8)].

The aforementioned items bring the total expenses related to the Expo project to JPY 727.5 billion, an increase of JPY 138.1 billion (23.4%) from the previous total of JPY 589.4 billion.

(2) Changes in Consumption Expenditures by Visitors

Our previous estimate utilized the 2019 average consumption per visitor (before the Covid-19 pandemic). In contrast, the current estimate employs the average expenditure for the January-September period of 2023[9)]. Furthermore, the average spending by Japanese and foreign tourists was divided by the average

6) The following documents were consulted for the figures used for calculating the final demand for operating expenses. Organizer: Japan Association for the International Exposition, 2025 (2023b), "On the Draft Financial Plan (Operating Expenses)," Exhibitor: Deloitte Touche Tohmatsu LLC (2018), p. 11.
7) The Ministry of Economy, Trade and Industry (METI) is bearing the cost of these expenses, which have been newly appropriated in response to the shooting of former Prime Minister Abe and other incidents.
8) In this estimation, only the project costs for Osaka Prefecture and City were included because the exact costs for municipalities other than Osaka Prefecture and City could not be ascertained.
9) The unit price revisions were made using data from 2023 onward, when the impact of the Corona pandemic has subsided and the effects of government and municipal measures to stimulate travel demand have not been included.

number of nights (Japanese: 2.2 nights, foreign tourists: 11.1 nights) and converted to consumption per person per night.

According to the Japan International Expo Association (2020), the total number of visitors to the Osaka-Kansai Expo is expected to be approximately 28.2 million (an average of 154,000 visitors per day). The breakdown of the total number of visitors is as follows: approximately 15.6 million from the Greater Kansai area, approximately 9.1 million from domestic areas outside of Kansai, and approximately 3.5 million from overseas (19,000 visitors per day).

For the purposes of this analysis, it is assumed that visitors from the greater Kansai area will visit the Expo on a day trip, while those from other parts of Japan will spend one night in Kansai. It is further assumed that overseas visitors will stay for three nights and four days.

The Greater Expo scenario posits that an increase in repeat visitors can be achieved by encouraging additional participation in events held in various locations other than the Yumeshima site. We consider two cases: one in which the number of overnight visitors increases (hereinafter referred to as Greater Expo Case 1), and another one in which the number of day-trippers increases in addition (hereinafter referred to as Greater Expo Case 2).

In both Greater Expo Case 1 and Case 2, the number of nights spent by domestic overnight guests is expected to increase from one to two nights, while the number of nights spent by international guests is expected to increase from three to five nights. With regard to the two-night increase for overseas visitors, one night is assumed to be spent in Osaka, while the other night is assumed to be spent in another area, in the same proportion as the extra night spent by domestic visitors[10].

With regard to the increase in spending, we made the following assumptions. For domestic overnight visitors, the accommodation expenses are assumed to increasy by 2 nights, and transportation, food, beverage, and entertainment expenses are assumed increase by the equivalent of an additional 1.5 days. This results in a total of 5 nights of accommodation expenses, and transportation, food,beverage, and entertainment expenses for 4.5 days.

In addition, Case 2 assumes a 20% increase in transportation, food, and beverage, and entertainment service expenditures by day visitors. Based on the experience of the Aichi Expo, approximately 40% of visitors are reported

10) The destinations of domestic overnight visitors and international visitors for extended stays are calculated using the Japan Tourism Agency's "Lodging Travel Statistics Survey" (January-September 2023), using the share of total overnight stays in one prefecture and eight prefectures (excluding Osaka).

to be repeat visitors[11]. It was assumed that the efforts of the Kansai municipalities, namely the pavilionization of the Kansai prefectures, would result in an additional 20% increase in domestic day-trippers visiting areas other than Osaka. Assumptions about the travel patterns of domestic day-trippers in the Kansai region (excluding Osaka) during the January-September period of 2023 were based on the Japan Tourism Agency's "Survey of Travel and Tourism Consumption Trends."

Table 5-1-2 shows our estimate of visitors' consumption expenditures in each prefecture. Total consumer spending is projected to be JPY 891.3 billion in the baseline scenario, representing an increase of JPY 104.7 billion (+13.3%)

Table 5-1-2 Consumption expenditures by visitors (Unit: JPY 100 million)

Previous Estimates

Conventional case

	Domestic day visitor	Domestic overnight visitor	Over-seas	Total
Transportation expenses	1,196	738	198	2,132
Lodging expenses	0	838	562	1,400
Food and drinks expenses	540	404	412	1,356
Shopping expenses	832	357	633	1,822
Entertainment services expenses	777	303	76	1,155
Total	3,344	2,640	1,881	7,866

Greater EXPO case1

	Domestic day visitor	Domestic overnight visitor	Over-seas	Total
Transportation expenses	1,196	1,107	297	2,600
Lodging expenses	0	1,676	937	2,613
Food and drinks expenses	540	606	619	1,765
Shopping expenses	832	357	633	1,822
Entertainment services expenses	777	454	114	1,345
Total	3,344	4,201	2,599	10,144

Greater EXPO case2

	Domestic day visitor	Domestic overnight visitor	Over-seas	Total
Transportation expenses	1,435	1,107	297	2,839
Lodging expenses	0	1,676	937	2,613
Food and drinks expenses	648	606	619	1,873
Shopping expenses	832	357	633	1,822
Entertainment services expenses	932	454	114	1,500
Total	3,847	4,201	2,599	10,646

Current estimate

Conventional case

	Domestic day visitor	Domestic overnight visitor	Over-seas	Total
Transportation expenses	1,214	803	224	2,240
Lodging expenses	0	1,054	681	1,735
Food and drinks expenses	665	495	459	1,619
Shopping expenses	941	421	505	1,867
Entertainment services expenses	964	370	117	1,450
Total	3,784	3,143	1,986	8,913

Greater EXPO case1

	Domestic day visitor	Domestic overnight visitor	Over-seas	Total
Transportation expenses	1,214	1,204	335	2,754
Lodging expenses	0	2,108	1,136	3,243
Food and drinks expenses	665	743	688	2,096
Shopping expenses	941	421	505	1,867
Entertainment services expenses	964	555	175	1,693
Total	3,784	5,031	2,839	11,654

Greater EXPO case1

	Domestic day visitor	Domestic overnight visitor	Over-seas	Total
Transportation expenses	1,457	1,204	335	2,997
Lodging expenses	0	2,108	1,136	3,243
Food and drinks expenses	798	743	688	2,229
Shopping expenses	1,129	421	505	2,056
Entertainment services expenses	1,157	555	175	1,886
Total	4,541	5,031	2,839	12,411

Source: Prepared by the authors

11) For details, see Global Industrial and Social Progress Research Institute (2024).

from our previous estimate. In Greater Expo Case 1, the total consumer spending is estimated to be JPY 1,165.4 billion, representing an increase of JPY 151 billion (+14.9%) from our previous estimate. Finally, in Greater Expo Case 2, the total consumer spending is projected to be JPY 1,241.1 billion, representing an increase of JPY 176.5 billion (+16.6%) from our previous estimate.

2. Re-Estimation of Economic Ripple Effects

We re-calculated the economic ripple effects of the Expo using APIR's Interregional Input-Output Table for Kansai in conjunction with our re-estimation of final demand presented above (see Table 5-1-3).

The induced production is estimated to be JPY 2,745.7 billion in the baseline scenario, JPY 3,238.4 billion in Greater Expo Case 1, and JPY 3,366.7 billion in Greater Expo Case 2. Relative to the baseline scenario, the figures are respectively, JPY 492.7 billion and JPY 621.0 billion higher.

Next, we examine the extent to which induced production in Greater Expo Cases 1 and 2 diverges from the baseline scenario by prefecture. Kyoto Prefecture (JPY 172.1 billion in Case 1, JPY 188.2 billion in Case 2) exhibits the most pronounced increase in both cases, followed by "Other region" (JPY 88.2 billion in Case 1, JPY 104.4 billion in Case 2), and Hyogo Prefecture (JPY 79.3 billion in Case 1, JPY 99.7 billion in Case 2).

Table 5-1-3 Economic ripple effects of Osaka-Kansai Expo by prefecture: Total effects (Unit:JPY 100 million)

	Conventional Expo	Greater Expo case 1	Greater Expo case 2	Greater Expo case 1-Conventional	Greater Expo case 2-Conventional	Greater Expo case 1-case 2	Conventional Expo share	Greater Expo case 1 share	Greater Expo case 2 share
Fukui pref.	78	278	359	199	280	81	0.3	0.9	1.1
Mie pref.	359	719	865	360	506	146	1.3	2.2	2.6
Shiga pref.	201	452	535	251	334	83	0.7	1.4	1.6
Kyoto pref.	242	1,963	2,124	1,721	1,882	161	0.9	6.1	6.3
Osaka pref.	20,621	20,874	21,069	254	448	194	**75.1**	**64.5**	**62.6**
Hyogo pref.	722	1,515	1,719	793	997	204	2.6	4.7	5.1
Nara pref.	76	165	246	88	170	81	0.3	0.5	0.7
Wakayama pref.	192	385	436	193	244	51	0.7	1.2	1.3
Tottori pref.	32	156	193	125	161	37	0.1	0.5	0.6
Tokushima pref.	89	210	232	121	142	22	0.3	0.6	0.7
Other region	4,846	5,668	5,889	822	1,044	221	17.6	17.5	17.5
Total	27,457	32,384	33,667	**4,927**	**6,210**	**1,283**	100.0	100.0	100.0

Source: Prepared by the authors

The distribution of economic ripple effects by region reveals that the share of Osaka Prefecture declines from 75.1% in the baseline scenario to 62.6% in Greater Expo Case 2, while the shares of other prefectures increase. The results of this estimation indicate that the economic ripple effect can be significantly enhanced if appealing content for tourists in various locations throughout the Kansai region is developed.

3. Summary and Implications

This section presented our estimates of final demand generated by the Expo, as well as its economic ripple effects based on the APIR's Regional Input-Output Table[12] for Kansai. The induced production amount is JPY 2,745.7 billion in the baseline scenario, which assumes that the Expo will take place only at the Yumeshima site. In the Greater Expo Case 1, the induced production amount is JPY 3,238.4 billion, which assumes an increased number of nights by visitors related to events outside the Yumeshima site. Finally, in the Greater Expo Case 2, the induced production amount is JPY 3,366.7 billion. Case 2 assumes an increase in repeat visitors. These amounts are respectively 15.6% (JPY 369.8 billion), 16.2% (JPY 450.9 billion), and 16.8% (JPY 484.9 billion) higher than our previous forecast.

The obtained estimates are based on calculations of how much demand will be generated in various industries under the current industrial structure, both directly and indirectly. It should be noted, however, that the economic ripple effects obtained from the input-output analysis are based on the assumption that there are no supply constraints. However, in 2024, the possibility of problems that could create bottlenecks for the construction of the Expo site is still being discussed. Consequently, our estimates should be taken as approximate.

In order for our estimates to turn into reality, it is essential to alleviate supply constraints. To this end, the use of DX (e.g., "MaaS" in the construction and transportation industries) will be crucial, and this will enhance Japan's potential growth rate. In this estimation, the economic ripple effects are calculated separately for Expo-related demand (construction costs, operating costs, and municipal expenses for hosting the Expo) and consumption expenditures. With regard to the former, it is of the utmost importance to alleviate supply

12) In the case of an inter-regional input-output table for each prefecture alone, industries with low self-sufficiency rates have large leakages, suppressing direct effects, but the "inter-regional input-output table" is characterized by the fact that all (domestic) demand is captured as demand in one of the regions, allowing a more accurate grasp of spillover effects.

constraints. With regard to the latter, it is of the utmost importance to refine the travel content tied to the Expo in order to attract overseas travelers to the Expo.

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