An effective methodology to measure tourism at different sub-national levels*

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Introduction

In the field of tourism statistics, following the standards set by the UNWTO in the "International Recommendations for Tourism Statistics 2008" (IRTS2008), national-level statistics in many countries has been developed in order to grasp behavior of visitors who undertake travel for less than one year outside of their usual environment.

However, there are no international standards similar to the IRTS2008 for sub-national levels (e.g. state, prefecture), despite studies being carried out at these levels by statistics organizations in individual countries and by international bodies, such as the UNWTO and the OECD. One reason for this may be the way in which sub-national level tourism statistics differ from regional statistics in any other fields, being based on an area of expenditure (i.e. destination area) rather than on the area of residence. Thus, while national level statistics are developed and made public in many developed countries, sub-national level statistics are not often available.[1]

Various methods have been examined with the intention of creating publicly available statistics at sub-national levels in Japan. Here, we show such methods examined mainly by the Japan Tourism Agency (JTA), several universities, and private research bodies.

1. Compilation methods at sub-national levels

Japan comprises numerous sub-national levels, such as blocks (made up of several prefectures), prefectures, and municipalities. Here, we discuss the selection and use of compilation methods for sub-national levels, considering the advantages and disadvantages of demand-side statistics and supply-side ones. Note that in tourism statistics, as previously stated, regional tabulations are compiled based on the places where people visited and they spent money, rather than where they live. Therefore, the size of a sub-national level should be determined according to the number of visitors, and not physical area. However, because the number of visitors is usually larger in bigger regions, differences in terms of area size are sometimes used for simplicity.

1-1. Advantages and disadvantages of related statistics in Japan

Data for compiling tourism statistics at sub-national levels have been available in Japan since around 2000, because the Japan Tourism Agency (JTA) introduced the "National Tourism Survey," the "Consumption Trend Survey for Foreigners Visiting Japan," and the "Accommodation Survey". Moreover, the Ministry of Internal Affairs and Commerce (MIC) and the Ministry of Economy, Trade, and Industry (METI) began the "Economic Census for Business Activity" in 2012. The "National Tourism Survey" and the "Consumption Trend Survey for Foreigners Visiting Japan" are quarterly surveys that target visitors and their travel trends, including their expenditure and destinations. These data are demand-side statistics, and are used to compile numbers of visitors and amounts of expenditure.

In contrast, the "Accommodation Survey" and the "Economic Census for Business Activity" target establishments and enterprises, and present supply-side statistics. The former is a monthly survey of accommodation facilities, providing details on stays of overnight visitors, but not for day visitors. The "Economic Census for Business Activity" is a census survey of establishments and enterprises and, while it does not include the number of visitors, it provides data on the sales and added value of accommodation businesses involved in tourism, even at the municipality level.

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[1] With the exception of countries such as Australia, the United Kingdom, and New Zealand, statistics at sub-national level are not publicly available.

1-2. Selective use

Given advantages and disadvantages of each statistics aforementioned, we think that different methods should be selected and used, as described below.

Firstly, for blocks and prefectures with many visitors, it is desirable to use the national-level and demand-side statistics of the "National Tourism Survey" and the "Consumption Trend Survey for Foreigners Visiting Japan," which record visitors' destinations and expenditure. In this case, the compilation methods can provide data consistent with statistics at national level. For example, according to the report of Dupeyras & Quinn (2014) in the "13th Global Forum on Tourism Statistics," methods of compiling sub-national level statistics using national statistics can be seen in Australia. In Australia, the National Visitor Survey (NVS) is a telephone questionnaire survey of 120,000 Australian residents per year. Furthermore, a questionnaire survey is conducted on 40,000 foreign visitors, aged 15 years and older per year, at airports as they leave the country. These statistics record total tourism expenditure (national value) for residents and foreign visitors separately. Then, Tourism Research Australia compiles the number of visitors and their expenditure at regional level using a model that estimates these data among regions.[2]

When using national demand-side statistics in this manner, if the scale of the destination area is sufficiently large, an adequate sample size can be guaranteed, and accurate compilations are possible. However, if the area is smaller, it becomes difficult to guarantee an adequate sample size, and the accuracy of the compilations decreases. In Japan, even if the national statistics have an adequate sample size (e.g., 100,000 people), it is difficult to ensure adequate sample sizes for all 1,718 municipalities (as of April 2014), and numerous municipalities can't have sample sizes below 100. Therefore, these statistics are thought to be usable when adequate sample sizes can be guaranteed (or, in regions that have many visitors). Note that similar problems are evident in Australia, where there are accuracy issues in regions that receive few visitors: of the 84 regions in the country, it is reported that expenditure data is statistically valid in 71 regions in the case of domestic visitors, and in only 36 in the case of foreign visitors.

In contrast, for the supply-side statistics, and particularly in the case of the "Economic Census for Business Activity," the data are usable even on a narrower region, without accuracy issues. There are no data on visitor numbers because these are not specialized tourism statistics, but it is possible to compile not only in municipalities but also along with visitors' routes (e.g., railway travel) because the statistics are collected at the street level.

From the above, the selection and use of different compilation methods for sub-national levels, and the features of related statistics in Japan, can be shown in Table 1.

[2] For more detail, see the website of Tourism Research Australia: http://www.tra.gov.au/aboutus/national-visitor-survey.html.

Table 1: Features of related statistics in Japan and effective methods of use

	Demand-side statistics		Supply-side statistics	
Name of survey	JTA "National Tourism Survey"	JTA "Consumption Trend Survey for Foreigners Visiting Japan"	JTA "Accommodation Survey"	MIC & METI "Economic Census for Business Activity"
Overview	Sample survey on tourism behavior of Japanese people	Sample survey on tourism behavior of foreign visitors to Japan	Sample survey on trends of guests staying at accommodation facilities in Japan	Census on economic activity of establishments and enterprises
Usable data	・ Number of visitors ・ Amount of tourism expenditure	・ Number of visitors ・ Amount of tourism expenditure	・ Number of visitors (overnight visitors only)	・ Amount of expenditure and added value (requires estimation)
Period	Quarterly	Quarterly	Monthly	Once every five years
Survey methods	Targeted at individuals selected from the Basic Resident Registers, and conducted by mail survey to residences, etc.	Questionnaire survey of foreign visitors conducted by surveyors at airports or seaports	Targeted at facilities selected from business registers, and conducted by mail survey, etc.	Targeted at all establishments from all industries from business registries, and conducted by surveyors or by mail survey
Suitability for small areas	As this is a sample survey, the margin of error increases for small areas, and for areas that have few visitors	See left	This is a sample survey, but the margin of error is smaller than demand-side surveys owing to the high coverage of population	Because this is a census, the data are accurate, even for extremely small areas
Methods for effective use	Blocks and prefectures with many visitors; visitor numbers and expenditure amounts	See left	Blocks and prefectures for visitor numbers (accommodation only)	Blocks, prefectures, and municipalities for accommodation business sales and added value
Notes	Possible that the data are consistent with national statistics, based on the compilation method		More precise data for accommodation numbers than in the case of demand-side statistics	Can produce regional data not only for municipalities but also along with movement paths of travelers (e.g. railway)

The following sections discuss the compilation method for large sample sizes of visitors and one for small sample sizes separately, and outline the methods and results of these approaches.

2. Compilation methods for large sample sizes (e.g. blocks)

Some national-level tourism statistics such as "National Tourism Survey," the "Consumption Trend Survey for Foreigners Visiting Japan," and the "Accommodation Survey" provide data on numbers of visitors, numbers of overnight visitors, number of same-day visitors, and expenditure amounts. Sub-national-level statistics at block and at prefecture are created by combining these data.

2-1. Numbers of visitors

At first, step of estimating the numbers of visitors, this study considers the real numbers of overnight visitors within blocks and prefectures, based on the supply-side statistics "Accommodation Survey." This is because, for tourism behavior, accommodation information is acquired from accommodation facilities such as hotels and hostels (i.e., supply-side), which yields a higher rate responded facilities to all than that of the consumer side. Almost 50,000 accommodation facilities are surveyed, of which approximately 10,000 facilities have 10 or more persons engaged while the remainder have fewer than 10. The responded rate to all is almost 70% for facilities with 10 or more employees, and around 7–8% for those with fewer than 10 employees. In contrast, in consumer-side statistics, even with a sample size of 10,000 people, the responded rate to all is less than 0.01% from Japanese population. Thus, supply-side statistics offer greater overall responded rates and more accurate values.

Therefore, we use the "Accommodation Survey" data on real numbers of visitors (for the same accommodation facility). The real numbers of visitors counts how many people stayed in a single accommodation facility, and counts a two-night stay by a single person as one visitor. Note that because the "Accommodation Survey" obtains responses from accommodation facilities, a single person who stays in multiple accommodation facilities within a prefecture will be counted as multiple visitors. Thus, it is necessary to divide the real visitor numbers for accommodation facilities by prefecture further by the average number of staying facilities in order to obtain the actual number of visitors within a region (for both Japanese and foreign visitors). Furthermore, for Japanese visitors, the number of accommodation visitors is produced by multiplying the figures by the ratio of those camping or staying at their parents' house, etc. This is because accommodation facility statistics do not include other forms of stay, such as camping, staying with family/friends/parents/others, second homes, sleeping in vehicles, and so forth.

Next, the number of same-day visitors is compiled by first compiling the ratio of overnight visitors to same-day visitors, within a prefecture, from the "National Tourism Survey" for Japanese visitors, and from the "Consumption Trend Survey for Foreigners Visiting Japan" for foreign visitors. Then, these values are multiplied by the number of overnight visitors, as follows:

(i) (Number of overnight visitors) = {(Real number of overnight visitors in accommodation facilities) / (Average number of accommodation facilities used)} × (Proportion camping or staying at their parents' house, etc.)

(ii) (Number of same-day visitors) = (Number of overnight visitors) × (Ratio of same-day visitors to overnight visitors)

Where:

- Real overnight visitors in accommodation facilities: real overnight visitor number data of the "Accommodation Survey" are used.
- Proportion staying with family or camping: Proportion of overnight visitors staying with family, camping, and so forth, compiled from the "National Tourism Survey." The figures are revised by adding the numbers of overnight visitors staying in places other than accommodation facilities.
- Average number of accommodation facilities used: Average number of accommodation facilities, acquired from the "Tourism Visitor Statistics based on Common Standards" local parameter survey; excludes double-counts of real overnight visitors within the same prefecture.
- Ratio of same-day visitors to overnight ones: Ratio of same-day visitor numbers and overnight visitor ones derived from the "National Tourism Survey" for Japanese visitors, and from the "Consumption Trend Survey for Foreigners Visiting Japan" for foreign visitors.

2-2. Tourism expenditure

The amount of tourism expenditure is compiled by multiplying the expenditure amount (individual expenditure) by the number of visitors, for both overnight and same-day visitors.

Individual expenditure amounts by prefecture are compiled based on samples from the "National Tourism Survey" for Japanese visitors, and the "Consumption Trend Survey for Foreigners Visiting Japan" for foreign visitors.

The "National Tourism Survey" does not provide data on expenditure amounts by prefecture. Therefore, we establish the number of prefecture(s) visited while travelling, and divides respondents' expenditure amounts by the number of nights stayed. Note that for prefectures visited during a day trip, it is feasible to use, for instance, settings such as "0.5 nights."

Based on the visitation rates, foreign visitors visit two or more prefectures and, since 2015, the "Consumption Trend Survey for Foreigners Visiting Japan" has elicited responses on expenditure amounts by destination. These data can be used here. Note that the expenditure amount by destination does not include expenses related to movement between destinations, such as costs of transport. This is because such amounts are not necessarily paid to the region (e.g., return tickets are purchased at the point of departure), and because there is no established approach that stipulates how the costs should be divided between the points of departure and destination.[3]

Expenditure amounts are compiled by multiplying the individual expenditure amounts by visited prefecture, compiled above, by the number of visitors, as follows:

(iii) (Overnight visitor expenditure amount) = (Number of overnight visitors) × (Individual expenditure)

(iv) (Same-day visitor expenditure amount) = (Number of same-day visitors) × (Individual expenditure)

- Number of overnight visitors: Derived using formula (i).
- Number of same-day visitors: Derived using formula (ii).
- Individual expenditure: Amount of expenditure per person is total of individual expenditure amounts by type (overnight/same-day) divided by the number of

[3] Dupeyras & Quinn (2014) make a similar point.

samples with valid responses.

Estimated values for 2014 produced in this manner are as shown in the Appendix.

3. Estimation methods for areas with small numbers of visitors (e.g., sub-municipal level) using supply-side statistics

This section presents the compilation methods and estimated results for the GDP of accommodation businesses by railway station/line as an example of investigating the scale of tourism in areas smaller than municipalities. We compile the GDP by industry for each station in the 23 special wards of Tokyo, and analyze the development of the railway network and the location of accommodation businesses.

The special wards of Tokyo have especially large populations, even within Tokyo, the capital of Japan. They form a region that plays a central role in economic activity. The region has an area of 627 km^2, a nighttime population of over 9 million, and a daytime population of over 12 million. A comparison with Venice, which has an area of 415 km^2 and a population of around 260,000, shows that the region has extremely high population density. Furthermore, in 2014, Tokyo received 6.42 million visits by foreign visitors and 86.03 million visits by Japanese visitors (see Appendix). Thus, in terms of the scale of tourism, Tokyo is also the most visited region in Japan.

There are over 450 railway stations and 50 railway lines within the special wards. The region has highly developed railways, and it is possible to access any part of the wards by rail easily. Therefore, many travelers use the railways to move within the wards. On the other hand, the railway network is extremely complicated, and foreign visitors in particular can find it troublesome to get to a destination via the most appropriate route, often transferring across several lines. Thus, we analyze the following hypothesis: "The fewer the number of transfers required to access a station from the airport by train, the greater the number of accommodation businesses that can be developed."

Supply-side statistical data such as the "Economic Census for Business Activity" are necessary in order to figure out the scale of tourism at railway stations (or surrounding areas), an area far smaller than the municipal level. Here, we use the "2012 Economic Census for Business Activity." Basically, places considered tourist sites do not necessarily correspond to the municipalities; it is often the case that a site will be spread over several municipalities, or that a site will be smaller than a municipality. Thus, the example given in this paper can be considered as showing a method for obtaining not only the data on small areas, but also the data focused on areas not limited to administrative districts, which are necessary for analyzing regional tourism. Next, we discuss the method used to estimate the GDP by station, followed by the results of the analysis.

3−1. Method

Figure 1 illustrates the process of compiling GDP by station, line, and industry based on the 2014 "Economic Census for Business Activity." First, data are obtained on the number of persons engaged (workers) by street location (Japanese chō) and industry from the survey (I in Figure 1). "chō" is a finer scale than the municipality level. In general, these are the smallest area divisions used in published data. There are 3,133 street locations (chō) in the special wards, and in each case, figures are available for the number of persons engaged by broad industry classification. However, these classifications do not differentiate between "accommodations" and "eating and drinking services". Therefore, we use information about individual establishments collected

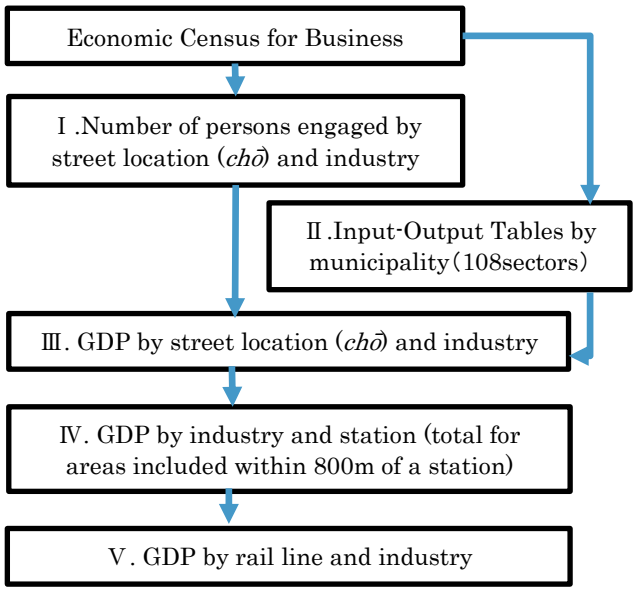

Figure 1: Process for compiling GDP by station and

online from restaurant websites and hotel booking websites to divide numbers of persons engaged between "accommodations" and "eating and drinking services".[4] The Input-Output tables by municipality indicated in (II) in Figure 1 are tables for all municipalities in Japan compiled by one of the authors, Prof. Suga. They are based on establishment-level micro data from the 2014 "Economic Census for Business Activity."[5] There are 23 Tokyo special wards; accordingly, 23 I-O tables were created. In this analysis, the GDP by street location and by industry (III) are compiled by dividing the GDP by industry, obtained from the I-O tables, by the numbers of persons engaged by street location and industry compiled in (I). Next, the GDP by station is compiled using GIS to select street locations within 800m of each railway station inside the 23 wards, followed by the total GDP by industry for each of these street locations. This process was undertaken for all 465 stations in the Tokyo special wards (IV). The GDP by railroad line and industry are estimated by aggregating the GDP by station for each line (V). Figure 2 shows an image of the GDP by line. The circles indicate the 800m areas around each station. The total GDP generated by establishments within each circle is given as the GDP by station. The figure shows the Yūrakuchō Line as an example, and the total GDP generated by establishments within all circles is the GDP of the Yūrakuchō Line. Note that when the distances between neighboring stations are short and the circles overlap, totals are compiled by excluding the overlapping portions; accordingly, the total GDP of all stations sometimes do not match the GDP by line. In addition to these estimations of GDP by station and railroad line, we determine the distance and number of line transfers involved in reaching each station from an airport for the analysis in the next section.

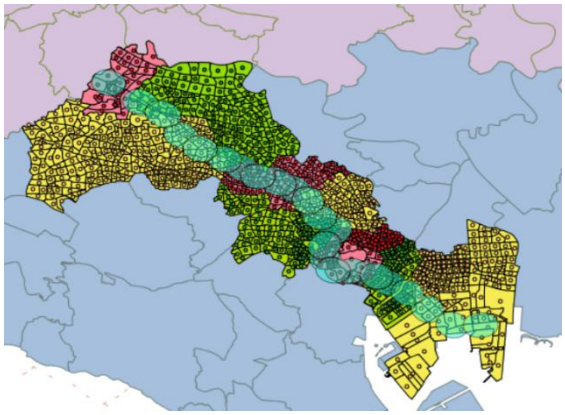
Figure 2: Illustration of GDP by Yūrakuchō

3-2. Results

Figure 3 is a partial illustration of the results of GDP by station. The orange indicators

[4] The numbers of persons engaged for "accommodations" and "eating and drinking services" by street are compiled without contradicting the "Economic Census for Business Activity" by using a matrix-balancing technique called the KEO-RAS method. See Kuroda (1988) for details of the KEO-RAS method.

[5] Details of the compilation method are presented in Suga (2015). The data are also made available by the Hosei University Japan Statistics Research Institute (https://www.hosei.ac.jp/toukei/index-j.html), aimed at local governments; additionally, there is ongoing work to improve the accuracy of the data, as required.

show the locations of stations with the highest GDP totals, from 1 to 10. Tokyo Station had the highest GDP, and as can clearly be seen from the figure, all of the top 10 stations are concentrated in a small area to the east and south sides of the Imperial Palace (the green area in the center of the image). Note that comparatively well-known stations within Tokyo, such as Shinjuku (indicated by the yellow star on the left), Shibuya (blue star on bottom-left), and Ikebukuro (green star on top-left) do not have particularly high rankings: Shinjuku is 25rd, Shibuya is 74th, and Ikebukuro is 91th. The finer rankings of GDP per sector show that while there are personal services sectors in which these centers rank comparatively highly—Shinjuku for "Eating and Drinking Services" (2nd) and "Entertainment Services" (11th), Shibuya for "Entertainment Services" (14th), and Ikebukuro for "Accommodations" (21st) and "Education and Learning support" (16th)[6]—they have comparatively lower GDPs than those sectors involving large sums of money for stations around Tokyo Station, such as "Finance and Insurance" and "Head Offices."

These results show that there are regional biases in industry blocks within the 23 wards of Tokyo, and that "B-to-B" production activity conducted by financial institutions and the head offices of large businesses play a more central role in the Tokyo economy than do the "B-to-C" production activities, which are aimed at individuals.

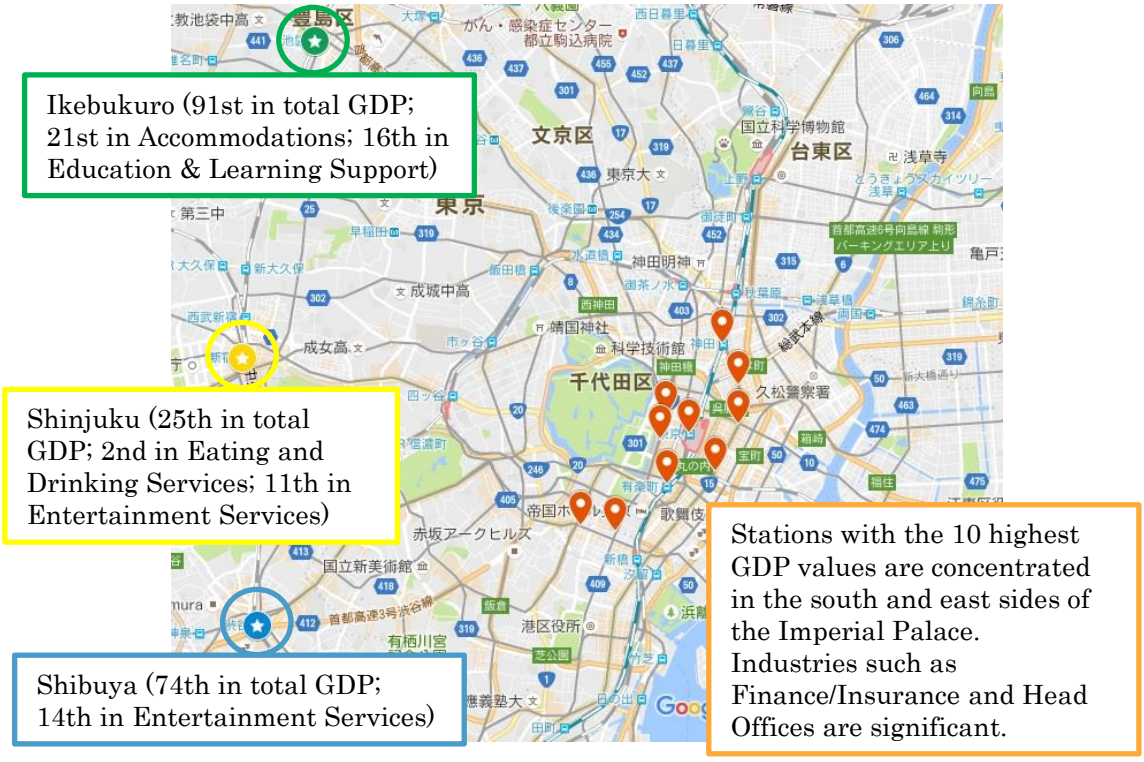

Figure 3: Illustration of top 10 stations by GDP amount

Table 2 sorts the stations by the number of line transfers involved in reaching each station in the 23 wards by train from the two airports around Tokyo. In each case, we also show the number of railway stations, the average GDP of accommodation industry

[6] Each of these sectors are included in Table 2 under "Others."

by station, the average ratio of accommodation GDP to the GDP of all industries, and the average distance from the airports.

Table 2: Average GDP amount and ratio for accommodation businesses by number of line transfers required to reach at each station within the 23 wards from Haneda and Narita Airports

Number of line transfers	Haneda Airport				Narita Airport			
	Number of railway stations	Average GDP of accommodation industry (yen, in millions)	Average ratio of GDP of accommodation industry	Average distance (km)	Number of railway stations	Average GDP of accommodation industry (yen, in millions)	Average ratio of GDP of accommodation industry	Average distance (km)
0	42	4,067*	0.48%**	13.52	50	5,233***	0.37%**	51.73
1	231	2,901***	0.26%***	18.00	293	2,413***	0.25%***	54.32
2 or more	192	1,213	0.15%	19.00	122	861	0.15%	55.34

* The "*," "**," and "***" in the table indicate significance (0.1, 0.05, and 0.01, respectively) following the results of testing for differences between the average values for a given group of stations and another group with one additional transfer.

For Haneda Airport, there are 42 stations that can be reached without line transfers, 232 stations which require one transfer, and 192 stations that require two or more transfers. The "Average GDP of accommodation industry" column contains the average accommodation industry GDP by station for each group. While the zero-transfer group has 4,067 million yen, the one-transfer group has 2,901 million yen, and the two-transfer group has 1,213 million yen. The GDP amount shrinks as the number of transfers increases. The "*" indicators in the table are *t*-test results, addressing differences in the average values between the zero- and one-transfer groups, and the one- and two-transfer groups; all exhibit a significant difference. The "Average ratio of GDP of accommodation industry" is the per-station average ratio of GDP for accommodation businesses to the total GDP of all businesses. As may be expected, there is a clear trend whereby the ratio drops as the number of transfers increases. The *t*-test results are all significant. The "Average distance" column contains the average distance from the airport to each station: although there is a difference of 4.5 km between the zero- and one-transfer groups, there is only a difference of 1 km between the one- and two-transfer groups. These results show that the location of accommodation businesses has been influenced by the ease of access to Haneda Airport in terms of number of railway line transfers. Table 2 shows that the analysis results for Narita Airport exhibit essentially the same trends as the Haneda Airport results, showing the ease of access by train from an airport has influenced the positioning and accumulation of accommodation industries within the 23 wards of Tokyo. Analyses of this kind can be considered the first to be made possible using statistical data on establishments, and also indicate the importance of supply-side statistical surveys of areas smaller than municipalities.

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Appendix

Table 3: Number of visitors with and without stay (two divisions), for Japanese and foreign visitors, respectively (estimated values for 2014)

	Number of visitors (thousand persons)			
	Japanese		Foreigner	
	overnight	same-day	overnight	same-day
Hokkaido	16,099	9,258	1,237.9	5.0
Aomori	4,967	2,375	48.0	3.8
Iwate	5,922	4,157	51.2	5.5
Miyagi	9,689	7,308	80.1	6.5
Akita	3,704	2,296	24.3	1.1
Yamagata	5,642	4,177	38.1	3.5
Fukushima	10,464	7,668	35.1	6.8
Ibaraki	6,330	12,816	77.2	11.0
Tochigi	8,512	8,971	141.2	61.9
Gumma	7,779	7,217	114.6	16.1
Saitama	6,922	13,363	92.0	24.4
Chiba	16,489	21,394	2,183.5	1,166.1
Tokyo	37,697	48,334	5,870.6	553.8
Kanagawa	17,292	24,259	1,033.0	395.5
Niigata	9,888	6,736	98.6	10.9
Toyama	3,622	1,797	105.1	25.4
Ishikawa	6,141	2,477	263.8	8.9
Fukui	3,350	4,412	25.4	5.4
Yamanashi	6,686	10,444	940.6	338.9
Nagano	14,941	12,089	382.6	38.8
Gifu	6,069	8,818	446.4	62.4
Shizuoka	19,747	20,305	624.3	186.9
Aichi	15,954	21,231	981.7	67.9
Mie	8,232	9,880	138.2	40.0
Shiga	5,272	10,351	206.4	55.3
Kyoto	11,041	12,622	1,972.3	881.4
Osaka	20,449	21,883	4,232.2	282.9
Hyogo	13,761	17,813	582.0	365.7
Nara	2,265	3,532	111.5	277.1
Wakayama	4,378	3,677	267.2	49.9
Tottori	3,494	2,626	57.5	4.5
Shimane	3,878	2,513	21.5	1.9
Okayama	6,138	8,121	82.9	18.2
Hiroshima	9,854	8,167	288.8	51.0
Yamaguchi	5,058	3,959	47.7	17.2
Tokushima	2,869	2,484	30.7	4.2
Kagawa	3,559	4,158	128.1	14.3
Ehime	4,721	3,593	54.4	4.3
Kochi	3,713	2,551	29.1	1.3
Fukuoka	14,667	14,381	911.5	65.4
Saga	3,270	4,104	78.6	33.9
Nagasaki	6,908	3,660	362.6	140.6
Kumamoto	7,098	6,167	368.1	144.8
Oita	5,074	3,800	272.8	141.3
Miyazaki	3,825	3,249	115.8	19.2
Kagoshima	7,358	3,491	227.6	17.2
Okinawa	11,518	1,095	1,325.8	2.0

Notes:

(1) These are the results of compilations combining existing JTA statistical surveys (the "National Tourism Survey," the "Consumption Trend Survey for Foreigners Visiting Japan," and the "Accommodation Survey").

(2) For each statistical survey, there were cases in which the adequate sample size required could not be guaranteed; accordingly, there is a possibility of large margins of error in the figures.

(3) The numbers of visitors are real figures (i.e., when one person visits the given prefecture in one trip, this is counted as one visitor.

Table 4: Tourism expenditure with and without stay (two divisions), for Japanese and for foreign visitors (estimated values for 2014)

	Tourism expenditure (Million yen)			
	Japanese		Foreigner	
	overnight	same-day	overnight	same-day
Hokkaido	579,054	82,938	165,290	67
Aomori	131,442	21,120	3,352	44
Iwate	156,908	36,052	3,859	67
Miyagi	239,129	58,396	5,200	84
Akita	81,966	13,979	1,918	13
Yamagata	148,376	35,402	2,103	47
Fukushima	259,271	64,094	1,903	85
Ibaraki	150,772	129,192	6,215	144
Tochigi	236,544	100,877	11,273	774
Gumma	220,281	71,659	9,704	208
Saitama	155,428	111,269	6,494	325
Chiba	523,889	273,953	142,535	15,273
Tokyo	1,179,437	400,390	677,447	14,367
Kanagawa	404,991	219,194	76,561	4,773
Niigata	246,325	69,152	4,752	146
Toyama	81,075	26,301	5,098	333
Ishikawa	193,456	38,712	12,527	110
Fukui	89,889	54,469	1,390	74
Yamanashi	190,392	114,335	54,001	5,396
Nagano	441,778	143,982	22,847	488
Gifu	154,691	77,848	24,218	821
Shizuoka	542,490	213,920	25,993	2,944
Aichi	375,344	177,300	62,790	1,004
Mie	250,191	108,787	7,714	525
Shiga	113,567	90,572	11,020	739
Kyoto	337,713	120,939	123,002	12,035
Osaka	543,587	212,250	301,430	3,587
Hyogo	366,915	165,835	31,845	4,436
Nara	54,869	24,050	5,652	3,613
Wakayama	125,543	40,277	14,039	698
Tottori	97,272	26,025	2,548	55
Shimane	116,324	28,468	1,102	23
Okayama	144,272	87,223	4,341	229
Hiroshima	215,944	111,635	15,565	569
Yamaguchi	103,853	41,690	2,382	205
Tokushima	66,294	21,189	1,569	59
Kagawa	87,647	33,268	6,797	171
Ehime	120,895	29,663	2,951	51
Kochi	86,152	19,936	1,853	18
Fukuoka	368,629	176,554	57,798	816
Saga	98,280	34,619	3,157	408
Nagasaki	190,531	36,853	17,154	1,703
Kumamoto	170,450	59,107	16,856	1,766
Oita	134,903	41,124	14,020	1,712
Miyazaki	93,894	35,911	6,040	232
Kagoshima	235,030	29,385	9,924	218
Okinawa	641,196	7,046	129,790	27

Notes:
(1) These are the results of compilations using a combination of existing JTA statistical surveys (the "National Tourism Survey," the "Consumption Trend Survey for Foreigners Visiting Japan," and the "Accommodation Survey").
(2) For each statistical survey, there were cases in which adequate sample sizes could not be guaranteed; accordingly, there is a possibility of large margins of error in the figures.
(3) The numbers of visitors are real figures. In other words, when one person visits the given prefecture in one trip, this is counted as one visitor.