Determinants of International-Meeting Venues: from Data of Japanese Cities

国際会議開催都市の決定要因: ~日本のデータを使った分析~

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Abstract

This paper attempts to investigate which of 14 major Japanese cities attracted more international meetings than others from 1998 to 2013 and why they did it. From data of international meetings held in Japan during this period, two interesting observations are arisen. First, although metropolitan Tokyo attracted more international meetings than any other cities for all sample years, there are large variations among other cities; in some cities the number of international meetings increased rapidly, while those stagnated in some other cities. Second, impacts of the Great East Japan Earthquake in 2011 seem to be different among cities; cities in western Japan seem to have gotten positive effects in general, but not all eastern Japanese cites have been affected negatively. Some regression estimates show positive effects of economy size measured by city population and of yendenominated dollar-yen exchange rate on the numbers of international meetings held in Japan. The second estimated result, statistically significant only when controlling for time trend, is consistent with a recent observation of increasing foreigners visiting Japan due to weaker yen. Case studies on two polar-case cities, Yokohama and Ama Town give us another clue for considering meanings of large-scale (international) meetings for big/small cities respectively.

JEL Classification: F14, F61, L83.

Keywords: International Meeting, MICE, fourteen major Japanese Cities.

1 Introduction

Tourism, especially with foreign visitors, is a rising industry in both developed and developing countries, because tourism boom may give positive impacts on domestic economy in various ways. For instance, Japan Department Stores Association recently released a report, available at its website, saving that in April 2015, number of shoppers from foreign countries topped 200,000 for the first time, more than 200% increase from April 2014, and sales also hit a record high, although consumption of domestic customers is still said to be sluggish due to stagnated real wage or income associated with long-lasting recessions and deflation.

In international economics, effects of a tourism boom on welfare of a host country are discussed in Copeland (1991) and others theoretically by general equilibrium trade models with non-traded goods. When visiting a country, foreign tourists import, i.e. buy, various services such as restaurant meals and hotel rooms, generally impossible to export, and also some amenities such as beautiful scenery and experience of local culture associated with tourism, as well as traded goods. Also, effects of tourism on economic development, especially for developing countries, are also discussed both theoretically and empirically.1 However, to the author's knowledge, analysis of business tourism in economics is few. Also, there are some empirical studies examining impacts of events attracting tourists such as world expositions on its national economy, but studies analyzing necessary properties of countries or cities to attract such events are not popular.²

To fill the gap among previous literature, this paper attempts to investigate which of fourteen major Japanese cities attracted more international meetings than others from 1998 to 2013, and possible reasons why they successfully did it. From data of international meetings held in Japan during this period, two interesting observations are arisen. First, although metropolitan Tokyo attracted more international meetings than any other cities for all sample years, there are large variations among other cities; in some cities the numbers of international meetings increased rapidly, while in some other cities the numbers stagnated. Second, impacts of the Great East Japan Earthquake in 2011 seem to be different among cities; some cities in western Japan got positive effects, but not all cites in eastern Japan were affected negatively. Some regression estimates show a positive effect of economy size measured by city population and a positive effect of yendenominated dollar-yen exchange rate on the numbers of international meetings held in Japan. The second estimated result, statistically significant only when controlling for time trend though, seems to be consistent with a recent observation of increasing foreigners visiting Japan due to weaker yen. Following case studies for two polar-case cities give us more implications for importance of MICE for big/small cities respectively.

This paper is organized as follows. In section two, which countries and cites have attracted more international meetings in the twenty-first century are shown to sketch out characteristics of internationalmeeting attracting cities. Also, as an interesting concept of business trips, MICE is introduced. In section three, data on international meetings in Japan used in this paper and some interesting observations about major Japanese cities are described. In section four, estimates of determinants of international-meeting venues by OLS and Poisson regression are shown. In section five, as a Japanese city attracting more international meetings than others, characteristics of Yokohama city are shown. Also, as a polar case of Yokohama, Ama Town in Shimane prefecture is also discussed. Finally, in section six, determinants of internationalmeeting venues not yet analyzed are discussed as concluding remarks.

2 Overview of International-Meeting Venues

In this section, first, data of number of international meetings held in various countries and cities are examined, also introducing the definition of international meeting by UIA, organization of collecting the data. This international comparison is a base for subsequent analysis of this paper. Then, one concept of business trip called "MICE" is introduced, and why this paper focuses on international meeting, which is a form of MICE, is discussed.

2.1 Definitions of International Meeting and International Comparison

Today many countries are trying to attract more tourists by hosting international meetings as well as in other forms of tourism. Table 1a shows the numbers of international meetings held in selected countries in years 2003 and 2013. Numbers are from International Meeting Statistics Report by Union of International Associations (UIA).3 UIA is a non-profit organization established in 1907 and conducts data collection and research on over 60,000 organizations around the world (JNTO 2013 P.14). UIA's definition of international Meeting is as follows (from its Press Release in June 2014). Note that the numbers in Tables 1 are sum of international meetings of types A and B, whose definitions are shown below.

(UIA's definition) "Meetings included are divided into three types. The types are indicated by letters: type A, type B and type C. Some events take place in more than one city; such events are counted in this report for each city separately. Meetings counted under the heading "A" are "Meetings of international organizations" and meet all the following criteria:

 meetings organized or sponsored by "international organizations," i.e. international non-governmental organizations and intergovernmental organizations that are included in the UIA's Yearbook of International Organizations and whose details are subject to systematic collection and updates on an annual basis by the UIA.

• with at least fifty participants, or number of participants unknown.

Meetings counted under the heading "B" are "Other international meetings (three days)" and meet all the following criteria:

- meetings not organized or sponsored by "international organizations" but nonetheless of significant international character, notably those organized by national organizations and national branches of international organizations.
- at least forty percent of the participants are from countries other than the host country and at least five nationalities are represented.
- lasting at least three days, or of unknown duration.
- with either a concurrent exhibition or at least 300 participants.

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Country	Numbers in 2003 (rank)	Numbers in 2013
Singapore	142 (25)	994
U.S.A.	1,582 (1)	799
South Korea	140 (27)	635

Table 1a: Numbers of International Meetings in Selected Countries.

280 (13) Japan 588 Belgium 371 (8) 505 Spain 454 (6) 505 France 829 (2) 408

Source: International Meeting Statistics Report, UIA.

Austria

313 (11)

Table 1b: Numbers of International Meetings in Selected Cities

City	Numbers in 2003 (rank)	Numbers in 2013
(Country)	(capital-concentration ratio)	(capital-concentration ratio)
Singapore	142 (8)	994
(Singapore)	(100)	(100)
Brussel	247 (2)	436
(Belgium)	(67)	(86)
Vienna	204 (4)	318
(Austria)	(65)	(80)
Seoul	85 (22)	242
(South Korea)	(61)	(38)
Metropolitan Tokyo	63 (30)	225
(Japan)	(22.5)	(31)
Madrid	94(20)	165
(Spain)	(21)	(33)
Paris	336 (1)	180
(France)	(41)	(44)

Source: International Meeting Statistics Report, UIA.

Meetings counted under the heading "C" are "Other international meetings (two days)" and meet all the following criteria:

- meetings not organized or sponsored by "international organizations" but nonetheless of significant international character, notably those organized by national organizations and national branches of international organizations.
- at least forty percent of the participants are from countries other than the host country and at least five nationalities are represented.
- lasting at least two days, or of unknown duration.
- with either a concurrent exhibition or at least 250 participants."(end of definition)

From Table 1a, between years 2003 and 2013, two interesting changes in the venues of international meetings are observed. While three Asian countries,

Singapore, South Korea, and Japan, increased their numbers of international meetings that they hosted between these two years, four western countries that hosted many international meetings in 2003 and years before, the U.S., France, Germany, and the U.K., decreased their numbers. Decrease in the number of the U.S. is phenomenal: its number was halved. Also, other European countries, Belgium, Spain, and Austria, increased their numbers of international meetings that they hosted. Therefore, Table 1a suggests increasing competition of international-meeting venues, resulting in some changes of top players, from a market dominated by large western countries to that with more competitors including some Asian countries.

Table 1b shows the numbers of international meetings held in seven most-hosting cities in 2003 and 2013, and it gives us an interesting point about how

international meetings are concentrated in capital cities of most host countries in the table. In all countries that those cities belong to but France, the numbers increased. Between the two years, more concentration to the capital cities occurred in five countries, Belgium, Austria, Japan, Spain, and France, while in South Korea the opposite accrued. Note also, however, that South Korea and Spain, besides their capital cities, Seoul and Madrid respectively, have one more cities that hosts many international meetings (Busan and Barcelona respectively).

Such dispersion of international meetings in South Korea and Spain is possibly due to the economic geography in each of the two countries, and it might affect the degrees of capital-city concentration of international meetings in these two countries (more careful analysis is necessary though). Both Busan and Barcelona respectively are economic powerhouses in their countries and also have long history of rivalry against its capital cities. Besides South Korea and Spain, relatively low concentration to capital city is also observed in Japan. Its concentration ratio to Tokyo is even lower than South Korea and Spain, although the number increased between the two years as shown in Table 1b. Japan's diffusion of international-meeting venues and its reasons are investigated in the rest of this paper.

2.2 International Meeting in Terms of MICF

As a concept of business trip, MICE has been getting more attention from the

tourism industry. According to Japan Tourism Agency of the Ministry of Land, Infrastructure, Transport and Tourism (JTA) (2010), MICE is the initial of the following four terms:

- Meeting, by firms and other organizations such as financial seminars for foreign investors.
- Incentive Travel, by firms for their employees such as prize-giving to best sales employees.
- Convention, by international organizations such as annual conferences of IMF/World bank.
 Note that international organizations include academic associations.
- <u>E</u>xhibition/Event such as cultural or sports events such as Olympic/ Paralympic games.⁶

Therefore, it is a collective term for events that attract many people from many countries as well as inside the country having same purposes and may facilitate communication among the participants, such as business events or academic conferences. JTA (2014) suggests the following three main effects of MICE:

- Creating opportunities of business innovation.
- 2. Regional Economic effects.
- 3. Spurring competitiveness of countries/cities.

Among these MICE events, this paper focuses on conventions, especially international meetings.⁷ The reason is that they seem to be effective in terms of regional economic growth through increasing demand for goods and services produced in the region, which can be a strong motive for both national and local

governments in many countries to host international meetings.⁸ They also attract many participants from foreign countries as well as domestic participants, so more intellectual interaction among people with different backgrounds, leading to a lot of innovation, is expected.

3 Data and Observations

In this section, the data used in the rest of this paper, collected by JNTO, and some observations on international meetings held in fourteen major Japanese cities are described. Because the definition of international meetings in the data by JNTO and those by UIA shown in subsection 2.1 are different, the definition by JNTO is first mentioned.

3.1 Definition of International meeting held in Japan

Japan National Tourism Organization (JNTO), affiliation of JTA, defines "international meeting" in its "International Meeting Statistics." JNTO changed its definition of international meeting in 2007. In this paper, numbers with the current definition are used. Note that JNTO's definition is laxer than UIA's listed in subsection 2.1. That is, JNTO's definition includes a meeting with a smaller scale and/or fewer international perspectives as an international meeting. This could be a big reason why numbers in JNTO's statistics are larger than those in UIA's.

In JNTO's definition, an international meeting is an event satisfying the following four properties.

1. Organizers are either international

organizations including branches in each country or state institutions. Because the definition of each body is not clear, every meeting except for those pursuing profits of specific companies is included.

- 2. More than fifty people participate.
- 3. Participants are from more than three countries including Japan.
- 4. It runs more than one day.

Next, comparison of fourteen major Japanese cities by two tables and a figure is shown to how international meetings venues are distributed in Japan and how the distribution has changed, before discussing possible determinants of international-meeting venues statistically.

3.2 Variations among Major Japanese Cities

Table 2 shows the numbers of international meetings held in fourteen Japanese cities or areas, i.e. clusters of cities, and the sum of them from 1998 to 2013. The samples start from 1998 because the data with the current definition start from this year. Table 2 also shows growth rates of the numbers for four (sub)periods:

- 1. overall period, 1998-2013,
- 2. period before worldwide financial crisis, 1998-2008,
- 3. period after the crisis, 2009-2013, and
- 4. period after the Great East Japan Earthquake, 2011-2013.

From Table 2, we can see some interesting observations. First, the numbers increased substantially in most cities/areas. However, variations among

cities are not small. Especially, the growth rates in the following two types of cities/ areas are larger than others:

- 1. Yokohama and Northern Osaka; they are the second largest metropolitan area and a part of the third largest metropolitan area in Japan respectively. They also have a lot of facilities necessary for hosting large-scale international meetings. For instance, Northern Osaka has Osaka University, which is a national university famous for its natural-science studies and also has hosted a lot of international meetings.⁹
- Sendai and Fukuoka; they are major urban areas in Tohoku and Kyushu regions respectively. Also, both cities have national universities having long tradition in its natural-science research like Northern Osaka.

Second, in some cities that are peripheral to Tokyo metropolitan area, the numbers have declined or stagnated since 2009; Tsukuba area and Chiba city are examples, but Yokohama is an exception. Third, impacts of the Great East Japan Earthquake in 2011 have been either positive or negative, depending on cities/areas. For Sendai and Northern Osaka, it has been positive. The former seems to have invited many international meetings whose main themes were the earthquake

and the subsequent recovery in earthquake-damaged areas. The Third World Conference on Disaster Risk Reduction organized by the United Nation in March 2015 is an example. 10 On the other hand, the latter is far from the area hit by the earthquake, i.e. eastern part of Tohoku region, which seems to have drawn attention as a safer area, especially from any perils related with Fukushima First Nuclear Power Plant, in which a nuclear meltdown occurred right after it was hit by the shock of earthquake and the subsequent Tsunami. 11 However, more observations with a longer period are needed to assess the long-run effects of the earthquake.

Figure 1 shows time-series changes of numbers for seven selected cities from 1998 to 2013, classified as either the following two types:

- Type 1: Sendai, Yokohama, Northern
 Osaka and Fukuoka mentioned
 above. Note that Fukuoka is a
 gateway to Asian counties,
 especially China and South
 Korea, thanks to its location
 (Kyushu is the westernmost
 region in Japan).
- Type 2: Nagoya, Kyoto, and Kobe: the numbers in 1998 were relatively large, but the growth rates are smaller than those of type-one cities.

Table 2: Numbers of International Meetings in 14 Japanese Cities/Areas, 1998-2013.

year	Sapporo	Sendai	Tsukuba	Chiba	Met-Tokyo	Yokohama	Nagoya
1998	50	26	13	39	222	77	97
1999	54	27	0	21	266	62	77
2000	46	54	67	26	308	28	84
2001	46	46	76	19	371	15	62
2002	42	41	55	16	408	70	86
2003	46	37	72	34	353	41	83
2004	65	43	56	59	428	82	89
2005	54	42	60	38	357	105	108
2006	48	45	64	39	460	103	109
2007	44	51	82	42	440	157	109
2008	77	63	80	67	480	184	130
2009	82	60	74	63	497	179	124
2010	86	72	69	56	491	174	122
2011	73	40	46	30	470	169	112
2012	61	81	53	32	500	191	126
2013	89	77	51	28	531	226	143

year	Kyoto	Nara	North- Osaka	Kobe	Hiroshima	Kitakyushu	Fukuoka	14-city Total
1998	105	6	92	86	37	27	66	943
1999	113	12	96	78	27	30	69	932
2000	108	13	116	69	35	45	104	1103
2001	111	24	108	82	25	31	75	1091
2002	145	18	114	79	12	18	77	1181
2003	149	23	119	84	13	28	77	1159
2004	170	17	152	44	26	30	76	1337
2005	137	27	124	58	20	19	97	1246
2006	154	19	160	76	22	28	126	1453
2007	183	23	108	89	20	43	151	1542
2008	171	29	130	94	32	47	172	1756
2009	164	15	165	76	24	50	206	1779
2010	155	33	134	91	25	49	216	1773
2011	137	21	126	83	24	38	221	1590
2012	196	30	253	92	37	45	252	1949
2013	176	31	285	93	50	57	253	2090

Source: JNTO International Meeting Statistics.

Table 2: Numbers of International Meetings in 14 Japanese Cities/Areas, 1998-2013 (continued: growth rates in each of four (sub)periods).

Periods /Cities	Sapporo	Sendai	Tsukuba	Chiba	Met-Tokyo	Yokohama	Nagoya
1998 -2013	78.0	196.2	292.3	-28.2	139.2	193.5	47.4
1998 -2008	54.0	142.3	515.4	71.8	116.2	139.0	34.0
2009 -2013	8.5	28.3	-31.1	-55.6	6.8	26.3	15.3
2011 -2013	21.9	92.5	10.9	-6.7	13.0	33.7	27.7

Periods /Cities	Kyoto	Nara	North- Osaka	Kobe	Hiroshima	Kitakyushu	Fukuoka	14-city Total
1998 -2013	67.6	416.7	209.8	8.1	35.1	111.1	283.3	121.6
1998 -2008	62.9	383.3	41.3	9.3	-13.5	74.1	160.6	86.2
2009 -2013	7.3	106.7	72.7	22.4	108.3	14.0	22.8	17.5
2011 -2013	28.5	47.6	126.2	12.0	108.3	50.0	14.5	31.4

Notes:

- 1. Tsukuba-area consists of Tsukuba and Tsuchiura cities.
- 2. North(ern) Osaka includes Toyonaka, Suita, Ibaraki, Takatsuki, and Minoo cities, besides Osaka city, capital city of Osaka prefecture.

Source: JNTO International Meeting Statistics.

Osaka, Kyoto, Kobe are in Kansai region, and Nagoya is between Tokyo and Kansai but nearer to Kansai. Therefore, competition among these cities might have led to the above result, not examined for details in this paper though.

4 Determinants of International-Meeting Venues

In this section, the estimated equation of the determinants of international-

meeting venues and results are discussed. First, an estimated equation is described. Then, estimates by two different methods are shown and discussed. One is by ordinal least squares (OLS) and the other is by Poisson regression. The OLS estimates are used as benchmark, while the Poisson-regression estimates are more credible due to a specific characteristic of the data.

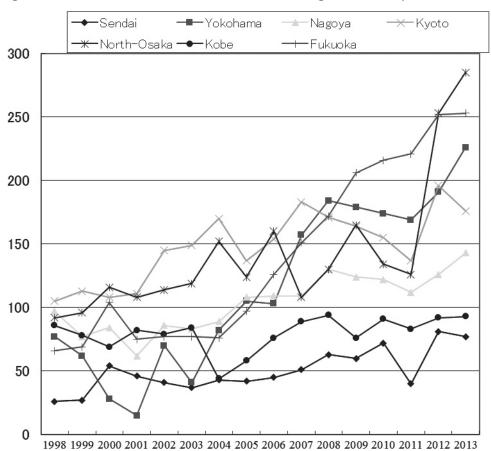


Figure 1 Time Series of Numbers of International Meetings in Seven Japanese Cities

Note: horizontal axis is year and vertical axis is number of international meetings in each of seven cities.

Source: JNTO International Meeting Statistics.

Although the estimation methods are totally different, the estimated coefficients are quite similar, which shows a kind of robustness of the estimated results.

4.1 Estimated Equation

The following equation or those without some of explanatory variables are estimated.

log(number of international meetings + 1) or number of international meetings

= constant+ β_1 · log(city population)

 $+\theta_2$ · yen-denominated dollar-yen exchange rate

 $+\beta_3$ · city dummies

 $+\beta_4 \cdot \text{time} + \text{error term.}^{12}$

(1)

Equation (1) is a kind of reduced form equation, consisting of both demand and supply factors. When OLS is used for estimation, the dependent variable is a log value of "the number of international meetings held in a specific city/area in a year, plus one". Because Tsukuba area had no international meeting in 1999, adding one to the numbers is necessary for log transformation. Taking log for the number of meetings and two explanatory variables, size of population and exchange rate, is also for standardization (therefore, the coefficients for log-transformed variables are elasticities). When Poisson regression is used, on the other hand, the dependent variable is the raw number of international meetings, including zero. With Poisson regression, log transformation is not needed as discussed later.

4.2 Estimates by OLS

Table 3 shows the estimated coefficients for explanatory variables (constant is not shown).13 All equations are estimated by OLS. First, population size has positive effects as expected. Moreover, estimated coefficients for population size with city dummies are much larger than those without the dummy variables. 14 The coefficients show that one-percent increase in the population size in a city increases the number of international meetings it hosts at least 0.7 percent. Coefficients for city dummies are positive and statistically significant for almost all cities in all estimated equations (not reported in the table). However, it is hard to interpret the sizes of the coefficients and any differences among cities. For instance, the coefficients of Yokohama- and Northern Osakadummies are smaller than those of other city dummies, although these cities, relatively large compared to other cities in the sample though, have successfully hosted international meetings as mentioned in section three.

Without controlling for time trend, yen-denominated dollar-yen exchange rates have negative effects. A larger exchange rate means cheaper yen against dollar, so it should attract more foreign visitors to Japan and thus a positive effect is expected.¹⁵ With time variable, however, the coefficients for yen-denominated dollaryen exchange rates become positive, not statistically significant though. The coefficients for time variable are positive and statistically significant, possibly capturing overall trend of increasing international meetings in Japan during the sample period. All equations whose numbers have prime marks are estimated with samples excluding metropolitan Tokyo, to compare the estimates with and without the capital city of Japan. The coefficients for log (population) with Tokyo samples are larger than those without them as expected, possibly because of Tokyo's dominant economic size and resource concentration in Japan.

4.3 Estimates by Poisson Regression

Table 4 shows the coefficients for explanatory variables estimated by Poisson regression. As with OLS estimates, constants are not reported in the table. Note that number of international meetings held in a city is a nonnegative integer called "count variable." Therefore,

it cannot be negative and it is also discrete. It is known that with count variable, OLS with log-transformed dependent variable, which allows an estimated value for a dependent variable, i.e. estimated constant, plus sum of (average of each of

explanatory variables, times estimated coefficient for the variable) to be negative and also continuous, is not desirable.

Instead, Poisson regression is generally used to get more statistically credible estimates.

Table 3: OLS Estimates of Determinants of International-Meeting Venues.

Explanatory variables	(1)	(1') Tokyo excluded	(2)	(2') Tokyo excluded	(3)
log	0.759**	0.640**	0.755**	0.634**	6.729**
(population)	(0.050)	(0.062)	(0.048)	(0.059)	(1.050)
log			-1.217**	-1.254**	-0.540**
(exchange rate)			(0.278)	(0.290)	(0.215)
city					yes (Tokyo
dummies					excluded)
time					
Number	224	208	224	208	224
of observations	224	208	224	208	224
(adjusted)	0.509	0.338	0.548	0.391	0.810
R-squared	1.300			3.301	0.010

Explanatory	(3')		(4')		(5')
variables	Tokyo	(4)	Tokyo	(5)	Tokyo
variables	excluded		excluded		excluded
log	6.850**	0.752**	0.631**	4.449**	4.678**
(population)	(1.118)	(0.047)	(0.058)	(1.194)	(1.252)
log	-0.587**	0.268	0.257	0.235	0.215
(exchange rate)	(0.226)	(0.458)	(0.477)	(0.297)	(0.318)
city	yes			yes	yes
dummies	(Sapporo			(Tokyo	(Sapporo
aummes	excluded)			excluded)	excluded)
time		0.058**	0.059**	0.040**	0.040**
ume		(0.014)	(0.015)	(0.011)	(0.012)
Number of	208	224	208	224	208
observations	208	224	208	224	208
(Adjusted)	0.732	0.573	0.430	0.82	0.747
R-squared	0.732	0.575	0.450	0.82	0.747

Notes:

- 1. Dependent Variable: Log (Number of International Meeting in a city/year +1).
- 2. Estimation method: ordinal least squares (OLS).
- 3. Standard errors are in parentheses.
- 4. ** indicates one-percent statistical significance.

Table 4: Poisson-regression Estimates of Determinants of International-Meeting Venues.

		(1')		(2')	
Explanatory variables	(1)	Tokyo	(2)	Tokyo	(3)
variables		excluded		excluded	
log	0.834**	0.587**	0.829**	0. 581**	6.160**
(population)	(0.008)	(0.012)	(0.008)	(0.012)	(0.314)
log			-1.091**	-1.236**	-0.399**
(exchange rate)			(0.043)	(0.051)	(0.059)
city					yes (Tokyo
dummies					excluded)
time					
Number	004	900	994	900	99.4
of observations	224	208	224	208	224
Pseudo	0.615	0.000	0.047	0.054	0.055
R-squared	0.615	0.290	0.647	0.354	0.855

	()			ı	
Explanatory variables	(3') Tokyo excluded	(4)	(4') Tokyo excluded	(5)	(5') Tokyo excluded
log (population)	6.750** (0.382)	0.826** (0.008)	0.577** (0.012)	2.578** (0.397)	3.704** (0.441)
log (exchange rate)	-0.586** (0.065)	0.251** (0.074)	0.193* (0.088)	0. 252** (0.074)	0.184* (0.088)
city dummies	yes (Sapporo excluded)			yes (Tokyo excluded)	yes (Sapporo excluded)
time		0.055** (0.002)	0.058 ** (0.003)	0.045 ** (0.003)	0.044 ** (0.003)
Number of observations	208	224	208	224	208
Pseudo R-squared	0.712	0.673	0.399	0.866	0.737

Notes:

- 1. Dependent Variable: Number of International Meetings in a city/year.
- 2. Estimation method: Poisson regression.
- 3. Standard errors are in parentheses.
- 4. * and ** indicate five- and one-percent statistical significance respectively.

Although the dependent variables are different, the sizes and signs of the coefficients are similar with those in Table 3, i.e. OLS estimates, in all equations. Therefore, the estimated results in either regressions are robust in some sense.

Population size has statistically significant positive effects. More interestingly, the effects of yen-denominated dollar-yen exchange rates are positive and statistically significant when controlling for time trend. It is said that lower yen

has attracted more foreign tourists to Japan, and these positive effects may support such a trend from an international-meeting point of view. As with OLS estimates, from the coefficients for city dummies, any implication cannot be drawn because no tendency is observed, although they are positive and statistically significant.

5 Examples of Attractive Cities

In the last two sections, which of fourteen major Japanese cites have attracted more international meetings and what properties such cities may have are examined both visually and statistically. This section complements the above analysis by describing details of Yokohama city, one of successful cities hosting international meetings. It is shown that besides the city's own resources and measures, it fully utilizes its locational advantage over other Japanese major cities, i.e. it is near and also highly integrated with Tokyo.

Besides the case of Yokohama, a kind of polar case is examined: it is a small island city in a rural area of western Japan, Ama Town, which may show other roles of hosting large-scale (international) meetings, totally different from those for large metropolitan cities like Yokohama.

5.1 Yokohama City

Yokohama Convention Bureau (YCVB), in its website, mentions four advantages for Yokohama of hosting many conventions including international meetings. First, they adduces the following three things as evidence that Yokohama

has been the number-one convention city in Japan.

- It has attracted more convention participants than any other Japanese cities since 2007.
- It is an international convention city, hosting Asia-Pacific Economic Corporation (APEC) summit in October 2010 for instance.
- It has four MICE zones, Shin-Yokohama, Yokohama-Station, Minato-Mirai, and Yamashita; each zone has all necessary facilities for conventions such as convention center, hotel, restaurant and mall, located within walking distance.

Second, YCVB says that Yokohama has the best access to transportation from any part of Japan and even from abroad. About railway, it has Shin-Yokohama station where all Shinkansen bullet-trains stop and it is near Tokyo station and other big railway stations in metropolitan Tokyo by various lines of East Japan Railway Company and other railway companies. About airline, it has easy access to both Haneda and Narita airports. After the Ministry of Land, Infrastructure, Transport and Tourism of Japan changed its policy that in eastern Japan, Narita airport in Chiba prefecture was virtually the only one, Haneda airport has increased international flights which is a big advantage for attracting foreign visitors. Third, related with its second advantage, Yokohama, having over 100-year tradition as a port city, has many attractions for visitors, as well as many sightseeing places surrounding the city such as Kamakura, an old city like Kyoto, and Atami and Hakone, resorts famous for hot springs.¹⁷

Forth, Yokohama provides with various supports for convention organizers and participants. They include:

- Financial supports from the city government.
- Special support for hosting international meetings such as help for writing proposal or presentation materials in English: this might be effective to attract Japanese organizations that want to host international meetings.
- Giving away information materials, and tourist information and Japanese-culture experiences with English guidance by local volunteers: this could facilitate multi-culture interactions between convention participants and citizens.
- Help for finding convention venues, hotels, firms providing conventionrelated services.
- (After-convention) attractions for both convention participants and their accompanying persons.

The next is Ama Town in a small island of a rural area. It thus is a polar case of Yokohama City.

5.2 Ama Town

Ama Town, Shimane prefecture, is in Nakanoshima Island, one of Oki Islands located about 50 kilometers north of mainland Shimane in western Japan. Besides its locational isolation, its winter weather is harsh. It is not rare that Oki islands must support themselves for many days when any ships or airplanes cannot reach them because of bad weather.¹⁸ This

small town has drawn a lot of attentions because of its active attempts to rebuild the town having suffered population decrease associated with aging and debt increase, with which many of small Japanese rural towns have been struggling. Besides its famous brand marketing for its local seafood products and education policy attracting many children outside the town, Ama Town use MICE as one of its tourism promotion measures.¹⁹

First, facilities for MICE in Ama Town are not as impressive as those in Yokohama city both in quantity and quality.²⁰ It has only two facilities for meeting of 100 people. One is Marine Port Hotel Ama located on a hill near Hishiura port, which can host a meeting of 100 people and provides with accommodation of fourtythree oceanfront rooms. The other is Oki Kaihatsu-Sogo Center, who has a 200-seat hall.21 Compared to Ama Town's two facilities, Pacifico Yokohama, in Minato-Mirai area of Yokohama city, has a National Convention Hall, which is a three-story huge convention hall and its first floor has more than 3,000 seats. However, Ama Town believes that one source of regional revitalization is "interaction of people" to accept heterogeneity, to keep diversity, and to continue to change for growth.²² Therefore, it tries to utilize MICE as a device of interaction between islanders and outsiders, and thus either the quantity or quality of its MICE facilities is not their priority. As an example of interaction, Ama Town holds "Island Meetings" every year. At each of the meetings, one common theme is set and some specialists or those who have interests in the theme are invited or voluntary attend from outside the town. Those guests/volunteers discuss the theme with islanders and enjoy other forms of interactions with them.²³

Second, Ama Town adopt "town of seaweed" as its slogan, and tries to facilitate academic and other kinds of interactions related with seaweed. Two examples are symbolic. One is "Applied Phycology Research Center," established in 2012 by Okabe Co., Ltd. Okabe Co., Ltd. produces various kinds of building materials, and its marine business division, producing concrete blocks for seaweed bed and others, operates this research institute. The other is that Ama Town has attracted academic meetings of phycology. It has held "AMA Seaweed Observation & Photography Symposium," co-hosted with The Japanese Society of Applied Phycology.²⁴ Ama Town tries to make a profitable use of these academic interactions to develop its own seaweed and other seafood products.

Ama Town also has formed alliances with universities. One is to take in university students as internship. For students, there are two advantages with this internship. One is a precious experience in this small isolated island, especially those who are from urban areas. The other is that they can study how Ama Town has revitalized itself. That is, it is a living textbook for successful local self-government. For instance, a student from Kanazawa University wrote a thesis on Ama Town, and now works at the town.²⁵ The other is as a health and welfare project

for (elderly) islanders. Ama Town public health clinic forms an alliance with Tottori University, which has over thirty-year record for its dementia study, for its countermeasure against diabetes.

6 Concluding Remarks

This paper tries to examine which of fourteen major Japanese cities attracted more international meetings than others from 1998 to 2013 and its reasons. It shows two main results. First, besides metropolitan Tokyo, four major cities, Sendai, Yokohama, Northern Osaka, and Fukuoka, have increased their numbers of international meetings they hosted substantially. These four cities are a kind of core cities in their regions attracting more people and firms as well as international meetings, so it is a part of higher concentration in the core cities in regions in Japan. Second, both economic size measured by population and yendenominated dollar-yen exchange rate have positive effects on number of international meetings, although the effects of exchange rates are statistically significant only when time trend, also having a positive effect, is controlled. The characteristics discussed in this paper may have some policy implications to many local governments wanting to attract more (international) meetings for their economic development.

However, many other possible determinants of international-meeting venues are not ether discussed or analyzed in this paper, some of which are:

 Roles of national government such as visa weaver program: this may be important as Tanaka (2013) suggests.

- Roles of local government such as subsidies: case of Yokohama city is a good example, but common measures are needed to examine inter-city variations.
- Transportation such as airports, railways, etc.: both Tanaka (2013) and the case of Yokohama city suggest its importance.
- Infrastructure such as convention

center, hotels, etc.: this is crucial to host large-scale international meetings.

The above issues and others are possible items for future research agenda on this topic. Also, to estimate locational choice such as international-meeting venues, ordered logit or other methods, the so called "limited dependent variable estimation" may be suitable, although more explanatory variables affecting such decision are necessary for such estimation.

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(Endnotes)

¹ About previous literature, see Hazari and Sgro (2004) for theoretical studies and Sinclair and Stabler (1997) for empirical studies.

- A related study with this issue is Tanaka (2013), who uses data of hotel guests in Japanese prefectures in years 2007-09 and shows characteristics that Japanese prefectures attracting many foreign visitors have. Major findings of this paper are as follows. (1) From locational Gini coefficients based on an estimated Lorenz curve, destinations of foreign visitors are more concentrated than Japanese visitors. (2) From estimated gravity equations, the following four factors have statistically-significant positive effects on the sum of nights spent by foreign visitors in a prefecture; 1) GDP of country where a visitor comes from, 2) existence of visa waiver program for visitors from particular countries, 3) GDP of destination prefecture, and 4) number of airports of destination prefecture.
- Note that data of international meetings held in Japan, used later in this paper, are collected by Japan National Tourism Organization (JNTO), and the definition of international meeting by JNTO is different from that by UIA. See subsection 3.1 for details.
- ⁴ Teramae (2009) shows the numbers in 2006, and discusses the impacts of the so called "convention law" in force in 1994 to regional tourism policies in Japan.
- ⁵ Because Singapore is a city country, 100-percent concentration always occurs.
- ⁶ The example of each of four MICE forms is raised by JTA (2010).
- ⁷ Sato (2002) describes the markets of exhibition/trade show in Europe and Asia in the

- 1990s. Because of different definitions, in Sato (2002), "meeting and exposition markets" mainly implies exhibition/trade show markets.
- ⁸ See a recent example of increase in sales by foreign shoppers at department stores in Japan described in section one.
- About characteristics of Yokohama, see subsection 5.1.
- ¹⁰ Sendai also will host the finance-minister meeting of G7 summit in 2016, one of whose purposes is said to show disaster-hit area's reconstruction to the world.
- ¹¹ Both Tsukuba area and Chiba city are located east of Metropolitan Tokyo while Yokohama is south of Tokyo. Such locational difference may be a reason of difference among cities peripheral to Tokyo mentioned above.
- ¹² About city dummies, Tokyo is set at zero as a benchmark. When Tokyo is excluded from the data, Sapporo is zero.
- ¹³ Sources of explanatory variables are as follows. Population data is from websites of Japanese national and local governments. Exchange-rate data is from the website of Mitsubishi UFJ Research & Consulting (MURC) (in Japanese). http://www.murc-kawasesouba.jp/fx/index.php
- ¹⁴ Equations (1) and (2) are also estimated by fixed-effect or random-effect formulae. Hausman test supports the fixed effect estimation (results are not shown in Table 3), suggesting that estimates with city dummies are more desirable than those without the dummies.
- 15 Using one-year lagged exchange rates does not change the results.
- ¹⁶ For details, see chapter nineteen of Wooldridge (2002).
- ¹⁷ Yokohama also has easy access to both Tokyo, as mentioned, and Mt. Fuji, both of which are very popular for foreign visitors, although YCVB does not stress it.
- ¹⁸ One official of Ama town said that this is a reason why Ama and other towns in Oki islands must have their own lifeline infrastructures such as water and electricity, which could be a huge costs for the budges of those towns.
- ¹⁹ The description of Ama Town's MICE policies in this paper is based on the author's visit to the town and an interview with two officials of the town in March 28, 2015. The author thanks Messrs. Kazuhiko Ooe and Sameera Gunawardena of Ama Town office and Ama Tourism Association respectively for a lot of valuable information from them.
- Ama Town does not care about its lack of MICE facilities. Rather, it tries to utilize existing facilities as much as possible. Its Japanese catch-phrase "Nai mono ha nai" has double-meanings: one is literally "what we do not have is what we do not have," and the other is "We have everything necessary." The second meaning best describes their attitude about infrastructure they have, i.e. its local economy does not heavily depend on public construction funded by national and prefectural governments.
- ²¹ This center also has a public library with a cafe. Therefore, it is literally the center of cultural interactions among islanders as well as those between islanders and outsiders.
- ²² From a document by the town titled "Challenge of Revitalizing the Region from an

Isolated Island -from the Bottom to the Top-," available at the following website (in Japanese).

- http://www.town.ama.shimane.jp/contact/pdf/saishin ritohhatsu H24 10(min).pdf
- 23 The latest meeting was held in March 14, 2015, and its theme was "management."
- ²⁴ One town official said they even hope to attract a conference by international organization such as International Seaweed Association, which organizes an international conference every three year.
- ²⁵ Ama Town forms an alliance with Hirao School of Management, Konan University (CUBE) in Hyogo prefecture, and has taken in internship students every year since 2012. See, for instance, CUBE's website:
 - http://www.konan-cube.com/diary/archives/4353. One town official said the town can offer free bus to student visitors for training camp if they come to Osaka.

要旨

本稿は日本の14都市のどこが1998年から2013年の間により多くの国際会議を誘致したかとその理由を明らかにすることを目的とする。データから2つの興味深い事実が観察される。第1に、全サンプル期間において東京都区部が最も多くの国際会議を誘致しているが、他の13都市の間では大きなばらつきがある。開催件数を大きく伸ばしている都市もあれば、その数がほとんど増えていない都市も見られる。第2に、2011年の東日本大震災の影響は都市間で異なるように見える。西日本の都市は概して大震災が国際会議の開催件数にプラスに働いているように見えるが、東日本のすべての都市がマイナスの影響を受けているわけではない。回帰分析から、人口で測った経済規模と円建ての円=ドル為替レートは開催件数を増やす効果を持つことがわかった。為替レートの効果はタイムトレンド(有意な正の効果)を考慮した時のみ統計的に有意であるが、円安が日本を訪れる外国人旅行者を増やしているという最近の事象とも整合的である。2つの極端な例である横浜市と島根県海士町の例は、大都市、小市町村それぞれにとっての大規模(国際)会議の意義を考える手がかりを与えてくれる。