Self-Assessed Positive Impacts of Area Management Organizations in Japan

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Japan is currently faced with an acute "aging society" coupled with a low birth rate, which is causing numerous social problems, such as weakened local and urban communities and unattractive landscapes and environments. Depressed towns are also hindering disaster prevention. However, local governments have made little attempt to address this situation. Therefore, there is a need to shed light on revitalizing both "software activities", such as holding events and festivals, as well as "hardware activities", such as building new facilities and providing new infrastructure. In this respect, the so-called "area management activities" (AMAs) play a significant role in the revitalization process. AMAs are used to revitalize towns and cities mainly by utilizing the power of the private sector in conjunction with the government. This paper conducts several empirical tests on factors associated with the (self-assessed) positive impacts of "area management organizations" (AMOs) on the revitalization of towns, relying on data sets from 1,300 areas (in almost 750 municipalities) in which revitalization programs such as the Act on Special Measures Concerning Urban Renaissance

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by the Ministry of Land, Infrastructure, Transport and Tourism have been implemented since 2002.

Keywords

"Area Management Activity", Area Improvement, Institutionalization of Stakeholders

1.   Introduction

There has been a growing focus on area management activities (AMAs) with regard to town revitalization in Japan. AMAs are a way to manage the growth and security of towns, mainly by the private and voluntary sectors in conjunction with the public sector (Kobayashi, 2015). The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) also defines AMAs as "city or area management activity that aims to increase the value of land and community with the participation of citizens, companies, and land owners" (Guideline for area management activity by MLIT in 2007). In short, AMAs enhance the value of towns and societies. In the past decade in particular, the MLIT has been promoting this kind of activity. In 2014, the MLIT established a special government committee called "Town Management in the New Era" to promote AMAs nationwide. In short, "town management by citizens with the private sector" has gained significance in terms of the growth of Japanese cities.

This paper examines Japanese-type AMAs to assess the (self-assessed) positive impacts of area management organizations (AMOs). For this purpose, we conduct an empirical analysis by using a statistical tool called the ordered logit technique. Although our analysis is based on subjective data, there is the need for a "third party" to assess the data, simply because AMAs are very complex and their performance should also be evaluated by a third party.

The structure of this paper is as follows. First, we examine AMAs with special reference to the business improvement district (BID) system instituted in the United Kingdom (UK). Secondly, we briefly examine the history of AMAs on town center economies from an economic perspective. Thirdly, we examine the impacts of several regeneration schemes on town economies by using empirical data gathered from our survey in conjunction with the MLIT. The paper concludes by referring to the findings from our survey result.

2.   AMAs in the UK

It is well known that AMAs have been working effectively in the UK. In particular, the town center management systems are well organized and

formulated by the Association of Town Centre Managers (ATCM) since 1990 (Thomas and Bromely, (2002)). Thus far, more than 300 town managers have been appointed by the ATCM to local towns, with their main task being to make the town center economically vibrant. In addition, the BID system was introduced in 2004 in the UK and affords local governments with legal power to impose an additional property tax on the land occupier in designated areas (BID areas). The revenue raised from such areas is only used for BID revitalization schemes. In England and Wales, BIDs were introduced through legislation (the Local Government Act 2003) and subsequent regulations in 2004.

The BID system has been instituted in many cities in England and Scotland, and helped to regenerate cities such as Hull, Nottingham, Swindon, Falkirk, Bathgate, and Elgin. Its benefits are as follows: first, it enhances efficiency through collective procurement which results in overhead reductions. For instance, the BID system contributes to reducing overhead costs simply because it can make a compulsory collection rather than collect contributions individually. Secondly, it generates greater and stronger partnerships among private, voluntary, and community organizations, and delivers additional investment and funding to support town center strategies and action plans.

By late 2014, there were over 180 BIDs in operation in the UK., administrated by town center managers. Thus, in the UK, the town management system has been activated by using legal frameworks, while in Japan, it remains in the initial phase.

3.   AMAs and Historical Background in Japan between the 1980s and 2010s

Here, let us briefly examine the background of AMAs with reference to town center economies since the 1980s and the Japan-U.S. Structural Impediments Initiative Talks. During the 1980s, the cheap yen facilitated a Japanese export boom and the national trade surplus reached historic heights, thus putting pressure on the U.S. economy. This, in turn, led to trade friction with the U.S., and Structural Impediments Initiative Talks were held between the U.S. and Japan from 1989 to 1992, which focused on ways to redress the trade deficit. One idea was to promote a "free trade" policy in Japanese domestic markets by deregulating trade in a number of industries, as well as the town planning systems of Japan. Foreign governments, the U.S. in particular, had accused the Japanese of having a "protective" town planning policy, which was preventing foreign capital from starting businesses in Japan, particularly superstores. American officials called on their Japanese counterparts to deregulate, for example, the Large-scale Retail Store Act (introduced in 1973; hereafter, the

LSRSA).[1] This act made it difficult for U.S. stores to open in Japan, because although in theory they were permitted to open branches anywhere in Japan, this was provisional upon the approval of the local chamber of commerce. As these local organizations essentially reflected the interests of small retail shopkeepers, there was effectively no way for superstores, foreign superstores in particular, to set up shop in Japan. Therefore, there was virtually no opportunity for large amounts of U.S. capital to enter the Japanese market.

As mentioned above, the U.S. government required Japan to redress its protective town planning system, including the LSRSA, and particularly to abolish regulations that allowed the local chambers of commerce to become involved. In 1992, the Japanese government accepted these demands and began to employ a new town planning regime, for example by deregulating the LSRSA. However, this policy was severely criticized by small retail shopkeepers, particularly in the town centers, and the government was again faced with a difficult situation. The political support base for the Liberal Democratic Party (hereafter, the LDP), the ruling party, lay with rural farmers and small town center retailers, and thus the LDP was obliged to listen to them. Since freedom of location, as well as free market policy, had been promoted since 1992, there remained the need to discuss with town center shopkeepers how to minimize traffic jams caused by out-of-town superstore development. However, despite a sharp increase in the number of out-of-town superstores from 1992 onwards, the U.S. continued to call for further reform and deregulation.

3.1   The Three Acts

In 1998, the Japanese government introduced the Town Centre Revitalization Act (TCRA) in an attempt to revitalize town centers in Japan. The TCRA created new bodies, known as town management organizations (TMOs), to market or "manage" town centers with strong central government financial support. These subsidies could be used, for example, to hold events in town centers as long as they enhanced the local economy.

In 2000, further deregulation of the LSRSA was undertaken to accommodate the request of the U.S. Along with the reform of the LSRSA, the Reformed Town Planning Act (hereafter, RTPA) was also promulgated in 2000 to enable large-scale superstores to easily establish branches on roadsides in out-of-town areas without local permission. `In short, the government employed a "carrot-and-stick" policy to create conditions conducive to the expansion of superstores (Fukumoto (2006)).

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[1] Large-scale Retail Store (Type 1) is defined as a superstore with a floor space that is greater than 3,000 m^2, while Large-scale Retail Store (Type 2) is a superstore with a floor space that is greater than 500 m^2.

Thus, the introduction of the above acts, the TCRA, LSRSA, and RTPA (hereafter, the "Three Acts"), allowed for the co-existence of a free-market philosophy that governed the location of superstores with a subsidization policy that supported town center retail shopping. Undoubtedly, without these subsidies, the economies of scale enjoyed by the superstores would have placed these small retailers in a highly disadvantaged position.

In Japan, most citizens in rural areas use private cars for transportation. Large-scale superstores provide a significant number of free parking spaces, whereas in town centers, customers must pay for expensive parking facilities. There has been a sharp increase in the number of large-scale superstores, which has made business even more difficult for small retail shops, particularly independents, since 2000.

3.2   Results of Free-Market System on Town Planning in Japan

Following the introduction of the Three Acts, the results of the attempts of the Japanese government to revitalize local economies are as follows. The Town Center Retail Survey (2005)[2] demonstrated that there had been a serious and continuous decline in town center populations for 125 of the 155 cities sampled; these cities were selected on a random basis, but all had a population size of more than 100,000 people between 2001 and 2005.[3] In short, there were virtually only negative impacts on the "regeneration" of town centers (Adachi, 2010).[4] This was simply because normally, the "regeneration of the town center" is accompanied by a population increase with some degree of economic impact.

4.   Growing Expectations of AMAs

In face of the decline in local town centers, there is the need to use several different strategies to revitalize towns. Like previous times, we cannot rely on the public sector as the main stakeholder to revitalize towns due to its lack of financial resources (Miura (2004)). Thus, utilizing the voluntary and private sectors to manage the growth of cities, we focus on the AMAs led by these sectors in Japan.

4.1   Example of AMAs in Japan: Kurokabe TMO

As stated previously, AMAs are a way to revitalize towns, mainly with the contributions of the private sector and the voluntary sector, in conjunction with

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[2] "The effects of the Town Centre Revitalization Act on the population and sales of retail shops in town centre areas 2005," Ministry of Land, Infrastructure, Transport and Tourism.

[3] The sample excludes cities such as Tokyo with populations over 1 million.

[4] Adachi, M, "How to revitalize town centres" Minerva Books 2010.

the public sector. According to a research meeting entitled "Area Management Study Project" (2014)[5], AMAs can be roughly categorized into six types. These are: "improving the landscape of the town" (Type A), "holding events and increasing attendance in the town" (Type B), "promoting the town" (Type C), "disaster prevention" (Type D), "managing public facilities through private funding and methods" (Type E), and "utilizing private facilities for public purposes" (Type F).

A successful example of an AMA in Japan is the Kurokabe initiative in Nagahama City in the Shiga Prefecture, which is a Type F AMA.

The town center economy in Nagahama City experienced a serious decline in the 1980s and a number of strategies were thus undertaken to revitalize the city. Several local citizens decided to establish an area management company called Kurokabe, Inc., which acted as a TMO and has initiated several revitalization schemes since 1989, such as the refurbishment of old retail shops and offices in the main shopping streets. Funds were collected from eight start-up members (i.e., investors), who each paid 10,000,000 yen (i.e., US$800,000) in 1989 to cover the initial costs. Each of their schemes has been successful due to the use of a well-planned marketing system. Within 10 years, there was a sharp increase in the number of visitors from 80,000 in 1989 to 2,000,000 in 2000.

4.2   Example of AMA in Japan (2): Centre of Tokyo

The Otemachi, Marunouchi, and Yurakucho areas (Daimaru lands district) in the Tokyo metropolitan district are located in the heart of the financial district. There has been a growing focus on the various urban AMAs in these areas. Here, three organizations are discussed as follows.

Beautification Association: This association has been managed by several association-related area managers in this region as well as landowners such as the Mitsubishi Jisho (Mitsubishi Real Estate). The headquarters are located in the Mitsubishi Jisho. Funding for this activity is mainly from membership fees and subsidies, which totals almost 4 million yen per annum (US$35,000). The Beautification Association is the first regional management organization run by landowners, who mainly manage tree planting.

District Redevelopment Project Council: This is a council that comprises 96 members such as landowners. Its main purpose is to "renew and redevelop" the town center of Tokyo from the perspective of infrastructure provision. This council includes Chiyoda-ku, the Tokyo metropolitan government and East Japan Railway Company, and funding comes from membership fees of 30 million yen per annum.

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[5] The meeting was organized by research staff from the Kyoto University, Wakayama University, and MLIT sponsored by Koua Kosan, a real estate company, to investigate AMAs between 2014 and 2015.

Area Management Association: This is a body of which the members include local companies, organizations, workers, academics, lawyers, and citizen groups. It is a nonprofit-based association.

With regard to the current funding situation, the District Redevelopment Project Council is performing well but the Beautification Association is now facing difficulties due to the lack of public subsidies. The Area Management Association also has financial difficulties due to the recent expansion of its activities and tasks.

4.3   Example of AMA in Japan (3): Grand Front Osaka

In January 2011, the government designated areas such as the Osaka Station District (82 hectares), Nakanoshima Island, and the Midosuji district (490 hectares) as specific emergency urban revitalization districts. A vacant site of 24 hectares situated near Osaka Station and the utilization of this idle land as well as the redevelopment of the brown field sites were given priority for redevelopment. The development project was conducted by the private sector but "management" of this area is partly conducted by "nonprofit-based area management bodies" such as the Grand Front Osaka, (hereafter, the GFO), a mall next to the Osaka Station.

In April 2013, the GFO opened its doors and received up to 340,000 visitors. The number of visitors has been on the increase since opening day and as of September 2013, 27.61 million people have visited the GFO.

The area management of the GFO (i.e., AMA) has been conducted by the TMO of the GFO, the ultimate purpose of which is to increase the value of the area. For this purpose, the organization is divided into two departments: the Department of Town and Community Planning and the Department of Information and City Promotion.

The tasks of the TMO are provided in detail below. They:
  I.   hold regular and promotional events,
  II. enhance urban public space utilization with town and community information,
  III. have created a comfortable environment,
  IV. strengthen partnerships between private and public space management and administration bodies,
  V.   have utilized public roads as a marketplace that features for example, restaurants and cafés,
  VI. have established new transportation services that are inexpensive, such as the Umegle Bus and rental bikes,
  VII. coordinate administrative, economic, and management activities, and
  VIII. plan sponsored events (i.e., festivals) that are produced by the TMO.

While this is a successful case of an AMA in Japan, no survey has been conducted to examine the extent that such successful cases are found in Japan. In particular, we would like to determine the extent that the average AMA enhances the value of towns and societies. Adachi (2007) has conducted an empirical analysis of the impact of several schemes on town center development in Japanese local towns, but there are almost no earlier studies on AMAs. Area management is therefore a relatively new phenomenon in Japan and there is a need to examine the relationship between AMOs and their policy impacts. Thus, we have conducted an empirical survey with regard to AMAs at this point in time.

5.   Hypothesis

This section outlines the central hypothesis of this paper. There are many economic theories related to AMOs. According to Tsuruno (2003), more frequent AMO meetings with regard to the activities could positively contribute to communication and therefore enhance organizational ties. Hosono (2007) also points out that town center regeneration organizations have been historically successful at putting together teams that effectively obtain subsidies. However, after they received the subsidies, they did not have an appropriate system in place to organize the businesses, plans, or staff simply because they outsourced the job. Kobayashi (2015) suggests that private associations are no longer beneficial for town development at a regional scale. It is therefore now necessary for corporate organizations to have a head office with trained staff.

Therefore, valuable know-how in private organizations, such as financing arrangements, formation of networks, and development of human resources, has good potential to actively contribute to enhancing the self-assessed positive impacts of AMAs. However, there are no studies that test this assumption. In order to do so, the following hypothesis is established:

Hypothesis 1
It is very important to have a head office for AMAs in order to increase management efficiency (e.g., one with a physical address and office telephone number)

Hypothesis 2
Government subsidies are necessary to manage AMAs in order to bridge the gap between cost and income. In this way, there is a positive correlation between the assessment of AMAs and obtaining a subsidy.

Hypothesis 3
Mature organizations can better assess their own management. It is therefore reasonable to insinuate that local citizens and companies are more

familiar with an older organization and rely more on an older organization from a general management and funding perspective.

Hypothesis 4
Frequent meetings held for the organization of AMAs will increase their assessment value. It is therefore reasonable to insinuate that more meetings will contribute to more efficient management of the organization of AMAs.

6.   Data Analysis of the Impact of AMOs

In the remainder of this section, we clarify the institution and funding of AMAs in Japan. We also examine the relationship between AMA performance and their attributes.

Public data sets are available but divided and administrated in accordance with the respective local governments. Therefore, it is sometimes very difficult to make efficient use of the data. For this reason, we rely on the original data taken from questionnaires. For example, data sets related to evaluating the impact of AMA related events have not been fully captured thus far. Therefore, we decided to collect our own original data.

6.1   Types of Policy Considered Effective in Japan

The authors, in conjunction with Kyoto University and the MLIT, conducted a questionnaire survey in 2014 as well as empirical surveys that incorporated the ordered logit model (OLM). The OLM was used to examine the relations between the policy impacts of AMAs and explanatory variables such as the attributes of institutions.

6.2   Discrete Statistical Modeling: Logit and Probit Models

Here, we provide a brief explanation about the binomial logit model where the dependent variable is a "discrete" type. Statistical analysis of a model with qualitatively dependent variables is predicting the probabilities of the various possible values (responses) of the dependent variables. Binomial probit and logit analyses are two well-known techniques for cases in which there are only two possible responses, typically the occurrence and non-occurrence of an event. Theil (1969) has developed a multinomial logit model that allows for an arbitrary number of responses and explanatory variables. McFadden (1974) provides a maximum likelihood estimation procedure for this type of model. While the multinomial logit approach is commonly used, binomial probit estimation is less so due to the difficulties involved in using an estimation algorithm.

Zax and Skidmore (1994) examine the relationship between tax increases and the rate of land development by using a binomial probit model. In their model,

the dependent variable represented by the development activity is a dummy term: zero for the case of no development and one for the case of development. They conclude that property tax increases at the rate of land conversion. However, the binomial probit specification by Zax and Skidmore (1994) is not appropriate for our analysis because the specification of the model is complex and difficult to estimate.

In our analysis, we use the applied binomial logit model, which is called the "ordered logit model".

6.3   Model Specification of Ordered Logit Model

Here, we assume that the underlying categories are discrete realizations of some underlying continuous distribution of attitude, such as "very effective", "effective", "fair", and "not effective". If these categories are the "dependent variables", then we can use the ordered logit model. While the ordered logit model is a well known empirical method, we will still briefly describe the model here.

In the ordered logit model, there is an observed ordinal value, Y, and Y is a function of another variable, Y*, which is not measured.

The continuous latent variable Y* has various threshold points. The value on the observed variable Y depends on whether we have crossed a particular threshold. For example, when the number of the orders are four (i.e., very effective, effective, fair, and not effective), the thresholds are:

$$
\begin{aligned}
Y_i &= 1 \ \ \text{if} \ Y^*_i \le \mu_1 \\
Y_i &= 2 \ \ \text{if} \ \mu_1 \le Y^*_i \le \mu_2 \\
Y_i &= 3 \ \ \text{if} \ \mu_2 \le Y^*_i \le \mu_3 \\
Y_i &= 4 \ \ \text{if} \ \mu_3 \le Y^*_i \le \mu_4
\end{aligned}
\tag{1}
$$

The ordered logit model equation is

$$
Y^* = \sum_{k=1}^{K} \beta_k X_k + \varepsilon = Zi + \varepsilon
$$

where

$$
Z_i = \sum_{k=1}^{K} \beta_k X_k = E(Y^*_i)
\tag{2}
$$

$\beta =$ parameter value for X (i.e., explanatory value)

We can use the estimated terms to estimate the probability that Y will take on a particular value. The formulae in the case of M = 4 (i.e., very effective, effective, fair, and not effective) are

$$P(Y = 1) = \frac{1}{1 + \exp(Z - \mu_1)}$$

$$P(Y = 2) = \frac{1}{1 + \exp(Z - \mu_2)} - \frac{1}{1 + \exp(Z - \mu_1)}$$

$$P(Y = 3) = \frac{1}{1 + \exp(Z - \mu_3)} - \frac{1}{1 + \exp(Z - \mu_2)}$$

$$P(Y = 4) = 1 - \frac{1}{1 + \exp(Z - \mu_3)}$$

(3)

By using the estimated value of Z in Equation (2) and assuming logistic distribution of the disturbance term, we can estimate the probability that the unobserved variable Y* falls within the various thresholds limits (see Equation (3)). By using the maximum log likelihood method, we can estimate the explanatory valuables.

6.4   Dependent and Explanatory Variables

As we had done so previously, the "effects of the schemes" of the dependent variables are categorized into "very effective", "effective", "fair", and "not effective". We only examine the extent that a town has changed as a result of an AMA, which can be observed as a non-monetized value of the scheme. The explanatory variables (i.e., independent variables) are attributes of the management body or institution (e.g., income, etc.). This statistical analysis thus examines the assessment of the impact of AMA schemes and their background characteristics (i.e., attributes).

6.5   Data

The survey was e-mailed to 826 local authorities who had at one time or another conducted "town regeneration schemes" through the MLIT. The details of the questionnaire are outlined below.[6]

Target:	826 local governments[7]
Timeframe:	November 20 –December 12, 2014
Sample size:	The questionnaire was distributed to 826 local governments, which have carried out "regeneration schemes" and we received 746 responses. Of these, the total number of AMOs that responded to our questionnaire is 574.
Respondents:	Local officials

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[6] For the empirical analysis, see "Town Centre Regeneration and its Strategies", Adachi, 2010, Minerva Press.

[7] The questionnaire surveys were sent to 826 local governments and we received 746 replies. The number of "organizations" that had carried out an AMA is 574.

A summary of the dependent and independent variables is given in Table 1.

Table 1   Explanation of Dependent Variables
(Does the scheme have a positive effect on the town?)

Dependent Variable	
4	Very effective
3	Effective
2	Fair
1	Not effective

As done so previously, we asked the respondent(s) or officer(s) in charge of the policy effects to directly respond. It should be noted that the observation of such effects is very subjective and depends on the personal impressions of the public servant in question, but while this survey has such limitations and problems, we can still obtain useful information. A third party could find such assessment data useful simply because AMAs are very complex and the quality of their performance depends on the self-assessment from a third party.

6.6   Independent variables

The independent variables are: (1) whether the organization has a head office (i.e., a headquarters), (2) whether funding is generated from donations, (3) whether funding has been generated from the AMA, (4) whether funding is generated from membership fees, (5) whether funding is generated from public sector subsidies, (6) frequency of meetings, (7) total cost of the AMA, (8) area size of the area management to which the AMA belongs, (9) distance of the AMA from the Tokyo metropolitan area, and (10) date when the management body (i.e., organization) was established.

The dependent variables are given in Table 2 below.

Table 2   Dependent Variables

Improving the landscape design of the town
Attracting visitors and increasing the crowd size
Revitalizing the local real-estate market
Enhancing community ties and social networks
Promoting the town and AMA
Increasing the population and improving the economy

Results

6.7   Organization - Hypothesis 1

From the z-statistics of the independent variables such as "The organization has a head office" in Tables 3 and 4, we found that the presence of a head office is not an important factor in the assessment of the AMA. Most of the "z-values" are not statistically significant. In some cases, the "z-values" are statistically significant but the sign is negative. Thus, Hypothesis 1 is not supported. This is partly because most of the AMA-related organizations are non-profit and part of the voluntary sector, so that they are considered to be relatively small in business.

6.8   Funding - Hypothesis 2

With regard to the funds required to run an AMA, we find almost no relation between government subsidization and management assessment (see Tables 3 and 4). The signs of the independent variables are not positive and not statistically significant. Rather, there is a negative relation between AMA subsidization and assessment for "improving the landscape design of the town". However, we find a positive correlation between a positive assessment and "funding from membership fees". There is the possibility that funding from membership fees enhances the awareness of participation in the AMA.

6.9   Other Factors 1 – Hypothesis 3 - Age of Organization

With regard to the age (or history) of the organization, we find that almost all of the independent variables are statistically not significant (see Tables 3 and 4). Thus, the number of years that an organization has been established is irrelevant in the assessment of AMAs.

6.10   Other Factors 2 – Hypothesis 4 - Frequency of Meetings

With regard to the frequency of meetings, we find that the independent variables "Attracting visitors and increasing the crowd size", "Revitalizing the local real-estate market", "Enhancing community ties and social networks", and "Promoting the town and AMA" are negatively and statistically significant (see Tables 3 and 4). Organizations with "fewer meeting times per month" are assessed more positively than organizations with more meeting times. This is surprising as our intuition is that more meetings would be positive for management. This is probably because meeting frequency is not a good indicator of management quality. A smaller number of meetings is sometimes adequately efficient for management.

Table 3   Results for Ordered Logit Model for "Improving the Landscape Design of the Town", "Attracting Visitors and Increasing the Crowd Size" and "Revitalizing the Local Real Estate Market"

	Y1=Improving the landscape design of the town			Y2=Attracting visitors and increasing the crowd size			Y3=Revitalizing the local real estate market		
	coefficient	z-statistics		coefficient	z-statistics		coefficient	z-statistics	
The organization has a head office	0.370	1.114		0.375	1.372		0.375	0.505	
Funding generated from donations	0.117	0.369		0.097	0.349		-1.168	-2.498	*
Funding generated from AMA	-0.500	-2.798	*	0.646	4.363	*	0.28	1.309	
Funding generated from membership fees	0.101	0.592		0.309	2.133	*	0.303	1.413	
Funding generated from subsidies	-0.896	-5.036	*	-0.149	-1.024		-0.094	-0.437	
Frequency of meetings for the activity	0.005	0.082		-0.190	-4.024	*	-0.196	-2.963	*
Cost of AMA	0.000	-1.276		0.000	2.889	*	0	1.314	
Area size of city	0.001	2.060	*	-0.001	-2.327	*	0	0.81	
Distance from Tokyo metropolitan area	-0.001	-0.700		0.000	0.033		-0.003	-2.081	*
Year of establishment of organization	0.000	0.535		0.000	1.585		0	0.538	
Pseudo R-squared	0.033			0.042			0.034		

Notes: Log likelihood Y1=-607.633; Log likelihood Y2=-813.726; Log likelihood Y3=-433.392

Table 4 Results for Ordered Logit for "Enhancing Community Ties and Social Networks", "Promoting the Town and AMA" and "Increasing the Population and Improving the Economy"

	Y4=Enhancing community ties and social networks			Y5=Promoting the town and AMA			Y6=Increasing the population and improving the economy		
	coefficient	z-statistics		coefficient	z-statistics		coefficient	z-statistics	
The organization has a head office	-0.749	-2.383	*	-0.370	-1.119		-1.724	-2.885	*
Funding generated from donations	-0.023	-0.076		-0.102	-0.339		0.896	1.949	
Funding generated from AMA	-0.624	-3.649	*	-0.629	-3.676	*	-0.326	-1.479	
Funding generated from membership fees	0.455	2.755	*	0.233	1.410		-0.180	-0.848	
Funding generated from subsidies	0.102	0.618		-0.133	-0.793		0.211	1.011	
Frequency of meeting for the activity	-0.246	-4.253	*	-0.133	-2.267	*	-0.042	-0.597	
Cost of AMA	0.000	1.966		0.000	3.418	*	0.000	4.193	*
Area size of city	0.001	3.229	*	0.001	2.337	*	0.001	2.622	*
Distance from Tokyo metropolitan area	0.000	-0.019		0.002	1.466		-0.002	-0.996	
Year of establishment of organization	0.000	0.089		0.000	1.627		0.001	2.093	*
Pseudo R-squared	0.055	,		0.037			0.072		

Notes: Log likelihood Y4=-629.881; Log likelihood Y5=-650.912; Log likelihood Y6=-395.234

7.   Conclusions

In this paper, the Japanese version of AMAs has been evaluated through the perspective of AMOs. There has been a sharp increase in the number of AMAs since 2000, which coincides with the decline of the local economies. The local economies in Japan have performed very poorly, particularly since the collapse of the bubble economy in the 1990s, and have experienced bad debt problems. Under these circumstances, the private sector needs to play a key role in AMAs. The main findings are as follows.

First, in terms of the funds required to run AMAs, we find almost no correlation between government subsidization and management assessment. Rather, there is a negative correlation between subsidization and AMAs with regard to "improving the landscape design of the town". It could be therefore assumed that town center regeneration organizations have been historically successful at putting together effective teams to acquire subsidies; however, after they received a subsidy, they did not have the system in place to organize the businesses, plans, or staff. Thus, as our analysis suggests, subsidies for "improving the landscape design of the town" have a negative impact. For the future, AMAs should be undertaken until they reach sustainable management, and then the system should be passed on (to others) in the area.

Second, we find a positive correlation between a positive assessment and "funding from membership fees". There is the possibility that funding from membership fees will enhance awareness of participation in an AMA.

Third, with regard to the number of years of establishment of an organization, we find that there is almost no correlation between the number of years of establishment and assessment of the organization.

Fourth, in terms of the frequency of meetings, we find that organizations with "fewer meeting times per month" have a better assessment than those with more meeting times. This is surprising but tells us that "meeting frequency" is not an important factor.

These results are not always in line with our intuition and therefore it is very important to consider the above findings to ensure better management of AMAs.

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