

Clarifying the Declining factors of shopping arcade with the statistical analysis¹

Proposal for the reformation of “Three Acts”
on City Planning

Keio University Yoshio Higuchi Seminar

City and Traffic Course

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Proposal to Revise the “Three Acts” on City
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Summary

This paper aims to clarify the declining factors of shopping arcade using statistical analysis. Because of the difficulties in accessing to the data of shopping arcade, there were only few papers in the past which made quantitative analysis. Thus our research is focused on analyzing and finding the specific declining factors of shopping arcade.

In first chapter, we have examined the transition of the laws. By taking a careful look at the transition of the laws, we could make a deeper understanding to governments response to decrease in the number of small and medium retail stores and shopping arcades..

Second chapter mentions about the situations of shopping arcade. Subsequently, by stating the problems potentially be caused by the decline of shopping arcades, we will explain why it is important to protect shopping arcade.

In the third chapter, we have summarized the previous paper related to the shopping arcade and large retail store. This gave us with guidance over how we should conduct our statistical analysis.

In the fourth chapter, we have done the regression analysis and clarified the declining factors of shopping arcade.

Last chapter shows our proposal statement based on the result of regression analysis.

Content

1. Current Analysis (Transition of Laws)

- 1-1. Department Store Act
- 1-2. Large Scale Retail Store Act
- 1-3. “Three Acts” on City Planning
 - 1-3-1. Large Scale Retail Store Location Act
 - 1-3-2. City Planning Act
 - 1-3-3. Act on Vitalization on City Center

2. Problem (The Atrophy of Shopping Arcade)

- 2-1. “Shutter Arcade”
- 2-2. Poor Consumer
- 2-3. Deterioration in Security
- 2-4. Shopping Arcade As the Symbol of the Community

3. Previous Paper

- 3-1. Large Scale Retail Stores and Large Scale Retail Stores Location Act
- 3-2. The Causes and Consequences of Wal-Mart’s growth
- 3-3. The Entry and Retire of Large Scale Retail Store and Restoration of City Center

4. Regression Analysis

- 4-1. Regression Model
- 4-2. Result from Regression Analysis
- 4-3. Implication from the Regression Analysis

5. Policy Statement

- 5-1. Large Scale Retail Store Location Act
- 5-2. City Planning Act
- 5-3. Act on Vitalization on City Center
- 5-4. Shopping Arcades as a Whole

Reference

1. Current Situation (Transition of Laws)

There has been lots of discussion about regulation for large scale store in Japan although few are discussed based on statistical analysis. In this paper, we will first consider the transition of laws and look carefully how Japan has dealt with small and medium retail store.

To discuss about the issue of Large Retail Store Location Act, it is necessary to look back on the history of its act. Japan has enacted laws about distribution channels focusing on three main points. To promote fair competition, to encourage small and medium retail business, who has played an important role in Japanese society in the past, and to balance the business activities between large scale stores and small and medium retail stores.⁴

1-1. Department Store Act

The first Department Store Act enacted in 1937 and was abrogated in 1947. Small and medium retail business, which had played an important role in Japanese society were suffering from business expansion of department store. To preserve small and medium retail business and to improve and reorganize department stores, the act was enacted. In this act, department store was defined as store which has 1500 m² or more sales floor. (3000 m² or more in the designated area) However, this act was abrogated in 1947 since it was against the Antimonopoly Law.

The second department store was reenacted in 1956 and was changed to Large Store Retail Act. After Department store was abrogated, competition

⁴Shirota Yoshitaka(2007), "A Study on Department Store Law Enactment", *Nagoya Bunri University bulletin*, No.7

between small and medium retail store and department store was getting tougher that small and medium retail store were put in severe situations. Additionally, competition among department stores was also getting keen that they expand their business immensely. Government has taken this situation seriously that they have decided to protect small and medium retail business.⁵

In the second Department Store Act, entry of department store needs admission of local small and medium retail stores. It not defines department store as building but as cooperation.

1-2. Large Scale Retail Store Act

After the second Department Store Law, supermarket store entered Japanese distribution channel. Each supermarket store tried not to infringe on law that it can escape from the restriction. Entry of supermarket store also threatened small and medium retail store that another needs for restriction have occurred. Large Scale Retail Store mainly focused on restricting the expansion of supermarket.⁶

1-3. “Three Acts” on City Planning

In general Large Scale Retail Store Act did not prevent large scale retails to do further damage to small and medium retail business, and thus further protect was needed

. Moreover, Large Scale Stores were tended to settle in suburb area, which caused several problems including the environmental issues. In reaction to these tendencies, Large Scale Retail Store Location Law has enacted in 2000 simultaneously with abrogation of Large Scale Retail Store Act. New Law regulates mainly on protection of the surrounding environment for those who are planning to build new large scale store. The implication of

⁵ Shirota Yoshitaka(2007), “A Study on Department Store Law Enactment”, *Nagoya Bunri University bulletin*, No.7

⁶ Same as Above

protecting small and medium retail business was taken over to City Planning Act. In addition, Acts on Vitalization on City Center were consecutively enacted, which imply to set the scheme for developing city center. These three laws are often called as “Three Acts” on City Planning, which play an important role in considering the development of each city.⁷

1-3-1. Large Scale Retail Store Location Act

This law has settled guidelines when opening large scale retail store regarding the parking lot, traffic jams, noise pollution, industrial waste and so on. Those who are planning to build new large scale store are required to submit the outline regarding the surrounded environment to each prefecture. Each prefecture has rights to claim for their outline based on the opinions of the surrounded residents. They also can urge to improve its outline if nothing changes.

1-3-2. City Planning Act

This law was enacted aiming for the flexible city planning relying on the complex cases of each city. It enables each city to regulate business use of property based on the future scheme of the city development. The scheme is expected to plan taking small and medium retail business and tradition shopping arcade into consideration.

This law urged each city to plan the use of each estate area in detail and develop systematically. First, each prefecture decides the planning area and divides into “development area”, which enlarge development, and “regulation area”, which restrain development. However, it is possible not to determine the area, which is left as “undecided area”. For “development area” and part of “undecided area”, each city can decide the general use of each estate such as habitations, business or manufacturing.

⁷ Yokouchi Ritsuko(2006), “Reformation of Three Acts on City Planning”, *National Diet Library ISSUE BRIEF*, No513

1-3-3 Act on Vitalization on City Center

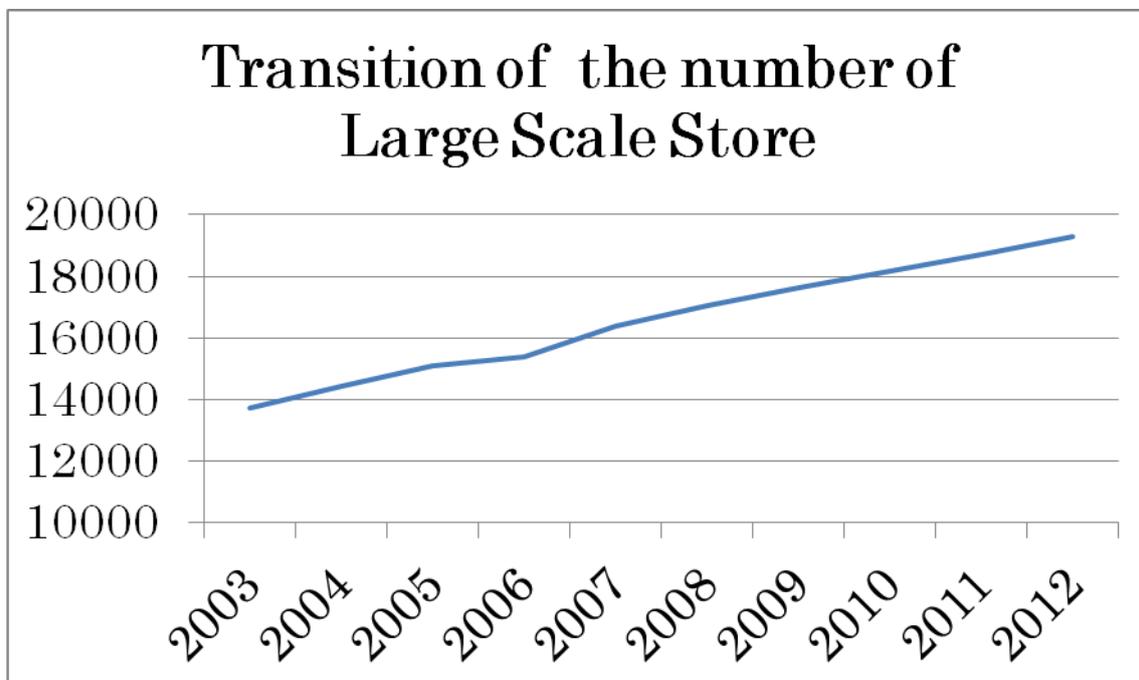
Based on the Vitalization on City Center policy, which government publishes, each local city government submits guideline for Vitalization on City Center. This guideline will be composed of fundamental plan for vitalization such as where and how to vitalize, development of city town, plan for future business and so on. Based on the guideline, local city government will mainly execute the plan for city vitalization and development and Town Management Organization (=TMO), which will be organized by local community, will take leadership on operating future business plan.

At first, local community will plan “vitalization concept for small and medium retail business” (=TMO Concept), which includes fundamental future business content, based on the guideline for Vitalization on City Center. Once TMO Concept is accepted by local city government, its local community will be officially admitted as TMO. As the next step, TMO and the other local business will make TMO Plan, which explain about the detailed plan for each future business such as their budget, concrete content and so on. TMO Plan will be handed in to Ministry of Economy, Trade and Industry, and once it has been accepted, each business will be supported by the government.

2. Problem (the Decline in Number of Shopping Arcades)

Even though the government is trying to protect and encourage the business of small and medium retail store with its regulations, it is obvious that shopping arcades are on the decline. The declines of shopping arcades will cause several social problems. The declines of shopping arcades will explain why people have to consider protecting small and medium retail stores.

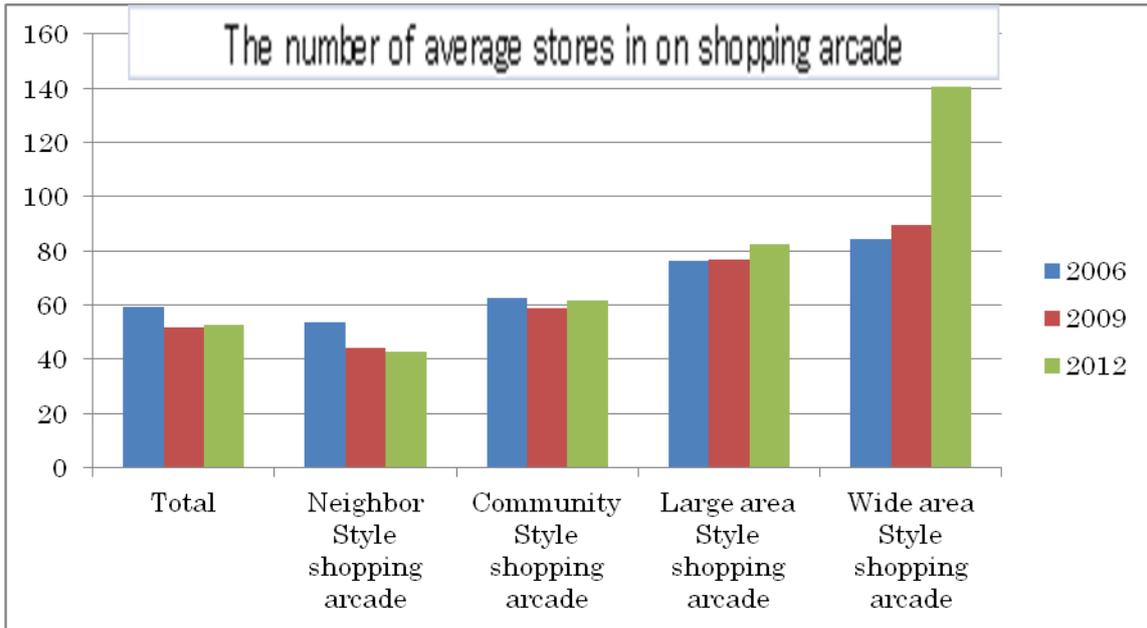
2-1. “Shutter Arcade”



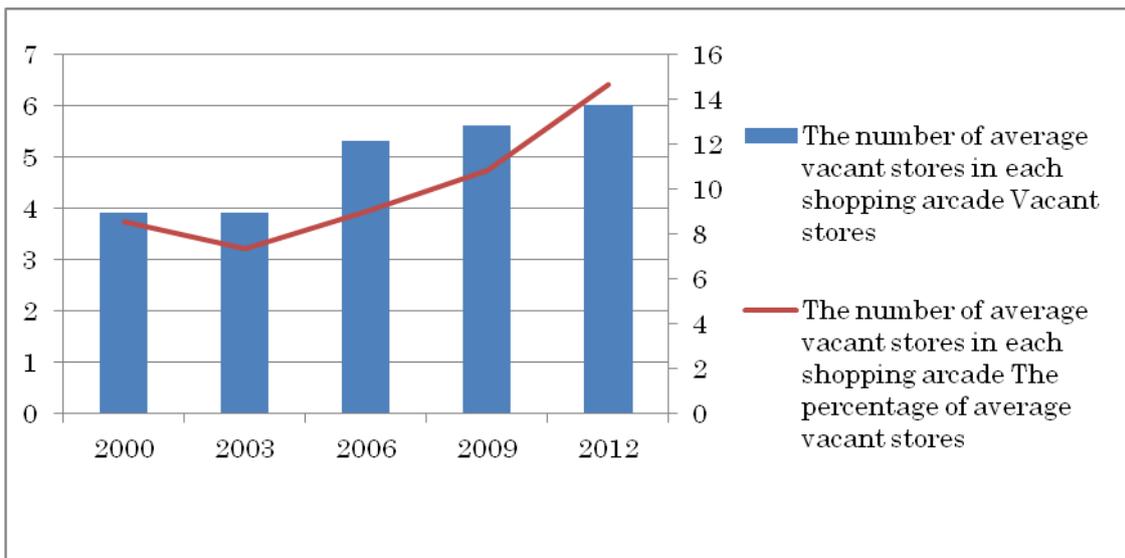
8

⁸ Toyo Economic Publisher “National Large Scale Retail Store Survey”, 2013/09/02 data acquired

Since the restriction of the entry of large scale stores had been alleviated after the change of the law, the number of large scale store is increasing constantly. On the other hand, traditional shopping arcades were put in severe situations that number of stores in each arcade is decreasing.



9



10

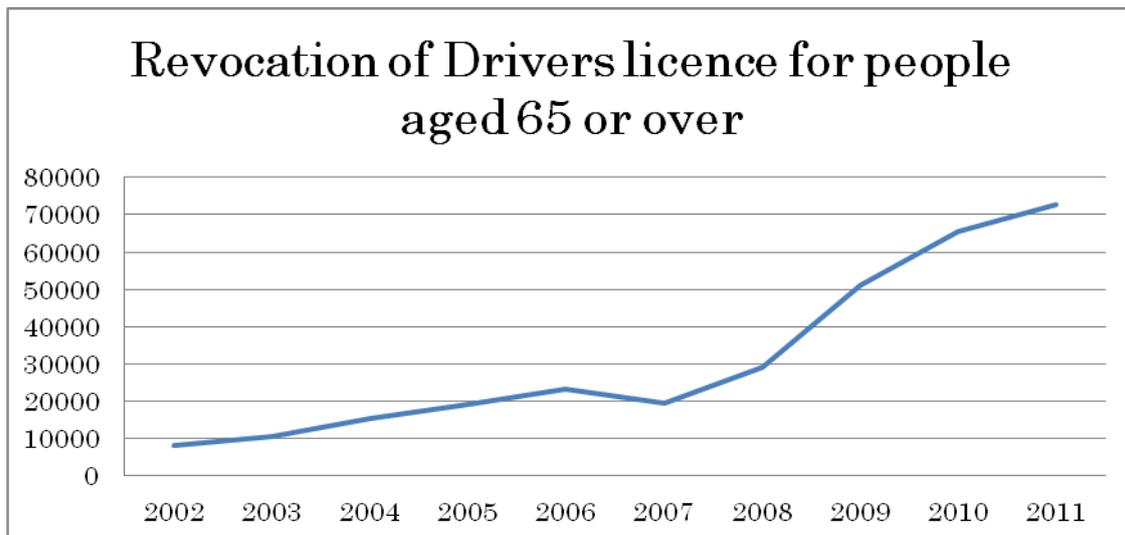
⁹ National Shopping Arcade Vitalization Organization “Actual Survey on Shopping Arcade”, 2013/09/02 data acquired

As the graph shows, the number of typical shopping arcade is decreasing. Large and Wide Style shopping arcade is similar to shopping mall in United States that it is located in far from downtown city.

The number of vacant stores is increasing that more and more traditional shopping arcade loses attraction of consumers. This situation can be called as “Shutter Arcade” that few shopping arcades are lively.

2-2. Poor Consumer

One of the merits of shopping arcade was its distance from each house. As Japan faces the problem of aging society, it is needed to organize the circumstances for elderly people so that they can buy things easily. However, large scale stores are tended to be built in suburb area which most of the elderly without cars cannot go.



11

¹⁰ National Shopping Arcade Vitalization Organization “Actual Survey on Shopping Arcade”, 2013/09/02 data acquired

¹¹ Police Traffic Department “Drivers License Statistic”, 2013/09/02 data acquired

2-3. Deterioration in Security

Decline of the shopping arcades will cause the deterioration in security. When the shopping arcades lose functions as the shopping place, nighttime population will decrease which leads arcades to become a high-crime area since there will be no guide to keep a look at, which retail stores had played roles in. The increase of crime rate will threaten the lives of the residents.¹²

In addition, people who used to work at the shopping arcade are required to change jobs. It is said that they have difficulty in finding better jobs that their wages decrease. Drop of the quality of life can be one of the causes of the deterioration in Security.¹³

2-4. Shopping Arcade As the Symbol of the Community

Shopping arcades are said to be the symbol of the community. Because of the shopping arcades residents tend to feel strong attachment to the community. Convenience stores or other large scale retail stores are find it difficult to become the symbol of the community since they are often build by outsiders.

Shopping arcades also have importance as “the third place”. “The third place” is the place for people to have comfortable communication without having any particular interests or aim.¹⁴ It is needed for modern busy people to have place like “the third place” to get rid of stress and get relaxed. Shopping arcades often lead the festivals or events of the community, which can be regarded as one type of “the third places”. “The third place” is also important for creating human relation. When the disasters like earthquake or typhoon happen, strong bonds among residents will help overcome the problem.

¹² Ando Shizuka(2007), “Consider the Restoration of Shopping Arcade reflecting on risk of its decline”, *Kagawa University Economic Policy Research*, No3

¹³ Yahagi Hiroshi(2005), “Large Retail Store and City Planning”, *Iwanami Booklet*

¹⁴ Harada Hideo(2002), “106 Discussion on Local Government”, *Jiji Express*

3. Previous Paper

In this section, first we will introduce discussion and research about large-scale retail stores in Japan and try to point out the area where we need deeper research. Then in order to tackle that problem, we will refer to papers mainly in the USA and try to make our own model. In the end, to refer to the statistical analysis of shopping arcade, we will take a look at paper making similar research.

3-1. Large Scale Retail Stores and Large Scale Retail Stores Location Law¹⁵

The author makes an inquiry into Large Scale Retail Stores and Large Scale Retail Stores Location Law. In the first chapter, she sorts the purpose of two laws, Large Scale Retail Stores law and Large Scale Retail Stores Location law, and thinks about the implication of the change in the law on Large Scale Retail Stores. In the Second chapter, she reflects on the effect of the “three acts” on city planning on Large Scale Retail Stores. In order to encourage shopping streets, she insists on strengthening the “three acts” on city planning. In the third chapter, she sees the transition of the number of Large Scale Retail Stores since the law was changed in 2000. In the fourth chapter, she thinks about the current situation of Large Scale Retail Stores in Matsumoto city in Nagano prefecture and makes an attempt to point out the problems which are caused by the increase in Large Scale Retail Stores. Overall, she advocates that the change of the law in 2000 “deregulated” the participation of Large Scale Retail Stores into market, swelled the number

¹⁵ Shimizu Satoko(2009), “Large Scale Retail Stores and Large Scale Retail Stores Location Law”, *General Area Research*, p43-53, Matsumoto University

of those stores and that exacerbated the situation of shopping streets and decreased the number of shops in shopping streets. Since Large Scale Retail Stores tend to be built in the suburban areas, reflecting on the aging problem and the emission of the green effect gas, she insists that we should embrace the idea of “compact city” where all important functions of cities are centralized and also each city should have their own identity based on their history, nature, racial characteristics and so on.

3-2. The Causes and Consequences of Wal-Mart's growth¹⁶

Large scale retail store has been said to have large impact on surrounded society. For example, Wal-Mart plays a large role in the U.S. economy and the society around its store. Wal-Mart is the largest private employer in the United States, with 1.3 million employees, and the largest retailer in the United States. Wal-Mart is the top U.S. seller of apparel, groceries, and music, among other products, and is the top retailer in most states. It also has large influence on the society that 46 percent of Americans live within five miles of the nearest Wal-Mart. Because the chain has a presence in so many markets, virtually all other retailers compete head-to-head with Wal-Mart: 67 percent of all retail stores in the United States are located within five miles of a Wal-Mart. Although most of the consumers are satisfied with the low cost of Wal-Mart, there are some criticisms saying that Wal-Mart store in their area had a negative effect locally and was bad for the country, which also shows how big impact Wal-Mart had made to the society.

3-2-1. Local Labor Markets

A new Wal-Mart store hires several hundred workers when it opens. There are many applicants for this offer that it seems entry of Wal-Mart's has

¹⁶ Basker Emek(2007), “The Causes and Consequences of Wal-Mart's Growth”, Journal of Economic Perspectives, vol.21, Number3, p177-198

large good impact on labor market. However, these increases in jobs are mostly offset by job losses at competing retailers that contract or exit as a consequence's of Wal-Mart's entry. In the long run, the number of retail jobs in a county increases by 100 the year Wal-Mart opens a new store (relative to what would have happened had Wal-Mart stayed out of the county), and 50 after five years. However, the number of wholesale jobs declines by about 30, reflecting the fact that Wal-Mart is vertically integrated: unlike the merchants it replaces, Wal-Mart does not rely on local wholesalers.

Entry of Wal-Mart not only affects the amount of jobs in the county but also affects the average wages in the county.¹⁷ use state-level averages to estimate the effect of Wal-Mart on hourly wages; they control for average demographics (average age, percent white, percent of workers with a high school education or lower level of educational attainment) and find that entry of ten Wal-Mart stores causes the average hourly wage of retail workers in the state to fall by 2 percent.

From these facts, it can be said that Wal-Mart's entry has huge impact on local labor markets.

3-2-2. Suppliers

Wal-Mart's buying power has affected both its business relationships with suppliers and the way these suppliers organize internally. (Basker, 2007) Since Wal-Mart is acknowledged as low-cost stores, its suppliers are also forced to lower the price down by consumers.

On the contrary, Wal-Mart had made positive impact on the past with its campaign called "Buy American" from 1985 to 1992. Wal-Mart promised, among other things, to pay up to a 5 percent premium for U.S.-made

¹⁷ Dube, Arindrajit, Barry Eidlin, and Bill Lester, (2007) "Impact of Wal-Mart Growth on Earnings throughout the Retail Sector in Urban and 196 Journal of Economic Perspectives Rural Counties." Available at SSRN: <http://papers.ssrn.com/abstract>

goods.¹⁸ It had saved American suppliers who were suffered from the other foreign imported goods.

3-2-3. Government Policy

As retail chain grows, its influence and interest towards local-national government increases. Wal-Mart has rapidly increased its lobbying budget in this last 10 years, with its main focus on deregulation of wage and import policies, infrastructure development, and subsidies.

The response of local government towards Wal-Mart had varied, some welcoming with the infrastructure development and deregulations, others restricting with zoning regulations and “living wage” ordinances.

3-2-4. Concluding Remarks

The initial investment to information technologies have given Wal-Mart the substantial advantages to outperform competitors by large. Its presence creates pressure for incumbents in the local market to decrease its price, therefore pushing down the price which consumer pays. However, although this is a positive phenomenon for local consumers, it is controversial whether Wal-Mart provides economic benefit as a whole. The share it holds in the industry is already at dominating level and some argue that the in order for healthy competition to be held at the market, certain regulation has to be set. The effect to the wage of the locals is also a question that is yet to be discussed, and the increasing trend of outsourcing also has both positive and negative impact.

¹⁸ Zellner, Wendy, (1992) “How True-Blue is Wal-Mart’s ‘Buy American’ Pledge?” *Business Week*, March 16, 1992.

3-3. The Entry and Retire of Large Scale Retail Store and Restoration of City Center¹⁹

In this report, METI (Ministry of Economics, Technology and Information), METI conducted a quantitative analysis considering an effect of Large Scale Retail Store entry and withdrawal on small to medium size retail's sales.

This paper aims to provide insights to the revitalization of city central by investigating the correlation between activities of large-scale retailers and the activity of small or mid-sized retailers. They have conducted a quantitative analysis by setting three explanatory variables; 1. entry and withdrawal of large scale retailers, 2. presence of public facilities within the target area, 3. level of motorization within the target area.

The research has proven that the entry and withdrawal of large-scale retailers has a positive influence over city central revitalization. However the research has shown that the influence against retailers established before 1997 is not significant, and their influence is limited to entry and withdrawal of retailers established after 1997.

In order to see the influence of motorization, Matsuura and Motohashi has conducted the research by dividing the area by its level of motorization. Research shows that area with low level of motorization is highly effected by the entry of large scale retailers. However, area with high level of motorization was not effected by the entry of large scale retailers. In other words, area with high motorization level will not be revitalized by inviting large scale retailers.

The presence of public facility showed a same result as entry and withdrawal of large scale retailers. The area with low level of motorization showed an improvement after the entry of large scale retailers and visa versa. From the research, they have concluded that large scale retailers, public facilities, and motorization level plays a significant role over the debate on

¹⁹ Matsuura Toshiyuki & Motohashi Kazunori(2006), "The Entry and Retire of Large Scale Retail Store and Restoration of City Center", *RIETI Discussion Paper Series*, 06-J-051

city center revitalization. Moreover, this paper emphasizes the significance of motorization level over the other variables, stating that invitation of large scale retails and establishment of public facilities alone is not sufficient enough for the revitalization. Their hypothesis over this is that high occurrence of traffic jams and constant occupation of parking lot is becoming the bottleneck of consumers to be attracted to city center, and policies considering these environmental factors of the city are required.

4. Regression Analysis

In the last session, we have seen that the impact of large scale store analyzed by previous papers. However, there were few papers which analyzed the reasons for the decline of shopping arcade using specific data. This thesis will try to clarify what are the causes of decline in the number of shopping arcades. In details, we will conduct a regression analysis using “the decline ratio of the number of shopping arcade in each prefecture” as dependent variables, and using 4 independent variables in order to find the reasons for the decline.

4-1. Regression Model

As for dependent variable, we chose “the decline ratio of the number of shopping arcade in each prefecture”. It is not easy to get hold of the data, which shows the number of the shopping arcade. (this was the one of the reasons why there were few papers analyzed the reasons of the decline of shopping arcade) Therefore, we used mesh data²⁰ which shows the number of retail stores. We have defined shopping arcades as group of retails which has less than 500 m² of sales area each that are gathered within 1 km². If there are more than 50 retail stores, we have defined it as “shopping arcade”.

As for independent variables, we chose “the changing rate of cars in each prefecture”, “the changing rate of the number of convenience store”, “the changing rate of people getting out from each prefecture” and “the changing rate of the number of large scale retail store”.

²⁰ METI Statistical Survey Group “Mesh Data on Retail Store 2004&2007” data acquired 2013/10/29

“The changing rate of cars in each prefecture”²¹ symbolizes the change of people’s way of shopping that has occurred because of motorization. Without cars, people tend to go shopping within walking distance from their home, and retail shops outside the range is unlikely to be chosen as shopping options. If the rapid increase in number of cars can be seen, the distance which consumers would be willing to cover for shopping increases significantly, thus will be give more options to choose which places to buy from. It can be assumed that people will choose shopping arcade less after the acquisition of cars.

“The changing rate of the number of convenience store”²² symbolizes the changes of the place of shopping. One of the strong points of shopping arcade is its variety of stores within the arcades. Various goods can be purchased at the same time and at the same place. However, we assume this competes with the benefit of going to convenience store, which usually are located in a convenient location with high variety of goods.

“The changing rate of people getting out from each prefecture” symbolizes people’s sense of attachment to its local community. One of the prior researches has mentioned the function of shopping arcades as the “face” of community, the increasing number of people getting out from each prefecture shows that community lost its attractiveness by its residents.

“The changing rate of the number of large scale retail store”²³ shows the relationship between shopping arcade and large retail store. This independent variable is said to have strong impact to decline of shopping arcade in prior researches. However, most of this result is based on survey targeting workers at shopping arcades, thus quantitative analysis is necessary to examine whether this impact is truly significant

²¹ Asahi Shinbun Publication “Number of car owned by individuals”
https://minryoku.jp/enduser/minryoku/pref/step3/0015/00163/01666/#value_-0001 data acquired 2013/10/29

²² Ministry of Economy, Trade, and Industry, “Commerce Establishment Survey 2006,2009” Volume2 Industry Section

<http://www.meti.go.jp/statistics/tyo/syougyo/result-2/h19/index-kakuho.html> data acquired 2013/10/29

²³ same as above

As we used the data of 2004 and 2007, the change rate means the change between 2004 and 2007.

4-2. Result of the Regression Analysis

Below is the result of regression analysis.

Y= the decline ratio of the number of shopping arcade in each prefecture

X1= the changing rate of cars in each prefecture

X2= the changing rate of the number of convenience store

X3= the changing rate of people getting out from each prefecture

X4= the changing rate of the number of large scale retail store

Residuals:

Min	1Q	Median	3Q	Max
-0.157628	-0.030389	0.009425	0.031418	0.081541

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	2.309739	0.551807	4.186	0.000142 ***
x1	-1.606172	0.586128	-2.740	0.008974 **
x2	-0.068818	0.112604	-0.611	0.544395
x3	0.276087	0.160856	1.716	0.093464 .
x4	0.007936	0.077904	0.102	0.919345

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.04777 on 42 degrees of freedom

Multiple R-squared: 0.1658, Adjusted R-squared: 0.08633

F-statistic: 2.087 on 4 and 42 DF, p-value: 0.09962

As shown in the results, x_1 = the changing rate of cars in each prefecture shows 5% statistically significant and x_3 = the changing rate of people getting out from each prefecture shows 10% statistically significant.

4-3. Implications from the Regression Analysis

Our research shows that there are correlations between motorization level, weakening of community mutual relations and the decline in the number of shopping arcades. Understanding these two as the external and internal factor which explains the reason for decline in the number of shopping arcade, we would like to discuss the further implications of these two factors.

Motorization expanded the maximum distance that consumers can cover to purchase product, which it now allows for the consumers to choose over multiple options of shops to shop within its range. This means that competitive environment for shopping arcades have changed, as before the motorization, they did not have to consider about the competitors outside the walking distance of its consumers. Now, they must compete with not only with large scale retails, but also with convenience stores, so called "drug stores", supermarkets, and many others that with more product lines, in terms of product varieties and qualities. It is especially difficult to compete for shopping arcades, as it itself usually are not organized in any ways to complement each individual stores product line coverage perfectly compared with the other competitors. Not only each of them does not complement each other, but once one of the shops closes, the value as a whole shopping area decreases, as now consumer is more likely to be not able to fulfill its needs by just visiting shopping arcades. Shopping arcade is now in highly competitive environment, thus they must either become more competitive somehow or differentiate itself from other types of retail stores.

Shopping arcades also have to consider the fact that liquidity of residents also have effects on its own vitality.

Our research has shown that higher liquidity of population is the internal factor for the cause of decline in the number of shopping arcades. This can be explained from the fact that shopping arcades were functioning not only as anonymous shopping facility but, also as community hub for residents which surrounds it. Within the community with sense of identity, the act of going for shopping inevitably becomes social engagement, meaning that the act of shopping itself means more than just satisfying the consumption needs for the residents. Intuitively, we can understand that rise in liquidity rate means less sense of belonging to the community, especially for individuals who had moved in. For them, shopping is nothing more than just functional activity to sustain their life, thus their preference on which place to shop purely will be determined by the overall utility the facility provides. We state that higher liquidity of population leads to the decline of shopping arcade.

On the other hand, our research also shows that entry and withdrawal of large scale retails and convenience stores does not have direct impact over decline of shopping arcade. We have conducted regression analysis to determine whether large scale retails and convenience stores entry actually leads to the withdrawal of the whole shopping arcade. From our research result we have come up with the hypothesis which is that although we can assume there are some influences over shops inside the shopping arcades, these two retails is not the critical factor for the withdrawal or decline of the number of shopping arcades itself.

5. Policy Statement

From our regression analysis result, we would like to propose that Act on City Vitalization on City Center should be revised into contents which consider how to stabilize the local residents surrounding the city center.

Considering these internal and external factors, policies that supports shopping arcades to create resident friendly environment is essential for the revitalization. From the implications from the regression analysis above, it is necessary to reconsider “Three Acts” on City Planning.

5-1. Large Scale Retail Store Location Act

Since there were no clear correlation between the entry of large scale retail store and the decline of the shopping arcades, it can be interpreted that it is not necessary to regulate the entry of large scale retail store in terms of protecting the business of small and medium retail store. As mentioned in the current analysis, Large Scale Retail Store Location Act does not regulate the entry strictly when compared with the former Acts. Since it can be assumed that large scale retail store has certain benefits to the consumers and the residents, regulation of its entry may have negative effects to its community. Therefore, based on our regression analysis, it is not necessary to reform current Large Scale Retail Store Act.

5-2. City Planning Act

Talking about the City Planning Act, we suggest that it is necessary to revise the Act. We suggest two proposals. One is to revise it to include the contents which considers supporting the shopping arcades differentiation

with other competitors and second is to add the concept of improving residential environment to refrain from people leaving out the community.

Current Act mainly focuses on regulating the entry of large scale retail store by local government planning the future use of the estate. However, since our regression analysis implies that motorization affect the decline of the shopping arcades, it is inevitable for shopping arcade to compete with other competitors. Since motorization made it possible for consumers to expand their shopping area, shopping arcades need to compete against not only large scale retail store but also against supermarket and the others. Therefore, shopping arcades need to create strong points by themselves to overcome against others. As mentioned in the problem statement, one of the characteristics of shopping arcades is that they have the power of “the third place”. We suggest that this function of “the third place” can be one of the strong points of shopping arcades. We propose that City Planning Act should include the use of public place in the shopping arcade so that more and more people will visit shopping arcade not only for shopping but also for the place to communicate with the local people.

Our regression analysis also implies that it is important to keep their residents from going away and create a community within their area. However, current City Planning Act mainly focuses on the future business use of the estate and lacks the concepts of how to improve the current residential environment. To prevent residents from going away, we propose that local government should make clear future plan on residential area so that residents can ensure of their future residence. With the clear plan residents can stay longer term, which will help creating strong community.

5-3. Act on Vitalization on City Center

We would also like to make proposal for reformation on Act on Vitalization on City Center. Although TMO focuses on making future business plan, we

suggest that they should take more consideration in creating strong community for the prosperity of shopping arcades.

Based on our regression analysis, it became obvious that strong community has correlation with the prosperity of shopping arcades. Nevertheless, current Act mainly thinks about their business plan. To create strong community, shopping arcades should be attractive not only in terms of business but also in terms of social connections. Therefore, we suggest that TMO plan should include the plan to make shopping arcade as the symbol of local community. For example, organizing the festival or developing symbolic monument will help create strong community. With the strong community, it will be possible to avoid people getting out from community, which leads to the prosperity of shopping arcades.

5-4. Shopping Arcade as a Whole

Finally, we suggest that current shopping arcades themselves should try to develop by reflecting the perspective of “local community”. Our regression analysis clarifies the importance of people staying in the same community for the prosperity of shopping arcades. To compete against the other competitors, shopping arcades should play an important role as “the third place”. Even with the current Act, if shopping arcades try to make fascinating business plan, which also has the purpose of becoming the symbol of community, certain amount of subventions will be given from the national government. We propose that shopping arcades must shift its purpose from just a means of shopping to reorganize itself into hub of community, or a symbol of community. It is important from local economic and social point of view, which can be realized by subsidies and redesigning of the shopping arcades into more community oriented environment.

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