HEISEI MUNICIPALITY MERGING: UNDERSTANDING MUNICIPALITY MERGING THROUGH TYPOLOGICAL ANALYSIS^{*}

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1. Introduction

Japan has long history of municipality merging to enhance the administrational efficiency. The first grand municipality merging happened in 1888. In a year, the number of municipalities reduced from 71,314 into 15, 859, almost one fifth. It is called Meiji Grand Municipality Merging, because it was done during the Meiji era (1868~1912). During the Showa era (1926~1989), about 10,000 municipalities were decreased into 3,400. Another grand merging happened these seven years. Supported by *Amended Special Act on City Merging 1996*, 1,967 municipalities have been merged into 557 since 1999 (as of March 2006). In seven years, the total number of municipalities in Japan has been decreased by 43.6% (Fig. 1). This is called Hesei Grand Merge using the name of the era. But, the important questions are not answered yet: how do we interpret the municipality merging?; is merging an effective method to solve the local problems and to improve the situation?; should it be promoted?; and what should be improved? To answer these questions, understanding the characteristics of municipality merging is essential. And, as a useful tool for it, we proposed typological analysis. Did we have distinctive types to categorize? They answer was yes. Using the clustering method (Fig. 2) and tree diagram method, eight different types of mu nicipality merging were discovered. This paper categorized the patterns of city merging with the 557 Heisei Merging cases, examined each characteristic, and provided the basis for the further policy recommendation in city merging.



Fig. 1 Flowchart Explaining the City Merging Status

Fig. 2 Clustering

2. City Merging Patterns

(1) 7 Indexes to Categorize

Seven criteria were used to categorize the patterns of municipality merging; 1) the degree of population concentration to the

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biggest municipality; 2) the average of financial status among the merged municipalities; 3) the financial superiority of the biggest municipality; 4) the number of municipalities merged; 5) the relative area of the biggest municipality; 6) the number of densely inhabited areas (DIDs); and 7) whether the DIDs are merged.^{1),2)} Here, the biggest municipality means the one with largest population among the merged. The first criterion reflects population condition, the second and third consider financial, and the last four deal with spatial. The correlation among these seven indexes turned out low enough.

(2) The characteristics of each type of city merging

Using the clustering method (Fig. 2), it is found that the municipality merging can be understood with 8 types (Fig. 3). Each type has the following characteristics (Fig 5).

- Type 1: The merge of small municipalities with poor financial status. The average population of this cluster is 27,000. They received Merging Special Subsidy but did notbecome a city. Without strategies, the regional vitalization is hard to expect (140 cases, ex. Appicho, Hokkaido)
- Type 2: Similar to Type 1, but the area itself is more spread. Through the merging, the municipalities were promoted to cities and tried to improve the financial status. The average population of the merged cities is 38,000. (89 cases, ex. Kunisaki City, Oita-ken).
- Type 3: The merging is occurred from the practical base, because the areas have already shared the activities even before the merging. Merging effect is expected high (25 cases, ex. Shunan City, Yamaguchi-ken).
- Type 4: High dependency on the biggest municipality in the merge. Some municipalities rejected to be merged to preserve their own identity. The highest effect from the merging is expected among the 8 merging types (44 cases, ex. Maebashi City, Gunma-ken).
- Type 5: This type often observed around the Kanto, Chubu and Tokyo Metropolitan area. Relatively the financial status is fine, so they mostly aim the administrational power transfer. Higher independency among the municipalities before the merging might require the negotiation cost or efforts for consensus, comparing Type 4 (41 cases, ex. Noda City, Chiba-ken).
- Type 6: The pattern that small municipalities merged to a municipality which once flourished, but declining with the change of the industry environment. To revitalize the area, innovative ideas will be necessary (95 cases, ex. Shinhidaka City, Hokkaido).
- Type 7: Municipalities merged each other with a very clear purpose and highly motivated intention. They aimed financial status improvement, administrational efficiency, as well as special status such as the Cabinet-Order Designated City, the Special City or the Mid-Nuclear City (12 cases, Tottori City, Tottori-ken).
- Type 8: Even though the purpose of the merging was the financial status improvement and administrational efficiency, often the merging was frustrated by the geographical limitations, because this type comprised large area. In addition, many cases were broken up while the processing, because the merging of municipalities of bad financial status does not promise better future. The tendency of riding the trend was also observed. The average population of the merged municipality is 83,000 (111 cases, Tsuruoka City, Yamagata-ken).





Fig. 3 The Result of Categorization of City Merging

Fig. 4 Conceptual Diagram of City Merging Pattern



Type 3: Shunan City, Yamaguchi-ken



Type 5: Noda City, Chiba-ken



Type 7: Tottori City, Tottori-ken



Type 2 Kunisaki City, Oita-ken



Type 4: Maebashi City, Gunma-ken



Type & Shinhidaka City, Hokkaido



Type & Tsuruoka City, Yamagata -ken



Fig. 5 The Example City of Each Municipality Merging Pattern Note: All the pictures share the same scale with that of Abiracho, and the red-lined areas designate DIDs.

(3) The result of analysis from the city merging categorization

The 8 types of city merging can be rearranged according to the area size after the merging and the degree of concentration (Fig. 4). From this figure, it can be said that merging is more effective when the consolidated city area is more compact, and when it is more concentrated. All the types of city merging had effect of administrational cost saving, but it is not considered the merging cost and service quality after the merging. Between the area size and the degree of concentration, the latter seems to be more influential in expecting the merging effect from the perspective of sustainability.

The distribution of Heisei Merging is shown in Fig 5. As shown in this figure, most of the places in Japan were under merging during the last seven years. Type 8 merging happened in vast areas, especially where the financial situations are unstable, but merging by itself have not become a solution to improve the local problems including finance and vitality.



Fig. 5 Distribution of Hesei Grand Merge according to the 8 Types

3. Conclusion and Discussion

This study clarified the necessity of the close study on the specified strategy development in city merging according to the merging pattern. Differentiated city merging guidelines and strategies to each type will enhance the effect of city merging and envision more sustainable direction for the areas. Scrutinized case studies also recommended.

References

- 1) Ministry of Internal Affairs and Communications: Census 2000, Japan
- 2) Ministry of Internal Affairs and Communications: The Shape of Municipalities Looking from Statistics 2005, Japan