# Relationship between Administrative District Change and Regional Characteristics by Municipal Merger

- Reorganizing Process of Administrative District by Municipal Merger in Chugoku Region -

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### **Abstract**

The aim of this study is to make clear the relationship between administrative district change and regional characteristics by 2 large municipal mergers after WWII through the case study on the Chugoku region in Japan. In the Chugoku region, it was classified by the combination pattern of "city" and "town / village" at the time of the merger. Furthermore, using the four types of agriculture from urban to mountainous, the relation between the merger types and geographical conditions became clear. It has drastically reduced about 70% of the municipalities in the first municipal mergers called "Showa mergers", and about 60% in the second municipal mergers called "Heisei mergers". However, there is a big difference in the tendency of the combination pattern of municipalities. In the Showa mergers, geographical conditions had a significant influence. In addition, many cities spread by integrating many neighboring towns and villages in the Heisei mergers. Thereby, the gaps in fiscal capacities among local governments are also expanding.

Keywords: Merger; Chugoku region; Geographical condition; Showa; Heisei

#### 1.Introduction

In Japan, 2 large municipal mergers were conducted after WWII, in the first municipal mergers called "Showa mergers" during the population growth period, educational reform and upgrade of administrative service were achieved. On the other hand, the second municipal mergers called "Heisei mergers" during the shrinking population period, has been conducted to establish and strengthen the financial basis of local governments efficient operation of public management. In short, each large municipal merger had established a different social background and purpose. Therefore, the current administrative district of Japan has expanded by the merger of municipalities. Fig.1 shows the number of municipals divided cities, towns and villages in Japan since 1922. The number of cities, towns, and villages in 1953(Showa28)was 9,868 (1,966 cities, 286 towns, 7,616 villages).

It decreased to about 18% (1718(790 cities, 745 towns, 183 villages)) between 1953 and 2014(Heisei26). From now on, it is necessary to consider the specific planning methods for efficient public facilities management and maintain the regional bases. However, the forms of municipal merger are different at each municipality by

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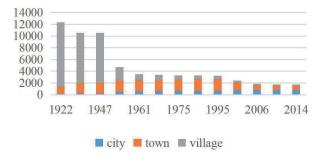


Fig.1: Change of the number of the municipalities in Japan

geographical conditions and consolidation processes. For the reason, it need to consider the maintenance method for the characteristics of the each municipalities.

Research of the past includes study on "The Showa Municipal Merger Promotion Policy Revisited "that Ichikawa wrote in 2015. However, there are a few studies about the forms of municipal mergers.

#### 2. Method

# 2-1.Research target area

The Chugoku region is situated in west of Honshu, and comprise the five prefectures of Tottori, Shimane, Hiroshima, Okayama, and Yamaguchi.

	1950			Rate of		2000	Rate of	2018			area	
	City	Town	sum	change	City	Town	sum	change	City	Town	sum	km²
Tottori	2	168	170	-78%	4	34	38	-50%	4	15	19	3,507
Shimane	3	241	244	-76%	8	50	58	-67%	8	11	19	6,708
Okayama	5	362	367	-79%	10	68	78	-62%	18	12	30	7,114
Hiroshima	5	342	347	-71%	12	88	100	-70%	13	17	30	8,479
Yamaguchi	10	163	173	-68%	14	42	56	-66%	11	8	19	6,112
Sum Total	25	1,276	1,301	-75%	48	282	330	-65%	54	63	117	31,921

Figure 2 shows the reduction rate of municipalities from 1999 to 2010.

According to Table 1, it has drastically reduced 75% of the municipalities from 1950 to 2000, and about 65% from 2000 to 2018. Therefore, among Japan, Chugoku region was especially affected by 2 large municipal mergers. Accordingly, we clarify the consolidation process of administrative district after WWII through the case study on the Chugoku region in Japan.

### 2-2.Period

After World War II, the role of municipalities was management and administration of the junior high school. In addition, administration about daily activities of residents such as firefighting and the social welfare was aimed for. However, the administration and financial base of municipalities was inadequate for the enforcement. Therefore promotion of the municipal merger was demanded. The Law for the Promotion of the Mergers of Towns and Villages was established in 1953, and a merger was pushed forward to reduce the number of municipalities to 1/3. Furthermore, the Law for the Promotion of Construction of New Municipalities was established in 1956 before the Law for the Promotion of the Mergers of Towns and Villages lapse. The government and the prefectures urged the merger for non-merger municipalities less than the appropriate scale.

The life of the people greatly transformed after rapid economic growth in Japan for next 40 years, but most of the municipalities did not merge. In this period, in the other side of the economic growth, the roles of the municipalities which gave a public service increased by a change of the life of the people. Furthermore, the financial status became serious. Throughout Japan that progress of "population decline" and the "declining birthrate and aging society" without being able to anticipate economic growth after the Heisei. It was establishment of administration and the financial base that the local government was demanded as the person bearing responsibility of the decentralization of power for the offer of a variety of resident's services. Therefore old Special Mergers Law was amended in 1999 to support financially such as

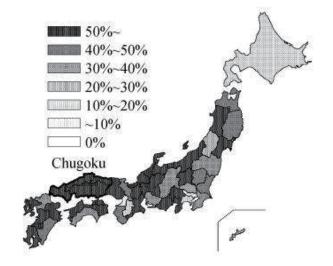


Fig.2 The reduction rate of municipalities (1999~2010)

merger exception bonds. Furthermore, in 2005 when the old Special Mergers Law lapsed, the new Special Mergers Law that specified the active participation of the government and the prefectures for the merger was established.

In this paper, based on the number of the municipalities (figure 1), we divided from 1950 to 2015 into 2 periods. Therefore, we analyze the characteristic of the merger of Chugoku region in each time.

### 2-3. Classification method

In Japan, "cities with a population of over 50,000 people" once had been defined as the city. Therefore, it is divided the type of local government into "city" and "town and village". Specifically, 1,399 municipalities as of 1950 in the Chugoku region were classified by the combination pattern of "city" and "town / village" at the time of the merger. Furthermore, using the four types of agriculture from urban to mountainous, the relation between the merger types and geographical conditions became clear.

# 3. Geographic condition

Tottori prefecture located in the northeastern part

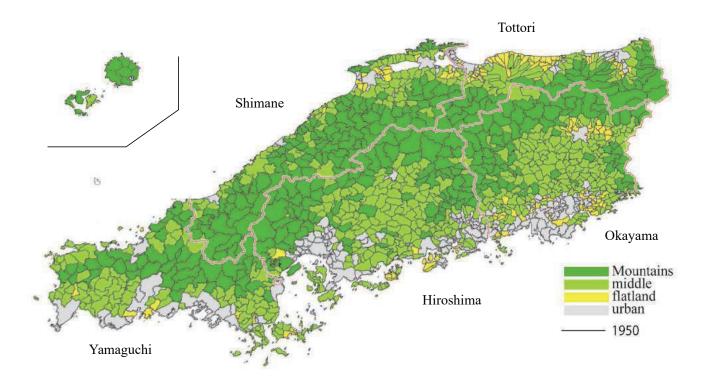


Fig3: Distribution of agricultural area type

and Okayama prefecture located in the southeastern part are adjacent to the urban region called Kansai region. Yamaguchi Prefecture is located in the western part and is adjacent to the Kyushu region. Compared with the number of municipalities for the area, the largest prefecture is Okayama, and the smallest prefecture is Yamaguchi. The Ministry of Agriculture, Forestry and Fisheries measured the area of agricultural land divided by the area of the municipality in 1950. It is classified into 4 types, Mountainous agricultural area (less than 10% of arable land area), Middle agricultural area (less than 20% of arable land area), flat land agricultural area (less than 50% forest area ratio, arable land ratio more than 20%), urban area. Fig.3 shows the distribution of Agricultural area type. About 50% of the Chugoku region is mountainous agricultural area and it is distributed around prefectural borders.

# 4. Showa merger types

Before the merger, the number of municipalities in 1950(Showa 25) was 1397 by 1151 villages of 219 towns of 27 cities. After the merger, the number of municipalities in 2000(Heisei 12) was 325 by 40 villages of 228 towns of 57 cities. According to the combination of city and town / village, it can be categorized into 4 types: A (city + town/village = city), B(town + village = city), C (town (village) + village = town), D(no merger). Figure 4 shows the model of each type of merger. Table 2 shows the number of merger type for each prefecture. The most frequent case is C type 209, accounting for 64% of the total. Figure 6 shows the rate of the

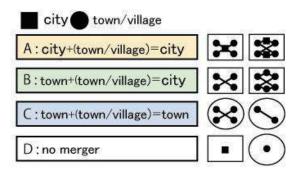


Fig4.Merger type model

Showa merger type. The rest consists of 29 cases (9%) for type A, 27 cases (8%) for type C, and 60 cases (18%) for type D.

Figure 5 shows the distribution of type of the Showa merger from 1950 to 2000. Almost of the type A and type B are distributed in coastal areas. Tsuyama city, Okayama prefecture is distributed in the inland area. Type D is distributed in inland areas along the prefectural border as an exception. Almost of the D type is town or village, but Shinnanyo, Yamaguchi Prefecture which is an exception of type D is the city. In case of Type A, many cities spread by integrating many neighboring towns and villages. Type B consist a lot of municipalities such as towns or villages, and form a large administrative area. Table 2 shows the percentage of merger type for each prefecture. In Chugoku region, Yamaguchi prefecture was especially high percentage of type A.

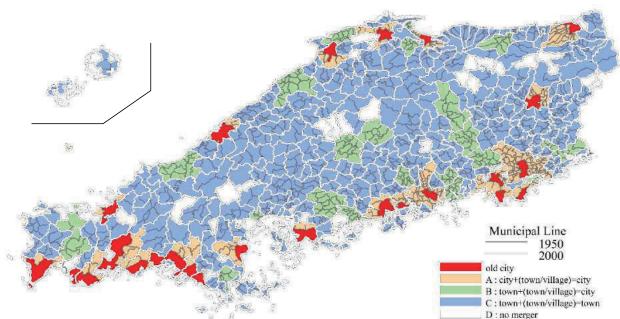


Fig.5: Distribution of type of the Showa municipal merger (1950~2000)

Table3: Type of the Showa municipal merger

	Tottori		Shimane		Okayama		Hiroshima		Yamaguchi		Total	
A	2	5%	4	7%	4	5%	7	8%	12	21%	28	9%
В	2	5%	4	7%	11	14%	7	8%	3	5%	27	8%
С	30	79%	41	72%	50	62%	58	62%	30	54%	209	64%
D	4	11%	8	14%	16	20%	21	23%	11	20%	60	18%
Total	38		57		81		93		56		325	

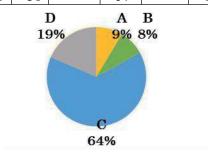


Fig.6:Rate of merger type (1950-2000)

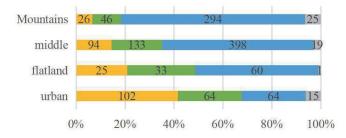


Fig.7:Agricultural area type and merger type (1950-2000)

# 4-2.Relationship between agricultural area type and merger type

According to Figure 3, there are a lot of types A and B in urban areas of coastal areas. Some exception type A that distributed in inland areas include urban areas. B type is distributed in the area where the rate of mountainous agricultural area is low even in inland area. There are a lot of type C and D in areas where the ratio of mountainous area agricultural area is high.

Figure 7 shows that the percentage of merger types for each type of agricultural area. The number is based on 1399 municipalities in 1950.

In case of the urban or flat land area, there are a lot of type A or B. On the other hand, there are a lot of type C that form a town by towns and villages in mountainous areas.

# 5. Heisei merger types

Before the Heisei merger, the number of municipalities in 2000(Heisei 12) was 325 by 40 villages of 228 towns of 57 cities. The number of municipalities in 2018(Heisei 30) after the merger was 117 by 4 villages of 61 towns of 52 cities.

It is classified into 4 types according to the combination of city, town and village after merger.

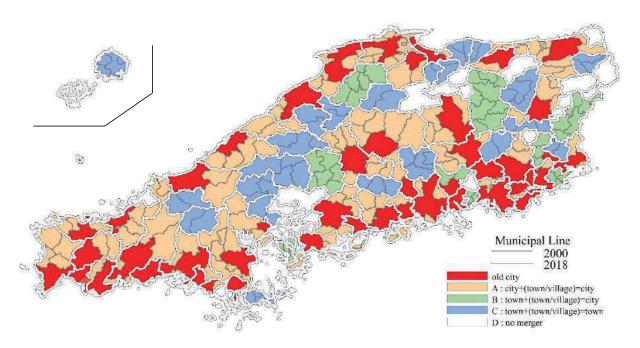
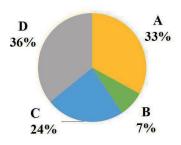


Fig.8 : Distribution of type of the Heisei municipal merger(2000~2018)

Table3: Type of The Heisei Municipal Merger

	Tottori		Shimane		Okayama		Hiroshima		Yamaguchi		Total	
A	3	16%	7	37%	8	27%	9	30%	11	58%	35	30%
В	0	0%	1	5%	5	17%	2	7%	0	0%	8	7%
С	7	37%	7	37%	4	13%	6	20%	1	5%	25	21%
D	9	47%	4	21%	13	43%	13	43%	7	37%	38	32%
Total	19		19		30		30		19		117	



**Fig.9:** Rate of merger type (2000-2018)

Table 3 shows the number and percentage of merger type for each prefecture. Figure 9 shows the rate of the Heisei merger type. The most frequent cases are D type 38, accounting for 32% of the total. The rest consists of 35 cases (30%) for type A, 8 cases (7%)for type B, 25 cases (21%) for type C. Figure 8 shows the distribution of type of the Heisei merger from 2000 to 2018. Type A occupies the majority of Chugoku region. There are types B, C and D are distributed in inland areas and near the prefectural border. Type B consist a lot of municipalities such as towns or villages, and form a large administrative

area. Table 3 shows the percentage of merger type for each prefecture. In Chugoku region, Yamaguchi

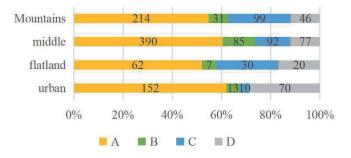


Fig.10:Agricultural area type and merger type (2000-2018)

prefecture was especially high percentage of type A.

# 5-2.Relationship between agricultural area type and merger type

According to Figure 3, B type is distributed in the area where the ratio of mountainous agricultural area is low even in inland area. There are a lot of type C that form a town by towns and villages in mountainous areas. Figure 10 shows that the percentage of merger types for each type of agricultural area. The number is based on 1399 municipalities in 1950. However, any geographical

condition consists of similar ratio.

#### 6. Conclusions

There are two patterns when merging into the city. The first type is A type in which cities spread by integrating many neighboring towns and villages.

Another type is B type which consist only towns and villages. Besides, there are C type which merges into the town and D type which does not merge. Compared with population disparity, type A is more serious than type B which consists only of towns and villages. So A type is classified into two types, A-A and B-A. Thus, the type of merger is categorized into 5. In the Chugoku region, it has drastically reduced about 70% of the municipalities Showa mergers, and about 60% in Heisei mergers. However, there is a big difference in the tendency of the combination pattern of municipalities. In the Showa mergers, geographical conditions had a significant influence. In addition, many cities spread by integrating many neighboring towns and villages in the Heisei mergers. Thereby, the gaps in fiscal capacities among local governments are also expanding.

In order to consider the maintenance method for the characteristics of the each municipalities, we need to understand the current situation of local life for each type of merger.

## 7. References

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