Municipal mergers and commuting

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One of the main purposes of the recent "Heisei no Dai Gappei" (the Great Heisei Merger) in Japan was to enhance local governments' administrative efficiency by remedying geographical disjunction between municipal boundaries and daily-life space of residents. This paper aims at examining whether municipalities actually merged with strongly-connected municipalities by using the data of inter-municipal commuting in the 2000 Population Census. To gauge the level of commuting connection for each (old) municipality, we calculate two indices; one is the gross commuting rate, in which the total number of commuters between the (old) municipality and the entire municipalities to merge with is divided by the population of the (old) municipality. The other is the average gross commuting rate per merged municipality, acquired by dividing the first index by the number of merged municipalities. Our analysis shows that gross commuting rates and average gross commuting rates tend to be low in Hokkaido and Shikoku. Municipalities with low levels of indices are by and large located in depopulated areas, or areas with higher percentages of those engaged in the primary industries. Correlation coefficients indicate that the gross commuting rate and the average gross commuting rate are negatively correlated with (old) municipality's population size and population share in the new municipality. However, a closer look at the data reveals that municipalities with less than 5,000 residents have on average lower values for both indices than those with moderate size of population. Variables such as the percentage of the elderly, financial index of municipality, and the percentage of those engaged in the primary industries also show the similar characteristics. In order to locate municipalities with small population and weak commuting connection, we sort out municipalities based on the following three criteria; 1) population was less than 5,000, 2) population share in the new municipality was less than 20 %, and 3) at least one of the two indices is less than average minus 1 standard deviation. 34 municipalities fit those criteria. Case studies of Hokkaido and Ehime prefectures indicate that the selected municipalities basically show very high percentages of the elderly and those working in the primary industries, as well as very low levels of financial index. Some of the municipalities had few commuters to/from outside, and others maintained stronger commuting connections with municipalities other than those to merge with, especially in Hokkaido.