

Evaluating administrative efficiency change in the post-merger period: A study on Ibaraki prefecture in Japan for the period 1979–2004

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Abstract

This paper analyzes municipal administrative efficiency change in the post-merger period by using the data of 92 municipalities in Ibaraki prefecture for the period 1979–2004. For this purpose, we employ a nonparametric programming method to compute Data Envelopment Analysis(DEA) Malmquist indices. These indices are decomposed into two component measures, namely, catch-up and frontier shift indices. We find that the administrative efficiency in Ibaraki prefecture in the post-merger period is slightly regressed and this is fully attributable to frontier shift. Moreover, the efficiency scores of merging municipalities are found to be higher than that of nonmerging ones. The contribution of scale change in the post-merger period is notable in Tsukuba city, which was formed after consolidating small-sized municipalities.

Keywords: Municipal mergers; Data envelopment analysis; Malmquist index; Japanese municipal administration

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