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SPATIAL ECONOMETRICS ANALYSIS ON THE CONVERGENCE OF LOW-CARBON ECONOMIC GROWTH EFFICIENCY IN THE YANGTZE RIVER ECONOMIC BELT

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Abstract

Based on the panel data of the Yangtze River Economic Belt in 1998-2016, this paper carries out a spatial econometrics analysis on the convergence of low-carbon economic growth efficiency (LCEGE) in the Belt. The main results are as follows: there are huge provincial differences in the LCEGE across the Belt; the spatial autocorrelation (Global Moran's I) test shows a significant spatial correlation of the LCEGE, with an obvious regional spatial clustering effect; considering the spatial effects, the provincial gap in the LCEGE is reduced gradually at an absolute convergence rate of 5.85%; the LCEGE has a significant positive correlation with the R&D investment and opening-up, a significant negative correlation with industrial structure and energy structure, and an insignificant correlation with environmental regulation.

Keywords: convergence analysis, low-carbon economic growth efficiency (LCEGE), spatial econometrics, Yangtze River Economic Belt

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