Spatial dimensions of intra-metropolitan disparities in female labor force participation and commute times[*]

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Abstract

We explore intra-metropolitan spatial patterns of female labor force participation and examine their associations with commute times in the Tokyo metropolitan area. Our municipal-level analysis reveals considerable intra-metropolitan disparities in female labor force participation, regular employment, and part-time employment rates. The Global Moran's I and Getis-Ord Gi* statistics show that the spatial patterns of labor force participation and regular employment rates differ markedly by marital status and the presence of children. Married women with children exhibit more significant spatial clustering of high and low values of these rates than unmarried women and married women without children. For married mothers, the spatial clusters of low participation and regular employment rates are largely located in the inner suburbs, many of which overlap with the spatial clusters of long male commute times. The non-spatial and spatial regression results indicate that for married mothers, a longer commute time is significantly associated with lower participation and regular employment rates, while for unmarried and childless married women, these associations are mostly insignificant. Our findings suggest that policies that alleviate commuting constraints could help women with children participate more actively in the labor market.

Keywords: female labor force participation, commute times, spatial patterns, spatial statistics, Tokyo

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