Extended Input–Output Model for Urbanization: An Empirical Test Using Chinese Data

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Abstract
Although the input-output model has been widely used for both pure economic analysis and environmental issues, demographic analysis has been relegated to the periphery in the input-output literature. Since the 1980s, Batey and his various co-researchers have made a significant contribution to the progress of economic-demographic modeling from the perspective of unemployment in the context of shrinking regional economies. This study focuses on another demographic aspect of the urbanization process by developing an extended input-output model for urbanization, using the so-called Batey-Madden model, which focuses on incorporating labor accounts with the input-output model. The study proposes a new “urbanization multiplier,” which implies strong population concentration in cities based on an employment multiplier in urban areas and labor allocation possibilities between urban and rural areas. According to a preliminary application to Chinese urbanization, economic structure can be said to determine the urbanization multiplier, indicating the extent of employment opportunities created in urban areas, and the size of the population attracted from rural areas. Furthermore, the study considers a wide range of possible applications of the input-output table in terms of urbanization.

Full Text
Due to technical limitations, full-text HTML conversion of this manuscript could not be completed. However, the manuscript can be downloaded and accessed as a PDF.
Figure 1

Economically active population in rural and urban areas Source: China Statistical Yearbook
Figure 2

Number of employed in urban areas
Figure 3

Number of employed in rural areas Source: Estimated from the China Statistical Yearbook

Figure 4

Output multiplier (backward linkage)
Figure 5
Output induced by consumption

Figure 6
Induced urban employment
Figure 7
Urbanization multiplier

Figure 8
Conventional Leontief multiplier
Figure 9

Output multiplier (backward linkage)

Figure 10

Output induced by consumption
Figure 11

Induced urban employment

Figure 12

Urbanization multiplier (urban and rural labor allocation multiplier)
