Task Trade and the Size Distribution of Cities[*]

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Abstract

Taking account of the increasing importance of task trade in urban contexts, this paper provides a model of a system of cities in which ex ante identical locations specialize in tasks that differ in their skill intensity, resulting in a unique size distribution of cities. The necessary and sufficient condition for a power law including Zipf's law is derived, and a quantitative analysis shows that the model is consistent with the size distribution of U.S. cities. A welfare analysis is also conducted, suggesting that the welfare loss due to spatial inefficiency is fairly small.

Keywords: size distribution of cities, task trade, spatial equilibrium, symmetry breaking

JEL classification: F12, R12, R13