Housing Prices and the Comparative Advantage of Cities

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Abstract

The spatial concentration of economic activity varies substantially across U.S. cities. In addition, cities with larger shares of skill-intensive industries have higher housing prices. Existing theories, however, have almost entirely focused on the relationship between city size and industrial composition. This paper proposes a theory of cities that relates housing prices, spatial sorting, and comparative advantage. There are many ex-ante identical cities and a continuum of heterogeneous individuals, as well as a continuum of tradable goods, which differ in their dependence on local skill-intensive differentiated input components. Each individual chooses an occupation and a location according to her productivity. Cross-city heterogeneity arises endogenously through the choices made by freely mobile individuals. In any stable equilibrium, cities organize themselves into specializing in different sets of tradable goods. Empirically, I find support for my model’s predictions about the cross section of cities. I use the model to study the effects of land regulations. When comparing Philadelphia and New York, the model can explain more than 70% of the differences in housing prices and wage rates between these two cities. I also extend the model to analyze the equilibrium effects of Federal Empowerment Zone Program. The model predicts that although a tax credit benefits the targeted region, it would lead to a welfare loss for the whole economy.

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