State Taxes and Spatial Misallocation

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Abstract

Dispersion in sales, income, and corporate taxes across U.S. states leads to spatial misallocation by distorting workers’ decisions about where to live and how much to consume, as well as firms’ decisions about where to locate, how much to produce, and where to sell. How big is the impact of this spatial misallocation on real output and welfare? To answer this question we build a quantitative trade model with imperfect firm and labor mobility that accommodates heterogeneity in tax structures across states. In the model, workers decide where to locate based on income, cost of living, and local amenities, while firms decide where to locate and how much to produce based on productivity, market potential, and costs of hiring workers and using land and intermediate inputs. The extent of misallocation depends on the elasticity of the number of firms with respect to profits, of employment with respect to real wages, and of inter-state trade with respect to import prices. We estimate these elasticities using data on state taxes and economic activity in the U.S. since 1980 and structural equations from the model that link variation in firm location, employment, and trade to variation in sales, income, and corporate taxes across states and over time. We then use the estimated elasticities and the structure of the model to predict the real-income effects associated with the changes in the number of firms, labor supply, and internal trade generated with counterfactual changes in the state tax distribution.