

Marshall meets Bartik: Revisiting the mysteries of the trade

Yasusada Murata (Nihon University) Ryo Nakajima (Keio University)

Abstract

We identify a causal effect of top inventor inflows on patent productivity of local inventors by combining the idea-generating process described by Marshall (1890) with the Bartik (1991) instruments involving state taxes and commuting zone characteristics of the United States. We find that the local productivity gains go beyond organizational boundaries and co-inventor relationships, which implies the partially nonexcludable good nature of knowledge in a spatial economy and pertains to the mysteries of the trade in the air. Our counterfactual experiment suggests that the spatial distribution of inventive activity is substantially distorted by the presence of heterogeneity in state taxes.