

Firm Sorting across Space

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Abstract

We study the importance of firm sorting for spatial inequality. If productive (“urban”) locations can attract the most productive firms, workers in unproductive (“rural”) locations are not only hurt through inferior location fundamentals but also lack access to technologically advanced producers. Thus, firm sorting acts as an amplifier of spatial inequality. We develop a novel model of spatial firm sorting, in which heterogeneous firms first choose a location and then hire workers in a frictional local labor market. Firms’ location choices are guided by a fundamental trade-off between regional productivity and local labor market competition: Operating in productive locations increases output. However, sharing a labor market with other productive firms makes it hard to poach workers and own workers are easily poached. We show that sorting is positive (i.e., better firms settle in urban locations) if firm and location productivity are complements in production and labor market frictions are sufficiently large. Using matched employer-employee data from Germany, we provide evidence for the main qualitative predictions of our theory. In a quantitative exploration, we study two stylized counterfactual policies to reduce spatial inequality: one that brings workers to productive firms and locations through labor market integration; and one that brings technology to workers by increasing rural productivity, e.g., through improving infrastructure or building schools.

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