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Bolstering Regional Economies

Esteban Rossi-Hansberg, Pierre-Daniel Sarte, and Felipe Schwartzman. “Local Industrial Policy and Sectoral Hubs.” *American Economic Association: Papers and Proceedings*, May 2021, vol. 111, pp. 526-531.

In recent years, the United States has seen many regions struggle economically while others thrive due to their so-called “superstar” cities — think San Francisco or Seattle for tech, or Boston for the biomedical industry. Some policymakers, researchers, and commentators have expressed their belief that a concerted federal investment in technology, or in research and development, can help level the playing field nationwide and spur economic growth. But is it optimal for all localities to specialize in the same sorts of industries?

A February 2021 paper by economists Esteban Rossi-Hansberg of Princeton University and Pierre-Daniel Sarte and Felipe Schwartzman of the Richmond Fed suggested that the answer to this question is no. Instead, they found that localities should double down on their existing strengths if they want to thrive economically. Cities that employ a large share of workers in cognitive nonroutine (CNR) occupations like medicine, law, engineering, or research should further concentrate workers in those jobs, due to the positive, productivity-enhancing external effects that arise from people working with each other. Conversely, smaller cities that employ a large share of non-CNR workers should focus on expanding the industries that they currently have.

In a more recent May 2021 paper published in the *American Economic Association: Papers and Proceedings*, Rossi-Hansberg, Sarte, and Schwartzman built on their earlier findings and analyzed the desirability

of industrial policies that might strategically help develop the economies of certain regions within highly concentrated “sectoral hubs.” They found that as far as the optimal policy is concerned, the large sectoral hubs in easily tradable services — such as professional services — that currently exist should persist, and the smaller hubs in less tradable services — such as health care and education — should also persist, albeit in a smaller and more localized capacity. The rest of the economy, under this optimal policy, should balance between tradable and nontradable services, with a particular emphasis on restoring and bolstering traditional manufacturing towns.

These conclusions are based on the paper’s model, which assumes that externalities arise from the composition of local labor markets and influence workers’ labor productivity. This aspect of the model means that externalities vary from industry to industry; in other words, some industries may experience more benefits from stronger externalities than others.

The authors used this model to determine where workers will choose to work and live. They found that in equilibrium, the decisions that workers make for themselves do not align with the living decisions that would most benefit society as a whole. Since workers positively influence each other and become more productive when in the same vicinity, the ideal scenario is one in which workers within similar profession groups concentrate geographically so that the productivity gains that allow local economies to thrive are fully realized.

Using wage and employment data, as well as data on the dependencies between different sectors, the authors then quantified the model and tested it empirically. After estimating the degree to which local externalities are present

within industries, they ran regressions on four industry groups: health and education; professional and other services; manufacturing; and accommodation, wholesale trade, and transportation. Their statistical analysis indicates that workers, particularly those in CNR occupations and those in manufacturing, have the most to gain from being around others who work in the same industries.

The authors then considered what the socially optimal geographic allocation of workers would be under the optimal policy. Costs for health care and education fall in larger cities, production becomes more concentrated along the U.S. coasts, and total-factor productivity, a proxy for efficiency and a key component of economic growth, increases. In most cities, wage growth increases by only slightly more than the total-factor productivity gains with respect to health care and education, but in San Francisco and San Jose, Calif., and Washington, D.C., wage growth far outpaces total-factor productivity and increases the cost per unit of each service. In these cities, the high level of specialization in professional services results in increased CNR wages to the point where health care and education are crowded out.

Manufacturing operates slightly differently, with the optimal policy leading to more evenly dispersed production across many smaller cities, most of which are too small to become manufacturing hubs.

“Different places can do different things, and different industries can fit in different places,” says Sarte. It follows that when localities “leverage their strengths,” as Sarte puts it, they can make themselves, their workers, and their economies better off. The paper concludes, “With the right incentives, sectoral hubs can yield shared gains for everyone.” **EF**