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“Just Right” Definitions of Local Labor Markets: Introducing SLMs

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ARTICLE HIGHLIGHTS

■ *Local labor markets are areas in which there is a strong spillover of job creation effects.*

They are useful as a basis for cooperative planning for local economic and workforce development.

■ *Current local labor market definitions, such as metropolitan areas, are often much larger than commonly used local planning areas and group together many counties that do not have strong links with each other.*

■ *I propose a new definition of local labor markets based on how job creation in one county affects employment rates in other counties.*

■ *These new local labor market definitions—spillover-based local labor markets (SLMs)—are generally smaller than current definitions. But they comprise most commuting flows and correspond more closely with local planning areas.*

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“Just Right” Definitions of Local Labor Markets: Introducing SLMs

Timothy J. Bartik

Local labor markets are geographic areas with shared economic interests—employers look for workers and residents look for jobs within a particular commuting range. For such an intuitive concept, defining the boundaries of local labor markets is remarkably difficult. Think of it like a rock thrown into a pond: Where do the ripples end? Draw the circle too tight and you miss many smaller ripples; draw the circle too wide and the ripples are scarcely visible at the edges.

Local labor market boundaries aim to capture the effect of labor market shocks (such as local job creation) on labor market outcomes (such as employment rates or wage rates). Two adjacent counties may be part of the same labor market if job creation in one county affects job availability in the other as residents commute to new job openings.

Like the rock and the ripples, however, defining local labor market boundaries involves trade-offs between capturing the strongest effects of the labor market shock by choosing tighter boundaries and capturing a broader range of job spillovers by choosing wider boundaries. Adding more counties to a local labor market will capture more of the spillovers of a county’s job creation on employment rates in nearby counties. But the average intensity of the job creation spillover within the local labor market will fall as the geographic spread increases.

Local strategies to create jobs can be better planned with local labor market definitions that are neither too small nor too large but are “just right.” A “just right” definition means that policy evaluations will capture most of the spillovers from local job creation—at the same time that the average intensity of the spillovers is strong enough that job creation anywhere within the area has meaningful benefits for residents throughout the area.

However, the most commonly used labor market definitions, both in government policy

and academic research, are typically too large. Core-based statistical areas (CBSAs) and commuting zones (CZs) may differ wildly from—and are frequently much larger than—the local intergovernmental areas that develop cooperative plans for economic development, transit, and housing.

Metropolitan areas are seldom good matches for local planning areas.

This article summarizes a [paper](#) in which I propose new local labor market definitions that better optimize the trade-off between capturing the complete extent of spillovers and the average intensity of the spillovers. These “slimmer” geographic definitions are based on estimates of how county-level job shocks affect employment rates in nearby counties. I then combine counties into labor market areas to maximize a weighted sum of total employment rate spillovers and average spillover intensity within these areas.

These new labor market geographies are smaller than under current definitions. But they capture most spillover effects and most commuting flows. They also are small enough to have strong average employment spillover intensity and are thus more cohesive as planning areas. Finally, these new labor market definitions more closely match commonly used local planning areas, which lends these definitions credence and also makes them more relevant for place-based policies.

What’s Wrong with Commuting Zones and Core-Based Statistical Areas?

A local labor market is a geographic area within which changes to any sub-area spread via

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commuting to affect the entire area. For example, new suburban jobs can affect job availability for city residents who can either commute to those jobs or access city jobs left vacant by formerly commuting suburbanites who take the new suburban jobs.

Well-defined local labor market areas are useful for both research and policy. Such local labor markets help researchers accurately estimate how changes in local labor demand or

In many local areas, the central city county and suburban counties all clearly benefit from creating jobs in any county in the area.

supply affect labor market outcomes such as employment rates and wages. For example, if a suburban county is mistakenly excluded from a metro labor market, then researchers will miss potentially large spillover effects of city jobs on that suburban county’s residents. On the other hand, suppose some suburban county is unaffected by city jobs, but is mistakenly *included* in a local labor market area. Then empirical studies will tend to understate how new area jobs affect area residents’ employment.

For some local planning purposes, policymakers may wish to define local labor markets broadly to include almost all the spillover effects on nearby counties. But suppose a local planning area includes counties with weak job spillover links. Getting these additional counties to cooperate in area job creation policies will be challenging. Appropriately defined local labor markets can provide local planners with more useful data.

The official local labor markets in the United States are CBSAs, designated by the Office of Management and Budget, which include both metropolitan areas (with

an urbanized core of at least 50,000 people) and micropolitan areas (with an urbanized core of at least 10,000 but less than 50,000 people). Some researchers also use CZs, which have the advantage of including rural counties.

Unfortunately, CZs and CBSAs are seldom a good match for local planning areas. CZs and CBSAs may be larger than local planning areas; for example, the Atlanta CBSA includes 29 counties. Yet, the Atlanta Regional Commission, which does local planning for transportation, housing, and community development, comprises only 11 counties. By contrast, some CBSAs may be too small. For example, San Francisco and Silicon Valley are defined as two separate metropolitan areas, despite their many spillovers.

Why do CZs and CBSAs go awry? These areas are set based on low thresholds for inter-county commuting. A county can be added even if its commuting rate to the entire CZ or CBSA is modest, leading to many of these areas being overdefined.

Using County Spillover Effects to Define “Just Right” Labor Markets

To construct more useful local labor market definitions, I directly estimate county-level job spillovers. I allow the change in a county’s employment rate to depend on job changes in the county itself and nearby counties, with these relationships flexibly varying with inter-county commuting.

This approach yields estimates of job spillovers for any county in the contiguous United States (excluding Alaska and Hawaii, leaving 3,080 remaining counties) on any other county. On average, I find that when employment increases by 100 jobs in a county, 23 of those jobs are filled by existing residents of that county and nearby counties who otherwise would not be employed.

For example, if an employer creates 100 new job vacancies, these will be filled by some combination

of (a) people who move to the area, (b) local residents who are not employed, and (c) local residents who are already employed and switch jobs. Job switching, in turn, creates new vacancies with other employers. When all the vacancy chains are complete, 100 jobs must go either to local area residents who otherwise would not be employed—thus raising the employment rate—or to new in-migrants to the area. I find that approximately 23 of the new jobs created in a county go to local area residents who otherwise would not be employed, while the other 77 are filled by people who move to the area.

While the *total* spillover of 23 jobs does not vary much across the 3,080 counties, the *share* of the spillover contained within the focal county varies considerably. On average, the own county share is about half—the own county’s employment rate increases sufficiently to amount to 11 or 12 jobs out of the 23-job total. But for some counties, the own county spillover share effect is over 80 percent—19 out of the 23 jobs. In other counties, this share is less than 20 percent—just 4 of the 23 jobs. These differences influence whether a county can rely on its own job creation or should link up with nearby counties.

In many metropolitan areas, political tension between central city counties and suburban counties inhibits regional cooperation. The county spillover estimates provide evidence that suburban and central city counties often have strong common interests.

For example, consider Detroit (Wayne County), where regional cooperation between the city and Oakland County, its largest suburban county, has sometimes been difficult to achieve. But these spillovers imply that Oakland County has large benefits from job creation in Wayne County, and vice versa.

For every 100 new jobs in Wayne County, the employment rate in Oakland County rises sufficiently to be

equivalent to six extra jobs for Oakland County residents. This Wayne-on-Oakland effect is almost as large as the direct Oakland-on-Oakland effect of 7 jobs; that is, when 100 new jobs are created in Oakland County, Oakland County's employment rate increases sufficiently to provide 7 extra jobs for Oakland County residents. In the other direction, for every 100 new jobs in Oakland County, the employment rate in Wayne County increases sufficiently to provide 7 extra jobs for Wayne County residents. This Oakland-on-Wayne effect is almost as large as the Wayne-on-Wayne effect of 10 jobs. Wayne and Oakland Counties both benefit from jobs created in either county, and they have little to gain from trying to compete for jobs.

Introducing Spillover-Based Local Labor Markets

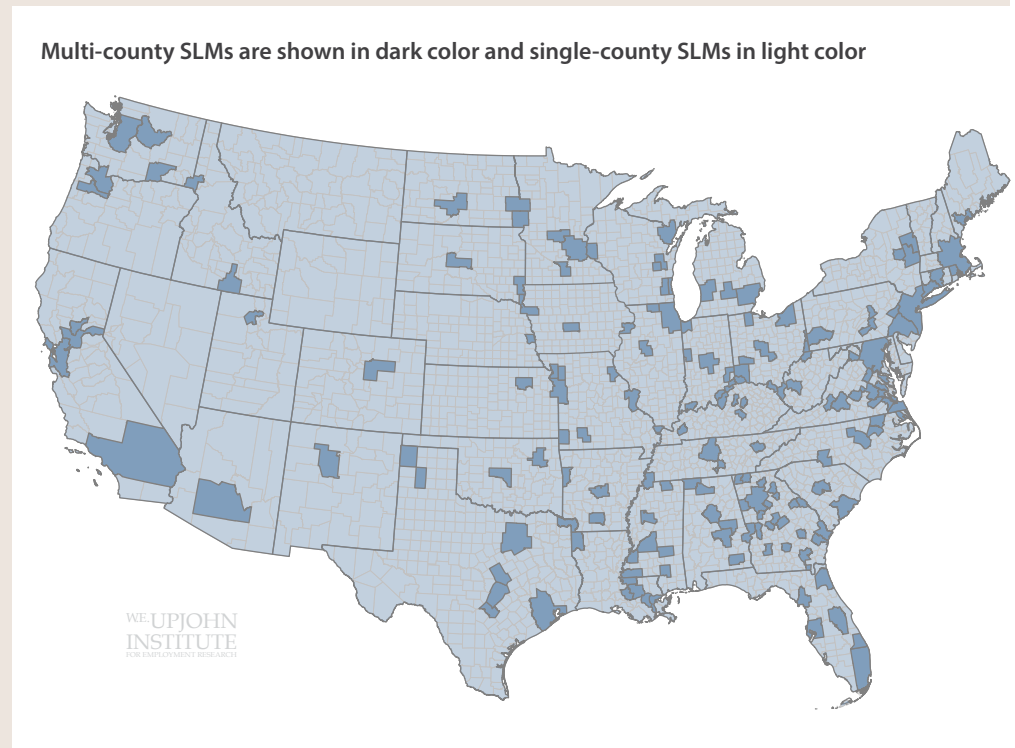
I use these spillover estimates to create a new set of local labor market definitions for the contiguous United States. These new definitions combine counties into local labor markets to balance the total spillover effects captured and the average within-area spillover intensity. I call the resulting areas “spillover-based local labor markets” (SLMs, or “Slims”).

The 3,080 counties in the contiguous United States are divided into 2,752 SLMs (Figure 1). Only 170 SLMs comprise multiple counties (498 in total), but they account for 59 percent of the population. The remaining 2,582 counties each comprise their own local labor markets.

As noted above, SLMs are, on average, smaller or “slimmer” than CZs or CBSAs. The average SLM is one-fourth the population size of the average CZ and 20 percent smaller in population than the average CBSA.

But these slimmer local labor markets still capture most spillovers and commuting. SLMs capture over 78 percent of the total employment spillovers. SLMs also capture over 87

Figure 1 Spillover-Based Local Labor Markets Provide a More Useful Definition of Local Labor Markets for Researchers and Policymakers



SOURCE: Author's calculations.

percent of total commuting in the (contiguous) United States.

More importantly, SLMs more closely match local planning areas. Atlanta's SLM is almost identical to the Atlanta Metro Regional Commission: both have 11 counties, 10 of which are in common. Chicago's SLM matches the 7 counties of the Chicago Metropolitan Agency for Planning, whereas the Chicago CBSA is larger, at 13 counties. The Minneapolis-St. Paul SLM includes 2 counties more than the 7-county Metro Council that administers metro transit, wastewater services, and a tax-base sharing system; in contrast, the Minneapolis-St. Paul CBSA consists of 13 counties. And although Silicon Valley and San Francisco are separate CBSAs, they are grouped together in the same SLM, which reflects the strong spillovers between these areas.

How Policymakers Can Use SLMs

Defining local labor markets has both practical and symbolic usefulness. For practical purposes, when different areas within a local labor market do

By defining local labor markets within which there are strong shared interests, these new definitions are more useful for place-based policies.

indeed have strong common interests in policies like job creation, local planners can use readily available data on such local labor markets to explore multiple issues:

- What quantities and types of labor are available, and therefore what new community college offerings or apprenticeships

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might provide more trained workers for new jobs the area could attract or grow?

- What business development sites are available, and therefore what industrial parks or business incubators might be needed to promote local economic development?
- What do local businesses need for capital investments, loans, or business advice, and how could these needs be met by local venture capital funds, manufacturing extension services, or small business development centers?

Symbolically, the local labor market definition sends a message that this is a geographic area in which residents have strong common interests. For example, it is important whether residents of Oakland and Wayne Counties in Michigan think of themselves as being part of the same area. Thinking “we’re in this area together” makes it easier for people to support political compromises for the interests of the entire area.

Place-based jobs policies depend on defining places that are labor markets with shared interests. Existing local labor market definitions fall short in serving the needs of U.S. places for common planning. These new definitions seek to be more useful in making and supporting better place-based policies.

For additional details, see the full working paper at https://research.upjohn.org/up_workingpapers/407/.

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Reduced School Tracking Increased Educational Attainment and Fertility in France

Serena Cnaan

School tracking is the practice of separating students into tracks or classrooms based on their academic achievement. While school systems around the world use tracking, some track more heavily than others. For example, some European countries, such as Germany, have a rigorous form of tracking whereby students are divided from an early age into academic and vocational tracks, which differ in their curricula, the types of degrees that students can eventually obtain, and—consequently—the career options available.

Other countries, including the United States, use a milder form of tracking in which students are sorted into different classrooms based on their abilities but follow a common academic curriculum.

Tracking is controversial, as low-income students are more likely than high-income students to be placed in low-achieving classrooms or tracks, resulting in greater socioeconomic disparities in educational attainment

and ultimately in the labor market. Several studies have examined how different types of school tracking affect individuals’ career outcomes (Malamud and Pop-Eleches 2010; Dustmann, Puhani, and Schönberg 2017; Cnaan 2020). However, less is known about the relationship between school tracking and family formation. This relationship is important to understand, as the decisions of whether, when, and whom to marry, as well as whether and when to have children, directly affect economic well-being.

In a [recent paper](#) (Cnaan 2024), I investigate how reducing the degree to which students are tracked at an early age affects their marriage and fertility outcomes. Specifically, I evaluate the consequences of a French reform that delayed the separation of students into academic and vocational tracks from age 11 to 13 and replaced it with a less intensive system of grouping students into achievement-based classrooms. I find three major consequences of

ARTICLE HIGHLIGHTS

- *In the late 1970s, France raised the age of tracking—separating students into classrooms based on academic achievement—from age 11 to 13.*
- *This reform increased the quality of degrees that individuals attained, especially for those from low-income backgrounds.*
- *It also made women more likely to have partners in high-skilled occupations and closer in age.*
- *For women from low-income backgrounds, the reform increased their total number of children at age 42.*
- *School tracking can have strong effects on long-term family formation.*