## FEDERAL RESERVE BANK

 of ST. LOUIS
## How Employment Has Shifted Across the U.S.

July 19, 2022

Employment varies significantly across U.S. counties. What is the geographical distribution of jobs, and how has it evolved in recent decades?

In an April 2022 Economic Synopses essay, St. Louis Fed Senior Vice President and Deputy Director of Research B. Ravikumar, along with research associates Iris Arbogast and Jesse Labelle, examined how employment varied across more than 3,000 U.S. counties.
"Most employment is concentrated in a few areas, with large areas of little employment in between," they wrote.

## Geographic Breakdown

To highlight the concentration of U.S. employment, the authors analyzed 2020 nonfarm payroll employment data from the Bureau of Economic Analysis. In the figure below, each point on the map represents a county with its size and color indicating a share of total U.S. employment.
"We order the counties by employment share and then split them so that the sum of employment represented by each color is approximately $20 \%$ of total U.S. employment," they wrote. "We see clusters of counties with high employment on the coasts, specifically in the northeast and southwest, with other sizable clusters spread out across the U.S."
U.S. County-Level Employment, 2020


SOURCES: Bureau of Economic Analysis and authors' calculations.

However, the authors pointed to the spaces between the areas of high concentration that have very little employment. In examining the county breakdown, they found that most of the employment is held in only a small percentage of counties. Eighteen counties make up 20\% of employment, while 112 counties make up $50 \%$ of employment.

## Employment Changes Over Time

The authors then organized the counties by employment share and categorized them into five groups. Each group was the same size and made up $20 \%$ of the total counties in the U.S. In the next figure, the blue dashed line represents the 621 counties that made up $81 \%$ of total employment in 1970. By 2020, that share rose to $84 \%$. However, the employment shares in other county groups were little changed and varied by less than $1 \%$ each from 1970 to 2020.


SOURCES: Bureau of Economic Analysis and authors' calculations.

Over that time frame, the most significant changes were in the top five counties in terms of employment share. The authors noted the top five in 1970 included Los Angeles County, Calif.; Cook County, Ill.; New York County, N.Y.; Wayne County, Mich.; and Philadelphia County, Pa. These five counties made up $12 \%$ of total U.S. employment. But by 2020, Wayne County, Mich., and Philadelphia County, Pa., dropped out of the top five and were replaced by Harris County, Texas, and Maricopa County, Ariz. That year, these top five counties totaled $9 \%$ of total U.S. employment.

The authors paid close attention to the increases in California, Texas and Florida.
"In 1970, 15 counties made up $20 \%$ of overall employment in the U.S., and one third of these counties were in California, Texas, and Florida," they stated. "In 2020, 18 counties made up $20 \%$ of overall employment, and over one half of those counties were in California, Texas, and Florida."

## Valuable Insight

So has employment become more concentrated? The authors wrote that depends on the way it is measured. They noted that the number of counties totaling $20 \%$ of employment rose from 15 in 1970 to 18 in 2020, which suggests that concentration decreased. However, they also observed that the share of the top $20 \%$ of counties
increased from $81 \%$ to $84 \%$ during that same period, which suggests that concentration increased.
"Continued analysis of employment concentration in U.S. counties will provide valuable insight into the evolving U.S. economy," they concluded.

