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Local Labor Markets

Aggregate statistics don't capture the local conditions that directly affect families and communities.

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Policymakers, researchers, and journalists often focus on the nationwide economy—for example, by talking about the overall unemployment rate. Aggregate economic conditions are important, but they do not capture the local economic conditions that directly impact families and communities. In this article, I discuss labor market outcomes from the standpoint of local areas. How much do labor market outcomes vary across local areas? What are the causes and consequences of this inequality? And does this inequality increase or decrease after a recession?

Measuring Local Labor Market Inequality

To understand what the prepandemic economy looked like, I use data from the 2018 and 2019 American Community Surveys, focusing on individuals ages 25-64 who were not serving in the armed forces or living in group quarters (such as a nursing home).[1] I define a local labor market as a metro area, which consists of counties that include a large population center and highly integrated adjacent areas. There are 22 metro areas in the Third District and 357 metro areas in the rest of the contiguous U.S. I summarize local labor market conditions using two measures: a metro area's median hourly wage and the share of that area's individuals who are employed. (This share is often called the employment rate.) Stronger local labor markets tend to have a higher median wage and a higher employment rate.

How much do labor market outcomes vary across areas? Quite a lot. The lowest median hourly wage is in McAllen-Edinburg-Mission, TX, at $13 (in 2019 dollars), and the highest is in San Jose-Sunnyvale-Santa Clara, CA, at $34 (Figure 1). In the Third District, the median hourly wage ranges from $18 in Altoona, PA, to $26 in Trenton, NJ. The second-highest wage, at $24, is in Philadelphia-Camden-Wilmington.

The employment rate also varies considerably across metro areas, from 56 percent in

Homosassa Springs, FL, to 87 percent in Fargo, ND. In the Third District, the employment rate ranges from 72 percent in East Stroudsburg, PA, to 81 percent in Harrisburg-Carlisle, PA. Median wages and employment rates in the Third District are high relative to the rest of the country.

What explains this local labor market inequality, and does this inequality translate into differences in individuals' well-being? I draw on empirical and theoretical research in economics to address these questions.

The Causes and Consequences of Inequality

What are the causes of local labor market inequality? For simplicity's sake, I focus here on the median hourly wage, and why it might be higher in some areas. This discussion helps us understand the three reasons why labor market opportunities are stronger in some places: employers' productivity, individuals' productivity and characteristics, and local policies.

First, wages may be higher because local employers are more productive. More-productive employers—that is, employers that generate more revenue per worker—typically face economic and social pressures to pay higher wages. There are many reasons why an area's employers might be more productive. They could benefit from a metro area's natural advantages, such as proximity to mineral deposits, or transportation infrastructure that facilitates exports, such as ports. These unique local advantages may make local employers more productive, and this in turn can lead to higher local wages. Or, employers could be more productive because of a metro area's historical advantages—that is, factors that increased productivity in the past but no longer matter directly today. One example of historical advantage is Philadelphia's role as a center of commerce and government in the 18th century. Historical advantages can have long-lasting effects because of path dependence: Once economic activity is concentrated in a particular location, employers and individuals tend to be attracted to this location as a place to live and work.[2] Even if there are no natural or historical advantages, employers can still become more productive by joining other employers in an agglomeration, or densely built-up area of human settlement, because an agglomeration provides a greater supply of potential workers, nonlabor inputs, and creative ideas, all of which aid productivity.[3] Finally, the nationwide economy experiences secular changes, such as the decline in manufacturing employment and the rise of information technology, and cyclical changes due to the business cycle. These changes affect areas differently based on the types of goods and services they produce. So local businesses may become more productive and thus pay higher wages simply because nationwide events and trends favor that area's local industries.

FIGURE 1

Wages and Employment Vary Greatly Across U.S. Metro Areas

Third District metros tend to have higher wages and higher employment rates.

Median hourly wage and employment rate by metropolitan statistical area, 2018–2019

Source: Author's calculations using data from Ruggles et al. (2021).

Notes: The sample contains individuals aged 25–64 who are not in the armed forces or living in group quarters in the 2018 and 2019 American Community Surveys. Wages are expressed in 2019 dollars using the Consumer Price Index for All Urban Consumers (CPI-U). The employment rate is defined as the share of individuals employed. Third District and outlier metro areas are labeled.

But an area might also have higher wages because of its residents, not its employers. For example, individuals with a higher level of education are more likely to work in knowledge-based jobs, and these jobs tend to concentrate in certain areas. And higher-income individuals might be willing to pay more for local amenities, such as warm weather, fine dining, and live entertainment, and these amenities may attract still more higher-income individuals who raise the median wage. In either case, a high median wage would reflect the characteristics of individuals, not employers.

Finally, wages can differ across places because of policies. For example, wages

could be higher in areas with a higher minimum wage, tax policies that encourage the creation of higher-paying jobs, or strong local colleges. Land use and housing construction regulations could also affect labor market outcomes, because they affect the cost of housing and the subsequent decisions of individuals about where to live.

In practice, the decisions of both employers and individuals interact with each other and with local policies. For example, employers that need to hire highly educated workers might locate in areas where workers seem to want to live, and policies that restrict the supply of housing in these areas could cause lower-income individuals to move away from the resulting higher housing prices.

What are the consequences of local labor market inequality? For a long time, many economists have argued that the average level of well-being attained by the individuals living in an area depends on that area's employment opportunities, cost of living, and quality of life. ("Quality of life" captures everything else, such as amenities and the value of local government services.) Because individuals consider all three factors when deciding where to live, these three factors are interrelated: The cost of living tends to be higher in places with better employment opportunities and a better quality of life.[4] As a result, higher local prices offset at least some of the benefits associated with better employment opportunities. This suggests that local labor market inequality likely overstates the differences in well-being that any one individual would experience by living in a different area.[5] Ultimately, it is challenging to measure inequality in well-being across areas.

A related issue is whether local labor market inequality translates into lower efficiency or equity for the nationwide economy. This need not be the case. For example, in a simple model where housing costs completely offset differences in employment opportunities and quality of life, any given person would be equally happy living in any given area. In a more realistic model, however, inequality between local labor markets could underlie inefficient and unequal outcomes. If it is difficult or costly for individuals to move, they might not move to better opportunities, leaving residents of weaker local labor markets worse off and their potential underutilized. Moreover, if local labor market conditions affect future generations, then a future generation could suffer because their parents or grandparents lived in a weak local labor market. That, too, would reduce efficiency and equity in the economy. To understand the relevance of these concerns, let's look at how recessions shape local labor markets and people.

Recessions and Local Labor Market Inequality

It helps to understand whether recessions affect local labor market inequality. The Federal Reserve, along with many policymakers, analysts, and the public, is keenly interested in the evolution of economic activity during and after recessions, and a local labor market focus complements standard analyses of the nationwide economy. Also, recessions shed light on fundamental features of local labor markets by creating sharp changes in local economic conditions, as we will see.

During each recession, some areas experience more severe employment losses than others. For example, Philadelphia-Camden-Wilmington lost 3.6 percent of its employment during the Great Recession (2007-2009), while State College (home to the Pennsylvania State University) saw an employment increase of 1.2 percent. These differences arise in part from each area's industrial specialization and shocks to specific local firms.

Do metro areas recover from employment declines that occur during recessions? The evolution of total employment depends on a range of factors, such as population growth, so it's not enough to simply look at the time series of employment for a single area. To isolate how recessions affect local labor markets, W.E. Upjohn Institute for Employment Research senior economist Brad J. Hershbein and I have compared changes in employment between areas where each recession is more versus less severe.[6] To simply illustrate this approach, I plot average log employment for metro areas where the Great Recession was more vs. less severe (Figure 2). Before 2007, these two groups of metro areas saw similar employment growth. In other words, areas that lost a higher share of jobs during the recession were not on a downward trend beforehand. By definition, there is a larger employment loss during the recession in more severely impacted areas. But worryingly, the relative employment decline persisted through 2019, 10 years after the end of the nationwide recession. Moreover, the Great Recession is not unique: We found a similar pattern for every recession between 1973 and 2009. (We don't yet have the data to tell if a similar pattern will follow the COVID-19 recession.)

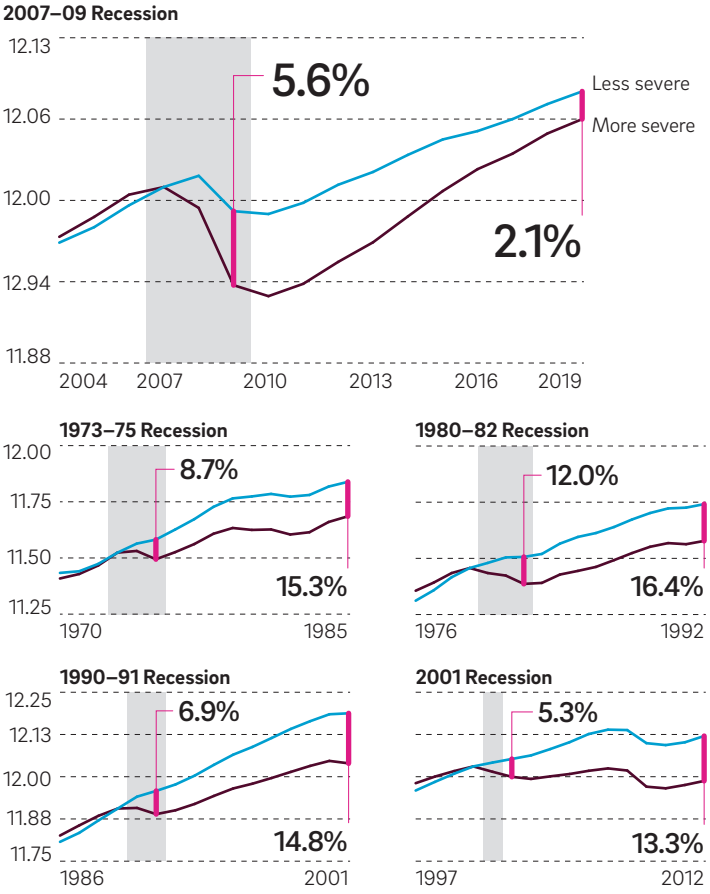
A persistent, postrecession decline in employment isn't necessarily a problem. The economy is dynamic, and creative destruction can be a powerful force for raising productivity and the standard of living. But for this to be the case, households must respond to shifts in employment opportunities by moving between areas. And, indeed, following each recession, more severely impacted areas do see a decrease in population. However, a hard-hit area's employment typically declines more than its population, and very little of the population decline is attributable to people moving away. Instead, there is a decrease in the number of people moving into an area where a recession was more severe. These results suggest that individuals face significant moving costs, as has been found in other work. Moreover, the employment-to-population ratio and per capita earnings both persistently decline in areas where recessions are more severe, which suggests that economic opportunities in these areas remain depressed.

Even more concerning, the decline in local economic activity that emerges during a recession leaves permanent scars on children and adolescents. Individuals who were born in places where the 1980–1982 recession was more severe, and who were children at the time of the recession, were less likely to get a college degree and, as adults, earned less income and faced a greater risk of living in poverty.[7] Researchers have yet to study whether these long-run effects on children followed other recessions, but the similar effects of recessions on local economic conditions makes it likely. The simple explanation is that these children spent their childhood in an area where local economic opportunities were diminished, which can have

FIGURE 2

Where a Recession Is More Severe, Employment Declines Persistently in Relative Terms

Mean log employment level in metro areas where a recession was more severe or less severe, as measured by whether the log employment change during the recession was above or below the nationwide median



Source: Author's calculations using data from the Bureau of Economic Analysis Regional Economic Accounts.

Notes: To keep the focus on changes over time, the less-severe recession line is adjusted to equal the more-severe recession line at the start of each recession.

wide-ranging consequences for parents, families, and communities. Overall, these results indicate that the local labor market inequality emerging from recessions is persistent and harmful for the economy's productive capacity.

Lessons for Policymakers

Policymakers seeking to boost a metro area's fortunes can do so by attracting jobs or people. Well-targeted policies should consider both sides of the labor market: An employer can't fill jobs unless people are willing to live within a reasonable distance of those jobs, and individuals are unlikely to move somewhere lacking in adequate employment opportunities. Seen this way, the local economic development toolkit includes not only traditional instruments like business assistance and employment subsidies, but also investments in schools, public safety, and outdoor spaces that make areas more attractive places to live. Expanding the availability of affordable housing is also critically important. Otherwise, improvements in employment opportunities and quality of life might be offset by higher housing costs.

Also, it is possible to lower inequality and increase the economy's productive capacity by providing adequate opportunities for children irrespective of where they are born. In the U.S., children born to lower-income families have access to fewer quality primary and secondary schools, and they struggle to pay for and navigate a college education. The fact that some children don't get a college degree simply because they were unlucky enough to be born in an area hit harder by a recession is one manifestation of how an individual's economic opportunities depend on the lottery of birth.

Finally, policymakers should understand that the consequences of recessions for metro areas last decades. Monetary policy is not well suited for helping specific areas or addressing the fundamental issues that lead to a lasting decline in local economic activity. However, the severity of a recession's consequences for metro areas underscores the value of supporting maximum employment and economic stability. There is greater scope for fiscal policy to provide transfers to specific individuals and places, provide subsidized loans to help businesses and individuals pursue new opportunities, or make long-term investments in education to increase opportunity for all. These policies must be implemented with care and could be expensive, but the potential benefits to individuals and communities are enormous.

Notes

1 See Ruggles et al. (2021).

2 Another example of historical advantage and path dependence: Economic activity in the modern era remains concentrated in locations where geological features encouraged overland transport of cargo between waterways in the 18th century. See Bleakley and Lin (2012).

3 Brinkman et al. (2015) studied a dynamic model with agglomeration forces and show that these forces influence firm entry, exit, and growth trajectories.

4 Albouy and Stuart (2020) developed a model that yields estimates of quality of life and productivity in local areas using data on population, wages, and housing prices. In this model, housing prices are higher in places with a better quality of life and higher productivity. The quality of life in an area could also depend on local transportation infrastructure and individuals' attachment to their homes. See Severen (2021) and Coate and Mangum (2021).

5 The cost of housing in the Third District is high relative to metro areas in the rest of the country. As a result, median hourly wages adjusted for the cost of housing in the Third District are not particularly high compared to the rest of the country.

6 See Hershbein and Stuart (2022).

7 See Stuart (2022).

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