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Policy Brief

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Is the Great Recession Really Over?

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Overview

Many have argued that the Great Recession is over and that the U.S. labor market is back to where it would have been in the absence of the recession and the shocks that gave rise to it. By the end of 2015, the U.S. unemployment rate had returned to its 2007 level, below 5 percent. Yet the U.S. labor force participation rate and thus the U.S. employment rate (employment-population ratio) remained three percentage points below their 2007 levels. Only half or less of the decline is explained by demographic change. What caused the remaining decline in labor force participation? I attempt to address this question in a recent paper, "Is the Great Recession Really Over? Longitudinal Evidence of Enduring Employment Impacts".[1] Using micro-data on two million retail workers, I show that local variation in the employment impact of the Great Recession had enduring effects across local areas. Workers in areas that were severely hit in 2007-09 were less likely to be employed in 2014 than similar workers from less affected areas, regardless of where they lived in 2014. This enduring employment impact of a worker's location at the onset of the Recession cannot be fully explained by nationwide skill-biased technical or trade changes.

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1. This recession is different: employment rates have not recovered to pre-recession levels

The unemployment rate — the share of adults actively seeking employment who are not employed — is the standard measure of labor market recovery. By that measure, the U.S. labor market is back to normal following the Great Recession. By the end of 2015, the U.S. unemployment rate had returned to its 2007 level, below 5 percent. However, the U.S. labor force participation rate (the share of adults who are employed or seeking employment) and thus the U.S. employment rate (the share of adults who are employed) remained three percentage points below their 2007 levels. Only half or less of the drop in the U.S. labor force participation rate can be explained by demographic change.[2] The drop is concentrated among low-skilled workers.[3]

FIGURE 1 Employment rate convergence after recessions

Source: Yagan (2016).

The anemic recovery of the U.S. employment rate is mirrored by anemic recovery of employment rates in states that experienced relatively severe Great Recession shocks. Figure 1 shows that when dividing states over each of three recessions into the half that were severely shocked and the half that were mildly shocked, employment rates in the severely shocked states converged to those in the mildly shocked states within approximately six years after the early-1980s and early-1990s recession. In contrast, employment rates remain depressed in the severely shocked states six years

after the Great Recession. Relative to full convergence to pre-recession between-state employment rate differences, a 2.2-million-person employment gap remained in 2015 between the severely shocked and mildly shocked halves of the country.

What caused these enduring declines in employment rates after the Great Recession?

2. Why have employment rates not recovered?

I consider two potential explanations for the enduring declines in labor force participation and employment rates:

1. Technical and trade changes — unrelated to the Great Recession and the underlying shocks that gave rise to it — may have favored high-skilled workers over low-skilled workers (e.g. routine workers) nationwide. Enduringly low employment rates in severely shocked states would therefore reflect disproportionate concentrations of workers adversely affected by these nationwide shocks.
2. The Great Recession and the underlying shocks that gave rise to it may have caused those declines.

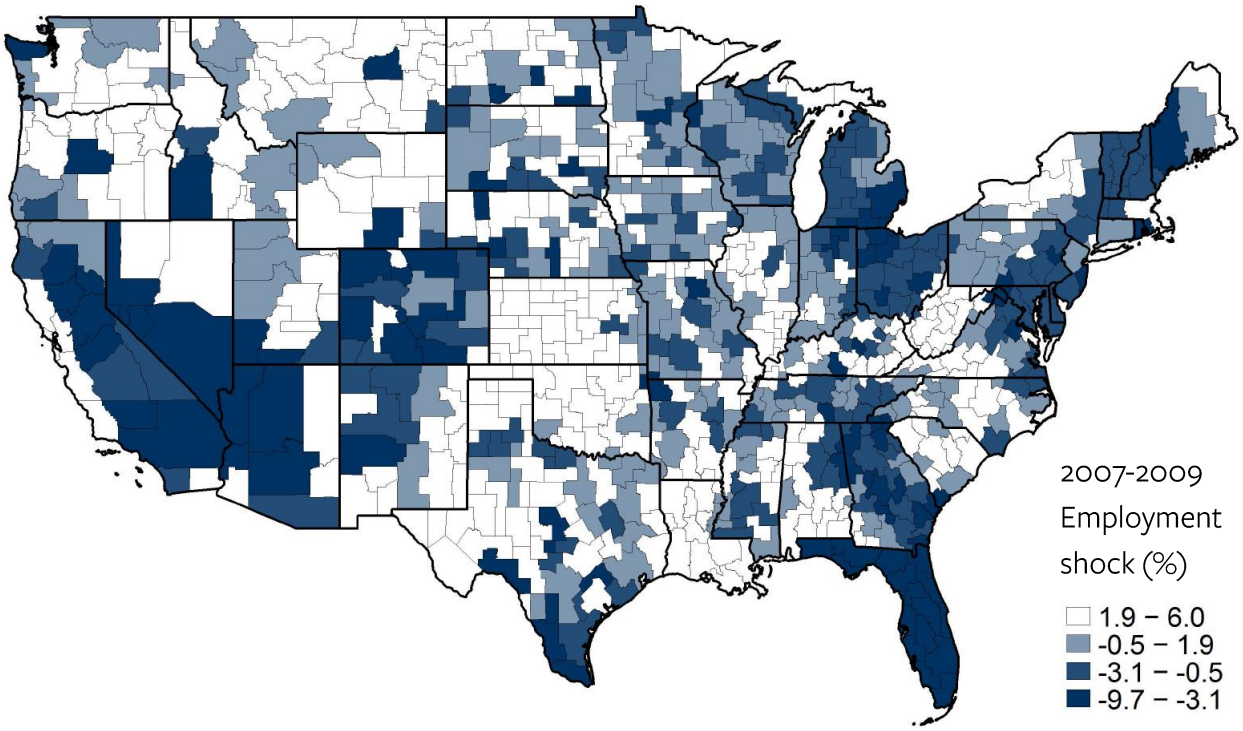
If the declines in employment rates are due to the technical and trade changes, then at the local level, two identically skilled workers in 2007, say, one from Phoenix (where the Great Recession hit relatively severely) and the other from San Antonio (where the Great Recession hit relatively mildly), should have the same likelihood of being employed several years after. In contrast, if the Great Recession and its underlying causes are responsible for the enduring declines in employment rates, then workers who were living in Phoenix when the Great Recession struck should have lower employment several years later than workers who had been living in San Antonio. I show the second explanation holds.

I measure the impacts of the Great Recession on employment outcomes at the local level using micro-data from federal income tax records for two million workers in the retail sector from 1999 to 2014[4]. I study wage workers from retail or accommodation and food service chains in 2006; workers with very similar skills, wages, ages, and demographic characteristics. I thus exploit the fact that unlike other major firm types, retail chain firms like Walmart and Starbucks employ workers with similar skills to perform similar tasks at similar wages in many different local areas. I am thus able to rule out that persistent spatial employment declines merely reflect spatial differences in worker types. This research design ensures that I am measuring the causal impact of Great Recession location on future labor market outcomes. Furthermore, by tracking a fixed set of workers who had been employed in 2006 no matter where they move, I show that spatial

employment differences are not due to the fact that severely shocked areas disproportionately attracted or retained non-labor force participants (e.g. the disabled or the retired) after 2007.

First, I categorized every Commuting Zone (CZ)[5] based on the degree of employment shock experienced from 2007-2009.

FIGURE 2 Differences in the severity of the Great Recession across commuting zones

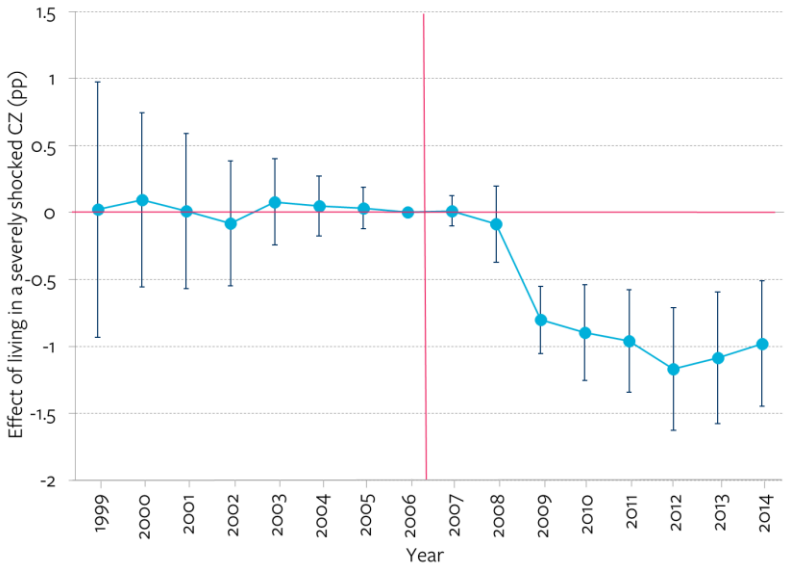


Source: Yagan (2016).

Note: This map depicts quartiles of 2007-2009 Commuting Zone (CZ) level shocks (employment change) relative to both the CZ's 2000-2003 shock and the aggregate shock levels of all CZs over both time periods. White represents mild shock, dark blue represents severe shock. See here for detailed notes on the methodology. [6]

Next, I analyzed the relationship between workers' location in 2007 and their employment status in 2014. I find that workers who in 2007 were living in areas that suffered severe employment contractions between 2007 and 2009 (e.g. Phoenix) had a 1 percentage point lower likelihood of being employed in 2014 than similar workers in less affected areas (e.g. San Antonio), despite the fact that the unemployment rate is similar in 2014 in those two areas (see Figure 3).

FIGURE 3 Employment Effect of Living in 2007 in a Severely Shocked Commuting Zone



Source: Yagan (2016). See here for detailed notes on the methodology.

3. What are the implications?

The ongoing spatial unevenness of employment recovery presents a significant challenge for policymakers, and raises important questions about the long-term effects of the Great Recession. Unemployment rates, the most common measure of economic recovery, can mask significant regional variations in real employment as discouraged workers leave the labor force. My findings have two implications for understanding these dynamics:

1. There are long-term limits to U.S. local labor market integration: comparable workers experienced dissimilar long-term employment outcomes based on their location in 2007, despite the option to relocate to more resilient regions after the recession. Differences in local employment rates reflect not just differences in the geographical distribution of firms and workers, but also the causal impacts of location on employment and distribution.
2. Second, at least at the local level and perhaps the national level, the results suggest that the Great Recession and its underlying causes have continued to depress employment rates via labor force exit even after unemployment rates returned to pre-recession levels.

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Endnotes

[1] Yagan, Danny (2016), "Is the Great Recession Really Over? Longitudinal Evidence of Enduring Employment Impacts", *Working Paper*: http://eml.berkeley.edu/~yagan/EnduringImpact.pdf

[2] Aaronson, Stephanie, Tomaz Cajner, Bruce Fallick, Felix Galbis-Reig, Christopher Smith, and William Wascher (2014), "Labor Force Participation: Recent Developments and Future Prospects." Brookings Papers on Economic Activity, 2014(2): 197-275; CEA (2014), "The Labor Force Participation Rate since 2007: Causes and Policy Implications", *U.S. President's Council of Economic Advisers*; Shimer, Robert (2014), "Historical and Future Employment in the United States", CBO Advisory Board Presentation: https://sites.google.com/site/robertshimer/cbo-employment.pdf.

[3] Charles, Kerwin Ko, Erik Hurst, and Matthew Notowidigdo (2016), "The Masking of the Decline in Manufacturing Employment by the Housing Bubble." *Journal of Economic Perspectives*, 30(2): 179-200.

[4] Retail firms employ 24 percent of U.S. private sector workers.

[5] A Commuting Zone (CZ) is a geographic unit developed by the Census Bureau to delineate local economies and labor markets. On the map, there are 741 Commuting Zones which correspond to 741 county groupings. These are similar to metropolitan statistical areas but span the entire United States.

[6] Each CZ's shock equals the CZ's detrended log employment change 2006-2009 relative to the aggregate of all CZs: Specifically it equals the CZ's log 2006-2009 employment change minus the CZ's log 2000-2003 employment change, minus the difference between the log 2006-2009 aggregate employment change and the log 2000-2003 aggregate employment change. The underlying data used to compute CZ shocks comprise all individuals in the longitudinal data aged 25-75 in the current year with a continental U.S. ZIP code from information returns in the current year. Employment is defined as the number of workers with positive W-2 wage earnings or positive 1099-MISC independent contractor earnings.

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