



The Midwestern Great Recession of 2001 and the Destruction of Good Jobs

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In 2000, 82 percent of women and men between ages 25 and 54 had a full- or part-time job. Today, 78 percent do.¹ The decline in employment in this age group—known as prime-age adults—has left 4.5 million additional Americans without a job.

This decline in the prime-age employment rate, or PER, has contributed to stagnant wages, slower economic growth, and growing despair. Policy researchers have been fervently debating the causes behind this decline and whether it is a result of an incomplete economic recovery, U.S. trade policy, overly generous social insurance, or serious health problems.²

More recently—and in light of the recent presidential election—the media and policy researchers have also begun to pay increasing attention to regional economic differences and inequalities. Specifically, they have focused on the Midwest, describing it as a region left behind by the economy as a result of globalization, the decline of manufacturing, and the growing economic dominance of coastal metropolises.³

This issue brief brings a regional lens to the decline in prime-age employment since 2000 and examines whether it has been particularly acute in the Midwest. The results show, surprisingly, that the PER has performed better in the Midwest than in the country as a whole, falling 3.3 percentage points since 2000 compared with the 3.6 percentage point national decline.⁴

But all is not well for Midwestern workers. First, unlike the rest of the country crippled by the Great Recession, the bulk of the recent decline in employment in the Midwest occurred from 2000 to 2007.⁵ In other words, the job market in the Midwest is no worse than in the rest of the country, but it has been bad for much longer. Second, Midwestern workers have experienced the worst wage growth of any region in the country since 2000, seeing real median wages grow a mere 2 percent compared with an 8 percent national increase.⁶

The discrepancy in employment and wage growth indicates structural changes unique to the Midwest in the past few decades. The Center for American Progress' analysis suggests that the most important recent economic crisis in the Midwest was not the Great Recession in 2008 but rather the disappearance of millions of manufacturing jobs that began during the 2001 recession. From 2000 to 2016, the United States lost 5 million manufacturing jobs, 1.5 million of them in the Midwest.⁷ This has not only made it harder for Midwestern workers to find a job, but it has also resulted in stagnant wages, since manufacturing jobs in the Midwest used to pay 15 percent more than service jobs.⁸ This manufacturing wage premium has traditionally been higher in the Midwest than in any other region of the country, but it has been falling sharply since the early 2000s.

The combination of fewer manufacturing jobs and the decline of the manufacturing premium has helped drive Midwestern wages toward stagnation. These results suggest that policymakers seeking to improve the economic fortunes of Midwestern workers cannot focus simply on creating jobs—they need to focus on creating good jobs that pay a decent wage.

The rise and fall of the prime-age employment rate

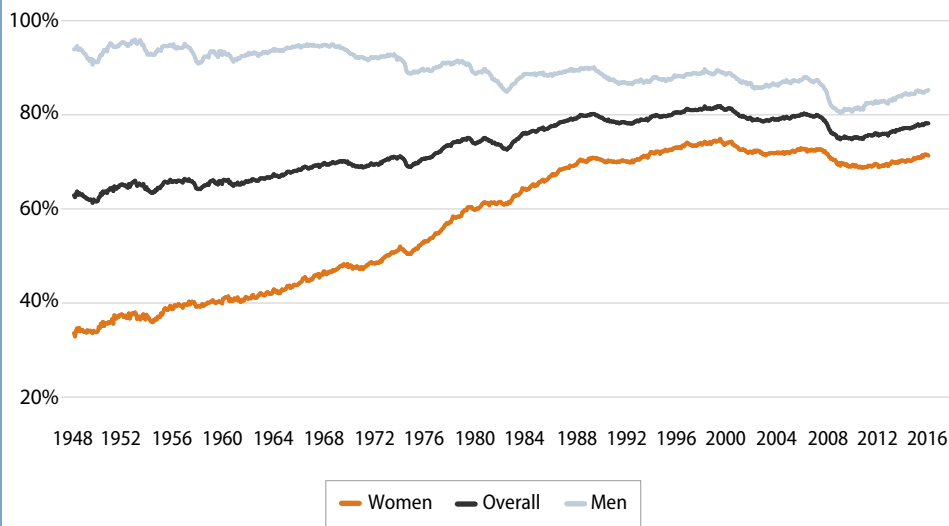
Politicians, policy researchers, and the media are paying increasing attention to the PER as a measure of labor market health.⁹ Prime-age employment is an effective measure of long-term patterns in the labor market because it excludes young and retirement-age adults. This helps ensure comparability over time, particularly as college attendance and retirement trends change.¹⁰ The PER grew during the 1980s and 1990s, peaked in 2000, and still remains below its 2000 level.

Researchers frequently divide the prime-age population by sex, since the trends for women and men have sometimes been quite different and the levels remain so. From 1979 to 2000, prime-age female employment rose 15 percentage points, while prime-age male employment fell 2 percentage points. In other words, women were responsible for the entire pre-2000 increase in the PER. The result was that prime-age women's employment was converging to that of prime-age men.

FIGURE 1

Rising female participation drove the rise of prime-age employment until 2000

Prime-age employment rate, 1948–2016



Source: Bureau of Labor Statistics, "(Seas) Employment-Population Ratio - 25-54 yrs, (Seas) Employment-Population Ratio - 25-54 yrs., Women, (Seas) Employment-Population Ratio - 25-54 yrs., Men," available at <https://www.bls.gov/cps/> (last accessed February 2017).

The increase in prime-age women's employment, however, came to an abrupt end around 2000 and has never recovered to that level. Indeed, it has practically mirrored the changes of the prime-age male employment rate while stuck at a much lower level. One important reason why women have been unable to close the gap with men is the lack of family-friendly policies, such as paid family leave and subsidized child care, that have been shown to increase female labor force participation. Research by Cornell University economists Francine Blau and Lawrence Kahn finds that U.S. women's labor force participation has fallen behind that of most other advanced economies, and the lack of family-friendly policies explains almost one-third of that relative decline.¹¹

Researchers have examined whether the decline in prime-age employment or labor force participation has been most acute among certain racial, educational, or age groups.¹² And they have devoted considerable energy to resolving its causes—most importantly, whether it reflects falling supply of or demand for labor. The most clarifying analysis of this topic comes from the Obama-era White House Council of Economic Advisers, or CEA, and its analysis of labor force participation among prime-age men. The CEA found considerable evidence that the decline in prime-age male labor force participation reflects declining demand for their labor instead of supply-side factors such as disability benefits. Indeed, the hypothesis that disability benefits have been a major cause in the decline of prime-age participation and employment has received considerable attention despite being rebutted by three high-quality studies.¹³

But researchers have devoted significantly less effort to examining whether there is a geographical component to these changes, something this brief provides by focusing on the overall PER as well as the PER of women, or PWER, and men, or PMER, separately. Most of the analysis focuses on the post-2000 period since the increase in female labor supply ended around that time. Further, this brief also provides information on changes in the PMER between 1979 and 2000 as a way to provide information on the health of labor markets while controlling for the increase in female labor supply during that period.

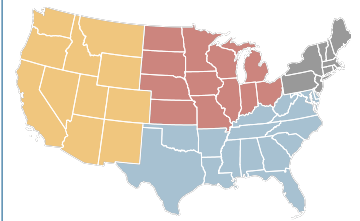
Prime-age employment rates across regions since 2000

The national PER in 2016 was 77.9 percent—3.6 percentage points below where it was in 2000. This represents a large, national deterioration in the employment situation for prime-age workers. But this national decline hides considerable differences in severity among the four U.S. census regions, as displayed in Figure 2. The decline has been most severe in the South and mildest in the Northeast, with the Midwest and the West falling between the two. It does not appear that the Midwest has seen a particularly egregious decline in its PER compared with the rest of the country.

But the timing of these declines also matters. The Midwest saw the largest decline of any region of the country from 2000 to 2007 but also saw the smallest decline from 2007 to 2016. One way to think about the timing of the Midwest’s employment decline is that it is not especially deep compared with other regions, but it started earlier and has persisted longer than in the rest of the country.

Region Map

The U.S. Census Bureau has classified each state into one of four regions: Northeast; Midwest; South; and West. These regions often provide subnational geographical context in data collection and analysis.



South

Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia

Midwest

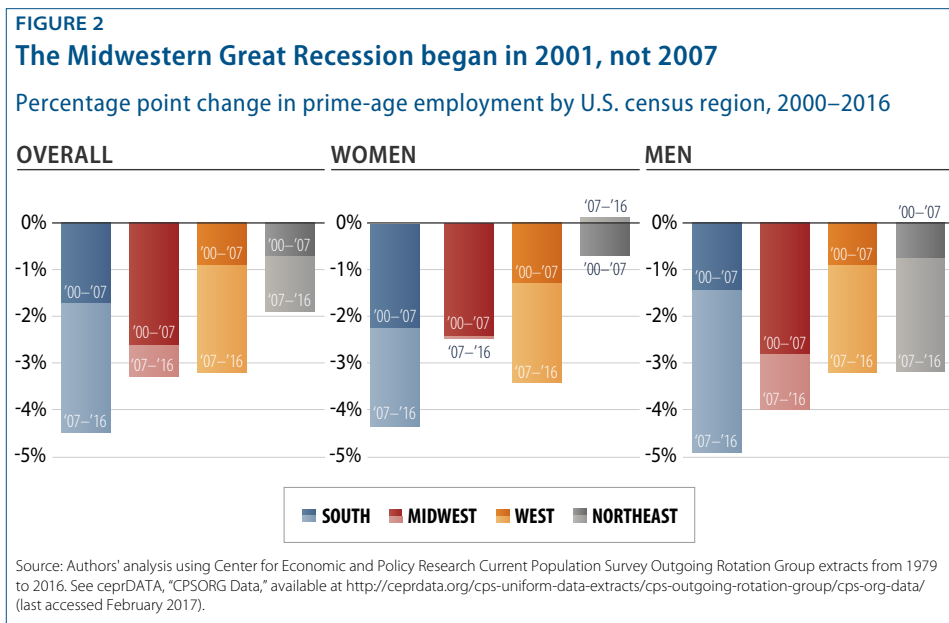
Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin

West

Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming

Northeast

Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont



A similar pattern is visible when looking at the PER for females and males separately, as also displayed in Figure 2. Both the Midwestern PWER and PMER declined most sharply from 2000 to 2007, with the PWER barely declining at all in the wake of the Great Recession. It is also worth noting that the decline in the Midwestern PMER from 1979 to 2000 was not especially large in relative terms—it declined 2.1 percentage points, compared with the national 2.2 percentage point decline. The 2000–2007 period, therefore, stands out as a particularly bad period for the Midwestern labor market as measured by prime-age employment.

These patterns are also visible at the state level, as displayed in Figure 3, which shows the changes in PER from 2000 to 2007 and 2000 to 2016, respectively. Selecting these two time periods allows for a relative comparison while using 2000 as a baseline. In the maps, maroon states are those that fared worst during the time period, experiencing relatively large declines in PER. Teal states are those whose employment rates were nearly the same or increased.

The 2000–2007 map underscores how poorly parts of the Midwest did during this period. Seven of the 20 worst performing states were in the Midwest, and Michigan had by far the biggest reduction in its PER. But the Midwest has performed relatively well over the entire 2000–2016 period because employment declines from 2007 to 2016 were quite minor. Michigan, for example, actually saw its PER rise from 2007 to 2016. Of the 20 states that have experienced the largest cumulative 2000–2016 declines, only three of them were in the Midwest. And quintessential Rust Belt states in the Midwest—such as Wisconsin, Indiana, and Missouri—saw their PERs decline more slowly than the nation as a whole.

Prime-age wage growth across major regions

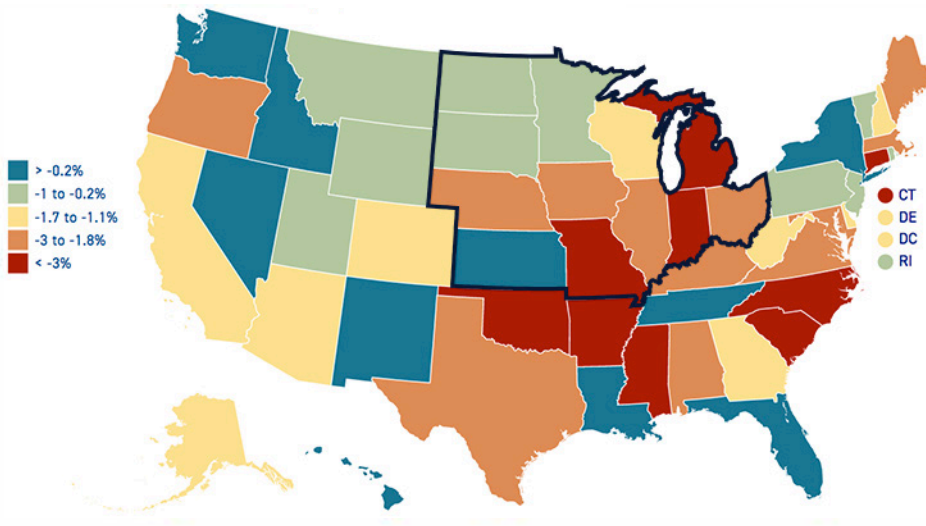
Another measure of labor market health is how quickly wages rise. Real median wages for prime-age workers nationally have been stagnant, rising just 8 percent since 2000 despite a 33 percent increase in productivity.¹⁴ But once again, we find large regional differences in wage growth for prime-age workers.

The Midwest stands out as having experienced the worst wage growth of any region, both from 2000 to 2007 and from 2007 to 2016. Unlike with employment rates—which performed relatively well in the Midwest from 2007 to 2016—the Midwest has consistently performed worse on wage growth than any other region of the country. Looking at Midwestern women and men separately, the 2000–2007 period also looks bad—men actually saw their real wages fall.

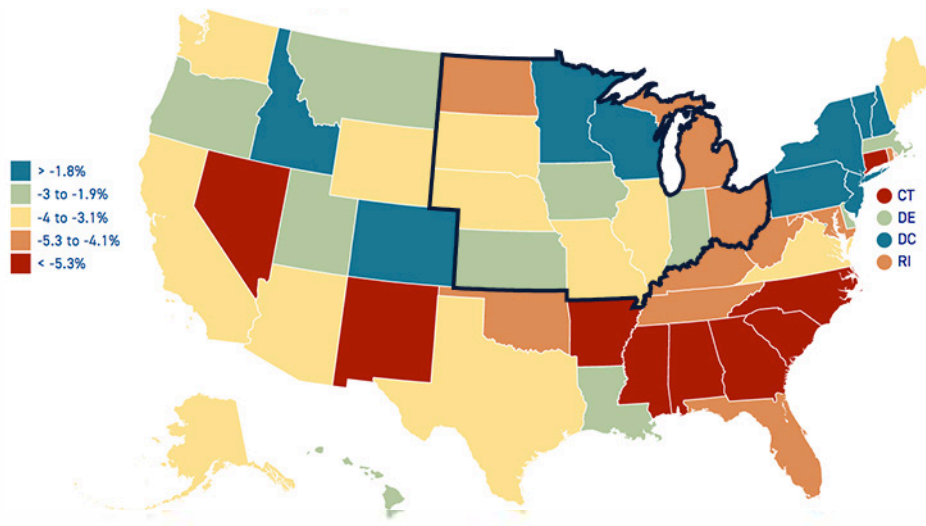
FIGURE 3

Midwestern states saw large employment declines between 2000 and 2007

Percentage-point change in state prime-age employment rates, 2000–2007



Percentage-point change in state prime-age employment rates, 2000–2016

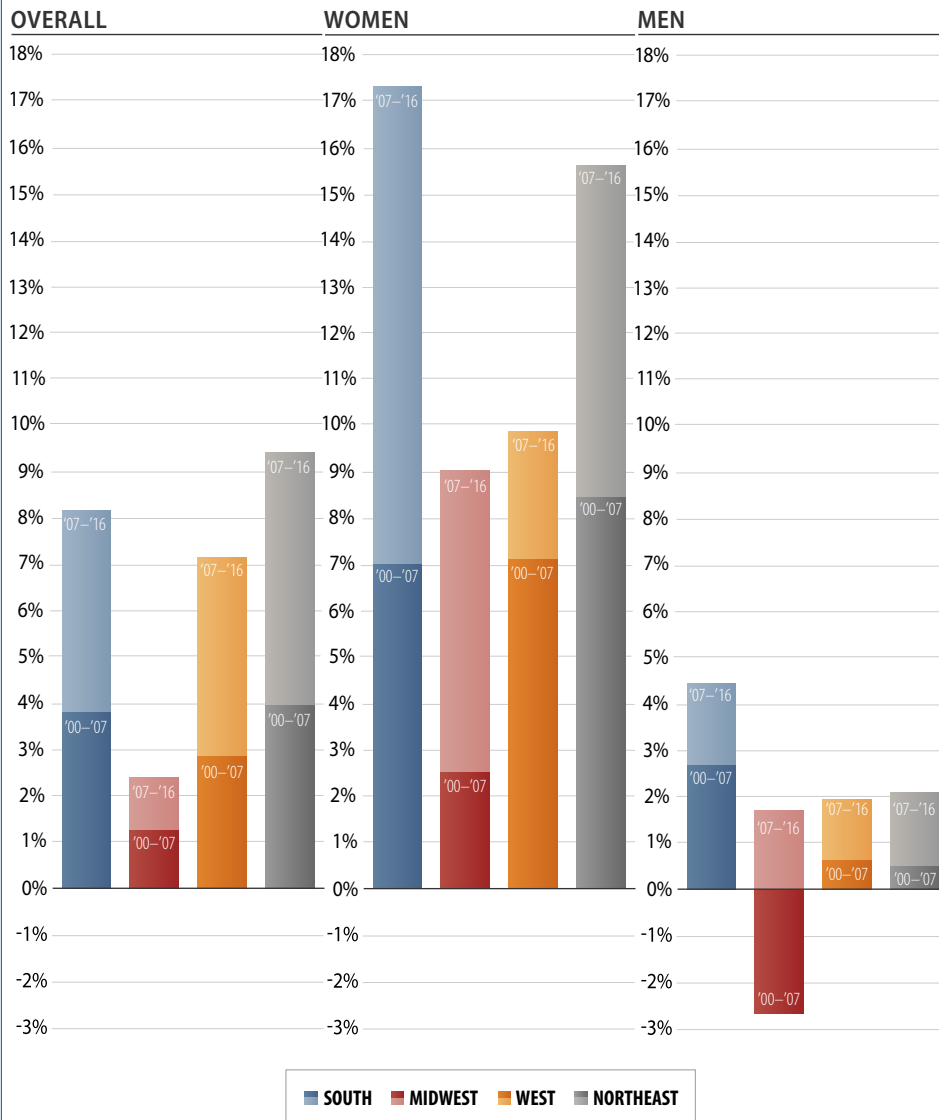


Note: Different colors denote different state quintiles of employment growth for each period.
Source: Authors' analysis using Center for Economic and Policy Research Current Population Survey Outgoing Rotation Group extracts from 1979 to 2016. See ceprDATA, "CPSORG Data," available at <http://ceprdata.org/cps-uniform-data-extracts/cps-outgoing-rotation-group/cps-org-data/> (last accessed February 2017).

The 2007–2016 period looks better for the Midwest when looking at women and men separately than it does when looking at them together. The reason is that the prime-age employment rate for men fell more quickly than the prime-age employment rate for women during that period, increasing the share of the prime-age workforce that was female. Since women are paid less than men, on average, this compositional effect pushed down overall wages more quickly than for women and men separately.¹⁵

FIGURE 4
Wage growth in the Midwest has been the worst in the country

Percentage change in real median wages by U.S. Census region, 2000–2016



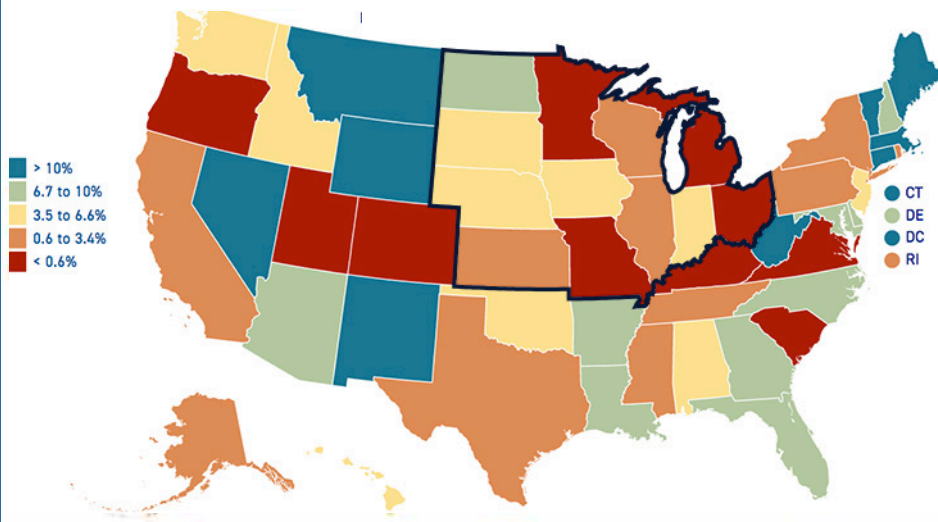
Source: Authors' analysis using Center for Economic and Policy Research Current Population Survey Outgoing Rotation Group extracts from 1979 to 2016. See ceprDATA, "CPSORG Data," available at <http://ceprdata.org/cps-uniform-data-extracts/cps-outgoing-rotation-group/cps-org-data/> (last accessed February 2017).

Analysis at the state level similarly shows that Midwestern wages performed poorly between 2000 and 2007, but the situation looks even worse when looking over the entire 2000–2016 period. Seven out of 20 of the worst-performing states between 2000 and 2007 were in the Midwest. For the entire 2000–2016 period, 9 out of 20 of the worst performers were in the Midwest. Again, the Midwest's poor performance between 2007 and 2016 partially reflects a workforce that is slightly more female.

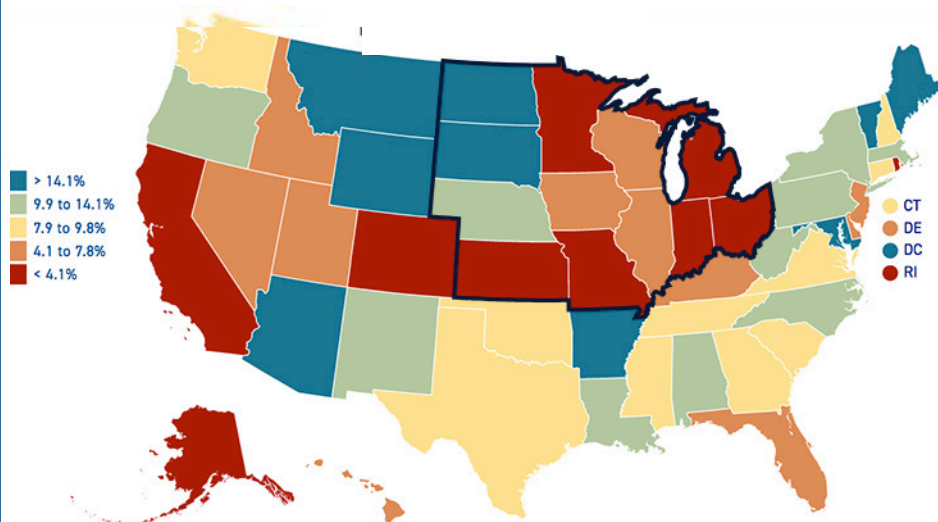
FIGURE 5

Midwestern states have experienced the worst 21st century wage growth

Real growth of median wages for prime-age workers by state, 2000–2007



Real growth of median wages for prime-age workers by state, 2000–2016

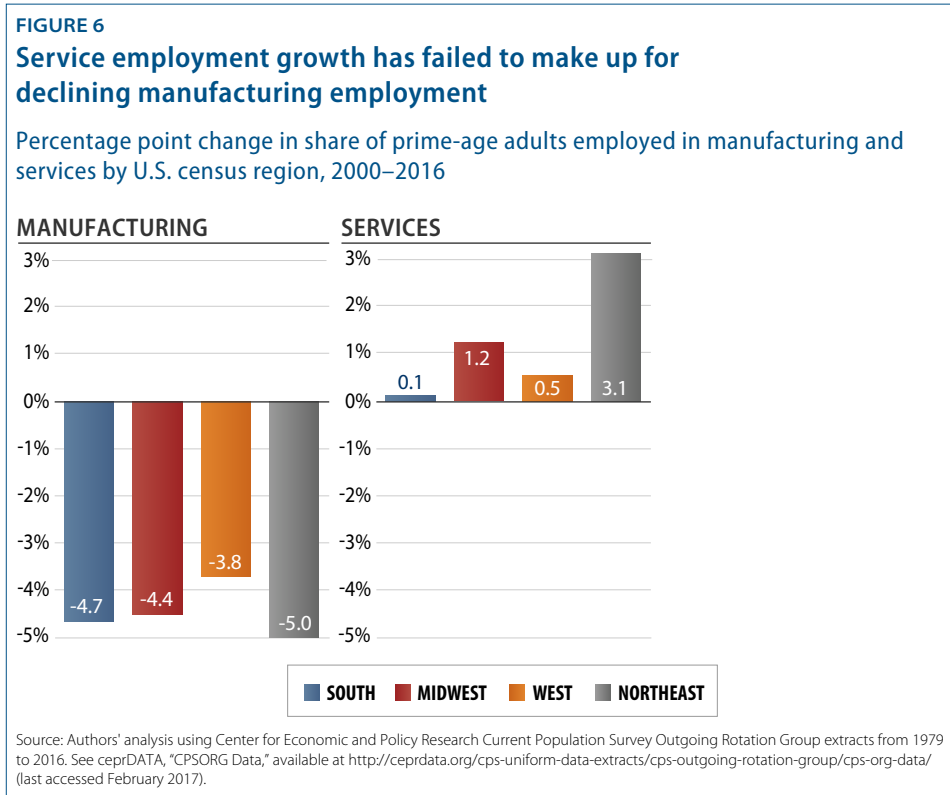


Note: Different colors denote different state quintiles of wage growth for each period.

Source: Authors' analysis using Center for Economic and Policy Research Current Population Survey Outgoing Rotation Group extracts from 2000 to 2016. See CEPRdata, "CPS ORG Data," available at <http://ceprdata.org/cps-uniform-data-extracts/cps-outgoing-rotation-group/cps-org-data/> (last accessed February 2017).

The role of manufacturing in Midwestern wage and employment trends

One obvious explanation for declining employment rates and stagnant wages for Midwestern workers is the rapid disappearance of manufacturing jobs after 2000. The share of workers employed in manufacturing across the country has been declining since the 1960s, but the number employed in manufacturing had been remarkably steady until it collapsed between 2000 and 2010. In 2016, there were 5 million fewer manufacturing jobs than in 2000. The Midwest alone has lost 1.5 million manufacturing jobs.¹⁶



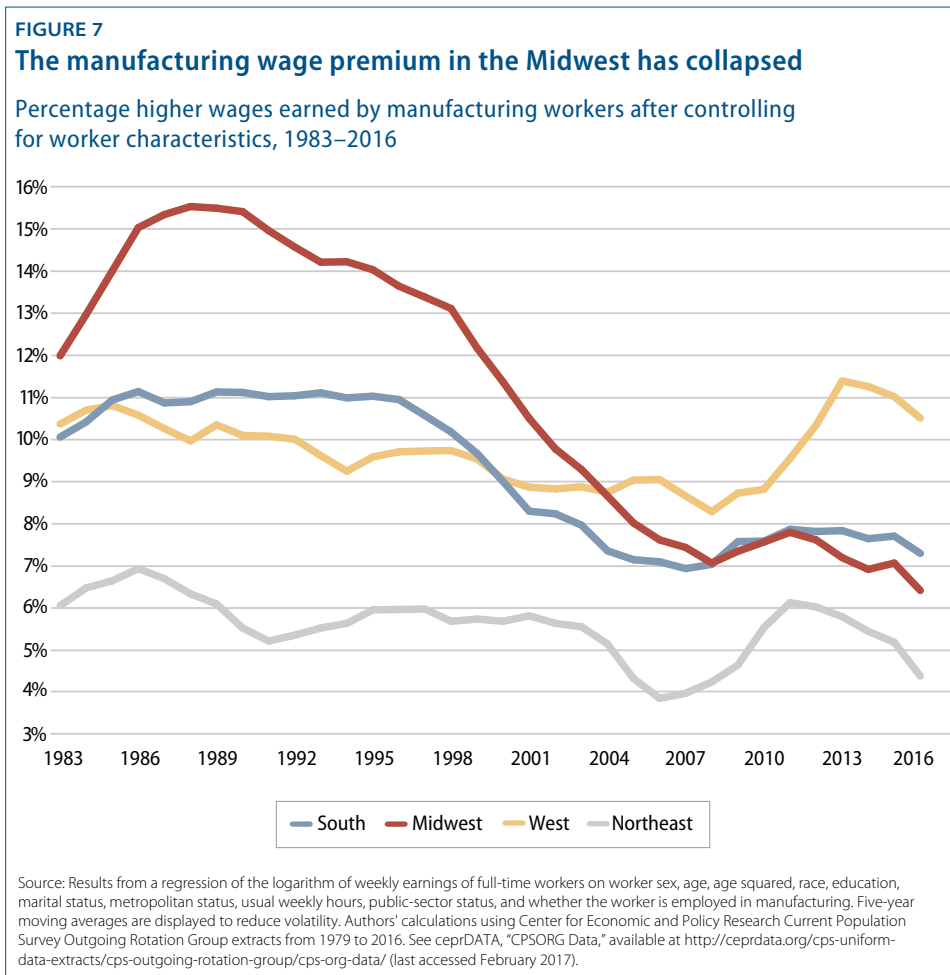
In theory, new service jobs could replace lost manufacturing jobs, but that failed to happen in every region, as demonstrated by the reduction in the prime-age employment rate. The Midwest actually performed better at adding service jobs between 2000 and 2016 than the South and the West, but it did not come close to making up for lost manufacturing jobs and population growth. Indeed, the disappearance of manufacturing jobs and sluggish service job growth may be related, as research shows that each manufacturing job creates about 1.6 jobs in the nontradeable sector.¹⁷ Moreover, replacing manufacturing jobs with service jobs has become far more difficult during a period when the Federal Reserve cannot or will not offset the drop in employment by reducing interest rates.

The rapid disappearance of manufacturing jobs is also a likely cause for wage stagnation. Manufacturing jobs pay more than service jobs—something known as the

manufacturing wage premium. We estimate a 7 percent national manufacturing wage premium while controlling for differences in age, sex, race, education, and a host of other control variables. In other words, a manufacturing worker with the same characteristics as a service-sector worker will earn 7 percent more. Fewer manufacturing jobs mean fewer quality jobs that pay the manufacturing premium, resulting in lower wages.

A more detailed look at the data, however, suggests that the disappearance of manufacturing jobs alone cannot explain the poor wage growth in the Midwest between 2000 and 2016, since manufacturing declined in every region. Instead of looking exclusively at the number of manufacturing jobs or their share of employment, one needs to also examine the behavior of each region's manufacturing premium, as shown in Figure 7.

The manufacturing premium used to be far higher in the Midwest than in the rest of the country, suggesting that a decline in manufacturing jobs is more likely to lead to overall wage stagnation there. Moreover, the manufacturing premium in the Midwest declined sharply between the mid-1990s and mid-2000s, falling from about 15 percent to about 6 percent. A large share of Midwestern workers continue to work in manufacturing, but these jobs no longer pay what they used to.



The disappearance of 1.5 million Midwestern manufacturing jobs and the decline of the manufacturing premium are likely related events. Manufacturing workers and companies realize that these jobs pay more than service-sector jobs and that manufacturing employment is shrinking. This combination makes it harder for workers to bargain credibly for higher wages with their employer. One sign of the decline of bargaining power of Midwestern manufacturing workers is the sharp decline in the share of them that are in unions. In 1985, 39 percent of Midwestern manufacturing workers were in a union, compared with 14 percent today.¹⁸ This decline in bargaining power is a likely cause of the decline in the manufacturing wage premium.

Conclusion

This brief examined the labor market trends for prime-age workers in the Midwest. The main finding is that the 2000–2007 economic expansion—not the Great Recession—was when sharply declining employment rates and stagnant wages hit prime-age workers hardest in that region. This is in contrast to the rest of the country, where the post-2007 period has brought the most trouble. The best way to think of the challenge facing Midwestern workers is that the Great Recession and slow recovery have lasted twice as long there as they have for the rest of the country.

The deterioration of the labor market for prime-age workers in the Midwest is deeply connected to the disappearance of 1.5 million manufacturing jobs starting in 2000. And, as a growing body of research shows, that disappearance is heavily connected to China’s accession to the World Trade Organization and the accompanying permanent reduction in tariffs.¹⁹ It is important to note that the reason the decline in manufacturing hit the Midwest so hard is not simply because it depended heavily on manufacturing jobs but rather because the region’s manufacturing premium was the highest in the country. The disappearance of jobs paying that high premium as a result of fewer manufacturing jobs and the premium’s decline have helped drive the region’s wages toward stagnation.

This analysis provides a framework for evaluating policy proposals seeking to improve the situation facing Midwestern workers. They are in no deeper of an employment hole than their counterparts in the rest of the country, but they have been in a hole for much longer. Moreover, Midwestern workers are in no particular need of regional development policies aimed at providing low-wage jobs in order to boost their employment rate. Workers in the Midwest do not just need more jobs—they need more good jobs that provide an opportunity to earn a middle-class wage. Future CAP work will focus on how progressive policies can achieve this for women and men in the Midwest and other regions.

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Appendix

State	Change in prime-age employment rate, 2000–2007	Change in prime-age employment rate, 2000–2016	Real median wage growth, 2000–2007	Real median wage, 2000–2016
Alabama	-3.0%	-8.4%	4.4%	11.1%
Alaska	-1.1%	-3.7%	0.6%	1.1%
Arizona	-1.2%	-3.5%	8.6%	19.6%
Arkansas	-3.1%	-5.4%	9.9%	17.3%
California	-1.4%	-3.3%	1.9%	3.2%
Colorado	-1.2%	-1.7%	-0.7%	3.2%
Connecticut	-3.1%	-6.1%	11.1%	9.8%
Delaware	-1.7%	-2.4%	7.8%	5.6%
District of Columbia	-1.6%	0.6%	17.5%	35.6%
Florida	0.6%	-4.5%	7.7%	5.0%
Georgia	-1.3%	-5.4%	6.9%	8.8%
Hawaii	-0.1%	-2.6%	3.9%	4.1%
Idaho	2.2%	-1.1%	5.9%	7.3%
Illinois	-2.4%	-3.6%	0.8%	6.2%
Indiana	-3.1%	-2.7%	3.5%	0.1%
Iowa	-2.1%	-2.3%	6.3%	4.6%
Kansas	-0.1%	-1.9%	1.9%	-0.8%
Kentucky	-2.9%	-5.2%	0.2%	4.2%
Louisiana	1.7%	-2.6%	9.2%	13.8%
Maine	-3.0%	-4.0%	10.1%	16.7%
Maryland	-3.0%	-5.0%	8.3%	14.2%
Massachusetts	-2.9%	-2.7%	11.4%	14.0%
Michigan	-5.7%	-5.3%	-3.1%	-2.8%
Minnesota	-0.2%	-0.8%	-0.1%	0.4%
Mississippi	-3.8%	-6.5%	2.8%	8.5%
Missouri	-3.4%	-3.4%	0.3%	2.6%
Montana	-0.3%	-2.4%	11.0%	24.2%
Nebraska	-2.1%	-3.7%	5.0%	10.5%
Nevada	0.2%	-6.5%	10.1%	7.3%
New Hampshire	-1.6%	-1.6%	8.4%	8.8%
New Jersey	-1.0%	-1.7%	5.3%	7.0%
New Mexico	0.1%	-7.0%	14.2%	10.0%

State	Change in prime-age employment rate, 2000–2007	Change in prime-age employment rate, 2000–2016	Real median wage growth, 2000–2007	Real median wage growth, 2000–2016
New York	0.6%	-1.3%	2.9%	12.8%
North Carolina	-3.7%	-5.6%	6.7%	11.3%
North Dakota	-0.3%	-4.3%	9.6%	28.9%
Ohio	-2.1%	-4.5%	-1.4%	1.1%
Oklahoma	-3.3%	-5.3%	4.1%	7.9%
Oregon	-1.9%	-2.9%	-0.1%	9.9%
Pennsylvania	-0.3%	-0.9%	1.3%	10.0%
Rhode Island	-0.6%	-4.4%	1.7%	-0.6%
South Carolina	-3.9%	-8.1%	-2.1%	9.4%
South Dakota	-0.4%	-3.9%	5.9%	16.2%
Tennessee	0.3%	-4.5%	0.6%	9.7%
Texas	-2.4%	-3.1%	0.9%	8.2%
Utah	-0.5%	-3.0%	-7.4%	4.1%
Vermont	-0.9%	-0.6%	13.7%	17.0%
Virginia	-2.3%	-3.9%	-0.2%	9.4%
Washington	1.0%	-3.3%	3.9%	8.2%
West Virginia	-1.5%	-4.4%	11.3%	11.6%
Wisconsin	-1.4%	-1.2%	1.9%	6.6%
Wyoming	-0.3%	-4.0%	20.9%	22.7%

Source: Authors' analysis using Center for Economic and Policy Research Current Population Survey Outgoing Rotation Group extracts from 1979 to 2016. See ceprDATA, "CPS ORG Data," available at <http://ceprdata.org/cps-uniform-data-extracts/cps-outgoing-rotation-group/cps-org-data/> (last accessed February 2017). Wages are weekly earnings of full-time workers and have been adjusted for inflation using the Personal Consumption Expenditure Chain-type Price Index. See Federal Reserve Economic Database, "Personal Consumption Expenditures: Chain-type Price Index (PCEPI)," available at <https://fred.stlouisfed.org/series/PCEPI> (last accessed February 2017).

Endnotes

- 1 Bureau of Labor Statistics, "Labor Force Statistics from the Current Population Survey: (Seas) Employment-Population Ratio - 25-54 yrs., Men," available at https://data.bls.gov/timeseries/LNS12300061?include_graphs=false&output_type=column&years_option=all_years (last accessed March 2017).
- 2 For examples of research on the topic, see White House Council of Economic Advisers, *The Long-Term Decline in Prime-Age Male Labor Force Participation* (Executive Office of the President, 2016), available at https://obamawhitehouse.archives.gov/sites/default/files/page/files/20160620_cea_primeage_male_lfp.pdf; Nick Buffie, "The Case for a Weak Labor Market" (Washington: Center for Economic and Policy Research, 2016), available at <http://www.cepr.net/images/stories/reports/weak-labor-market-2016-09.pdf>; Alan B. Krueger, "Where Have All the Workers Gone?" (Princeton, NJ: Princeton University, 2016), available at <http://bit.ly/2dFxBMr>; Nicholas Eberstadt, *Men Without Work: America's Invisible Crisis* (West Conshohocken, PA: Templeton Press, 2016).
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- 5 Ibid.
- 6 Ibid.
- 7 Authors' analysis using data from Bureau of Labor Statistics, "Current Employment Statistics - CES (National)," available at <https://www.bls.gov/ces/#data> (last accessed March 2017).
- 8 Results from a regression of the logarithm of weekly earnings of full-time workers on worker sex, age, age squared, race, education, marital status, metropolitan status, usual weekly hours, public-sector status, and manufacturing status. Authors' analysis using Center for Economic and Policy Research Current Population Survey Outgoing Rotation Group extracts from 1979 to 2016. See CEPRdata, "CPS ORG Data."
- 9 A decline in the employment rate, by definition, results from a combination of higher unemployment and lower labor force participation. Since the unemployment rate is relatively low today, the bulk of the recent decline is a result of reduced labor force participation.
- 10 Bureau of Labor Statistics, "Labor Force Statistics from the Current Population Survey: (Seas) Employment-Population Ratio - 25-54 yrs., Men"; Bureau of Labor Statistics, "Labor Force Statistics from the Current Population Survey: (Seas) Employment-Population Ratio - 25-54 yrs., Women," available at <https://data.bls.gov/timeseries/LNS12300062> (last accessed March 2017).
- 11 Francine D. Blau and Lawrence M. Kahn, "Female Labor Supply: Why Is the United States Falling Behind?," *American Economic Review* 103 (3) (2013): 251–256, available at <https://www.aeaweb.org/articles?id=10.1257/aer.103.3.251>.
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- 18 Results from a regression of the logarithm of weekly earnings of full-time workers on worker sex, age, age squared, race, education, marital status, metropolitan status, usual weekly hours, public-sector status, and manufacturing status. Authors' analysis using Center for Economic and Policy Research Current Population Survey Outgoing Rotation Group extracts from 1979 to 2016. See CEPRdata, "CPS ORG Data."
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