

# The Low-Wage Recovery and Growing Inequality

## Summary

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This report updates NELP's previous analyses of job loss and job growth trends during and after the Great Recession. We find that:

- 1 During the recession, employment losses occurred throughout the economy, but were concentrated in mid-wage occupations. By contrast, during the recovery, employment gains have been concentrated in lower-wage occupations, which grew 2.7 times as fast as mid-wage and higher-wage occupations. Specifically:
  - *Lower-wage occupations* were 21 percent of recession losses, but 58 percent of recovery growth.
  - *Mid-wage occupations* were 60 percent of recession losses, but only 22 percent of recovery growth.
  - *Higher-wage occupations* were 19 percent of recession job losses, and 20 percent of recovery growth.
- 2 The lower-wage occupations that grew the most during the recovery include retail salespersons, food preparation workers, laborers and freight workers, waiters and waitresses, personal and home care aides, and office clerks and customer representatives.
- 3 The unbalanced recession and recovery have meant that the long-term rise in inequality in the U.S. continues. The good jobs deficit is now deeper than it was at the start of the 21<sup>st</sup> century:
  - Since the first quarter of 2001, employment has grown by 8.7 percent in lower-wage occupations and by 6.6 percent in higher-wage occupations.
  - By contrast, employment in mid-wage occupations has fallen by 7.3.
- 4 Industry dynamics are playing an important role in shaping the unbalanced recovery. We find that three low-wage industries (food services, retail, and employment services) added 1.7 million jobs over the past two years, fully 43 percent of net employment growth. At the same time, better-paying industries (like construction; manufacturing; finance, insurance and real estate; and information) did not grow, or did not grow enough to make up for recession losses. Other better-paying industries (like professional and technical services) saw solid growth, but not in their mid-wage occupations. And steep cuts in state and local government have hit mid- and higher-wage occupations the hardest.

In short, America's good jobs deficit continues. Policymakers have understandably been focused on the urgent goal of getting U.S. employment back to where it was before the recession (we are still missing nearly 10 million jobs), but our findings underscore that job quality is rapidly emerging as a second front in the struggling recovery.

## After two years of growth, the good jobs deficit continues

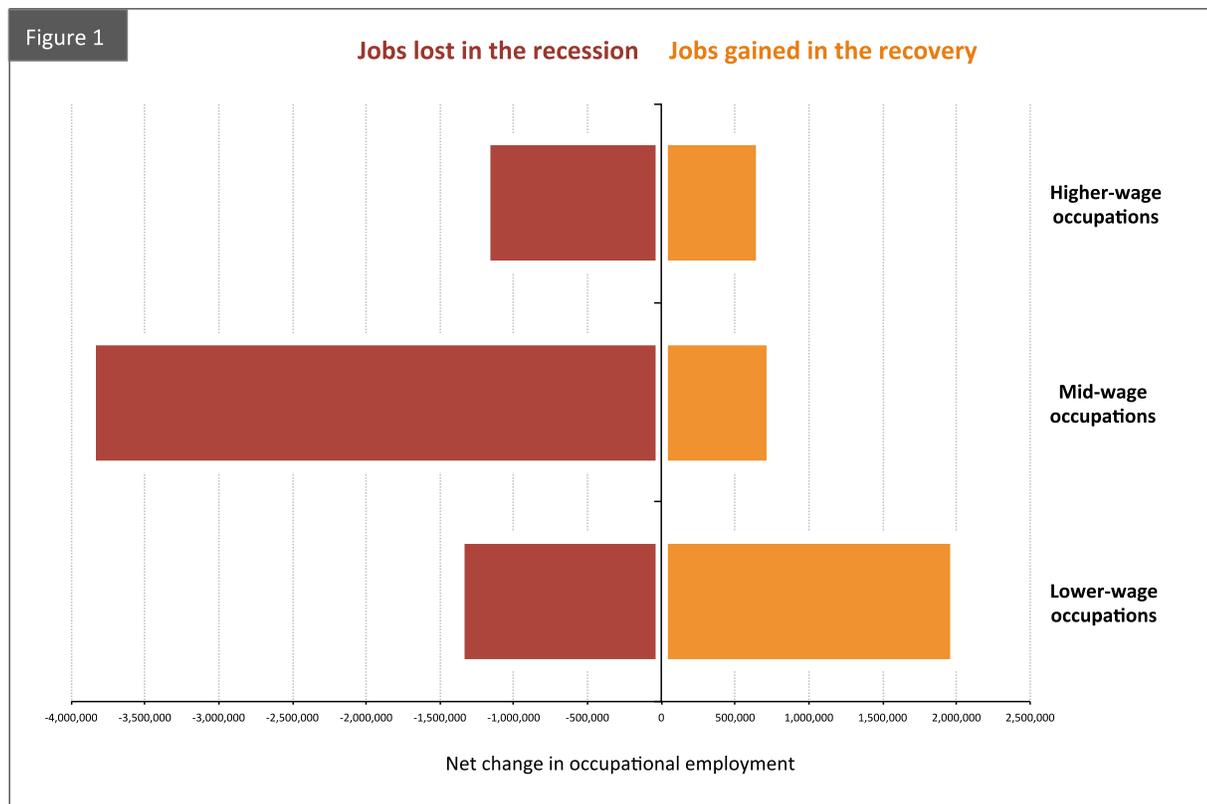
In what follows, we analyze data from the Current Population Survey (CPS), the main government survey providing information on wages and occupations for U.S. workers (see Appendix for details on data and methods).

Specifically, we examine employment trends in 366 detailed occupations. We formed three equal groups, each representing a third of U.S. employment in 2008: *lower-wage occupations* with median hourly wages from \$7.69 to \$13.83; *mid-wage occupations* with median hourly wages from \$13.84 to \$21.13; and *higher-wage occupations* with median hourly wages from \$21.14 to \$54.55 (all in 2012 dollars).

We then tracked net employment changes in these three groups over time, as shown in Figure 1. The red bars show net losses in employment during the recession (2008 Q1 to 2010 Q1). The orange bars show net growth in employment during the recovery (2010 Q1 to 2012 Q1).<sup>1</sup> The pattern is striking.

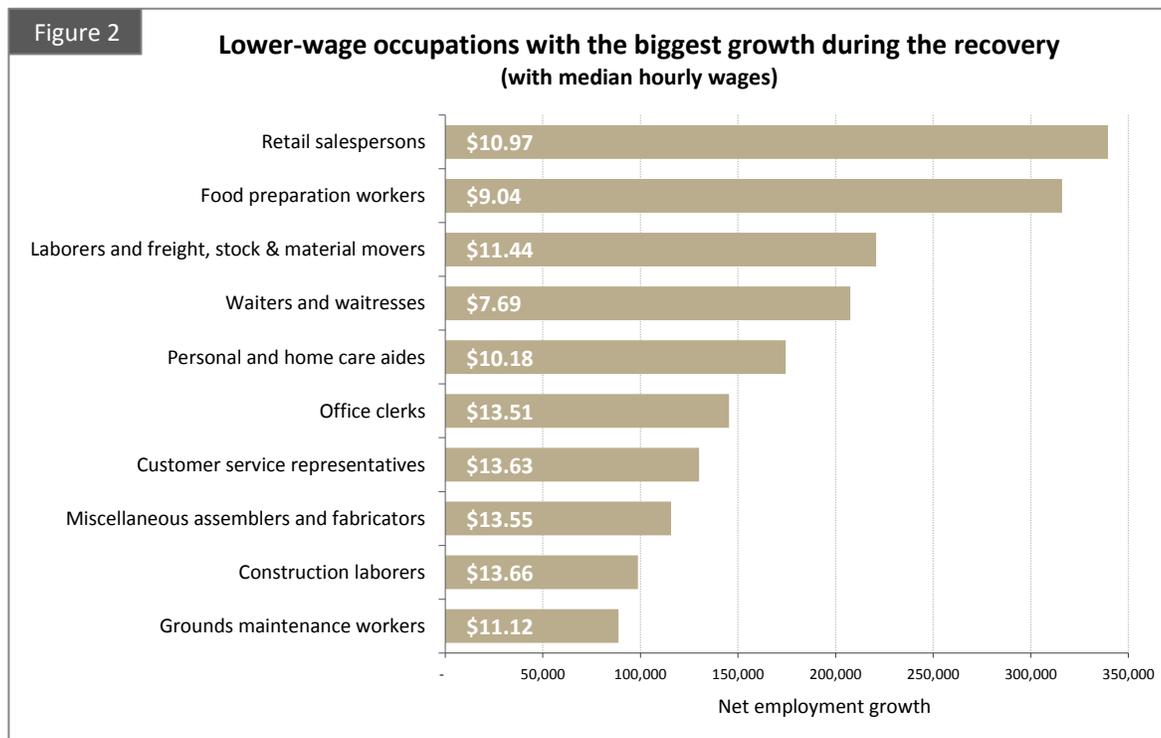
During the Great Recession, employment losses occurred across the board, but were concentrated in mid-wage occupations. By contrast, in the recovery to date, employment growth has been concentrated in lower-wage occupations, which grew 2.7 times as fast as mid-wage and higher-wage occupations:<sup>2</sup>

- *Lower-wage occupations* constituted 21 percent of recession job losses, but fully 58 percent of recovery growth.
- *Mid-wage occupations* constituted 60 percent of recession job losses, but only 22 percent of recovery growth.
- *Higher-wage occupations* constituted 19 percent of recession job losses, and 20 percent of recovery growth.



Source: NELP analysis of Current Population Survey. Recession is 2008 Q1 to 2010 Q1; recovery is 2010 Q1 to 2012 Q1.

Figure 2 shows the lower-wage occupations that grew the most during the recovery, and their median hourly wages. (Of these, six are also among the [top ten occupations](#) projected to add the most jobs by 2020). In terms of jobs that have struggled to come back, Table 1 lists the mid-wage occupations that currently have the biggest job deficit relative to pre-recession employment levels.



Source: NELP analysis of Current Population Survey. Recovery is 2010 Q1 to 2012 Q1; median wages in 2012 dollars.

**Table 1. Mid-wage occupations with the weakest recovery growth**

Occupations	2012 (Q1) – 2008 (Q1) employment	Median hourly wage (\$2012)
Driver, sales workers and truck drivers	-495,539	15.34
Secretaries and administrative assistants	-345,101	15.80
First-line supervisors/managers of office & administrative workers	-327,559	18.50
Carpenters	-211,954	16.56
Real estate brokers and sales agents	-181,078	21.06
Maintenance and repair workers	-145,139	17.96
Computer, automated teller, and office machine repairers	-118,822	19.86
Data entry keyers	-115,455	14.13
Billing and posting clerks and machine operators	-114,610	15.23
Insurance claims and policy processing clerks	-108,842	15.26
First-line supervisors, managers of production & operating workers	-107,059	19.90
Painting workers	-99,319	14.24
Electricians	-97,714	20.94
Pipelayers, plumbers, pipefitters, and steamfitters	-90,995	18.53
Carpet, floor, and tile installers and finishers	-88,774	14.11

Source: NELP analysis of Current Population Survey.

## The long-term rise in inequality continues

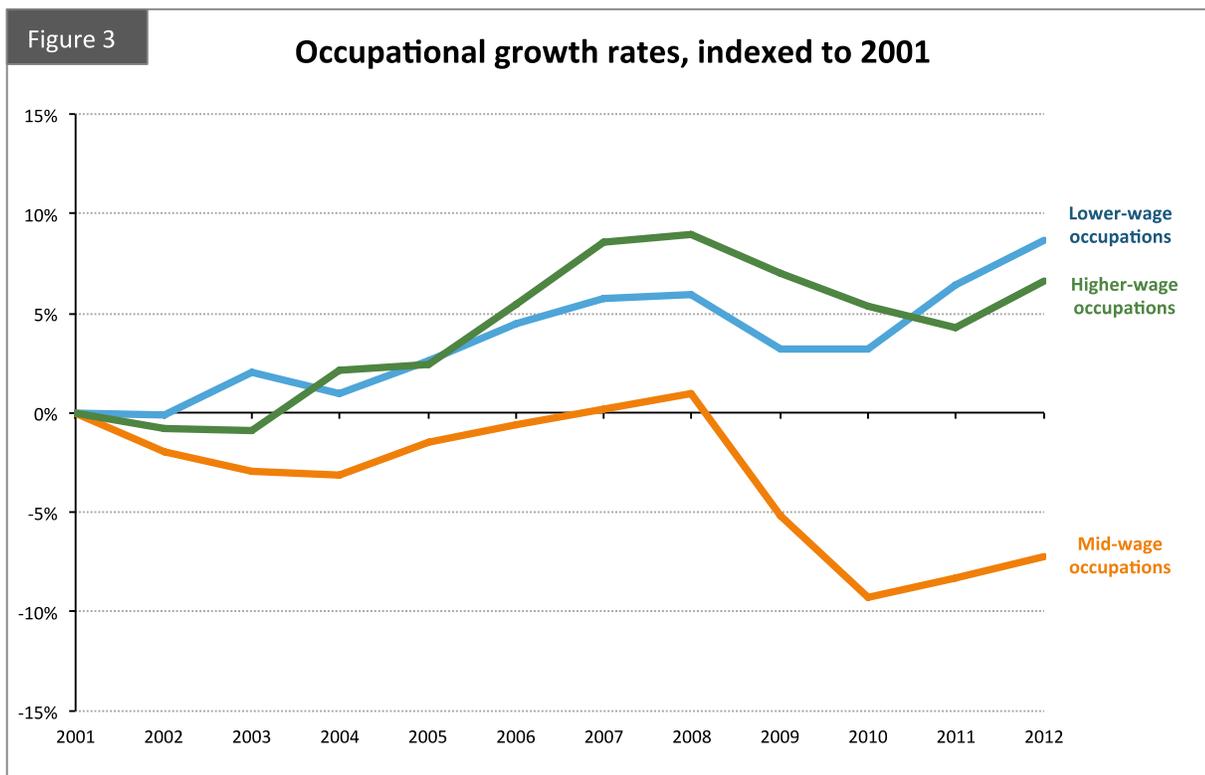
The U.S. labor market was already in trouble before the Great Recession, the result of 30 years of growing wage inequality and shrinking numbers of good jobs (see the [recent CEPR report](#)). But the twin trends described here – mid-wage occupations experiencing the biggest losses during the recession, and lower-wage occupations growing the most during the recovery – have only exacerbated the growth in inequality.

In Figure 3, we illustrate the longer-term trend by analyzing employment growth in occupations since the start of the century. The logic of the analysis is similar to the one above. Beginning with the first quarter of 2001, we formed three equal groups of occupations, each representing a third of U.S. employment, and tracked net employment growth through the first quarter of 2012.<sup>3</sup>

The graph shows a steady rise in inequality from 2001 to 2008, with lower- and higher-wage occupations experiencing more growth than mid-wage occupations (which barely saw gains in employment). But the hollowing out of the middle became even more pronounced during the recession and continues to leave its mark on the recovery. Specifically:

- Since the first quarter of 2001, employment has grown by 8.7 percent in lower-wage occupations and by 6.6 percent in higher-wage occupations.
- By contrast, employment in mid-wage occupations has declined by 7.3 percent since the first quarter of 2001.

In addition, the wages paid by these occupations has changed. Between the first quarters of 2001 and 2012, median real wages for lower-wage and mid-wage occupations declined (by 2.1 and 0.2 percent, respectively), but increased for higher-wage occupations (by 4.1 percent).



Source: NELP analysis of Current Population Survey.  
All estimates measured at Quarter 1.

## Which industries are driving the unbalanced recovery?

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Understanding differences in occupational growth requires understanding trends at the industry level. As shown in Figure 4, different sectors of the U.S. economy have seen different patterns of job loss and job growth, both during and after the Great Recession (in this section, we analyze BLS Current Employment Statistics data). In addition, the mix of occupations has also changed in some industries. Our analysis of both of these dynamics suggests the following four drivers of the unbalanced recovery to date:

### **#1: Large low-wage industries are dominating growth during the recovery**

Three low-wage industries have added 1.7 million jobs in the recovery and constitute 43 percent of total net growth: food services, retail, and administrative, support and waste management services (largely employment services, i.e., temp jobs). The majority of growth within these industries (76 percent) occurred in their lower-wage occupations.

### **#2: Key mid-wage and high-wage industries are either not growing, or not growing enough to make up for recession losses**

Steep losses in construction, FIRE (finance, insurance and real estate), and manufacturing during the recession created a large deficit in mid-wage occupations. These industries are not showing enough growth, and especially in the case of construction, are unlikely to get back to pre-recession levels any time soon. There has also been a long-term and continuing decline in the information sector, contributing to the deficit of higher-wage jobs. Finally, deep cuts in state and local government during the recovery (a loss of 485,000 jobs since February 2010) occurred largely in mid- and higher-wage jobs.

### **#3: Some mid- and high-wage industries are growing, but that growth has been unbalanced**

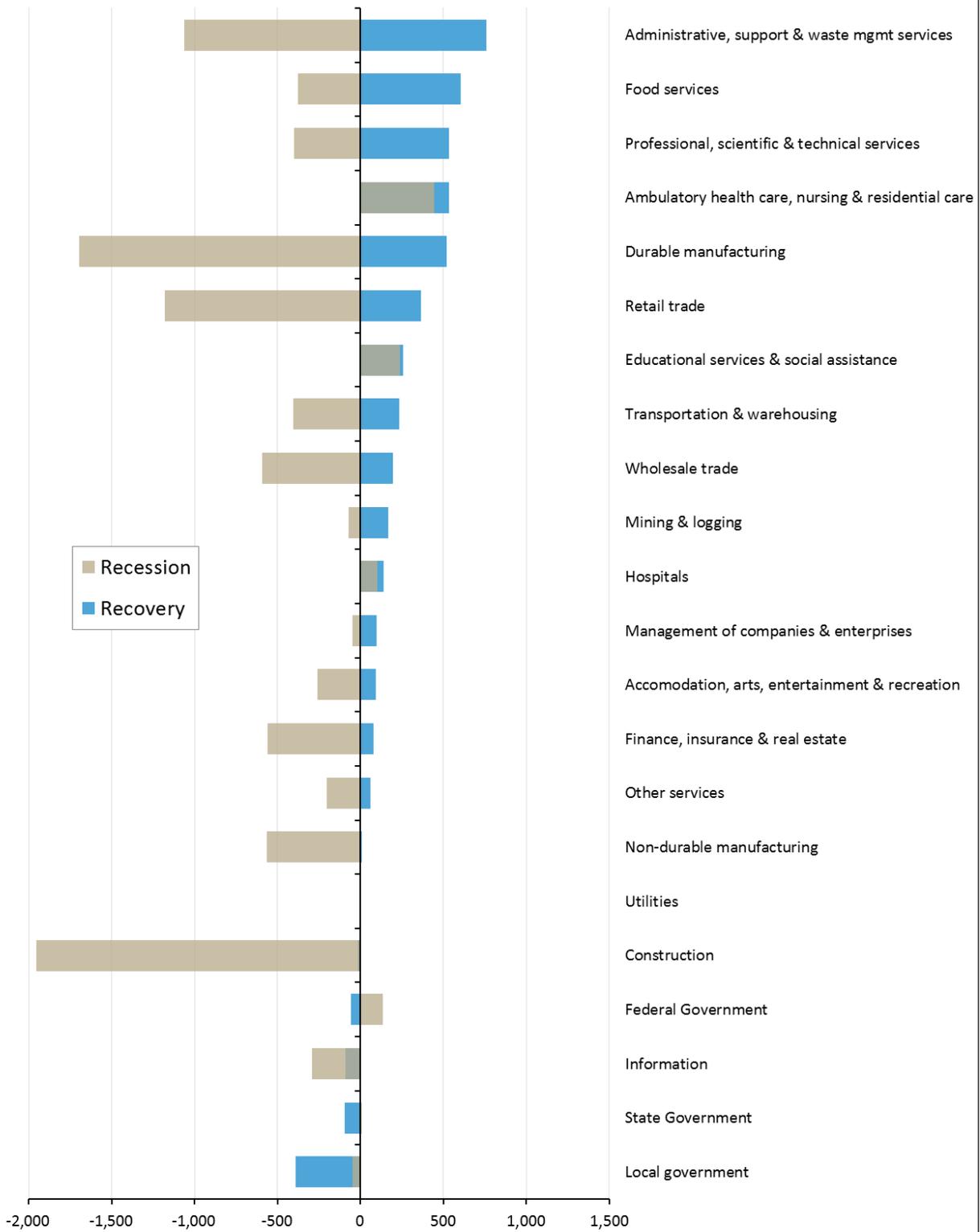
In a number of better-paying industries, recovery growth has not been evenly distributed and has contributed to the good jobs deficit. In wholesale trade, recession losses were concentrated in mid-wage occupations, but growth has been concentrated in lower-wage occupations. In educational services and social assistance, recent growth has been strongly polarized between lower- and higher-wage occupations. And the recovery in professional and technical services has been concentrated in higher-wage occupations, leaving a significant mid-wage gap in this sector.

### **#4: The bright spots: several mid- and high-wage industries have seen balanced growth**

Even though it lost more than a million and a half jobs during the recession, durable manufacturing has been one of the key drivers of the U.S. recovery, and importantly, growth in this sector has been concentrated in mid-wage occupations; similarly for transportation and warehousing. As important, the health care sector has seen solid employment growth across the occupational distribution. Without these industries, the recovery would have been even more unbalanced and skewed toward lower-wage occupations.

Figure 4

Net change in industry employment (in thousands)



Source: NELP analysis of BLS Current Employment Statistics.  
 Recession is 2008 Q1 to 2010 Q1; recovery is 2010 Q1 to 2012 Q1

## Endnotes

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<sup>1</sup> Nonfarm U.S. employment peaked in January 2008 and hit bottom in February 2010; in this report, we use “recession” as short-hand for the entire period of net job loss, and “recovery” for the ensuing period of net employment growth. Also, readers should be aware that employment estimates from the [Current Population Survey](#) (CPS) differ from employment estimates from the [Current Employment Statistics](#) (CES) series; this difference is [well-documented](#), and CES estimates are typically treated as the authoritative data source on overall employment levels. Our analysis of the CPS focuses on differences across different groups of occupations, rather than overall employment counts.

<sup>2</sup> Note that we are calculating net employment changes for each of the three occupational groups; within any one group, there are individual occupations that have gained employment and occupations that have lost employment.

<sup>3</sup> The results do not change appreciably when defining the three occupational groups in terms of 2008 Q1 employment instead of 2001 Q1 employment.

## Acknowledgements

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## Appendix: Data and methods

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Most of the analyses presented in this Data Brief draw on the [Current Population Survey \(CPS\)](#), a representative monthly survey of about 50,000 households in the U.S. that gathers a wide range of demographic and labor force information on workers, including the occupations they worked in and the wages they earned. Specifically, we use the CPS Outgoing Rotation Files, prepared by the Economic Policy Institute for the Economic Analysis Research Network (EARN). For the analyses presented in this report, we included the civilian population, age 18-64, that was working for pay in the week prior to the survey; we exclude the self-employed.

The core of our analysis focuses on employment trends in 366 detailed occupations, coded according to the [Census 2002 occupational classification system](#). In order to form a consistent series of occupation codes over the years analyzed in this report, minor recoding was necessary (resulting in the reclassification of 2.7 percent of cases) since some codes did not appear in every year. In addition, a revised coding system was introduced with the January 2011 CPS; we used the [Census 2002-2010 crosswalk](#) to recode 2011 and 2012 data to the 2002 classification system. (The changes in the 2010 coding system were not nearly as dramatic as ones in past decades, meaning that a sound reconciliation was possible.)

For each occupation, we calculated the median hourly wage of respondents currently working in that occupation. A well-documented problem is that workers often round their hourly wages (i.e., to \$10.00 when the actual wage might be \$10.13) when responding to surveys, resulting in “heaps” in the wage distribution; we therefore

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smoothed hourly wages in each year before calculating median wages for each occupation. When comparing wages over time, we used the [CPI-U](#) to adjust for inflation.

In tracking employment changes at the occupational level over time, we used the following time points to correspond to peaks and troughs of the business cycle and to ensure that we were measuring employment levels at the same time of the year (since employment levels in particular occupations are strongly seasonal):

- First quarter of 2001 (peak U.S. nonfarm employment month was February 2001)
- First quarter of 2008 (peak U.S. nonfarm employment month was January 2008)
- First quarter of 2010 (trough month for U.S. nonfarm employment was February 2010)
- First quarter of 2012 (most recent quarter 1 data available)

In order to simplify the analysis, we collapsed the 366 occupations into three groups (lower-wage, mid-wage, and higher-wage). For Figure 1, occupations were ranked by their median wage from lowest to highest, weighted by occupational employment in Q1 2008; we formed three equal thirds, and then tracked net employment changes in these thirds over time. For Figure 3, occupations were similarly ranked by their median wage from lowest to highest, weighted by occupational employment in Q1 2001 and then grouped into three equal thirds. The substantive results do not change when using more disaggregated groupings of the occupations; we present thirds here for ease of understanding.

Finally, in Figure 4, we use [Current Employment Statistics \(CES\)](#) data to estimate trends in industry employment (see endnote 1 above for a discussion of differences between the CES and CPS).