

www.urban.org


INSIDE THIS ISSUE

- Between 2006 and 2012, private-sector job losses and weak recovery were concentrated among younger and less-educated workers.
- Between 2009 and 2012, private-sector job growth has been slower for women than for men.
- The public sector has reinforced rather than offset these private-sector trends.

Government Job Losses Hit the Young, the Less Educated, and Women the Hardest

Josh Mitchell

The Great Recession was characterized by dramatic declines in private-sector employment with a lagged decline in public-sector jobs as well. Even as the private sector has slowly recovered, public-sector job losses, particularly in state and local government, have continued to mount. Yet little attention has been paid to the fact that these losses have not been spread evenly across workers.

This brief examines private- and public-sector workers' employment experiences across different educational attainment, age, and gender groups over the last six years. Between 2006 and 2009, net public-sector job growth was weakly positive overall, but less-educated and young workers lost jobs in that sector. Those two demographic groups also experienced the largest declines in private-sector employment. Also during this period, private-sector employment declined substantially, with men losing more jobs in the private sector than women.

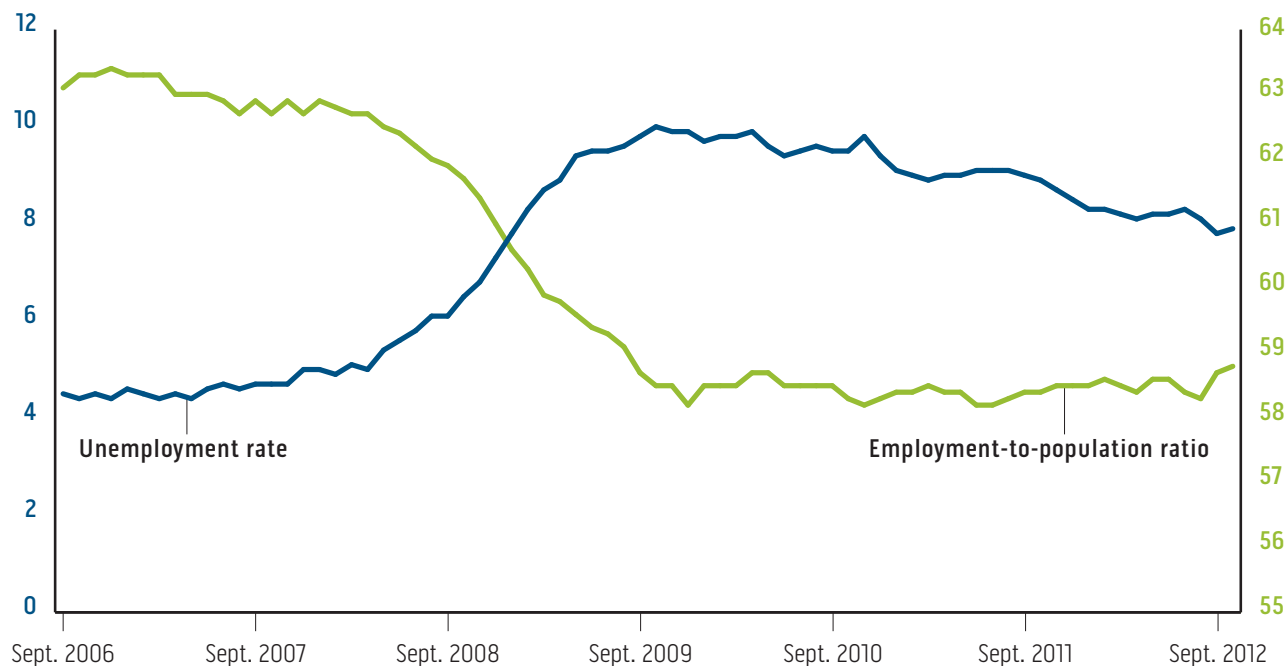
Between 2009 and 2012, the story was somewhat different because public-sector jobs declined overall and for a broader set of population subgroups. Still, the most-educated and oldest workers continued to gain public-sector jobs, while all other education and age groups suffered job losses. Further, female workers disproportionately lost public-sector jobs even as they lagged men in

private-sector job growth. Taken together, these patterns indicate that the public sector has not been a strong employment buffer for vulnerable groups, during either the Great Recession or its aftermath. Rather, the public sector has largely reinforced private-sector labor market trends.

This study uses the Current Population Survey (CPS) to analyze employment growth trends across demographic groups and sectors. The CPS is a monthly survey of approximately 50,000 households that is representative of the civilian non-institutionalized population, and is used to produce the nation's official unemployment rate.¹ Data from the September 2006, 2009, and 2012 CPS samples are used.² Other common sources of employment data, such as the Current Employment Statistics or "establishment survey" (used in exhibit 2) are unsuitable for this study because they do not report employment by educational attainment or worker age.

Dramatic job losses during the Great Recession and slow employment growth in its aftermath have taken a toll on workers across all demographic groups, although the pain has not always been spread evenly.

Exhibit 1. Unemployment Rate and Employment-to-Population Ratio, 2006–2012



Source: U.S. Bureau of Labor Statistics.

Changes in net employment in the CPS are computed for all individuals age 16 and over who have a job, including the self-employed, in the private-sector job numbers. These changes are calculated for three sectors: private, federal government, and state and local government. The results are shown separately for five education groups (less than high school, high school graduate, some college, college graduate, and advanced degree), for four age groups (age 16 to 30, age 31 to 45, age 46 to 55, and age 56 and over), and for two gender groups.

Labor Market Trends, 2006–2012

Exhibit 1 depicts two summary measures of labor market performance over the last six years—the unemployment rate and employment-to-population ratio. While the Great Recession officially dates from December

2007 to June 2009, the labor market peaked in late 2006 (as measured by both the lowest unemployment rate and highest employment-to-population ratio), stayed roughly steady throughout 2007, and then declined sharply through October 2009. Over the last three years, the unemployment rate has slowly declined, but the employment-to-population ratio has barely changed.

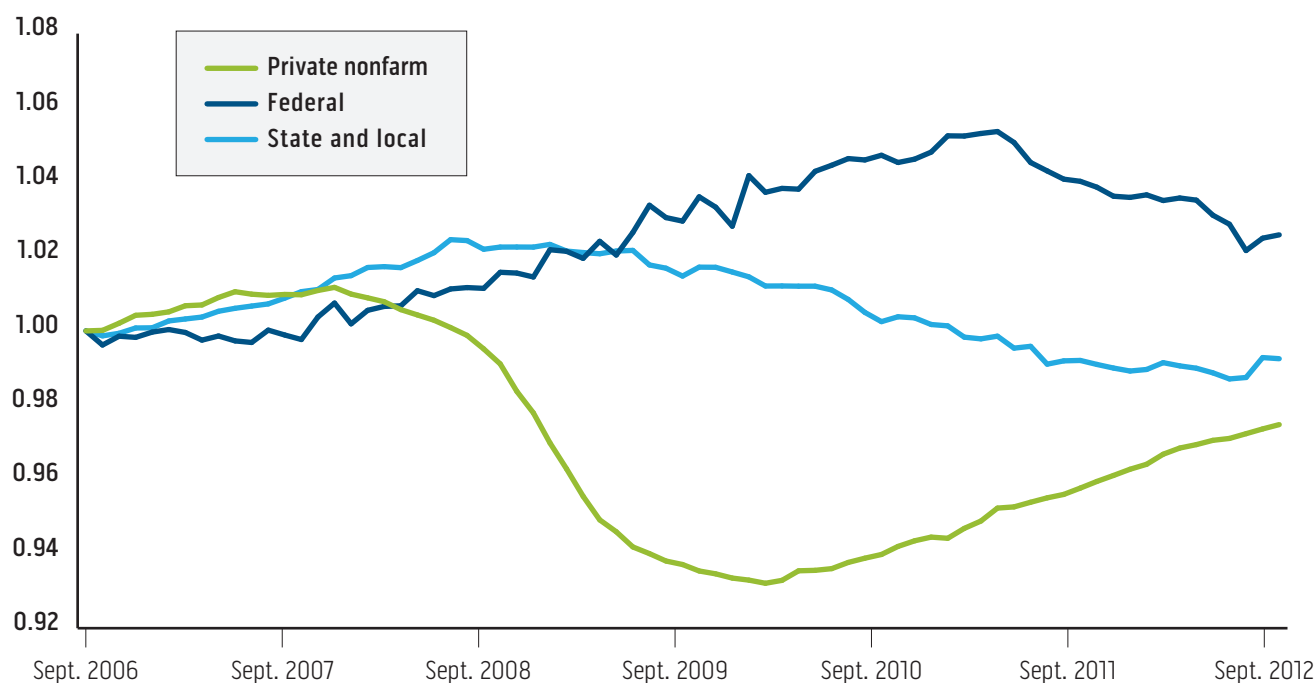
Exhibit 2 shows the monthly employment trajectory across the nonfarm private sector, federal government, and state and local government. Note that 87 percent of public employment occurs at the state and local level. While the private sector declined earlier and more dramatically than the public sector, state and local governments also began shedding jobs in late 2008 and have continued to do so even as the private sector expanded slowly for the last three years. Excluding

temporary hiring for the census, civilian federal employment increased significantly between 2006 and 2009 but as of 2012, federal employment is below its 2009 level. These employment trends by sector mask considerable variation in the employment experiences of different types of workers.

Public- and Private-Sector Employment by Educational Attainment

Employment by educational attainment is distributed unevenly across sectors. In general, public-sector employment is more heavily tilted toward workers with more education. Exhibit 3 shows that for the baseline year 2006, workers lacking a high school diploma composed only 3.8 percent of state and local employment and 2.5 percent of federal employment but 12.8 percent of the private sector. The private sector also disproportion-

Exhibit 2. Monthly Employment in the Private Nonfarm Sector, Federal Government, and State and Local Government, 2006–2012



Source: U.S. Bureau of Labor Statistics, Current Employment Statistics.

ally employs more workers with only a high school diploma, 31.2 percent versus 20.4 percent for state and local and 24.9 percent for federal. At the other end of the education spectrum, workers with advanced degrees compose 23.7 percent of state and local employment and 14.7 percent of federal employment, but only 8.2 percent of private-sector employment. These relative magnitudes are important when considering fluctuations in employment during the Great Recession and recovery periods.

Exhibit 4 compares employment growth from 2006 to 2009 and from 2009 to 2012 for each education level across each sector. To provide additional context, the percentage growth in population (irrespective of labor force attachment) is displayed next to each group.

The top-left set of bars in exhibit 4 shows CPS employment changes by sector for

workers of all education levels. Across all workers, the private sector contracted by 5.1 percent between September 2006 and 2009 (6,328,000 jobs) while federal employment grew 4.9 percent (231,000 jobs) and state and local employment grew 1.3 percent (170,000 jobs). During this period, overall population growth was 3.0 percent. That is, one might have expected employment growth of 3.0 percent to keep pace with the growing population. The top-right set of bars in exhibit 4 shows that from September 2009 to 2012 the private sector grew at 3.8 percent (4,471,000 jobs) and federal employment increased by 1.2 percent (44,000 jobs), while state and local government contracted by 1.6 percent (274,000 jobs). Population growth remained steady at 3.2 percent.

Employment growth differences across education groups and sectors are striking. For

workers with less than a high school diploma, the job market has been uniformly dire across sectors. Between 2006 and 2009 employment for those with less than a high school diploma fell by 18.8 percent for private-sector workers, (2,985,000 jobs), by 19.1 percent (16,000 jobs) for federal workers, and by 16.3 percent (105,000 jobs) for state and local workers. These dramatic employment losses are only partially mitigated by this group's population size declining by 6.6 percent. Their job losses continued to mount between 2009 and 2012 with a 4.2 percent (536,000 jobs) decline in the private sector, a 4.8 percent decline for state and local government (26,000 jobs), and a 17.4 percent decline in federal employment (12,000 jobs), although these private-sector and state and local government declines are more in line with the 3.2 percent decline in the population without diplomas.

Exhibit 3. Employment Distribution per Sector by Education, Age, and Gender, 2006 (%)

	State and local	Federal	Private
Education			
No HS diploma	3.8	2.5	12.8
HS diploma	20.4	24.9	31.2
Some college	25.9	31.9	28.6
Bachelor's degree	26.3	26.0	19.3
Advanced degree	23.7	14.7	8.2
Age			
Ages 16–30	18.5	12.0	28.3
Ages 31–45	34.6	32.1	35.1
Ages 46–55	28.1	35.4	21.9
Ages 56 and older	18.8	20.5	14.7
Gender			
Men	39.3	56.0	55.8
Women	60.7	44.0	44.2

Source: U.S. Bureau of Labor Statistics, Current Population Survey, September 2006, 2009, and 2012 samples.

Those with no more than a high school diploma also experienced private- and public-sector job losses in tandem. Between 2006 and 2009 high school graduates saw private-sector employment fall by 9.3 percent (3,587,000 jobs), federal employment fall by 13.7 percent (118,000 jobs), and state and local employment fall by 3.3 percent (114,000 jobs). Meanwhile, the population of high school graduates actually grew by 1.5 percent. In the following three years, private-sector employment fell by another 1.5 percent (523,000 jobs), federal employment actually grew by 1.6 percent (12,000 jobs), and state and local employment fell by another 4.4 percent (149,000 jobs), with the total population slightly increasing by 0.4 percent.

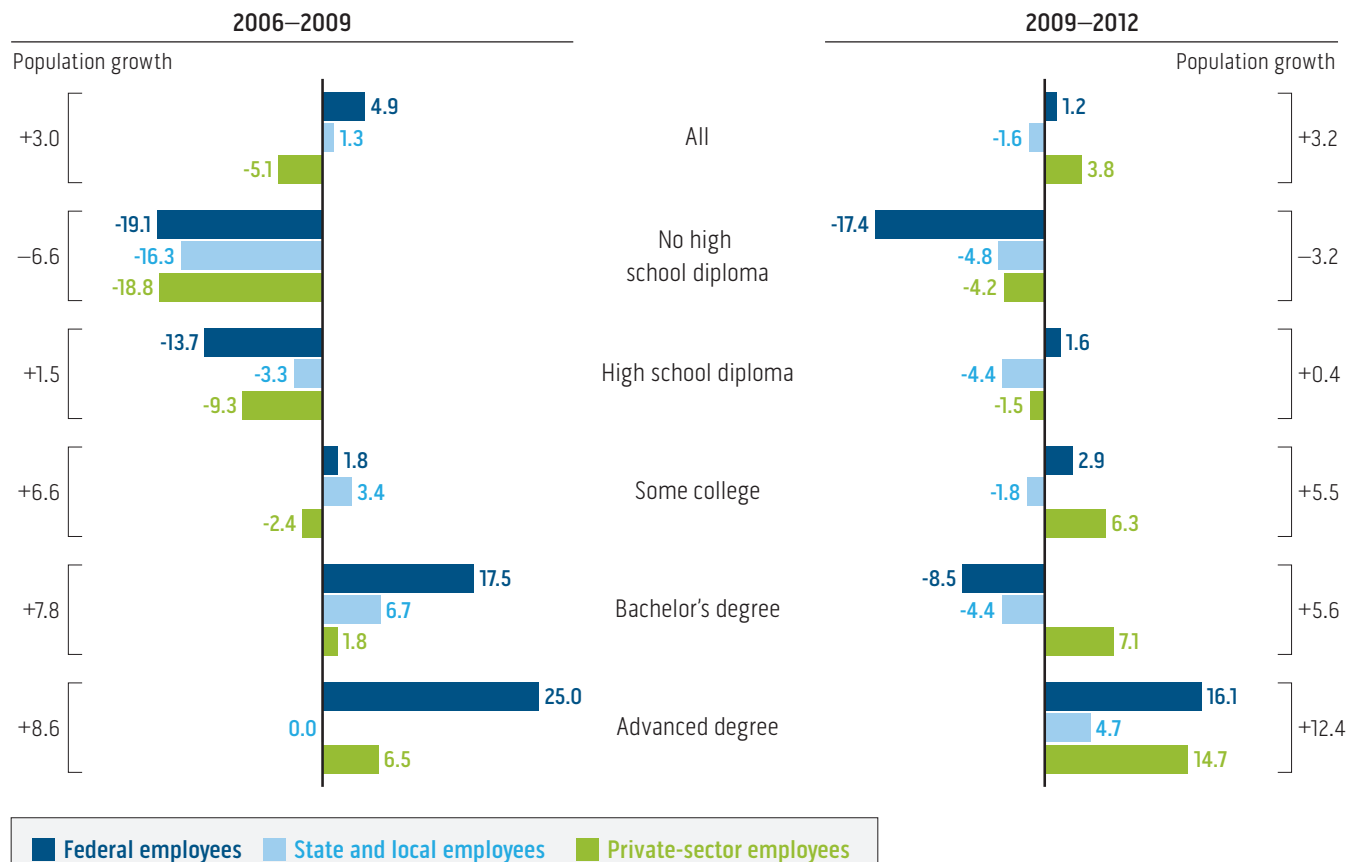
Workers with some college education experienced modest growth in public-sector employment between 2006 and 2009, which partially buffered the fall in the private sector. Private-sector employment contracted 2.4 percent (856,000 jobs) while federal employment grew 1.8 percent (20,000 jobs) and state and local employment grew 3.4 percent (151,000 jobs). The public-sector offset, however, was limited in the context of a 6.6 percent increase in population. From 2009 to 2012, private sector growth of 6.3 percent (2,200,000 jobs) kept up with population growth of 5.5 percent. Federal employment grew more slowly at 2.9 percent (32,000 jobs) and state and local employment continued its decline, falling by 1.8 percent (81,000 jobs).

In contrast to less-educated workers, college degree holders did not experience a private-sector employment decline in 2006–2009, but employment growth was still only 1.8 percent (441,000 jobs)—far behind population growth of 7.8 percent. Public-sector employment did buffer anemic private-sector growth by keeping pace with the growing population. Federal employment grew 17.5 percent (157,000 jobs) and state and local employment grew 6.7 percent (301,000 jobs). From 2009 to 2012, college-educated workers did lose employment, but only in the public sector. Private-sector employment continued expanding by 7.1 percent (1,742,000 jobs), while federal employment fell 8.5 percent (90,000 jobs) and state and local employment fell by 4.4 percent (211,000 jobs), even as the population of college graduates grew 5.6 percent.

The most-educated workers, those with advanced degrees, experienced patterns quite distinct from other groups. Private-sector employment growth of 6.5 percent between 2006 and 2009 (658,000 jobs) was clearly the strongest of all education groups; however, it was still insufficient to keep pace with 8.6 percent population growth. Federal employment growth was rapid at 25.0 percent (127,000 jobs), but state and local employment remained essentially unchanged. From 2009 to 2012, all three sectors grew, although state and local employment continued to lag. Private-sector employment grew 14.7 percent (1,588,000 jobs) and federal employment grew 16.1 percent (102,000 jobs), which surpassed population growth of 12.4 percent. State and local employment also grew but at a slower rate of 4.7 percent (192,000 jobs).

In short, public-sector job losses for less-educated workers reinforced private-sector trends, while public-sector job gains provided at least some buffer for higher-educated workers during the Great Recession. Between 2009 and 2012, public-sector job losses (particularly state and local) were more

Exhibit 4. Percentage Change for Employees by Education



Source: U.S. Bureau of Labor Statistics, Current Population Survey, September 2006, 2009, and 2012 samples.

widespread, with only the most-educated workers enjoying significant public- and private-sector job gains.

Public- and Private-Sector Employment by Age

Besides educational background, public- and private-sector workers also differ by age. As shown in exhibit 3, public-sector workers tend to be older than private-sector workers. For example, in 2006 workers age 16 to 30 composed 28.3 percent of the private sector but only 12.0 percent of federal employment and 18.5 percent of state and local employment. Workers age 56 and older composed 14.7 percent of private employment but 20.5 percent

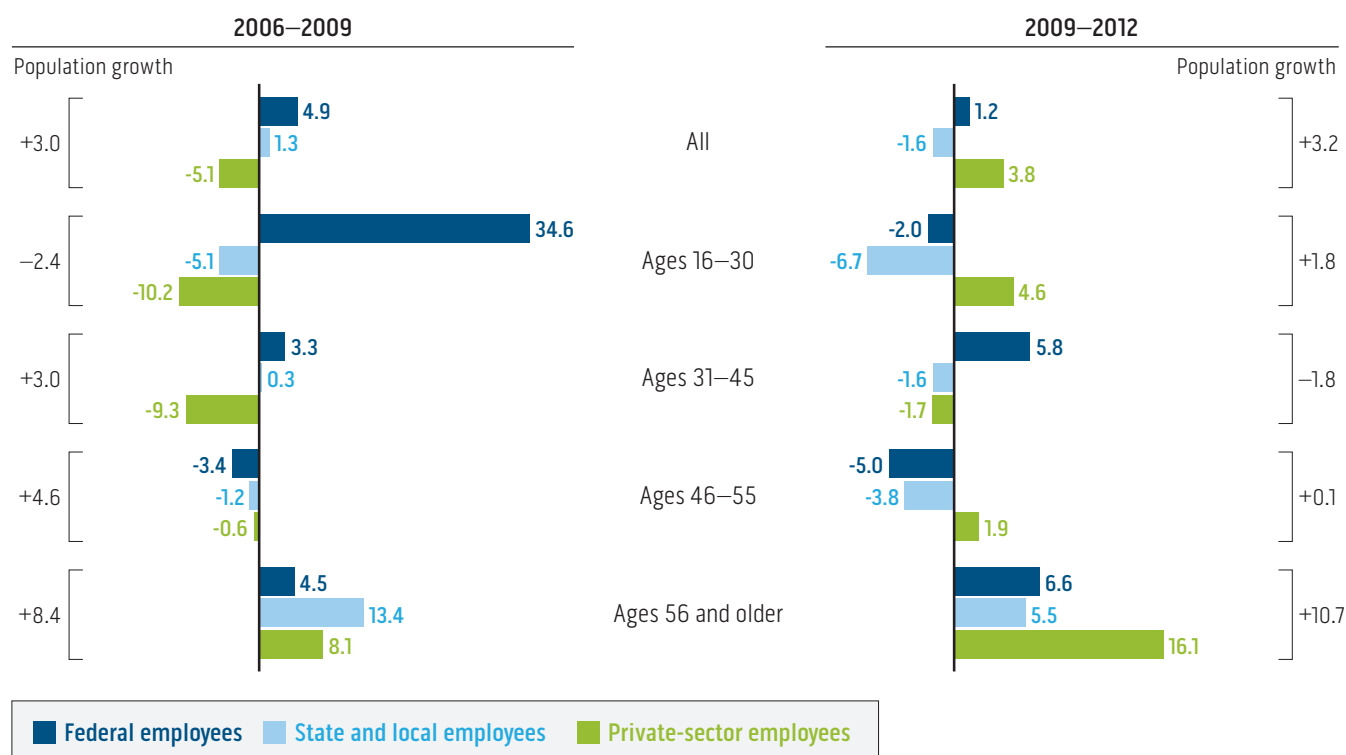
of federal employment and 18.8 percent of state and local employment.

Employment growth in the public and private sectors also varied considerably across workers of different ages, as shown in exhibit 5. The youngest workers, age 16 to 30, experienced particularly large losses in the private sector between 2006 and 2009—a 10.2 percent reduction (3,595,000 jobs) in employment at a time when population growth for this group fell only 2.4 percent. The public-sector picture was more mixed. Federal employment grew by a substantial 34.6 percent (142,000 jobs) but state and local employment also contracted 5.1 percent (161,000 jobs). Over the last three years, private-sector employment has some-

what rebounded to grow at 4.6 percent (1,448,000 jobs), but the public sector has now acted as a drag on total employment for young workers. Federal employment for young workers contracted 2.0 percent (11,000 jobs) and state and local employment continued to fall by 6.7 percent (201,000 jobs), even as the population has grown 1.8 percent.

Workers age 31 to 45 also experienced a substantial private-sector decline relative to population between 2006 and 2009 but remained somewhat supported by jobs across the public sector. While the population age 31 to 45 fell 3.0 percent, private employment fell 9.3 percent (4,068,000 jobs), yet federal employment grew 3.3 percent (37,000 jobs)

Exhibit 5. Percentage Change for Employees by Age



Source: U.S. Bureau of Labor Statistics, Current Population Survey, September 2006, 2009, and 2012 samples.

and state and local employment, 0.3 percent (17,000 jobs). From 2009 to 2012, private employment and state and local employment continued to decline but remained roughly constant relative to population size. That is, private employment fell 1.7 percent (677,000 jobs) and state and local employment fell 1.6 percent (95,000 jobs) as the population declined by 1.8 percent. Federal employment actually expanded 5.8 percent (66,000 jobs).

Workers age 46 to 55 saw employment declines across all sectors between 2006 and 2009. Private-sector employment fell by 0.6 percent (156,000 jobs), federal employment fell by 3.4 percent (42,000 jobs), and state and local employment fell by 1.2 percent (57,000 jobs). These declines were large relative to the population increase of 4.6 percent. Between 2009 and 2012, private-sector employment

recovered somewhat while public-sector employment declined significantly. Private employment increased by 1.9 percent (513,000 jobs), federal employment fell by 5.0 percent (59,000 jobs), and state and local employment fell by 3.8 percent (179,000 jobs), while the size of the population remained unchanged.

The last group of workers, age 56 and older, experienced stronger employment growth than other groups, even accounting for the large increase in population size. In fact, no other age group experienced any private or state and local growth during the Great Recession period. Between 2006 and 2009, private employment grew 8.1 percent (1,490,000 jobs), nearly at pace with the 8.4 percent population increase. State and local employment grew strongly at 13.4 percent (432,000 jobs), while federal employment

grew at 4.5 percent (32,000 jobs). Employment growth between 2009 and 2012 remained strong, particularly in the private sector. Private employment grew 16.1 percent (3,188,000 jobs), faster than the 10.7 percent population increase. Public employment grew as well but not as fast as the overall population. Federal employment grew 6.6 percent (49,000 jobs) and state and local employment grew 5.5 percent (202,000 jobs).

In short, between 2006 and 2009, only the oldest workers experienced strong job gains in the public sector. Between 2009 and 2012, public-sector job losses became widespread, but the youngest workers had the biggest losses, while the oldest workers were the only group that experienced any public-sector gains in addition to strong private-sector job growth.

Exhibit 6. Percentage Change for Employees by Gender



Source: U.S. Bureau of Labor Statistics, Current Population Survey, September 2006, 2009, and 2012 samples.

Public and Private Sector Employment by Gender

The Great Recession and recovery have also had disparate impacts on men and women. This is partly because men are disproportionately employed in the private sector and federal government while women comprise a larger share of state and local employment. Exhibit 3 shows that in 2006, 55.8 percent of private-sector workers were men as were 56.0 percent of federal workers, but men made up only 39.3 percent of state and local workers.

Exhibit 6 shows employment changes by gender. Between 2006 and 2009, private-sector employment for men fell by 7.1 percent (4,893,000 jobs) while falling for women by 2.6 percent (1,435,000 jobs). The large gender disparity in employment explains why the early stages of the labor market deterioration were often referred to as a “mancession”, where male-dominated industries such as construction and manufacturing were hardest hit. The public sector only modestly offset the large employment declines for men. Federal employment for men grew 2.0 percent (40,000 jobs), and state and

local employment grew 2.6 percent (175,000 jobs), while the population rose 3.1 percent. Women experienced a larger 8.6 percent increase in federal employment (130,000 jobs) but a smaller 0.5 percent increase in state and local government (56,000 jobs).

Between 2009 and 2012, the gender disparity flipped. Private-sector employment growth favored men over women 4.1 percent (2,627,000 jobs) to 3.4 percent (1,844,000 jobs). Public-sector performance reinforced this trend. Federal employment grew 5.3 percent (105,000 jobs) for men but fell 3.7 percent (61,000 jobs) for women, and state and local employment fell 0.9 percent (61,000 jobs) for men but 2.0 percent (213,000 jobs) for women. The continued weakness in state and local government hiring suggests that employment growth for women may continue to lag going forward.

Conclusion

Dramatic job losses during the Great Recession and slow employment growth in its aftermath have taken a toll on workers across all demographic groups, although the pain has

not always been spread evenly. While some view public-sector employment as a stabilizing force during times of private-sector distress, public-sector employment largely reinforced private-sector trends. Demographic groups most vulnerable to private sector job loss or weak private-sector job growth also had worse employment experiences in the public-sector. ■

Notes

The author would like to thank Janice Park for valuable research assistance on this project.

1. Tabulations of federal employment exclude the military but include postal workers.
2. The same month is used in all years to remove seasonal fluctuations.

About the Author

Josh Mitchell is a research associate with the Income and Benefits Policy Center at the Urban Institute.

Unemployment and Recovery Project

This brief is part of the Unemployment and Recovery project, an Urban Institute initiative to assess unemployment's effect on individuals, families, and communities; gauge government policies' effectiveness; and recommend policy changes to boost job creation, improve workers' job prospects, and support out-of-work Americans. Major funding for the project is from the Rockefeller and Ford Foundations.

Copyright © February 2013

The views expressed are those of the author and do not necessarily reflect those of the Urban Institute, its trustees, or its funders. Permission is granted for reproduction of this document, with attribution to the Urban Institute.

URBAN INSTITUTE
2100 M Street, NW
Washington, DC 20037-1231
(202) 833-7200
publicaffairs@urban.org www.urban.org