

## Payroll employment growth accelerates in 2011

Parth A. Tikiwala and Frank Conlon

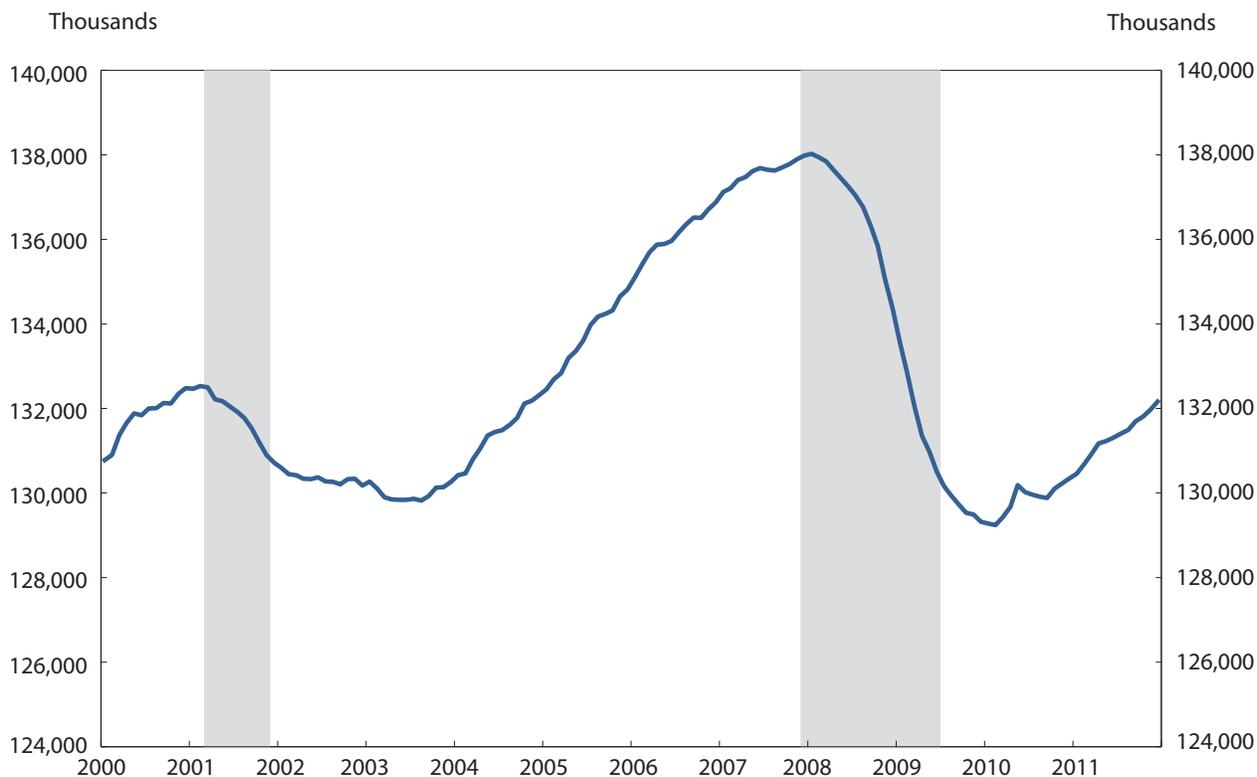
**I**n 2011, nonfarm payroll employment experienced its largest increase since 2006. Employment increased 1.8 million, or 1.4 percent, over the year. Within the private sector, job gains averaged 175,000 per month, compared with an average monthly gain of 104,000 in 2010. In contrast, government employment losses accelerated and averaged 22,000 per month in 2011, compared with 18,000 per month the year before. Every other major industry expanded payrolls in 2011, except the information industry, which continued its downward trajectory, marking its 11th successive year of job losses.

This visual essay examines employment gains in 2011, as measured using data from the Current Employment Statistics (CES) survey, which is also known as the Establishment Survey. The CES survey is a survey of

employers that provides a monthly measure of the number of payroll jobs in nonfarm industries, hours, and earnings during the pay period that includes the 12th of the month. The analysis begins with total nonfarm employment and then examines specific industries that changed notably over the year. The essay notes hours and earnings data and their activity throughout the year and compares employment growth with other economic indicators.

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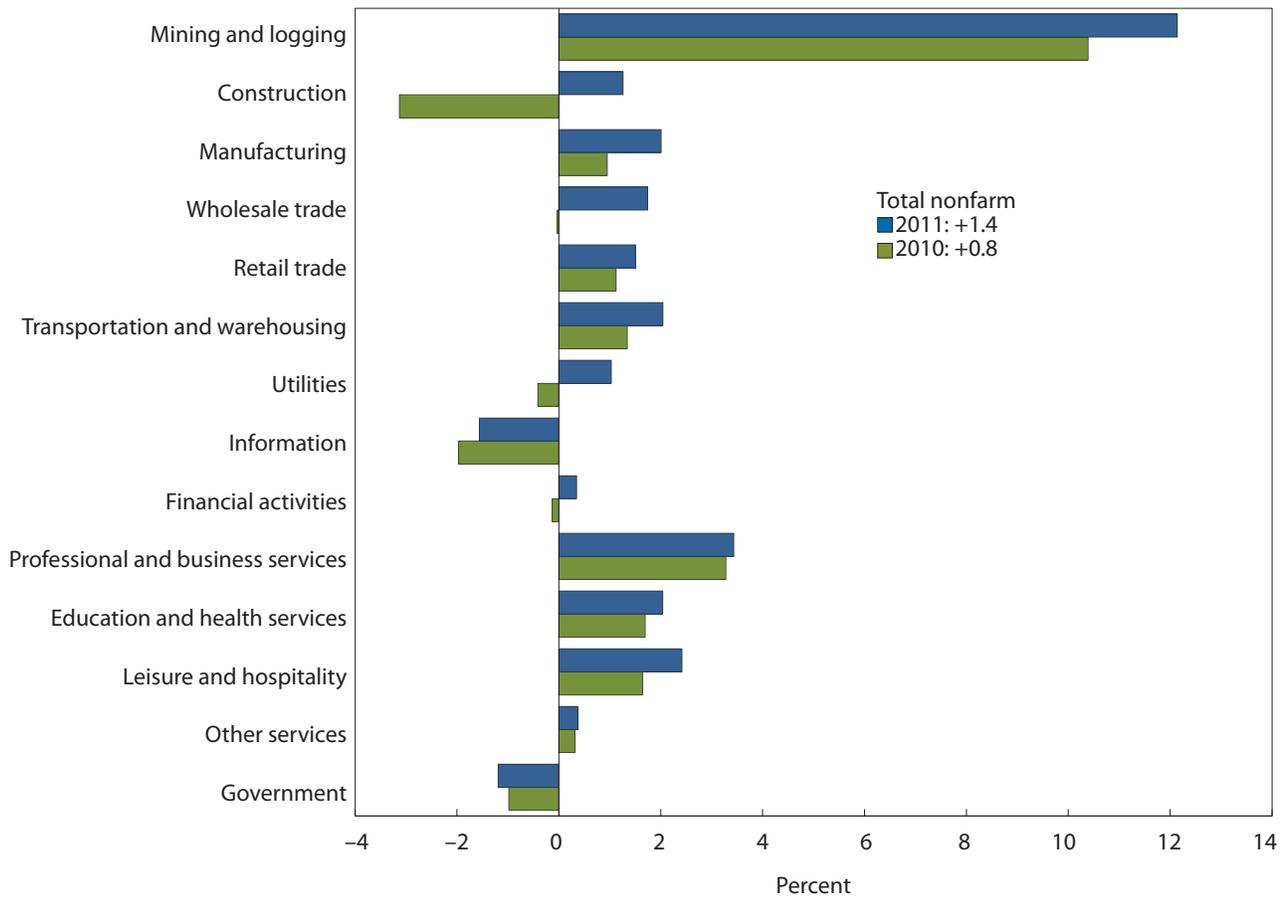
## 1. Total nonfarm employment, seasonally adjusted, January 2000–December 2011



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER).  
SOURCE: U.S. Bureau of Labor Statistics, Current Employment Statistics.

- Nonfarm payroll employment, as measured by the Current Employment Statistics (CES) survey,<sup>1</sup> expanded by 1.8 million in 2011, to 132 million.
- Job growth, at 1.4 percent, accelerated beyond the 0.8 percent gain seen in 2010.
- 2011 marked the largest over-a-calendar-year employment growth in magnitude and percent since 2006.
- As 2011 ended, however, nonfarm employment was still 5.8 million below its January 2008 peak.

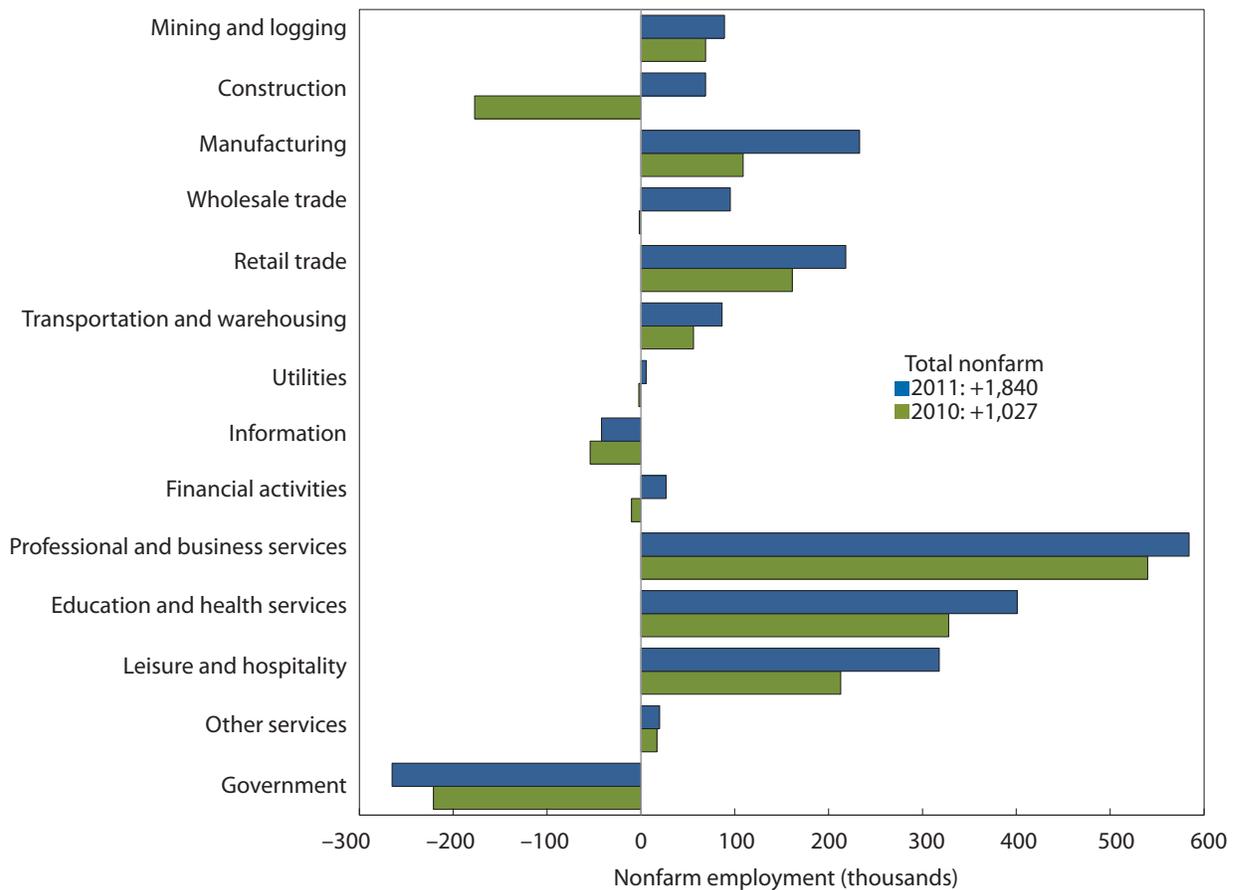
**2. Percent change over the year in total nonfarm employment by industry, seasonally adjusted**



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

- Most major industries in the private sector experienced job growth in 2011.
- Over the 12-month period ending in December, the diffusion index for total private employment was 65.2, compared with 58.5 at the end of 2010. An index value of 50 or more indicates that more industries are adding than losing jobs.
- With the fastest growing employment relative to all other industries, mining and logging expanded payrolls by 12.1 percent.
- Annual growth rates among other industries were more moderate, with professional and business services experiencing the second fastest rate of growth, at 3.4 percent.

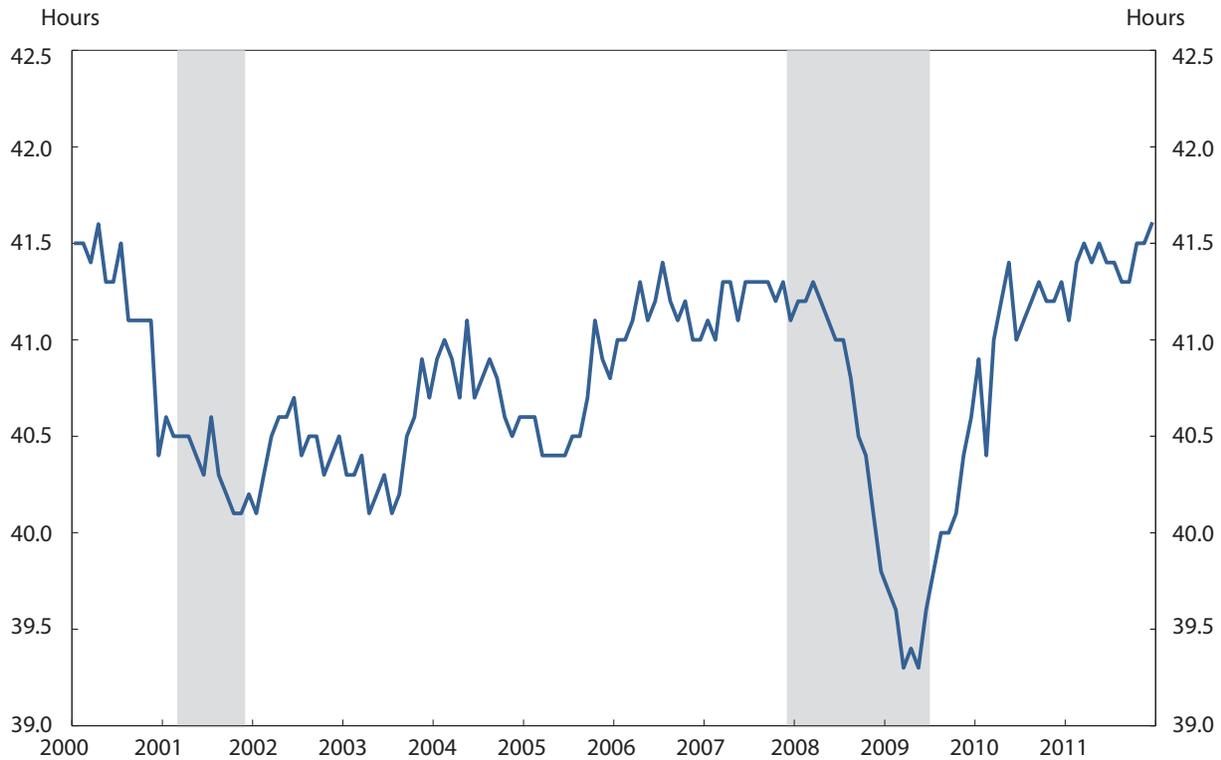
### 3. Over-the-year change in total nonfarm employment by industry, seasonally adjusted



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

- Professional and business services experienced the largest increase—584,000 from December 2010 to December 2011—in employment level. This gain accounted for nearly one-third of the total nonfarm job growth.
- Another 22 percent of aggregate nonfarm job growth can be ascribed to the education and health services industry, which added 401,000 jobs.
- The leisure and hospitality industry also added a large number of jobs—318,000—over the year.

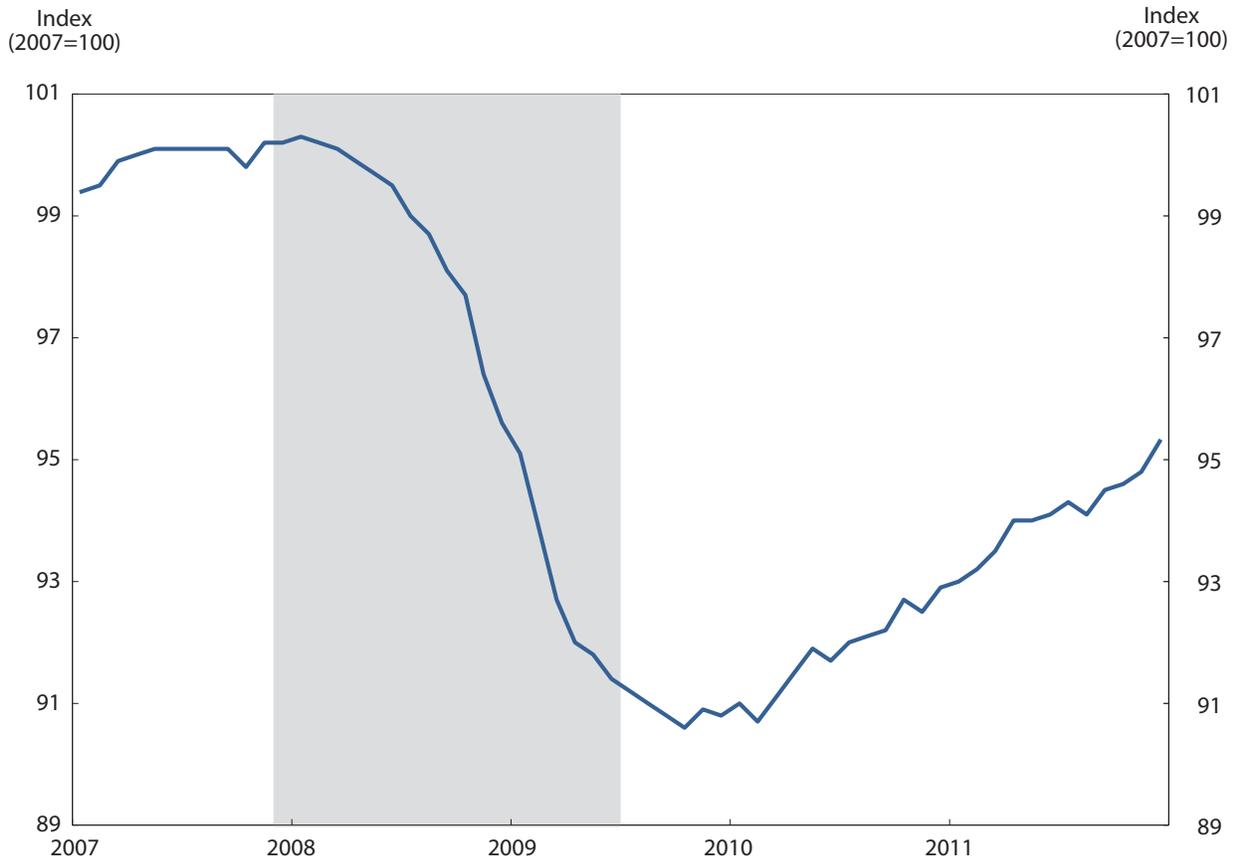
**4. Average weekly hours of production and nonsupervisory employees in manufacturing, seasonally adjusted, January 2000–December 2011**



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER).  
SOURCE: U.S. Bureau of Labor Statistics, Current Employment Statistics.

- Average weekly hours for production employees in manufacturing rose by 0.3 hour over the year.
- During the latest recession (December 2007–June 2009), average weekly hours for production employees in manufacturing decreased by 1.5 hours, or –3.6 percent.
- Many other economic indicators ended 2011 on a positive note. For example, the Conference Board Leading Economic Index® for the United States, which uses CES average weekly hours in manufacturing as an input, increased by about 3 percent over the year.<sup>2</sup>

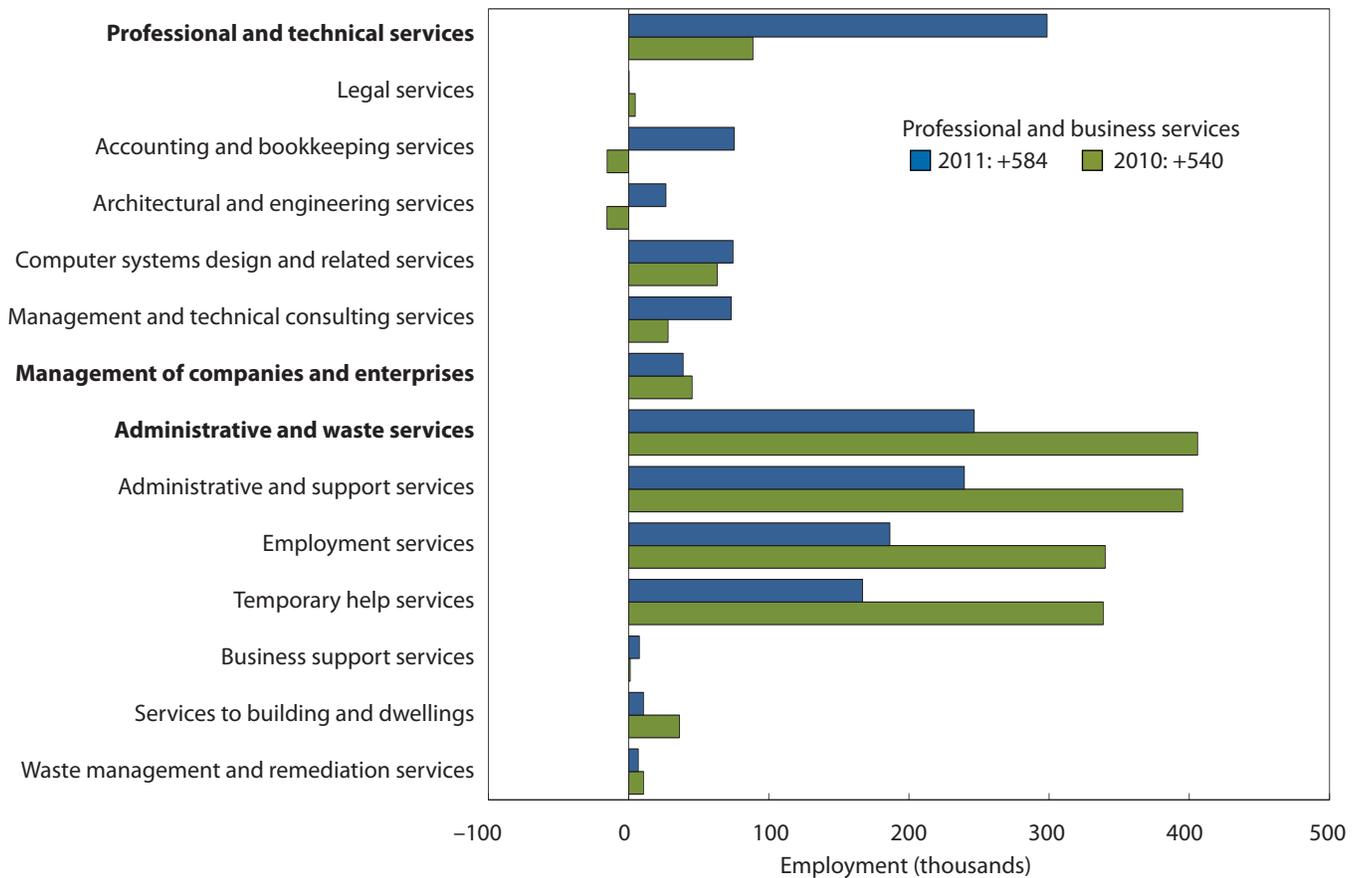
**5. Index of aggregate weekly hours of all employees in the private sector, seasonally adjusted, January 2007–December 2011**



NOTE: Shaded area represents recession as determined by the National Bureau of Economic Research (NBER).  
 SOURCE: U.S. Bureau of Labor Statistics, Current Employment Statistics.

- Aggregate weekly hours are the product of the average work week and employment. The index is calculated by dividing the monthly aggregates by the annual average of aggregate weekly hours for 2007. As the employment rose and the average weekly hours increased, the index for aggregate weekly hours expanded by 2.6 percent in 2011.
- Average weekly hours for all employees in the private sector increased 0.2 hour, to 34.5 hours in 2011.
- The index of aggregate weekly hours for all employees in the private sector rose 2.6 percent in 2011 but was still 5.0 percentage points below a peak in January 2008. Changes in the trend of aggregate hours tend to coincide with changes in U.S. business cycles.
- Average hourly earnings for all employees in the private sector rose 2.1 percent in 2011. However, adjusted for inflation, real average hourly earnings decreased 1.0 percent.<sup>3</sup>

**6. Over-the-year change in professional and business services employment, seasonally adjusted**

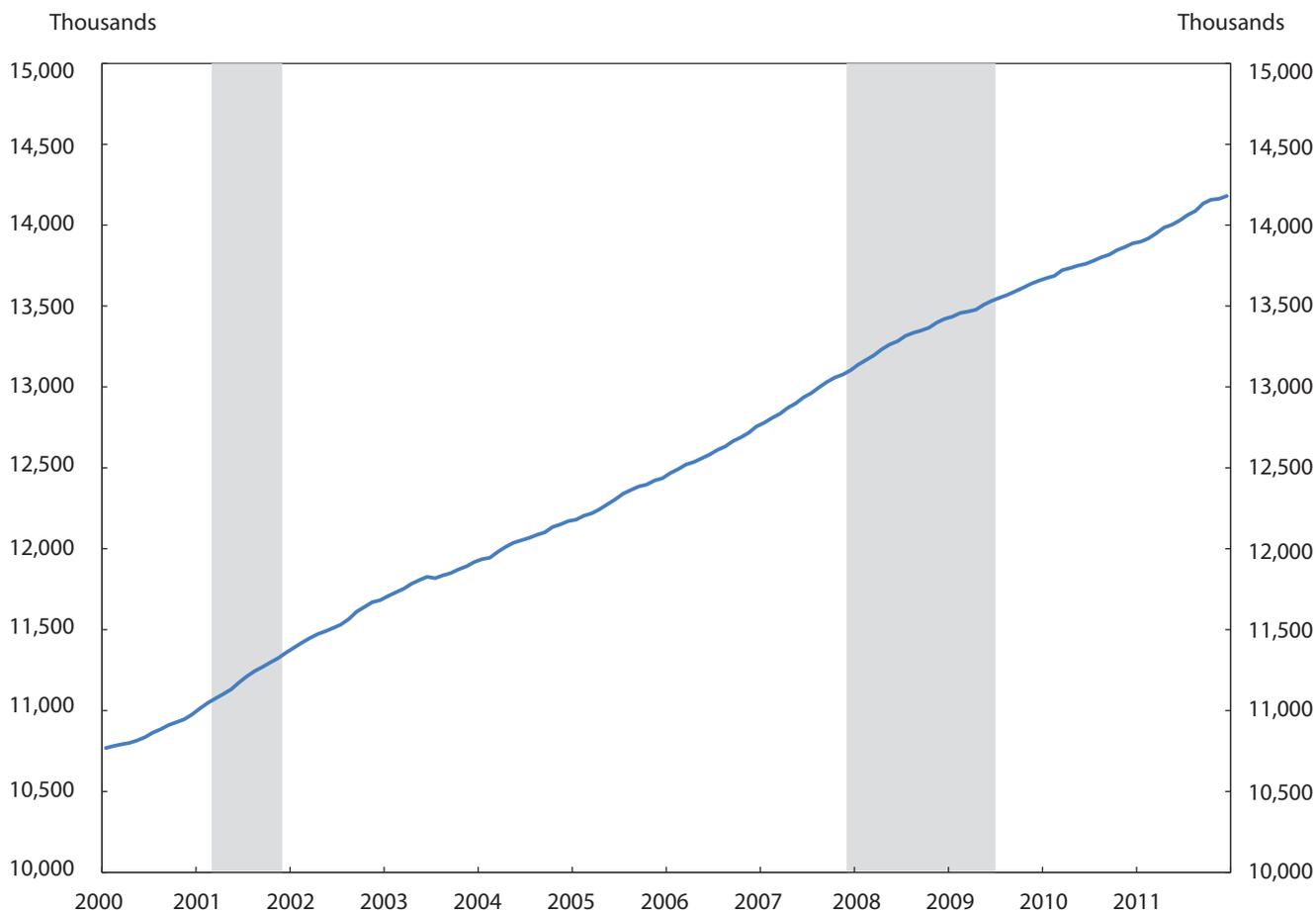


NOTES: Major components within professional and business services are bolded. Professional and technical services and administrative and waste services include industries not shown separately.

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

- Employment gains in professional and business services averaged 49,000 per month and totaled 584,000 in 2011, slightly above the 540,000 gained in 2010.
- The lion’s share of job growth during 2011 was divided among professional and technical services, which added more than half, or 51 percent, of the jobs gained in the industry, and administrative and waste services, with 42 percent.
- This distribution of employment gains contrasts to trends observed in 2010, when administrative and waste services led the job growth, contributing 3 out of every 4 jobs added in professional and business services.
- This shifting dynamic resulted from a moderation in job growth for temporary help services; the temporary help services industry had a 339,000 increase in payroll employment in 2010, followed by less than half that number in 2011.

## 7. Employment in health care services, seasonally adjusted, January 2000–December 2011

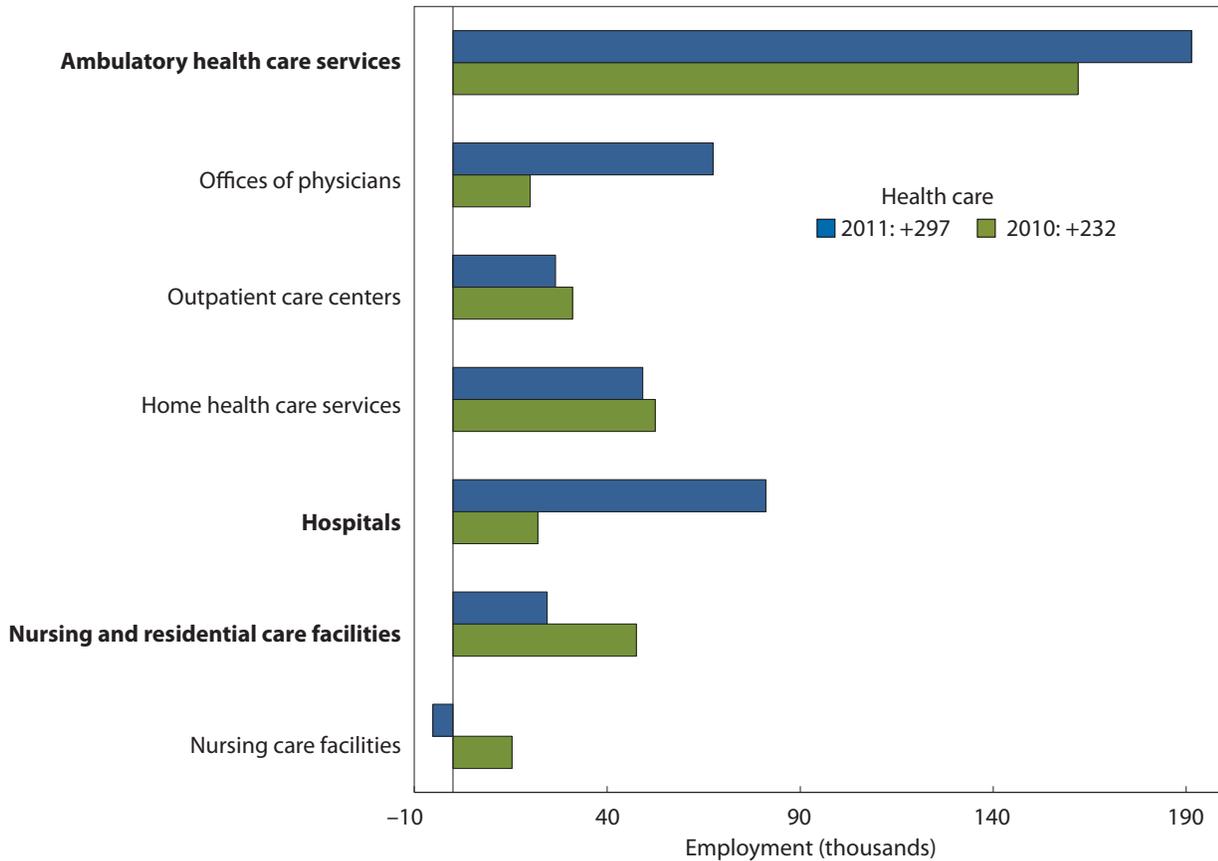


NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER).

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

- Employment in the health care industry grew by 297,000, or 2.1 percent, in 2011. This gain is consistent with historical job growth in the industry.
- Health care services employment tends to be “recession proof.”
- Since 2000, the average annual growth rate for health care services employment has been 2.3 percent.

**8. Over-the-year change in health care employment by industry, seasonally adjusted**

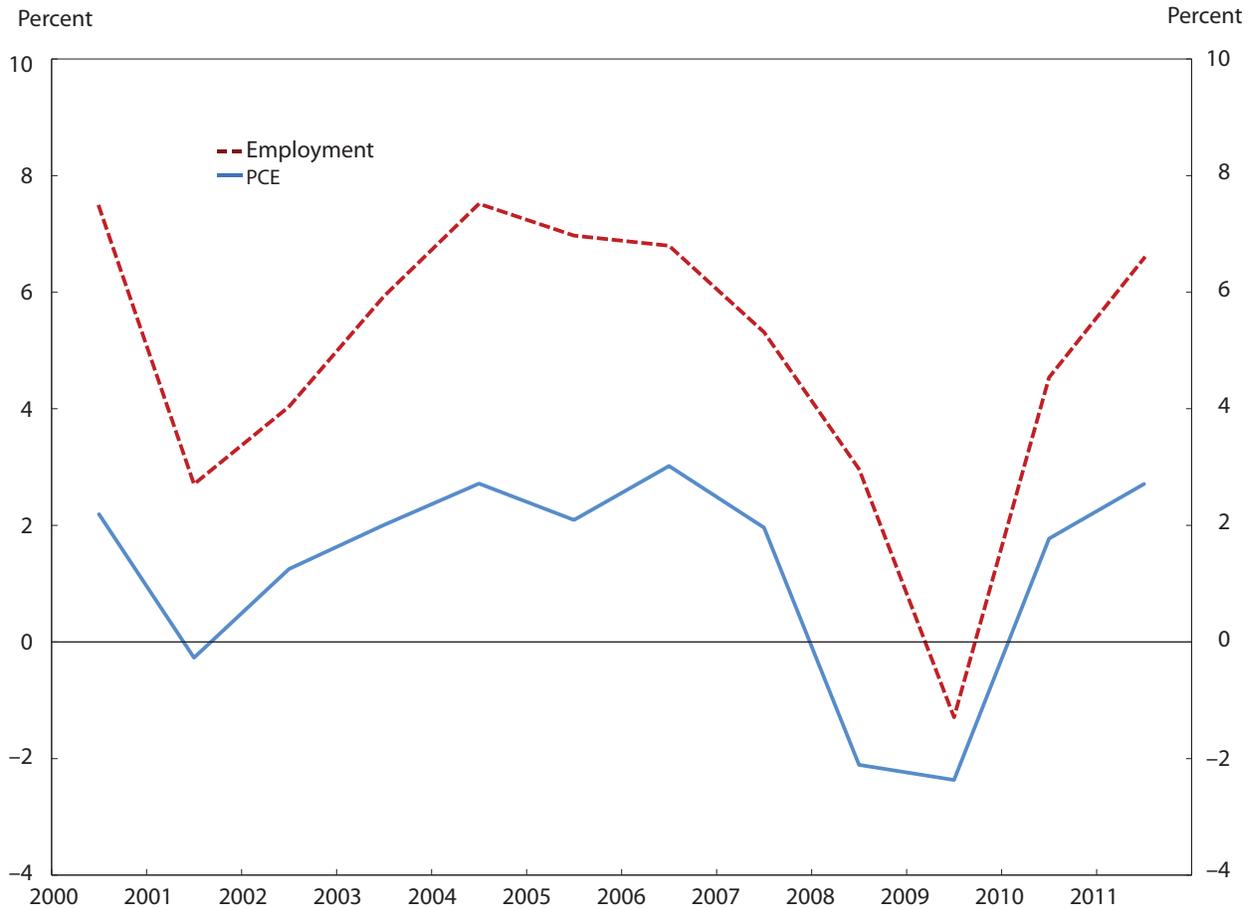


NOTES: Major components within health care are bolded. Ambulatory health care services and nursing and residential care facilities include industries not shown separately.

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

- Similar to the gain in 2010, the majority of the employment gain in the health care industry in 2011 occurred within ambulatory health care services, in which employment grew by 191,000. This industry provides health care services directly or indirectly to ambulatory patients and does not include inpatient services.
- Within ambulatory health care, substantial employment increases occurred in offices of physicians, home health care services, and outpatient care centers.
- Employment in hospitals grew by 81,000, or 1.7 percent over the year, more than triple its percentage growth in 2010.
- Job growth in nursing and residential care facilities (24,000) moderated in 2011, because employment growth in nursing care facilities was essentially flat over the year.

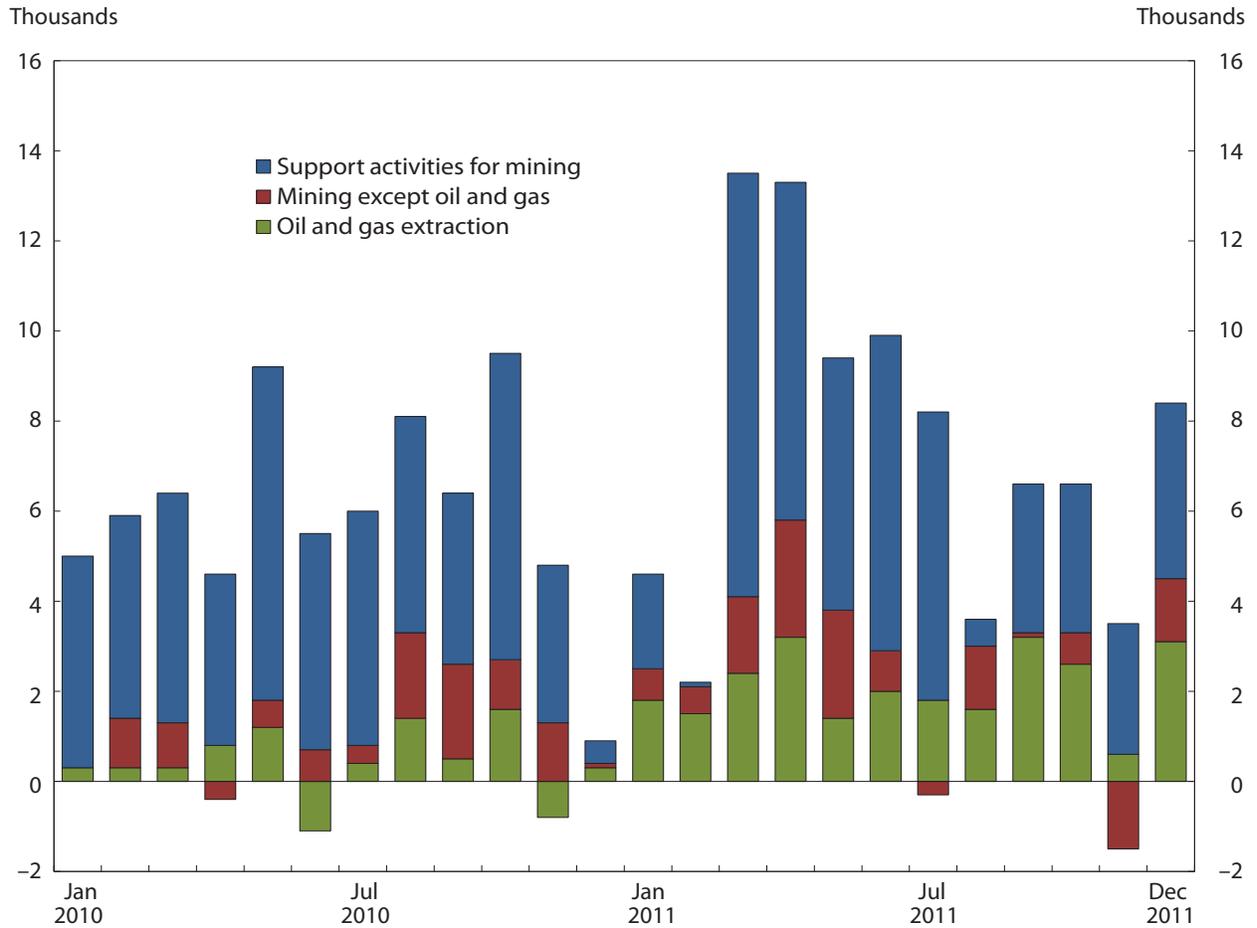
**9. Annual growth rates of employment and personal consumption expenditures (PCE) for accommodation and food services, 2000–2011**



SOURCES: U.S. Bureau of Labor Statistics and Bureau of Economic Analysis.

- The leisure and hospitality industry added a considerable number of jobs to nonfarm payrolls in 2011. Employment rose by 318,000, or 2.4 percent.
- Much like in 2010, the near sole contributor of this job gain in leisure and hospitality was the food services and drinking places industry. Employment within this industry tends to rise and fall with changes in personal consumption expenditures for accommodation and food services.

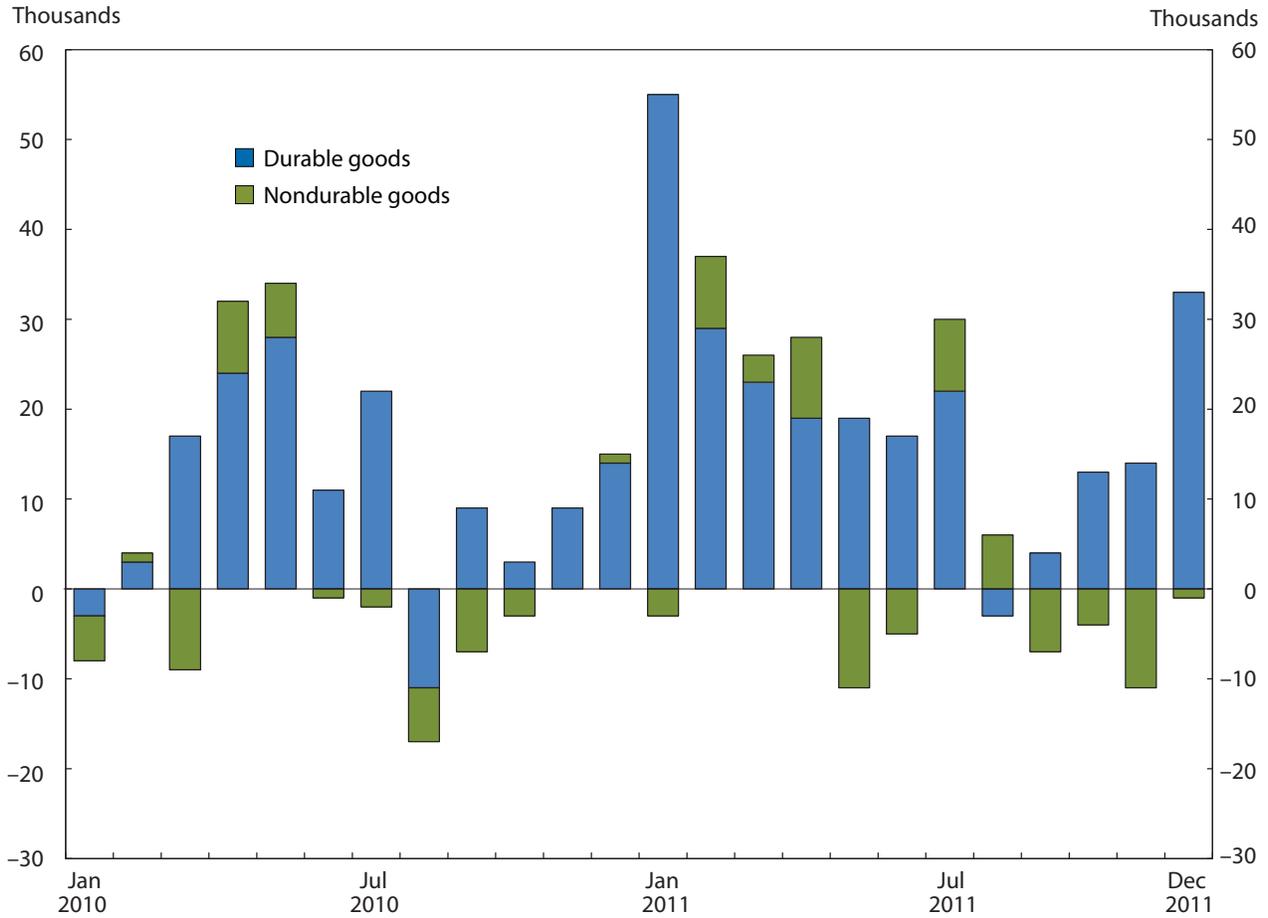
**10. Over-the-month employment change in mining, seasonally adjusted, 2010–2011**



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

- Mining employment grew by 12.8 percent over the year, making it the fastest growing industry.
- In 2010, the average over-the-month change for mining employment was about 6,000, while in 2011, this figure increased slightly to more than 7,000.
- Oil and gas extraction added 25,000 jobs over the year. More specifically, employment in support for oil and gas rose by 38,000, or 17.5 percent.

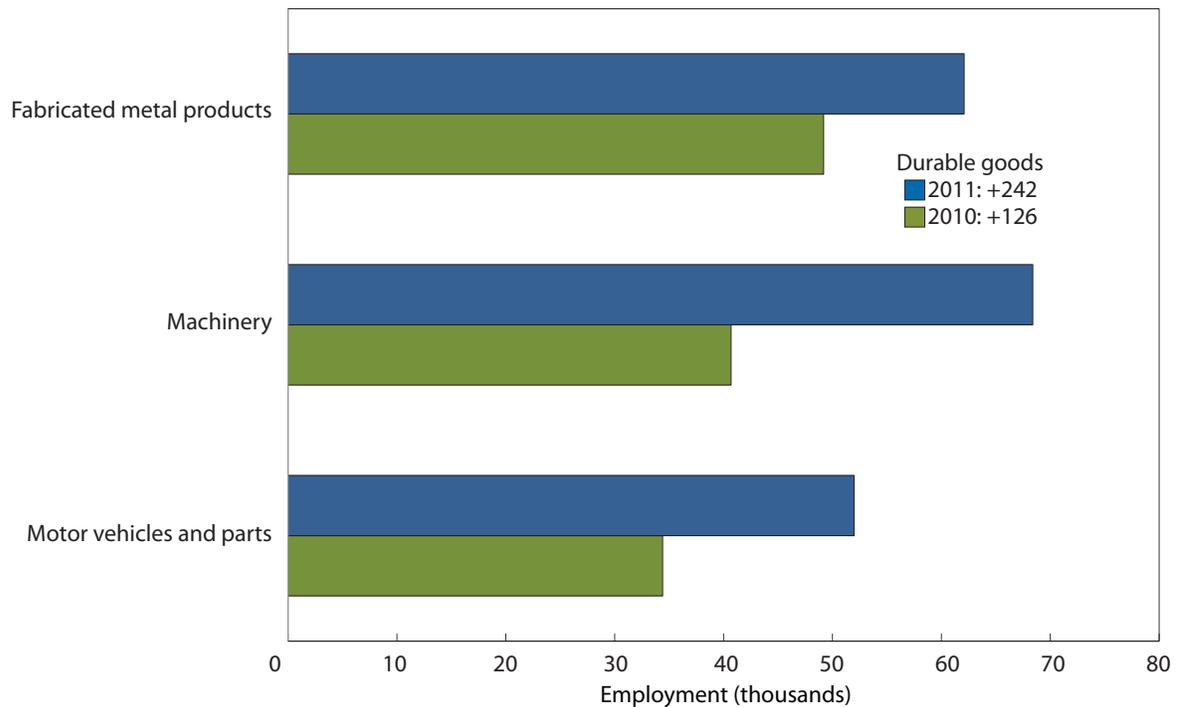
**11. Over-the-month employment change in durable and nondurable goods manufacturing, seasonally adjusted, 2010–2011**



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

- In 2011, manufacturing employment increased by 233,000, the largest annual job gain for the industry since 1997.
- Durable goods employment gained 242,000, or 3.4 percent in 2011. This employment gain was 116,000 more than that of 2010.
- Nondurable goods employment averaged a loss of 1,000 jobs per month in 2011, and netted a total loss of 9,000 for the year.

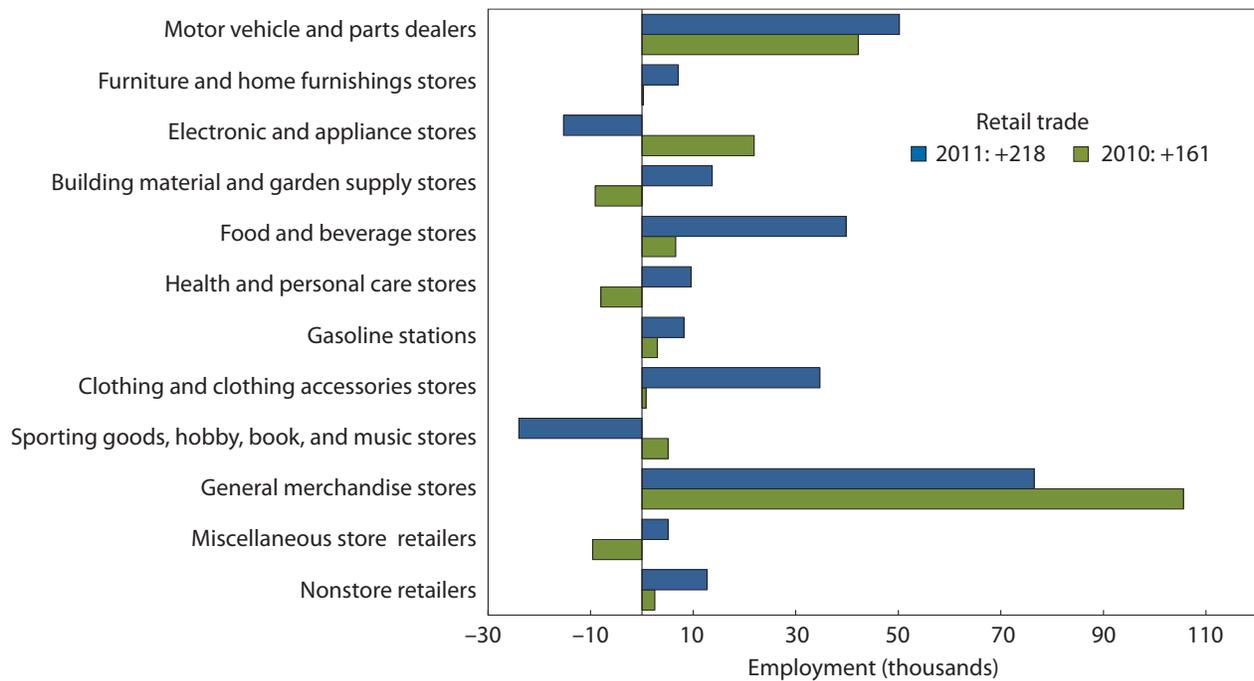
**12. Over-the-year employment change in selected durable goods manufacturing industries, seasonally adjusted, 2010–2011**



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

- Durable goods industry employment grew by 242,000.
- The 2011 job growth among durable goods industries was concentrated in fabricated metal products, machinery, and motor vehicles and parts manufacturing.
- Continued improvement in economic indicators related to manufacturing support employment gains. New orders for durable goods rose 17 percent, industrial production rose by 8 percent, and motor vehicle production rose by 31 percent in 2011. Motor vehicle sales increased by 8 percent over the same period.<sup>4</sup>

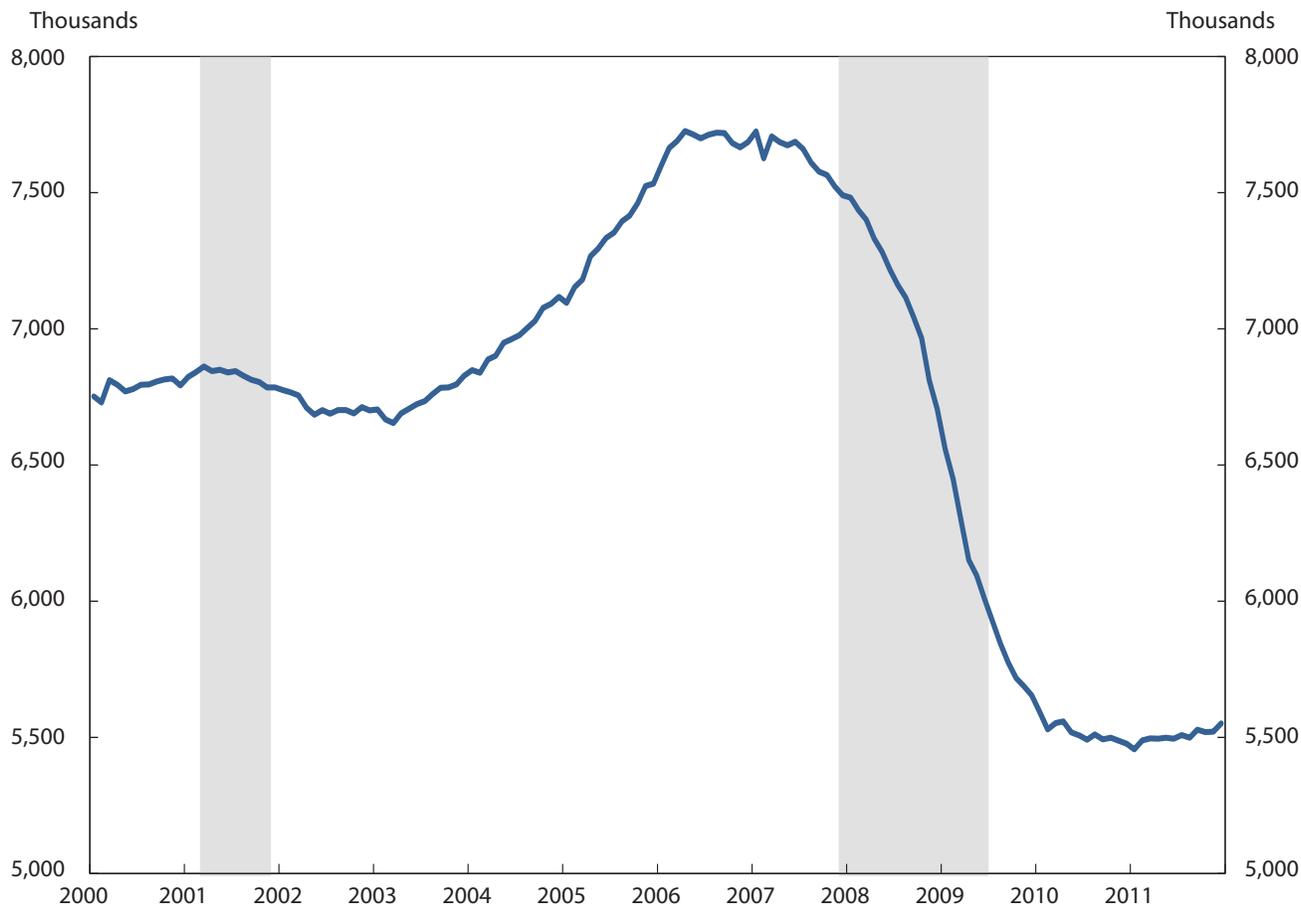
### 13. Over-the-year employment change in retail trade, seasonally adjusted, 2010–2011



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

- Employment in retail trade continued to grow in 2011, accelerating slightly over 2010. Employment growth was concentrated largely in general merchandise stores, which added 77,000 jobs, while jobs in other types of retailers grew more moderately.
- Electronic and appliance stores and sporting goods, hobby, book, and music stores experienced employment declines over the year.
- Employment growth in retail trade was driven, in part, by an increase in retail sales in 2011. According to The Conference Board Consumer Confidence Index®, retail sales increased by 6 percent during the year.<sup>5</sup>

**14. Employment in construction, seasonally adjusted, 2000–2011**

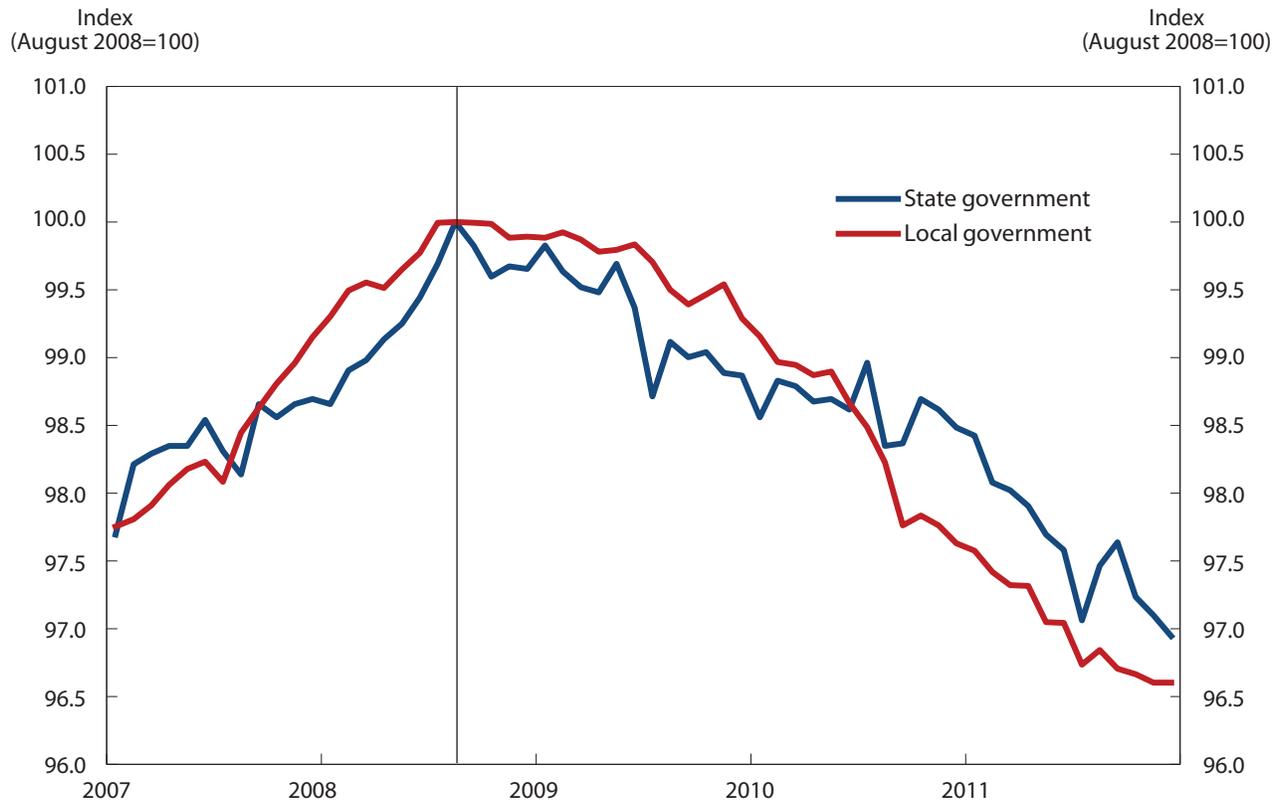


NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER).

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

- Construction employment increased by 69,000, or 1.3 percent, in 2011. This job gain marks the industry’s first calendar-year employment increase since 2006.
- While hitting an employment peak in April 2006 and a trough in January 2011, the construction industry has been experiencing a severe housing crisis. Construction employment within the peak-to-trough period declined by 2.3 million, or 29.4 percent. Despite gains in 2011, employment was still 2.2 million below its prerecession peak level.
- Over the year, employment edged up in residential and nonresidential (including heavy) construction. The largest gains occurred in specialty trade contractors, which accounted for 3 out of every 5 jobs gained in construction, nearly the same ratio at which the industry lost jobs during the prior 4 years.
- The improvement in construction employment was also reflected in industrywide economic indicators in 2011. The number of building permits issued rose by nearly 7 percent, and spending on both residential and nonresidential construction increased.<sup>6</sup>

## 15. Index of employment of state and local governments, seasonally adjusted, January 2007–December 2011



NOTE: Indexes shown in the chart are the monthly employment level divided by the employment level of August 2008, and the quotient is multiplied by 100. These indexes show the relative change in employment from August 2008. The vertical line represents August 2008.

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

- Marking its third consecutive year of decline, government employment continued to decrease in 2011, as state and local government payrolls decreased by 230,000 workers.
- Local government accounted for 150,000 of the job loss in 2011, while employment in state government fell by 80,000.
- Reduced revenues for local and state governments have led to budget cuts and resulting job losses. In 2011, 19 states enacted midyear budget cuts totaling \$7.4 billion.<sup>7</sup>
- Since reaching employment peaks in August 2008, local government has lost 496,000 jobs and state government lost 159,000 jobs through December 2011.
- The U.S. Postal Service, with 27,000 jobs lost, continued a longrun decline over the year.

### Notes

<sup>1</sup>The Current Employment Statistics (CES) program is a monthly survey of about 141,000 businesses and government agencies representing approximately 486,000 individual worksites. For more information on the program's concepts and methodology, see "Technical Notes to Establishment Survey Data" at <http://www.bls.gov/web/empsit/cestn1.htm>. To access CES data, see "Current Employment Statistics—CES (National)" at [www.bls.gov/ces](http://www.bls.gov/ces). The CES data used in this article are seasonally adjusted unless otherwise noted.

<sup>2</sup>For more information on The Conference Board, see "Global Business Cycle Indicators" (New York, The Conference Board Inc.) at

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<http://www.conference-board.org/data/bcicountry.cfm?cid=1>.

<sup>3</sup>To obtain constant-dollar or real earnings, the Bureau of Labor Statistics deflates current dollar series for all employees using the Consumer Price Index for All Urban Consumers (CPI-U).

<sup>4</sup>For data on new orders for durable goods, see “Manufacturers’ Shipments, Inventories, & Orders” on the Census Bureau website at <http://www.census.gov/manufacturing/m3/>. For industrial production data, see “Industrial Production and Capacity Utilization-G.17” at <http://www.federalreserve.gov/releases/G17/Current/default.htm>. For motor vehicle sales data, see “Auto and Truck Seasonal Adjustment, Table 1: Motor Vehicle Unit Retail Sales” at [www.bea.gov/national/xls/gap\\_hist.xls](http://www.bea.gov/national/xls/gap_hist.xls).

<sup>5</sup>For statistics data on retail sales, see “Table 1A. Estimated Monthly Sales for Retail and Food Services, by Kind of Business” at <http://www.census.gov/retail/marts/www/download/text/adv1.txt>.

<sup>6</sup>For data on building permits and expenditures on residential and nonresidential construction, see “Guide to Data Sources from the U.S. Census Bureau” at <http://www.census.gov/econ/construction.html>.

<sup>7</sup>For more information on the fiscal condition of U.S. states, see “The Fiscal Survey of States” (The National Governors Association and The National Association of State Budget Officers, fall 2011) at <http://www.nasbo.org/publications-data/fiscal-survey-of-the-states>.