Monthly Labor Review
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Employment growth moderates in 2017, continuing a lengthy expansionary period

This article uses data from the Current Employment Statistics survey to examine the state of the U.S. job market in 2017. Growth in total nonfarm employment continued an expansionary period that started in May 2014, albeit at a slightly slower pace than in 2016. Employment trends in goods-producing and service-providing industries changed notably from recent years.

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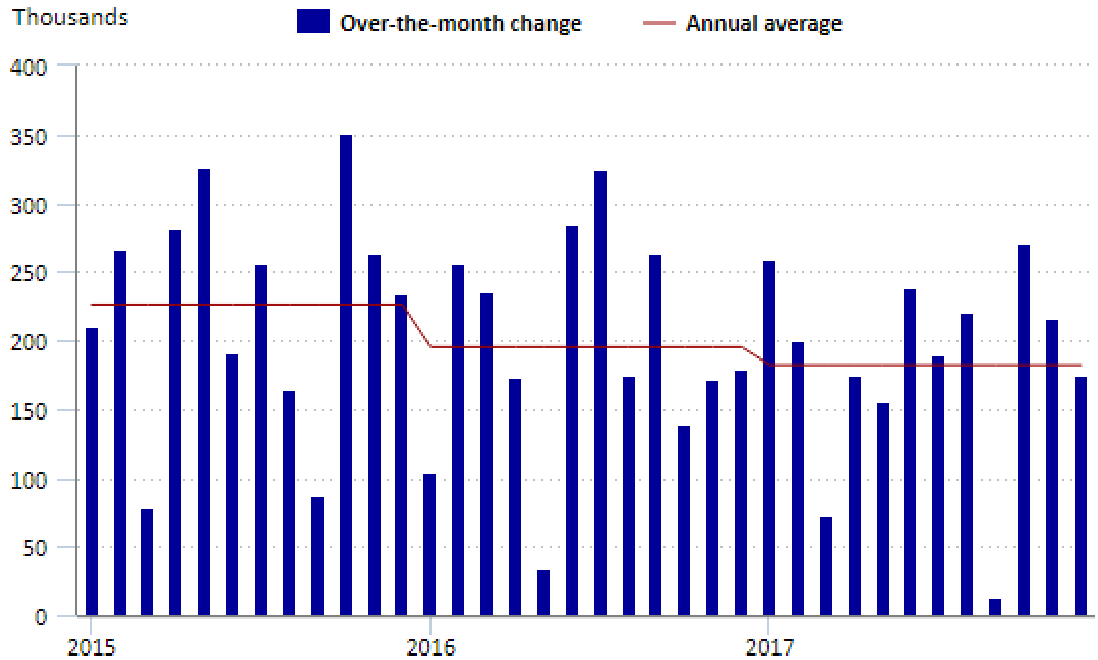
In 2017, total nonfarm payroll employment as measured by the Current Employment Statistics (CES) survey rose by 2.2 million, or 1.5 percent, slightly slowing its advance from 2016. Job growth accelerated in goods-producing industries, while growth in most service-providing industries decelerated.

The employment gains in 2017 occurred while many economic indicators of the U.S. economy signaled strength. However, there were still some headwinds resulting from a tight labor market and two major hurricanes. The slight easing of job growth also occurred in the fourth year of the current employment expansion, which is now longer than the expansion from January 2005 to January 2008.[1] This article provides an overview of these labor market developments.

Employment, hours, and earnings during 2017

In 2017, total nonfarm employment continued its upward trend, increasing by an average of 182,000 per month, slightly down from 195,000 per month in 2016 and 226,000 per month in 2015. Figure 1 displays the over-the-month employment changes for the past 3 years, including the average monthly change for each year.

Figure 1. Over-the-month changes in total nonfarm employment, seasonally adjusted, 2015–17



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics.

Average weekly hours for all employees on total private payrolls rose by 0.1 hour in 2017, partially offsetting a 0.2-hour decline during 2016. Combining the change in hours with the 1.8-percent increase in total private employment, aggregate weekly hours rose 2.1 percent over the year.

Average weekly hours for production and nonsupervisory employees in the private sector rose by 0.2 hour in 2017, to 33.8 hours, offsetting a decline of 0.2 hour during 2016. Production and nonsupervisory employees are defined as production employees in mining and logging and manufacturing, construction workers in construction, and nonsupervisory employees in service-providing industries. These groups account for approximately four-fifths of total private employment. Combining the change in hours with the 1.8-percent increase in production and nonsupervisory employment, aggregate weekly hours grew by 2.4 percent in 2017, surpassing the 1.2-percent increase in 2016.

Average hourly earnings for all employees rose by 2.7 percent in 2017, to $26.64, an increase similar to that recorded in the previous year. Combined with the increases in both total private employment and average weekly hours, the 2017 increase in average hourly earnings led to a 4.8-percent increase in the aggregate weekly payrolls for all employees, up from 3.9 percent in 2016.

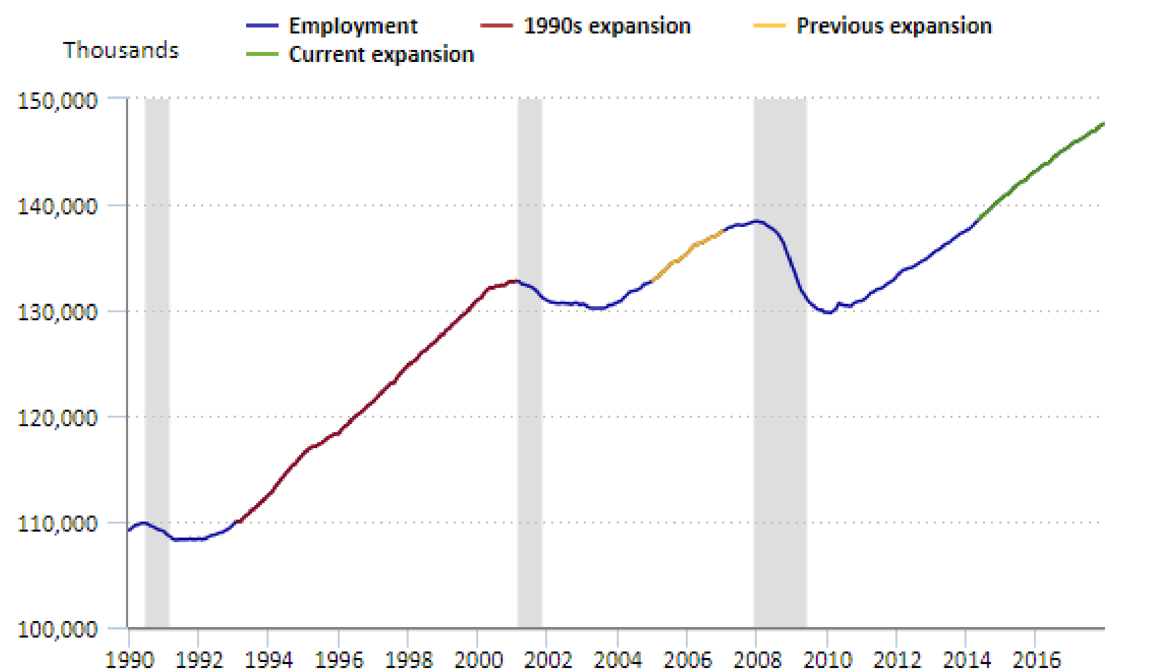
Average hourly earnings for production and nonsupervisory employees rose by 2.4 percent in 2017, to $22.31, an increase similar to the gains in 2015 and 2016. This increase, coupled with the gains in production and nonsupervisory employment and hours, led to a 4.9-percent increase in aggregate weekly payrolls for this category, up from 3.7 percent in 2016.

The Consumer Price Index for All Urban Consumers (CPI-U) increased by 2.1 percent in 2017, while the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) increased by 2.2 percent. Deflated by the CPI-U, real average hourly earnings for all employees increased by 0.6 percent during 2017, the same as in 2016. Deflated by the CPI-W, real average hourly earnings for production and nonsupervisory employees increased by 0.2 percent in 2017, down from 0.5 percent in 2016.

Employment expansion continued in 2017

Total nonfarm employment reached a peak of 138.4 million in January 2008 and then decreased by 8.7 million, reaching a trough in February 2010. At that point, employment started to grow and, in May 2014, reached its previous peak. Over the next 43 months, employment continued to expand and, as 2017 came to a close, surpassed its January 2008 peak by approximately 9.2 million. (See figure 2.)

Figure 2. Total nonfarm employment, seasonally adjusted, 1990–2017



Click legend items to change data display. Hover over chart to view data.
Note: Shaded areas represent recessions as determined by the National Bureau of Economic Research.
Source: U.S. Bureau of Labor Statistics.

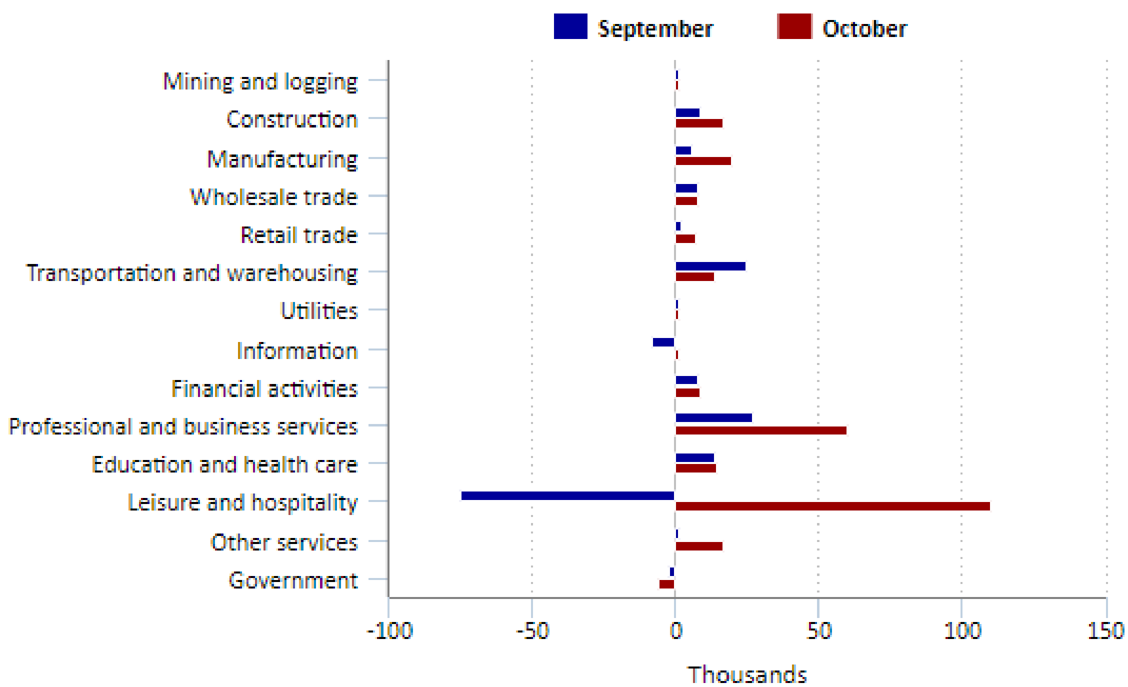
Hurricane impacts

Hurricanes, as well as other severe weather events, can affect CES employment and hours. Weather factored into monthly employment changes during 2017. Two major hurricanes, Harvey and Irma, affected nonfarm employment. Hurricane Harvey hit the southern coast of Texas during late August. Soon after, in early September, during the CES reference period, Hurricane Irma ran a path through most of Florida.

The CES survey form instructs respondents to include all employees *who worked or received pay* for any part of the pay period that includes the 12th of the month.[2] A temporary business closure can affect hours without affecting employment if employees are not paid for the hours missed. If an employer pays its employees for time missed during the entire closure, there should be no effect on employment or hours.

Given these insights, total nonfarm employment was essentially unchanged in September, increasing by only 14,000, far below the average over-the-month increase of 182,000 during 2017. Leisure and hospitality lost 75,000 jobs in September, while several other industries, including professional and business services (+27,000) and manufacturing (+6,000), experienced below-average employment increases. In October, total nonfarm employment, led by gains in leisure and hospitality (+110,000), rebounded with a 271,000 increase. (See figure 3.)

Figure 3. Employment change by industry, seasonally adjusted, September and October 2017



Total nonfarm employment change (in thousands): September = 14, October = 271.

Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics.

Economic indicators during 2017

A usual set of economic indicators serves as a barometer of economic activity. During 2017, most indicators for the general economy were positive. Real gross domestic product grew at an annual rate of 2.5 percent, faster than the 1.8-percent growth in 2016.[3] Personal consumption expenditures, increasing by 2.8 percent in 2017, spurred growth, while health-care consumption decelerated to 2.5 percent, down from 4.1 percent in 2016.

Industrial production rose by 3.4 percent in 2017, far exceeding its advance in the previous year.[4] The federal funds rate of the Federal Reserve rose to 1.42 percent at the end of 2017, more than double the 0.66-percent rate at the end of 2016.[5] Inflation was relatively stable, with the CPI-U rising 2.1 percent in 2017, matching its 2016 increase.[6] On the last day of 2017, the price of West Texas Intermediate crude oil was $60.46 per barrel, 12.5 percent higher than it was on the last day of 2016.[7]

All exports of goods and services rose by 5.9 percent in 2017, after decreasing by 2.2 percent in 2016.[8] Exports of goods rose by 7.0 percent in 2017, compared with a 3.4-percent decrease in 2016. The growth in exports of goods coincided with a rebound in durable goods manufacturing employment. Table 1 displays economic indicators for 2017, comparing them with those for the previous 2 years.

Table 1. General economic indicators, 2015–17

Indicator	Source	Change value	2015	2016	2017
Real gross domestic product	U.S. BEA	Percent change, SAAR(1)	2.0	1.8	2.5
Real personal consumption expenditures	U.S. BEA	Percent change, SAAR	3.0	2.8	2.8
Real health-care expenditures	U.S. BEA	Percent change, SAAR	3.5	4.1	2.5
Inflation	U.S. BLS, CPI	Over-the-year percent change	0.7	2.1	2.1
Industrial production	U.S. FRB	Over-the-year percent change	-3.4	0.8	3.4
Federal funds rate	U.S. FRB	Rate (end of year)	0.36	0.66	1.42
Oil prices	U.S. EIA	Over-the-year dollar change	-$16.32	$16.62	$6.71
		Over-the-year percent change	-30.5	44.8	12.5
Exports of goods and services	U.S. BEA	Over-the-year percent change	-4.6	-2.2	5.9
Consumer Confidence Index	The Conference Board	Over-the-year percent change	3.5	17.7	8.7
Business Confidence Index	OECD	Over-the-year percent change	-1.5	1.4	0.9
New orders for nondefense capital goods	U.S. Census Bureau	Over-the-year percent change	-7.6	1.5	8.0
Unemployment rate	U.S. BLS, CPS	Percent	5.0	4.7	4.1
Job openings	U.S. BLS, JOLTS	Over-the-year percent change	12.1	3.1	4.9
Businesses reporting few or no qualified applicants for job openings	NFIB	Percent	48	44	54

Notes:

(1) SAAR = Seasonally adjusted at an annual rate.

Every year brings new dynamics to the economy. Economic confidence and improved labor market indicators distinguished 2017. Expectations for a change in economic activity affected demand for labor, with renewed consumer and business confidence coinciding with job growth. The Consumer Confidence Index rose by 8.7 percent in 2017, about half the gain in 2016, but continued the momentum from the last 2 months of that year.[9] The Business Confidence Index for the United States rose 0.9 percent, also continuing the momentum from the last 2 months of 2016.[10] New orders for nondefense capital goods, a proxy for business confidence, rose 8.0 percent in 2017, compared with 1.5 percent in 2016.[11]

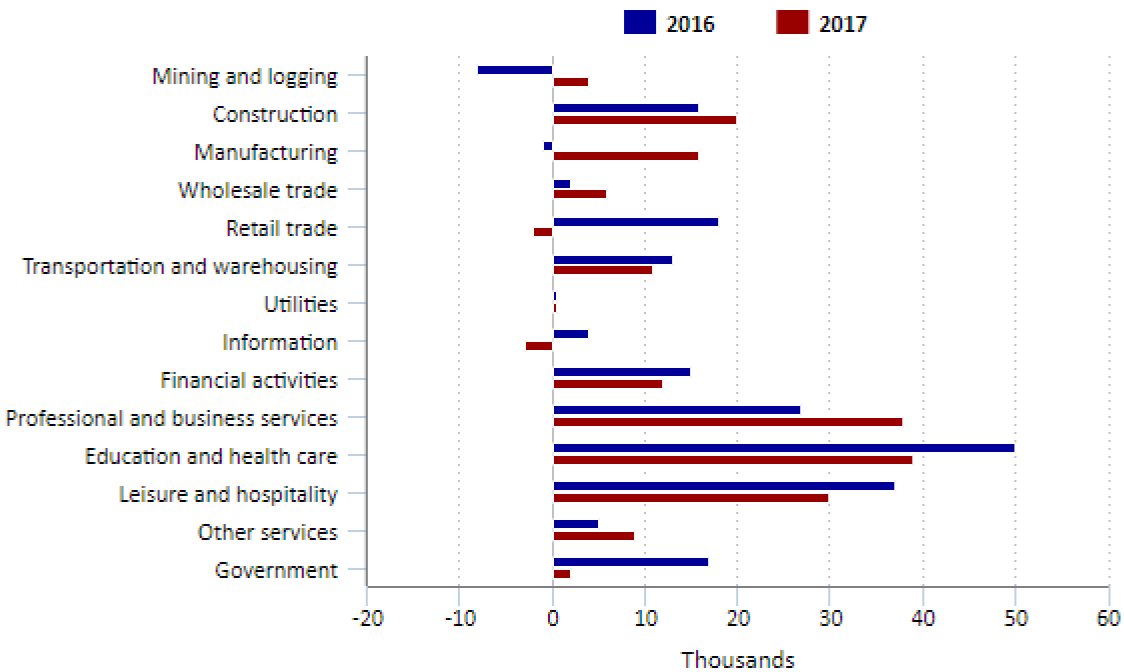
Several indicators pointed to further tightening of the labor market. The unemployment rate continued to trend lower, from 4.7 percent in December 2016 to 4.1 percent in December 2017, the lowest rate since December 2000.[12] Job openings reached a series peak (6.177 million) in September 2017 and grew by 4.9 percent over the year.[13] In addition to a tightening labor market and major hurricanes, a perceived lack of qualified applicants to fill these open jobs at the offered pay rate was another headwind to employment growth in 2017. According to the

National Federation of Independent Business, in December 2017, 54 percent of business owners (92 percent of those hiring or trying to hire) reported that they could find few or no qualified applicants for their open positions.[14]

Composition of employment growth in 2017

Although overall employment growth in 2017 was similar to that in 2016, many trends by industry sector diverged between the 2 years. In 2017, the largest job gains occurred in private education and health services and in professional and business services, with each of these industries gaining 458,000 jobs. Information experienced the largest employment loss, shedding 36,000 jobs. Figure 4 displays the average monthly changes in employment, by industry sector, for both 2016 and 2017.[15]

Figure 4. Average over-the-month employment changes, by industry sector, seasonally adjusted, 2016 and 2017



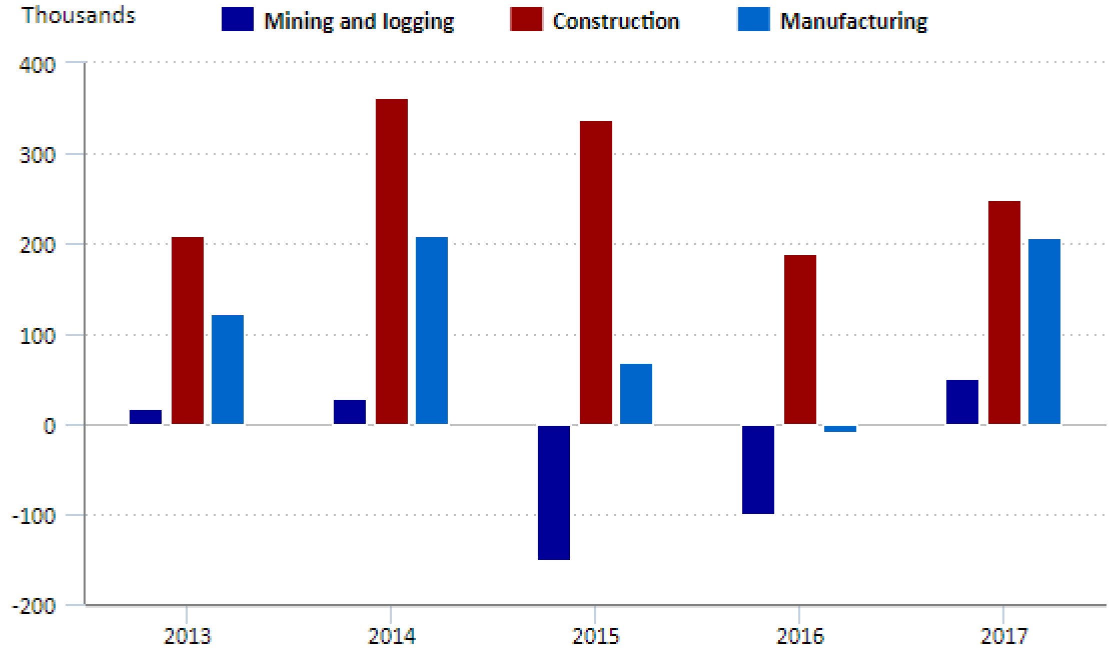
Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics.

In 2017, the composition of job growth between goods-producing and service-providing industries differed noticeably from that in 2016. In both years, the majority of job growth occurred in service-providing industries, largely because these industries make up approximately 86 percent of total nonfarm employment. However, employment growth in goods-producing industries greatly accelerated in 2017, while employment growth in service-providing industries decelerated.

Job growth accelerates in goods-producing industries

Employment in goods-producing industries grew by 509,000, or 2.6 percent, in 2017, far exceeding the 82,000 jobs gained during 2016. Job growth accelerated in both construction and manufacturing, while mining and logging added jobs after experiencing employment declines over the previous 2 years. (See figure 5.)

Figure 5. Annual employment changes in goods-producing industries, seasonally adjusted, 2013–17



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics.

Employment in manufacturing grew by 207,000 in 2017. This was the largest annual job gain since 2014, as manufacturing employment had changed little in 2015 and 2016. Average weekly hours for all employees in manufacturing rose by 0.1 hour in 2017, to 40.8 hours, while overtime hours rose by 0.2 hour, to 3.5 hours. The workweek for production employees in manufacturing remained at 41.8 hours over the year, while overtime hours for production employees rose by 0.3 hour, to 4.5 hours.

Within manufacturing, durable goods led job gains in 2017. Figure 6 shows the annual employment change for durable and nondurable goods over the past 5 years.

Figure 6. Annual employment changes in durable and nondurable goods manufacturing, seasonally adjusted, 2013–17

Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics.

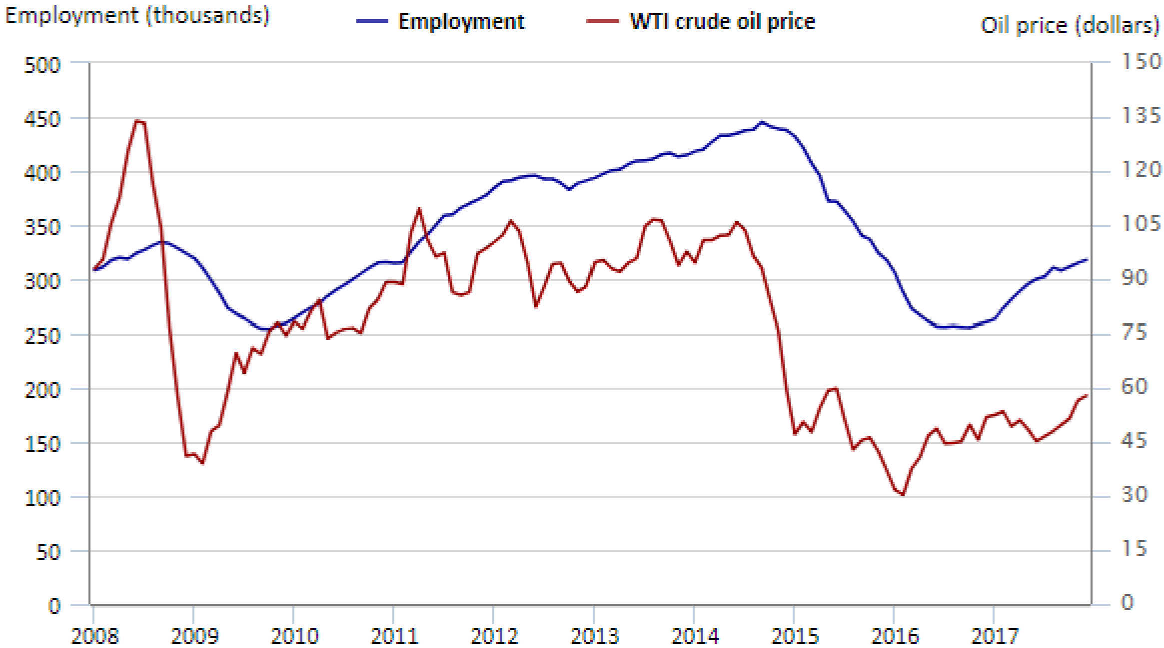
Employment in durable goods manufacturing increased by 130,000 in 2017, after changing little over the previous 2 years. Fabricated metals (+44,000) and machinery (+32,000) led this job growth, partially offsetting job losses for the previous 2 years. In contrast, employment in motor vehicles and parts manufacturing remained unchanged in 2017, after experiencing growth in each year since 2009.

Employment in nondurable goods manufacturing grew by 77,000 in 2017, more than in 2016. The majority of the job growth for the past 3 years occurred in food manufacturing, which added 51,000 jobs in 2017, slightly more than in each of the previous 2 years.

Employment in construction grew by 250,000, or 3.7 percent, in 2017, after rising by 190,000 in 2016. (See figure 5.) The majority of the 2017 job growth occurred in specialty trade contractors, which added 161,000 jobs, slightly more than in 2016. Among the specialty trades, nonresidential specialty contractors added 87,000 jobs, while residential specialty contractors gained 74,000 jobs. In contrast, in 2016, employment growth for residential specialty contractors was nearly double that for nonresidential contractors. Among all construction industries, employment in nonresidential and heavy construction industries grew by 149,000 in 2017, versus 74,000 in 2016, while all residential construction gained 100,000 jobs in 2017, compared with 117,000 in the previous year.

Employment in mining and logging grew by 52,000 in 2017, rebounding from 2 years of job losses totaling 250,000. Within the sector, mining employment had reached a trough in October 2016, after declining by 259,000 since September 2014. The industry had recovered 55,000 jobs, all in support activities for mining (+62,000). The employment rebound in support activities for mining coincided with a turnaround in oil prices during 2017. (See figure 7.)

Figure 7. Employment in support activities for mining vs. West Texas Intermediate (WTI) crude oil prices, 2008–17



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics and U.S. Energy Information Administration.

Growth slows in service-providing industries

Employment in service-providing industries rose by 1.7 million, or 1.3 percent, in 2017. This increase was nearly 600,000 jobs less than in 2016, as growth slowed in most service-providing sectors.

Employment in education and health services increased by 458,000, or 2.0 percent, during 2017. This job gain was the largest among service-providing industries, but the sector's smallest since 2013 (in both 2015 and 2016, the employment increases exceeded 600,000). In 2017, most of the job gains—381,000 jobs, or 2.0 percent—occurred in health care and social assistance. Health care gained 284,000 jobs, while social assistance gained 97,000, with each of these increases representing about three-fourths of those in 2016. The deceleration in health-care employment coincided with health-care consumption expenditures slowing to 2.5 percent, down from 4.1 percent in 2016. (See table 1.) Employment in private education grew by 77,000 in 2017, below the 103,000 increase in 2016.

Employment in professional and business services increased by 458,000, or 2.3 percent, up from the job gain in 2016 (+327,000) but still far below the gain in 2015 (+542,000). The employment improvement occurred in administrative and waste services, whose growth of 237,000 jobs was similar to that in 2015, but more than double that in 2016 (+101,000). Within administrative and waste services, temporary help services gained 96,000 jobs, after changing little in 2016 (−33,000). Employment in professional and technical services grew by 182,000 over the year, about the same as in 2016.

Employment in leisure and hospitality increased by 354,000, or 2.2 percent, in 2017. This was the weakest calendar-year employment increase since 2010, when the industry gained 213,000 jobs. The deceleration in job growth over the past year occurred largely in food services and drinking places, with an increase of 261,000 in 2017 versus 311,000 in 2016. Arts, entertainment, and recreation added 63,000 jobs in 2017, compared with 88,000 jobs in the previous year.

Employment in financial activities grew by 142,000, or 1.7 percent, less than the increase of 181,000 in 2016. Finance and insurance led the employment gains during 2017 (+82,000, or +1.3 percent), although this increase represented a deceleration from the previous 2 years. Most of the employment weakness occurred in credit intermediation and related activities, which added 25,000 jobs in 2017, compared with 52,000 in the previous year. Real estate and rental and leasing employment grew by 60,000 in 2017, or 2.8 percent, slightly stronger than the average percent change over the previous 5 years.

Employment in transportation and warehousing grew by 135,000 in 2017, the industry's smallest annual growth since 2013. The majority of this growth occurred in warehousing and storage (+43,000) and in couriers and messengers (+39,000). For couriers and messengers, the 2017 employment increase exceeded the gains in the previous 2 years. Warehousing employment growth in 2017 was half that in 2016, and was the primary cause of job weakness in all of transportation and warehousing.

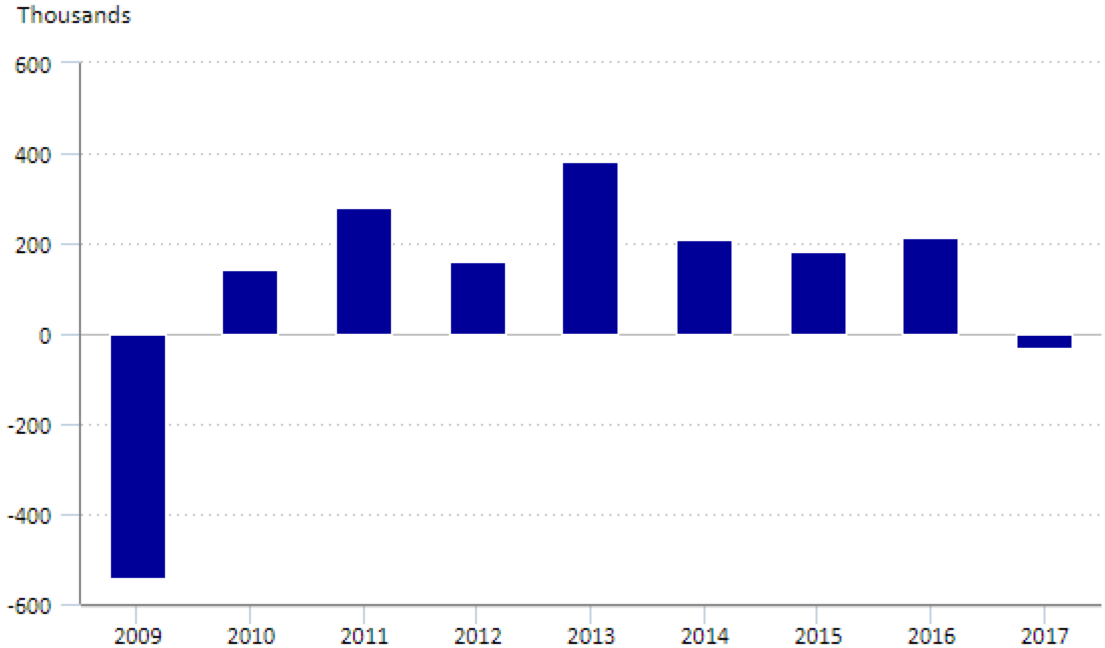
Employment in other services increased by 109,000 over the year, the industry's largest over-the-year increase since 2001. Nearly all of this growth occurred in personal and laundry services (+48,000) and membership associations and organizations (+40,000). The job gain in personal and laundry services was the largest annual increase in the history of the series, which dates back to 1990. For membership associations and organizations, the increase was the largest annual gain since 2002.

Employment in wholesale trade increased by 68,000 in 2017, about triple the change during 2016. The majority of the job growth in this industry occurred in durable goods wholesalers, whose employment grew by 55,000 after seeing little growth in 2016 (+10,000). The job growth in durable goods wholesalers coincided with job growth in durable goods manufacturing.

Government employment changed little in 2017 (+25,000). Federal government lost 15,000 jobs over the year, while state government (−16,000) and local government (+56,000) saw no significant employment changes.

Employment in utilities was essentially unchanged in 2017 (−3,000) and over the past decade. Employment in retail trade changed little in 2017 (−29,000, or −0.2 percent)—the first year since 2009 with no job growth. (See figure 8.) Job losses in retail trade were led by general merchandise stores (−51,000), which saw their first decline since 2012. Among general merchandise stores, department stores shed 44,000 jobs in 2017, continuing a downward trend in which 384,000 jobs had been lost since January 2012. Employment in general merchandise stores, including warehouse clubs and supercenters, was essentially flat over the year. Elsewhere in retail trade, job growth occurred in building materials and garden supply stores (+32,000) and motor vehicles and parts dealers (+24,000), coinciding with positive sales in these industries.

Figure 8. Annual employment change in retail trade, seasonally adjusted, 2009–17



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Source: U.S. Bureau of Labor Statistics.

Employment in information edged down by 36,000 in 2017, after experiencing little change over the previous 3 years. Most of this decline occurred in telecommunications, which shed 26,000 jobs and continued a 4-year trend in which the industry had lost 83,000 jobs.

Conclusion

In 2017, job growth averaged 182,000 per month, slightly lower than the average monthly gain of 195,000 in 2016. After reaching a trough in February 2010, employment started to grow, recovering in May 2014. Since that time, employment has continued to expand through 2017, despite some headwinds such as hurricanes and a tight labor market. This latest expansionary period is longer than the previous one from January 2005 through January 2008. Employment continued to grow in every month during 2017 and, as of December of that year, had grown for over 87 consecutive months.

Although net growth in total nonfarm employment was similar between 2017 and 2016, the employment trends differed by industry. Among goods-producing industries, job growth accelerated in construction, and employment in manufacturing and in mining and logging rebounded from losses in 2016. Employment in service-providing industries increased by 1.7 million, 0.5 million less than in the previous year. Job growth in both education and health services and professional and business services led the gains in service-providing industries. Growth decelerated in nearly all service-providing industries, with retail trade and information employment seeing a shift from positive to negative over-the-year changes.

SUGGESTED CITATION

Stephen Crestol, "Employment growth moderates in 2017, continuing a lengthy expansionary period," *Monthly Labor Review,* U.S. Bureau of Labor Statistics, May 2018, https://doi.org/10.21916/mlr.2018.14.

NOTES

1 According to CES definitions, an expansionary period begins when the current level of nonfarm employment rises past the previous employment peak. See "CES peak–trough tables," *Current Employment Statistics—CES (national)* (U.S. Bureau of Labor Statistics), https://www.bls.gov/ces/cespeaktrough.htm.

2 For CES survey forms, see "Current Employment Statistics report forms," *Current Employment Statistics—CES (national)* (U.S. Bureau of Labor Statistics), https://www.bls.gov/ces/idcfcesforms.htm.

3 Gross domestic product data, produced by the U.S. Bureau of Economic Analysis, can be found at https://www.bea.gov/.

4 For data on industrial production, see *Industrial production and capacity utilization—G.17* (Board of Governors of the Federal Reserve System), https://www.federalreserve.gov/releases/g17/Current/.

5 The federal funds rate is the rate at which depository institutions trade federal funds with each other overnight. The rates can be found at https://fred.stlouisfed.org/.

6 The CPI-U is produced by the U.S. Bureau of Labor Statistics (www.bls.gov/cpi).

7 West Texas Intermediate is a grade of crude oil used as a benchmark in oil pricing. For published oil prices, see "Spot prices," *Petroleum and other liquids* (U.S. Energy Information Administration), https://www.eia.gov/dnav/pet/pet_pri_spt_s1_d.htm.

8 For data on exports of goods and services, see "Trade in goods and services," *International economic accounts* (U.S. Bureau of Economic Analysis), https://www.bea.gov/international/index.htm.

9 The Consumer Confidence Index is produced monthly by The Conference Board (https://www.conference-board.org/).

10 The Business Confidence Index is produced by the Organisation for Economic Co-operation and Development for many countries (https://data.oecd.org/leadind/business-confidence-index-bci.htm).

11 For data on new orders for nondefense capital goods, see "Time series/trend charts," *Business and industry* (U.S. Census Bureau), https://www.census.gov/econ/currentdata/dbsearch?program=M3&startYear=1992&endYear=2018&categories=MTM&dataType=VS&geoLevel=US&adjusted=1&notAdjusted=0&errorData=0.

12 For data on unemployment rates, see *Labor force statistics from the Current Population Survey* (U.S. Bureau Labor Statistics), www.bls.gov/cps.

13 For data on job openings, see *Job Openings and Labor Turnover Survey* (U.S. Bureau of Labor Statistics), https:/www.bls.gov/jlt/.

14 See William C. Dunkelberg and Holly Wade, "NFIB small business economic trends" (National Federation of Independent Business, December 2017), p. 3, https://www.nfib.com/assets/SBET-Dec-2017.pdf. Data on qualified applicants for open positions are available from the monthly small-business survey of the National Federation of Independent Business (http://www.nfib.com/surveys/small-business-economic-trends/).

15 In subsequent analysis, the individual sectors within the trade, transportation, and utilities supersector are discussed separately.

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