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EMPLOYMENT AND UNEMPLOYMENT

Measuring employer and employee confidence in the economy: the quits-to-layoffs-and-discharges ratio

By Kimberly Riley

In 2016, there were, on average, 5.2 million hires, and 5.0 million separations, per month. The Bureau of Labor Statistics (BLS) Job Openings and Labor Turnover Survey (JOLTS) data show the number of workers hired into, and the number of workers separated from, jobs every month. JOLTS classifies separations into three categories. The first category, "quits,"[1] consists of employees who voluntarily quit their job.The second category, "layoffs and discharges,[2]comprises employees who are involuntarily laid off by the organization they work for or who are discharged with cause. The third category, "other separations," which consists of transfers, separations due to retirement, and other rare types of separations, is relatively small and remains consistent over time. The "other separations" data play a minor role in the analysis of separations.

What do these statistics tell us about employer and employee confidence in the U.S. economy? Quits tend to rise during an economic expansion and fall during an economic contraction. Therefore, quits can serve as a measure of workers' willingness or ability to leave their jobs. Conversely, layoffs and discharges tend to fall during an economic expansion and rise during an economic contraction.

This **Beyond the Numbers** article highlights the ratio of the number of quits to the number of layoffs and discharges, or the *Q*/LD ratio. The ratio, which contrasts voluntary separations (*Q*) with involuntary separations (LD), provides a measure to gauge employers' and employees' confidence in the economy. The measure also can be used to analyze trends in employment levels in different industries. The *Q*/LD ratio is greater than 1.0 when the number of quits exceeds the number of layoffs and discharges, and is less than 1.0 when layoffs and discharges exceed quits. A value greater than 1.0 indicates that employee confidence is strong, while a value less than 1.0 indicates that employees are not so confident.

At the national level, the *Q*/LD ratio has been greater than 1.0 most of the time since the JOLTS survey began in December 2000. (See table 1.) The ratio reached its lowest point, 0.7, in March and April 2009, during the most recent recession, and its highest point, 2.0, in September 2016.[3] From 2016 through June 2017, the ratio was frequently 1.9.

Table 1. Total nonfarm quits-to-layoffs-and-discharges (Q/LD) ratios, December 2000–June 2017, seasonally adjusted

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2000	…	…	…	…	…	…	…	…	…	…	…	1.6
2001	1.6	1.8	1.5	1.7	1.5	1.6	1.5	1.5	1.3	1.3	1.2	1.3
2002	1.5	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3
2003	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3
2004	1.2	1.3	1.3	1.4	1.3	1.5	1.5	1.4	1.4	1.5	1.4	1.4
2005	1.5	1.3	1.5	1.5	1.5	1.4	1.5	1.6	1.6	1.8	1.7	1.6
2006	1.8	1.8	1.8	1.6	1.6	1.8	1.7	1.9	1.7	1.6	1.6	1.8
2007	1.7	1.7	1.7	1.5	1.7	1.5	1.7	1.6	1.3	1.5	1.4	1.6
2008	1.5	1.5	1.4	1.6	1.4	1.3	1.3	1.2	1.2	1.1	.9	.9
2009	.8	.8	.7	.7	.8	.8	.8	.8	.8	.9	1.0	.9
2010	.9	1.0	1.0	1.1	1.0	1.0	.9	1.1	1.1	1.1	1.0	1.1
2011	1.1	1.1	1.2	1.1	1.2	1.1	1.1	1.2	1.2	1.1	1.1	1.1
2012	1.2	1.2	1.3	1.1	1.2	1.2	1.3	1.2	1.1	1.1	1.2	1.3
2013	1.4	1.4	1.2	1.3	1.3	1.4	1.4	1.4	1.3	1.6	1.5	1.4
2014	1.4	1.4	1.5	1.5	1.5	1.5	1.4	1.5	1.7	1.6	1.6	1.5
2015	1.6	1.6	1.4	1.5	1.6	1.6	1.7	1.7	1.5	1.6	1.7	1.8
2016	1.7	1.6	1.7	1.7	1.7	1.9	1.9	1.8	2.0	1.9	1.9	1.9
2017	1.9	1.9	1.9	1.9	1.9	1.7	…	…	…	…	…	…

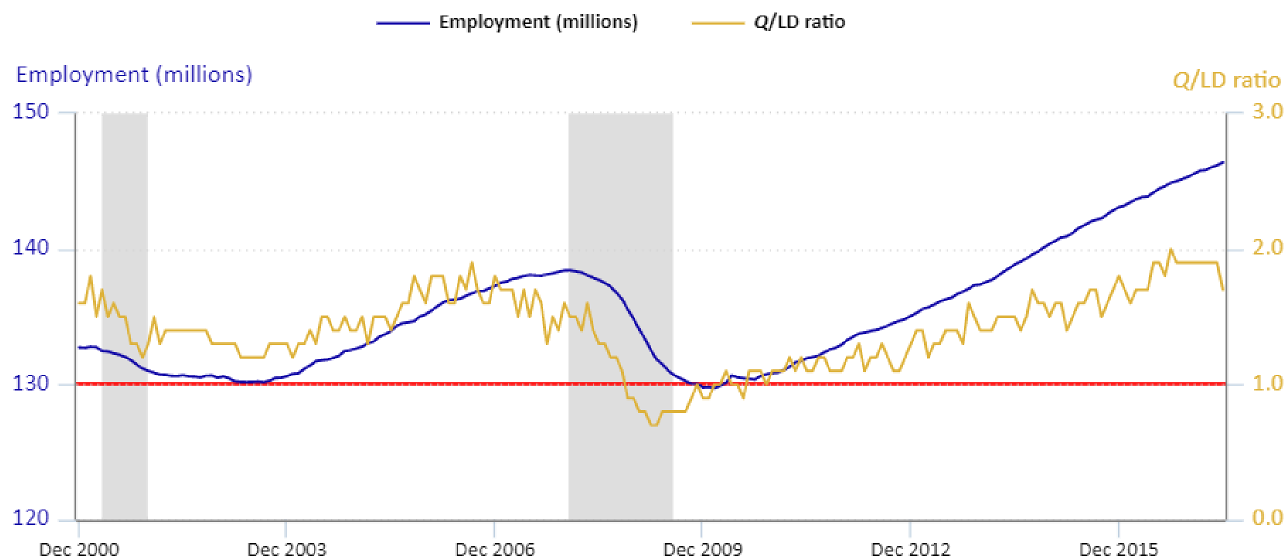
Source: U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey.

Observations at the national level

After the 2001 recession, both the *Q*/LD ratio and total nonfarm employment continued to decline until 2003, when they reversed and began to increase.[4] As the 2007–09 recession approached, the ratio leveled off and then began to decline because of a decrease in quits. Employment did not decline until February 2008. (See chart 1.)

During the 2007–09 recession, the *Q*/LD ratio decreased rapidly as a result of declining quits and increasing layoffs and discharges.[5] (See chart 1.) The series fell to a low of 0.7 in March 2009. Close to 1 year later, employment reached its most recent trough, 129,733,000. Following these series lows, the *Q*/LD ratio and employment trended upward. Still, the ratio remained below its prerecession level until December 2013, and employment remained below its prerecession level until April 2014. The ratio reached a high of 1.9 once before the last recession and has duplicated that figure fairly regularly since 2016, peaking at 2.0 in September of that year. Employment has remained well above its prerecession level since May 2014.

Chart 1. Total nonfarm employment and quits-to-layoffs-and-discharges (*Q*/LD) ratio, December 2000–June 2017, seasonally adjusted

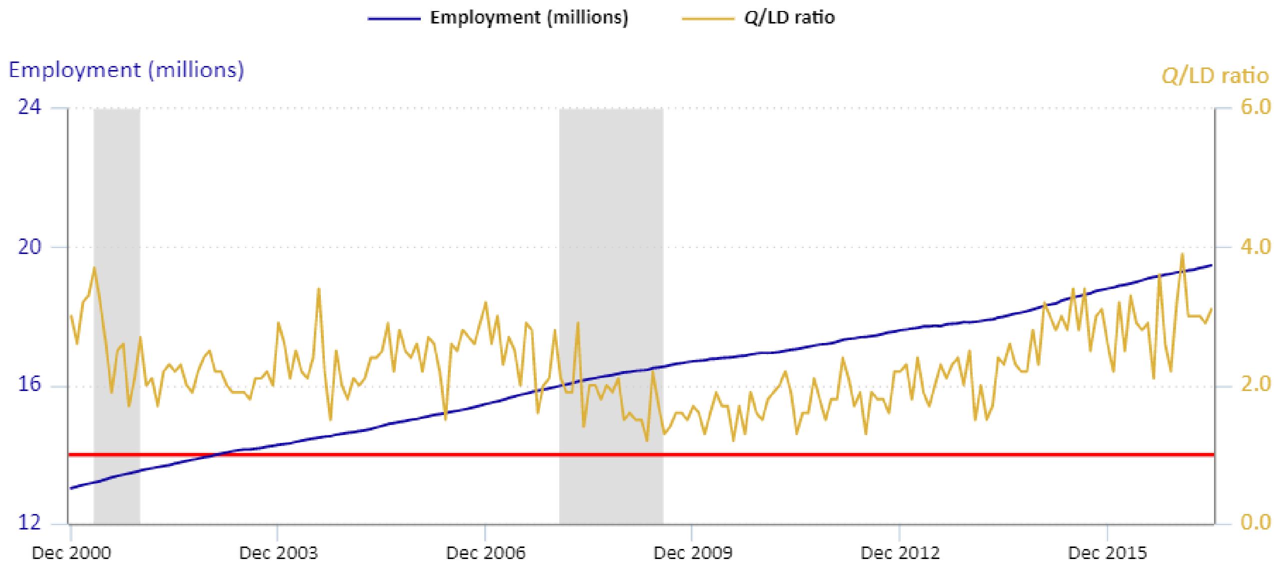


Click legend items to change data display. Hover over chart to view data.
Note: Quits are voluntary separations; layoffs and discharges are involuntary separations. Shaded areas represent recessions, as determined by the National Bureau of Economic Research. The red horizontal line represents the baseline of 1.0 to which industry *Q*/LD ratios are compared during analysis.
Source: U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey.

Ratio by selected industries

All industries experience a change in the ratio of quits to layoffs and discharges over the business cycle. However, regardless of the economic climate, there are also ongoing differences among the various industries—differences that are due to individual industry characteristics.[6] Health care and social assistance is a high-turnover industry with very high quits and very low layoffs and discharges. In fact, quits have outnumbered layoffs and discharges by enough that the *Q*/LD ratio was greater than 1.0 even during the depths of the most recent recession. (See chart 2.) The only other industry for which the ratio is greater than 1.0 for the entire series is accommodation and food services. The ratio for health care and social assistance has fluctuated between 1.2 and 3.9 since the JOLTS series began in December 2000. Despite the fluctuation in the ratio, employment continued to trend upward, even during the 2001 and 2007–09 recessions, because of the high demand for health care workers.

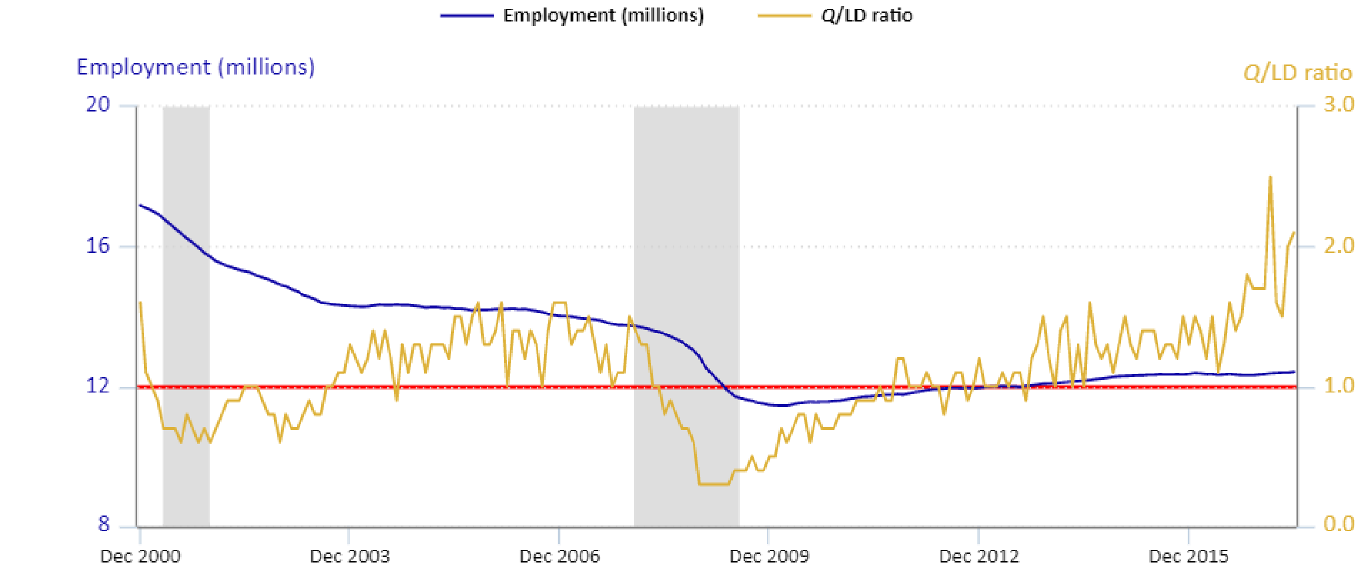
Chart 2. Health care and social asssistance employment and quits-to-layoffs-and-discharges (*Q*/LD) ratio, December 2000–June 2017, seasonally adjusted



Click legend items to change data display. Hover over chart to view data.
Note: Quits are voluntary separations; layoffs and discharges are involuntary separations. Shaded areas represent recessions, as determined by the National Bureau of Economic Research. The red horizontal line represents the baseline of 1.0 to which industry *Q*/LD ratios are compared during analysis.
Source: U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey.

Since December 2000, the *Q*/LD ratio in the manufacturing industry has moved above and below 1.0 with the business cycle, with trends matching employment. (See chart 3.) The ratio fell below 1.0 during the 2001 and 2007–09 recessions as quits declined and layoffs and discharges rose. The ratio remained below 1.0 during the early recovery periods following the two recessions, but as quits grew and layoffs and discharges remained steady, the ratio climbed above 1.0. After the most recent recession, the ratio climbed steeply as quits increased, although employment grew much more slowly.

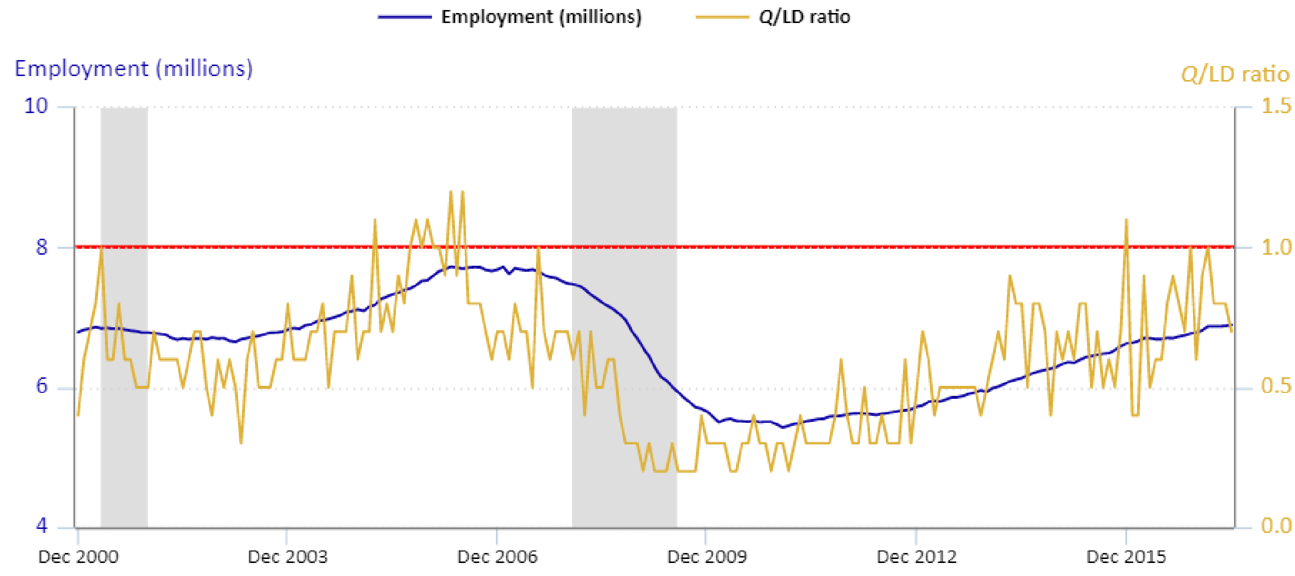
Chart 3. Manufacturing employment and quits-to-layoffs-and-discharges (*Q*/LD) ratio, December 2000–June 2017, seasonally adjusted



Click legend items to change data display. Hover over chart to view data.
Note: Quits are voluntary separations; layoffs and discharges are involuntary separations. Shaded areas represent recessions, as determined by the National Bureau of Economic Research. The red horizontal line represents the baseline of 1.0 to which industry *Q*/LD ratios are compared during analysis.
Source: U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey.

In the construction industry, layoffs and discharges are much more prevalent than in other industries because, typically, projects are completed and employees move to other jobs. By contrast, quits are much lower in construction than in other industries. The *Q*/LD ratio for construction has been below 1.0 most of the time since 2000. (See chart 4.) The ratio has moved with the business cycle, increasing during expansions and decreasing during contractions. The movement of the ratio has been similar to that of employment across the entire period.

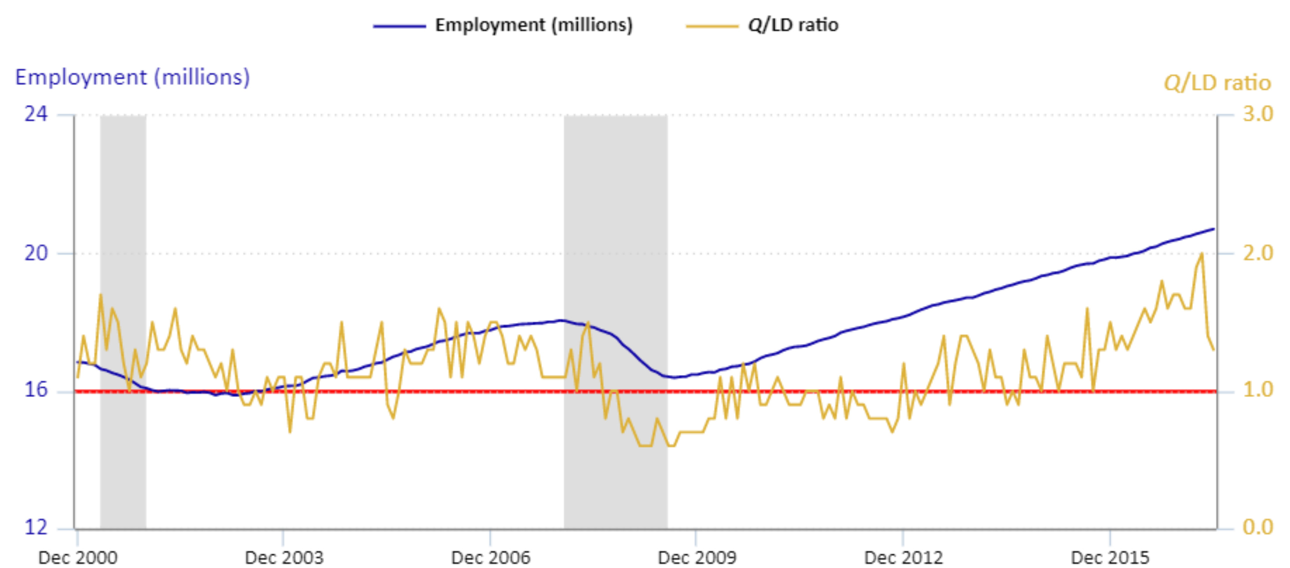
Chart 4. Construction employment and quits-to-layoffs-and-discharges (*Q*/LD) ratio, December 2000–June 2017, seasonally adjusted



Click legend items to change data display. Hover over chart to view data.
Note: Quits are voluntary separations; layoffs and discharges are involuntary separations. Shaded areas represent recessions, as determined by the National Bureau of Economic Research. The red horizontal line represents the baseline of 1.0 to which industry *Q*/LD ratios are compared during analysis.
Source: U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey.

As with construction, the *Q*/LD ratio for professional and business services has moved with the business cycle and trended in synchrony with employment since 2000. However, in professional and business services the ratio fluctuated not far above and below the 1.0 mark for most of the time until about 2015, after which quits accelerated, moving the ratio to a high of 2.0. (See chart 5.)

Chart 5. Professional and business services employment and quits-to-layoffs-and-discharges (*Q*/LD) ratio, December 2000–June 2017, seasonally adjusted

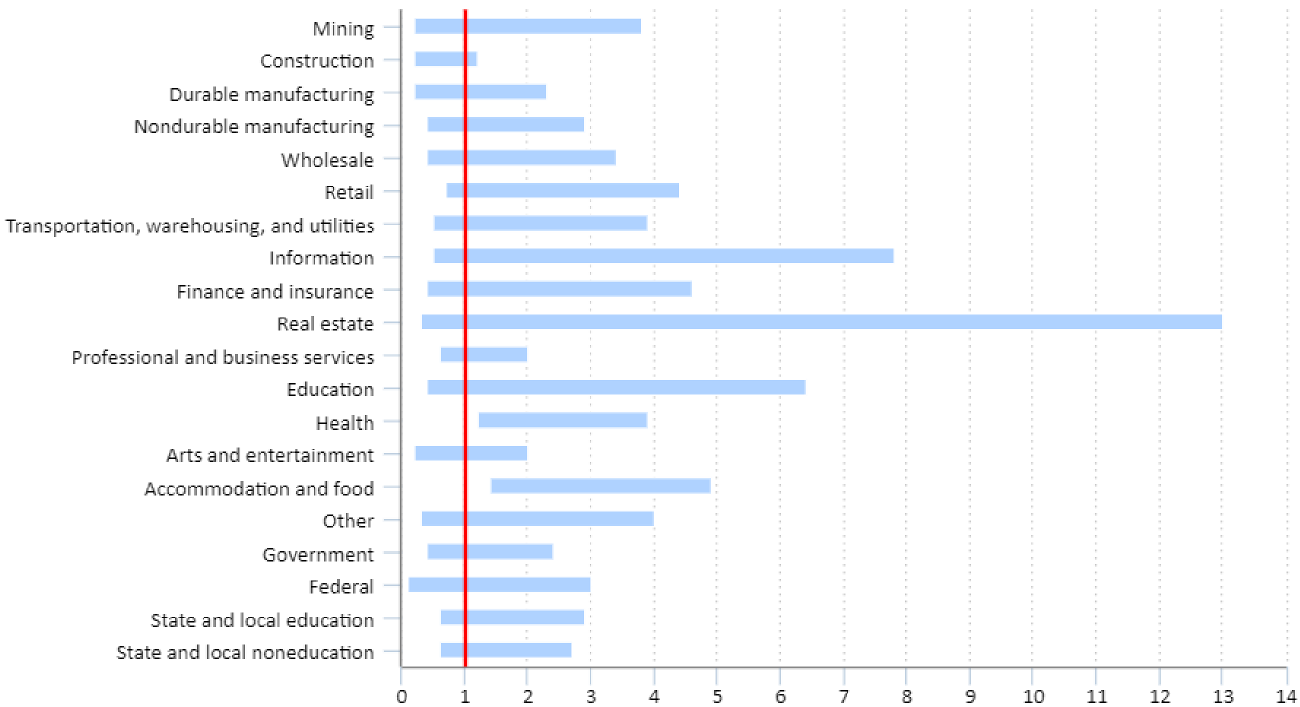


Click legend items to change data display. Hover over chart to view data.
Note: Quits are voluntary separations; layoffs and discharges are involuntary separations. Shaded areas represent recessions, as determined by the National Bureau of Economic Research. The red horizontal line represents the baseline of 1.0 to which industry *Q*/LD ratios are compared during analysis.
Source: U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey.

Ratios by industry

Chart 6 shows the minimum and maximum values of the *Q*/LD ratio by industry since the start of the JOLTS series in December 2000. As mentioned earlier, the accommodation and food services industry and the health care and social assistance industry have had more people quitting than being laid off, creating a ratio that is always greater than 1.0. The industry with the lowest minimum ratio, 0.1, is the federal government, and the industry with the highest maximum ratio, 13.0, is real estate and rental and leasing. With the exception of three industries—construction; durable goods manufacturing; and arts, entertainment, and recreation—the maximum ratio exceeds 1.0 by much more than the minimum ratio falls below 1.0. These ranges shown indicate that quits increase during strong economic times by more than layoffs and discharges increase during weak economic times.

Chart 6. Range of quits-to-layoffs-and-discharges (*Q*/LD) ratios, selected industries, December 2000–June 2017, seasonally adjusted



Click legend items to change data display. Hover over chart to view data.
Note: Quits are voluntary separations; layoffs and discharges are involuntary separations. Shaded areas represent recessions, as determined by the National Bureau of Economic Research. The red horizontal line represents the baseline of 1.0 to which industry *Q*/LD ratios are compared during analysis.
Source: U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey.

Summary: What the *Q*/LD ratio tells us

The ratio of quits to layoffs and discharges, a measure that can be derived from the JOLTS data, is an important tool for analyzing the business cycle and the differences among industries.

Quits move in a direction opposite that of layoffs and discharges, and the *Q*/LD ratio clearly reflects business cycle trends and turning points. The ratio rose during expansions and fell during contractions. The ratio stayed above 1.0 for most industries captured by the JOLTS series, illustrating that, during all but the most severe economic times, American workers are more likely to leave their job than lose their job.

The *Q*/LD ratio also shows that industries have different patterns of quits and layoffs and discharges. The health care and social assistance industry and the accommodation and food services industry are the only two industries for which quits always outnumber layoffs and discharges, producing a *Q*/LD ratio greater than 1.0, even during the most severe economic times. In other industries, such as construction, layoffs and discharges are more prevalent than quits, producing a ratio less than 1.0 in most months over the entire JOLTS series (2000–17). In still other industries, quits and layoffs and discharges rise and fall, creating a ratio that moves above and below 1.0 with the business cycle.

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NOTES

[1] JOLTS defines quits as separations in which employees leave a job voluntarily but do not retire from the labor force or transfer to another job.

[2] JOLTS defines layoffs and discharges as involuntary separations initiated by employers.

[3] *U.S. business cycle expansions and contractions* (Cambridge, MA: National Bureau of Economic Research), http://www.nber.org/cycles/.

[4] The National Bureau of Economic Research defines the 2001 recession as lasting from March 2001 to November 2001. Data on total nonfarm employment are available from the BLS Current Employment Statistics program. (See *Current Employment Statistics – CES (National)* (U.S. Bureau of Labor Statistics), https://www.bls.gov/ces/.)

[5] The National Bureau of Economic Research defines the most recent recession, also called the Great Recession, as lasting from December 2007 to June 2009.

[6] The term “industry” can refer to a supersector, sector, or subsector, depending on the context. In analyzing “industries,” the JOLTS and CES programs follow the North American Industry Classification System.

SUGGESTED CITATION

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