Business Employment Dynamics, Third Quarter 2015
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This article is the eighth in a quarterly series summarizing updated and revised Business Employment Dynamics (BED) data. BED data are a product of a federal-state cooperative program known as the Quarterly Census of Employment and Wages (QCEW). The QCEW data are based largely on reports filed quarterly by employers to pay unemployment insurance (UI) taxes. These reports are also used to produce BED data on gross job gains and losses.

In the BED program, QCEW records are linked across quarters to provide a history through time for each business. This allows net employment changes at the establishment level to be measured. BED data reveal the dynamics underlying the measure of net change in employment at the establishment level. A net increase in employment can come from either opening or expanding establishments, whereas a net decrease in employment can come from either closing or contracting establishments. Gross job gains include the sum of all jobs added at either opening or expanding establishments. Gross job losses include the sum of all jobs lost in either closing or contracting establishments. Exhibit 1 displays the four components that make up gross job changes along with the net change in employment during the third quarter of 2015. The most recent data for these components are discussed in the following sections. In this exhibit, and all following exhibits, data relate solely to private-sector establishments in New Mexico.

Gross Job Gains and Losses
Between July 2015 and September 2015, gross gains at opening and expanding private-sector establishments amounted to 40,153 jobs. These gains were fewer (by 1,632 jobs) than the gross gains in the previous quarter. Over this period, gross losses at closing and contracting private-sector establishments were 40,217 jobs. The amount of gross losses in this quarter was lower (by 2,136 jobs) than the gross losses seen in the previous quarter. The difference between the number of gross job gains and gross job losses in the private sector during the third quarter of 2015 yielded a net employment loss of 64 jobs. From the second to the fourth quarter of 2014, the amount of gross gains exceeded gross losses by at least 2,136 jobs. However, the net changes for the first, second, and third quarters of 2015 were all negative. The state has not seen three or more consecutive quarters of net losses since the period between the fourth quarter of 2008 and the first quarter of 2010. Gross losses rose sharply in the first quarter of 2015 and have remained high, while gross gains declined sharply (4,016 jobs) between fourth quarter 2014 and first quarter 2015. Exhibit 2 shows employment gains and losses within the private sector of New Mexico between the first quarter of 2008 and the third quarter of 2015.

Components of Gross Job Gains and Losses
Expanding establishments are those with positive third-month employment in both the previous and current quarters, with a net increase in employment over this period. Expanding establishments gained 32,168 jobs in the third quarter of 2015. Gains declined by 1,058 jobs from the previous quarter. Contracting establishments are those with positive employment in the third month in both the previous and current quarter, with a net decrease in employment over this period. Contracting establishments lost 32,377 jobs in the third quarter of 2015. The number of jobs lost in contracting establishments was down by 3,570 jobs compared to the prior quarter. Exhibit 3 shows expansions and
contractions within the private sector of New Mexico between the first quarter of 2008 and the third quarter of 2015. The large drop in gross losses due to contractions in the third quarter of 2015 brought net losses (between expansion-related gains and contraction-related losses) down to 209 jobs from 2,721 jobs in the previous quarter.

**Opening** establishments are those with positive third-month employment in the current quarter either for the first time (births) or after zero employment in the previous quarter (reopenings). Opening establishments accounted for 7,985 jobs gained in the third quarter of 2015. Gains at opening establishments declined by 574 jobs from the previous quarter.

**Closing** establishments are those with positive employment in the third month in the previous quarter and with zero employment in the current quarter. Closings may be either deaths or temporary closings. Closing establishments accounted for 7,840 jobs lost in the third quarter of 2015. Losses at closing establishments increased by 1,434 jobs from the previous quarter. Exhibit 4 shows openings and closings within the private sector of New Mexico between the first quarter of 2008 and the second quarter of 2015. The large increase in gross losses due to closings in the third quarter of 2015 brought net gains (between openings-related gains and closings-related losses) down to 145 jobs from 2,153 jobs in the previous quarter. (This offset the lion’s share of the reduction in net losses between gross gains due to expansions and gross losses due to contractions.)

**Births** are a subset of openings, the rest of openings being made up of reopenings of seasonal businesses. Births involve establishments with positive third-month employment for the first time in the current quarter, with no links to the prior quarter, or establishments with positive third-month employment in the current quarter and zero employment in the third month of the previous four quarters. Between July and September 2015, there were 5,124 gross job gains due to establishment births, which was down 79 jobs compared to gains in the second quarter of 2015.

**Deaths** are a subset of closings, the rest being made up of temporary shutdowns of businesses. Deaths involve establishments with no employment or zero employment reported in the third month of four consecutive quarters following the last quarter with positive employment. Be aware that an establishment that closes during the quarter may be a death, but the Bureau of Labor Statistics waits three quarters to determine whether it is a permanent closing or a temporary shutdown. Because of this, there is always a lag of three quarters for the publication of death statistics; therefore, the latest data on deaths are for the fourth quarter of 2014 (i.e., from October to December). Gross job losses due to establishment deaths were 4,127. This quarter, job losses due to deaths declined by 615 jobs from the previous quarter. The difference between the number of gross job gains and gross job losses from establishment births and deaths in the private sector during the fourth quarter of 2014 yielded 1,733 net job gains. Exhibit 5 shows employment gains and losses due to establishments.
establishment births and deaths within the private sector of New Mexico between the first quarter of 2008 and the third quarter of 2015.

**Job churn** is the sum of gross gains and gross losses and, since it captures gross change in the labor market, can be used to indicate employment mobility. Gains and losses due to job churn amounted to 80,370 reallocations in the third quarter of 2015. There were 3,768 fewer reallocations due to job churn than in the previous quarter. Exhibit 6 shows job churn between the first quarter of 2008 and the third quarter of 2015.

**Annual Average Rate of Reallocations (AARR)**

The following section compares historical reallocations due to job churn in New Mexico with those in the U.S. In order to do this, it was necessary to compare rates of reallocations rather than reallocation levels. The Bureau of Labor Statistics expresses gross job gain and gross job loss rates by dividing their levels by the average of employment in the current and previous quarters. This provides a symmetric growth rate. (Please refer to the box at the end of this article for further details on this rate.) An annual average symmetric growth rate for a given year was then created (author's own calculations) by taking an average of the symmetric rate of the fourth quarter of the previous year and the first three quarters of the given year (doing this allowed the inclusion of the most recent BED data in the calculations). Though the data used in this section range from 1993 to 2015, the focus is on the years 2015, 2009, 2003, and 1997, which are each six years apart, and 1993, which is the oldest year of data. This article will from here on refer to annual average rate of reallocations as “AARR” for brevity. Please note that this is not an official abbreviation.

Between 1993 and 1997, New Mexico had a significantly higher AARR than did the U.S. across all private industries. While New Mexico’s AARR ranged between 18.2 percent and 18.6 percent, the United States’ AARR ranged between 15.4 percent and 15.7 percent. From 1997 to 2015, the AARR for both areas declined, in both cases most significantly between 1997 and 2003. Between 1993 and 2015, New Mexico’s AARR fell from 18.4 percent to 13.2 percent (a difference of 5.2 percentage points). The United States’ AARR fell from 15.4 percent to 12.0 percent (a difference of 3.4 percentage points). So, while the AARRs for both areas declined, by 2015 the rates had come much closer together, indicating that job churn in New Mexico had become reduced to a level nearer that of the nation as a whole. Exhibit 7 shows the AARRs for New Mexico and the U.S. from 1993 to 2015.

The most significant component of change over the period was New Mexico’s 3.1 percentage point reduction in annual average rate of gains (from 9.8 percent in 1993 to 6.7 percent in 2015) compared to the 1.7 percentage point reduction of the U.S. (from 8.0 percent in 1993 to 6.3 percent in 2015). Since 2009, New Mexico’s annual average rate of losses has exceeded that of the U.S. by a greater margin than its annual average rate of gains has
exceeded that of the U.S. The recession hit both areas most heavily in 2009. Exhibit 8 shows components of change for both areas from 1993 to 2015.

In construction, AARRs are much higher than the average across all private industries in both areas, presumably due to the project-based nature of work in construction. Nevertheless, as in other private industries, AARRs declined between 1993 and 2015. In the case of construction, the AARR declined from 33.7 percent to 22.3 percent in New Mexico and from 30.5 percent to 20.1 percent in the U.S. In 2015, New Mexico’s reallocation rate in construction was 2.2 percentage points higher than that of the U.S. This difference is the same as the average difference of the two areas between 1993 and 2015. New Mexico’s annual average rates of gains and losses were consistently higher than those of the U.S. throughout the period. Exhibits 9 and 10 show annual average rates of reallocations and components of change, respectively, for the construction industry between 1993 and 2015.
The annual average symmetric growth rate: In the Business Employment Dynamics program, the Bureau of Labor Statistics expresses gross job gains and gross job losses as rates by dividing their levels by the average of employment in the current and previous quarters. This provides a symmetric growth rate. The rates are calculated for the components of gross job gains and gross job losses and then summed to form their respective totals. These rates can be added and subtracted just as their levels can. For instance, the difference between the gross job gains rate and the gross job losses rate is the net growth rate. The sum of them can be called the reallocation rate (indicating job churn). Additionally, the author of this article has created annual average symmetric growth rates for a given year by taking an average of the symmetric rate of the fourth quarter of the previous year and the first three quarters of the given year.

Technical Notes

The Bureau of Labor Statistics publishes three different establishment-based employment measures for any given quarter. Each of these measures—QCEW, BED, and CES—makes use of the quarterly UI employment reports in producing data; however, each measure has a somewhat different universe coverage, estimation procedure, and publication product. Differences in coverage and estimation methods can result in somewhat different measures of over-the-quarter employment change. It is important to understand program differences and the intended uses of the program products. Additional information on each program can be found at http://www.bls.gov/news.release/cewbd.tn.htm or in the ‘Labor Market Information Data Program Guide’ at http://www.dws.state.nm.us/Labor-Market-Information/Publications/Economic-Research-Publications. Previous Labor Market Review articles in this BED series can be found on the New Mexico Department of Workforce Solutions website at http://www.dws.state.nm.us/Labor-Market-Information/Publications/Labor-Market-Review.