Business Employment Dynamics, Fourth Quarter 2014
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This article is the fifth 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. Chart 1 displays the four components that make up gross job changes along with the net change in employment (the difference between gross job gains and gross job losses) between the fourth quarter of 2006 and the fourth quarter of 2014. The most recent data for these components are discussed in the following sections. In this chart, and all following charts, data relate solely to private-sector establishments in New Mexico.

Gross Job Gains and Losses
Between October 2014 and December 2014, gross gains at opening and expanding private-sector establishments amounted to 43,313 jobs. These gains were higher (by 3,028 jobs) than the gross gains in the previous quarter. Over this period, gross losses at closing and contracting private-sector establishments were 37,596 jobs. This amount was very similar to the gross job losses seen in the previous quarter (losses for this quarter were greater by only 34 jobs). The difference between the number of gross job gains and gross job losses in the private-sector during the fourth quarter of 2014 yielded a net employment gain of 5,717 jobs. This quarter’s net change was more than double that of the previous quarter. In fact, this quarter’s net gain was the largest quarterly increase, apart from the fourth quarter of 2012, since the first quarter of 2007. This indicates encouraging prospects for the New Mexico economy moving forward. Chart 2 shows employment gains and losses within the private sector of New Mexico between the fourth quarter of 2006 and the fourth quarter of 2014.

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 34,056 jobs in the fourth quarter of 2014. Gains were greater than those seen in the previous quarter by 737 jobs.

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 30,478 jobs in the fourth quarter of 2014. The number of jobs lost in contracting establishments was 186 greater than was seen in the prior quarter. Chart 3 shows expansions and contractions
within the private sector of New Mexico between the fourth quarter of 2006 and the fourth quarter of 2014.

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 9,257 jobs gained in the fourth quarter of 2014. The job gains at opening establishments were 2,291 greater than those seen in the previous quarter, representing a 32.9 percent increase. This increase in gains due to openings for this quarter represent over 75 percent of the over-the-quarter increase in all gross gains (3,028 jobs).

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 7,118 jobs lost in the fourth quarter of 2014. The job losses at closing establishments were 152 fewer than those in the previous quarter. Chart 4 shows openings and closings within the private sector of New Mexico between the fourth quarter of 2006 and the fourth quarter of 2014.

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 October and December 2014, gross job gains due to establishment births were 5,693, which were 1,229 more jobs gained than in the third quarter of 2014.

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 BLS 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 is for the first quarter of 2014 (i.e., from January to March). Gross job losses due to establishment deaths were 4,168. This quarter, there were 290 more job losses due to deaths than 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 first quarter of 2014 yielded 1,721 net job gains. Chart 5 shows employment gains and losses due to establishment births and deaths within the private sector of New Mexico between the fourth quarter of 2006 and the fourth quarter of 2014.

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 80,909 reallocations in the fourth quarter of 2014. There were 3,062 fewer reallocations due to job churn compared to the previous quarter. Chart 6 shows job churn between fourth quarter 2006 and fourth quarter 2014.

Comparing New Mexico and US Symmetric Growth Rates of Gross Gains and Losses

In this section we compare the symmetric growth rates of the components of gross job gains and losses for New Mexico and the US between fourth quarter 2006 and fourth quarter 2014. The US Bureau of Labor Statistics defines the symmetric growth rate as the level of gains (or the level of losses) divided by the average of total private employment in the current and previous quarters. Through the rest of this article, the symmetric growth rate of gross gains will be referred to as ‘gross gains rate’, while the symmetric growth rate of gross losses will be referred to as the ‘gross losses rate’. These rates can be added and subtracted just as their levels
can. For instance, the difference between the gross gains rate and the gross job losses rate is the ‘net growth rate’. The combination of the gross gains and gross losses rates may be referred to as the ‘gross reallocation rate’. When comparing two areas with very different employment levels—such as New Mexico and the US—the component rate provides a more useful comparison than the component level. The aim here in analyzing symmetric growth rates is to show which components of gains and losses (i.e., gains from expansions or openings and losses from contractions or closings) have been most significant, not just in terms of how they have affected New Mexico’s net growth rate but also how they have compared with an all-state average (the US rate).

Two distinct periods are contrasted for the purposes of this analysis: the fourth quarter of 2006 to the first quarter of 2010 (period one), which encompasses the Great Recession, and the second quarter of 2010 to the fourth quarter of 2014 (period two). Between these two periods, the US average net growth rate increased by 1.2 percentage points (from -0.6 to 0.6 percent), while that of New Mexico grew by only 0.7 percentage point (from -0.5 percent to 0.2 percent). More specifically, the way in which New Mexico’s rates of gross gains and gross losses differed from those of the US changed between these two periods. In period one, New Mexico’s gross gains and losses rates were substantially higher than those of the US, indicating that the state experienced more movement, or job churn, than the US, in general. In period two, the difference between New Mexico’s gross gains rates and those of the US narrowed, while New Mexico’s gross losses rates remained substantially higher than those of the US. The following sections use BED data to show that a reduction (not in real terms, but relative to the US) in expansions in period two is what primarily caused New Mexico’s net growth rate to recover more slowly than that of the US.

Exhibit 7 shows the percentage point differences between New Mexico and the US in the gross gains and gross losses rates between the fourth quarter of 2006 and the fourth quarter of 2014. The rates of gross gains and losses in New Mexico were each consistently higher than those of the US throughout the period, apart from three quarters in which the rates were the same (the fourth quarter of 2009 and the first and fourth quarters of 2011) and one quarter when the New Mexico rate was lower (first quarter 2013). This indicates that New Mexico experienced more job churn than the US, in general, during this time frame. Through the rest
of this article, the term ‘difference’ is used to abbreviate ‘difference between New Mexico and the US’, unless otherwise stated.

Another significant point is that the difference in the gross gains rate exceeded the difference in the gross losses rate in eight out of 14 quarters during period one (fourth quarter of 2006 through first quarter of 2010). Over this period, the average difference in the gross gains rate (0.7 percentage point) was similar to, but greater than, the average difference in the gross losses rate (0.6 percentage point). During period two (second quarter of 2010 to fourth quarter of 2014), the difference in the gross losses rate exceeded that of the gross gains rate in 15 out of 19 quarters. Only in the first and fourth quarters of 2012 did the difference in the gross gains rate exceed the difference in the gross losses rate. The average difference in gross gains during this period declined to 0.3 percentage point, whereas the average difference in gross losses during the same period remained at 0.6 percentage point.

This highlights an interesting phenomenon. Period one encompasses much of the surging losses and plummeting gains associated with the Great Recession (December 2007 to June 2009), as seen in Exhibit 2. Nevertheless, in this period, New Mexico’s gross gains and losses rates remained well above those of the US. On the other hand, during period two, which is normally associated with recovery, New Mexico’s gross gains rates declined to rates much closer to those of the US, and in several cases equaled or fell below them. At the same time, the average rate of gross losses remained 0.6 percentage point higher than the average US gross losses rate. As a result, New Mexico’s average net growth rate recovered more slowly than that of the US.

Exhibit 8 indicates the percentage point differences (between New Mexico and the US) in the rate of gains due to expansions and rate of losses due to contractions from the fourth quarter of 2006 to the fourth quarter of 2014. When compared even casually to Exhibit 7, it is clear that expansions and contractions have significantly shaped the broader phenomenon affecting gains and losses. In seven of 14 quarters in period one, the difference between the gross gains rate due to expansions exceeded the difference between the gross losses rate due to contractions. Over the period, New Mexico’s average gross gains rate from expansions was 0.5 percentage point higher than that of the US. The difference between the average gross losses rate from contractions was also 0.5 percentage point, with New Mexico’s rate being the higher of the two. So during period one, at the component level of expansions and contractions, the positive and negative differences in the gross gains and losses rates balanced each other, on average. On the other hand, in period two, the difference in the average rate of expansions was only 0.2 percentage point, whereas that of the average rate of contractions remained at 0.5 percentage point (in both cases New Mexico’s rate
was higher). Clearly, the significant point of difference occurred in New Mexico’s slower rate (relative to the US) of gross gains due to establishment expansions during recovery, while the gross losses rate due to contractions (relative to the US) remained stable.

Exhibit 9 emphasizes the point. Openings and closings, the only other components of gross job gains and losses, show a far more balanced trend through the two periods. In fact, the average differences (between New Mexico and the US) in both the gross gains rate and gross losses rate (due to openings and closings) in both period one and period two were all the same (0.1 percentage point).

Exhibit 10 takes the differences (between New Mexico and the US) in rates of gross gains and gross losses and calculates a new difference: the net gain-loss difference (in fact, the net growth rate difference). As an example, if a data point is higher than the x-axis (i.e. greater than zero), this indicates that the ‘gain difference’ (the amount by which New Mexico’s rate of gross gains exceeded the US rate of gross gains) exceeded the ‘loss difference’ (the amount by which New Mexico’s rate of gross losses exceeded the US rate of gross losses). The same principle is also applied to the rates of the underlying matched component (expansions and contractions and openings and closings) to produce a net expansion-contraction difference and a net openings-closings difference. The result is a clearer picture of the trends unearthed by focusing on each component earlier in the section. The similarity in the gain-loss difference series and the expansion-contraction difference series shows how reduced expansions in New Mexico, relative to stable contractions, have shaped New Mexico’s downward trend, relative to the US. The net openings-closings difference series reiterates that New Mexico’s growth rates due to openings and closings were relatively stable and flat in comparison to growth rates due to expansions and contractions.

**TECHNICAL NOTE: Differences between QCEW, BED, and CES employment measures**

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/cwbd.tn.htm](http://www.bls.gov/news.release/cwbd.tn.htm).

The next BED data release is scheduled for November 18, 2015. The next article on BED is scheduled to appear in the October Labor Market Review, published on November 30, 2015. With the processing of fourth quarter 2014 BED data, the US Bureau of Labor Statistics (BLS) implemented a new statistical matching process used in the longitudinal linking of Quarterly Census of Employment and Wages (QCEW) data. Tabulations from this quarter forward will reflect this new methodology. For additional details on this new methodology, please see the article “A Simplified Approach to Administrative Record Linkage in the Quarterly Census of Employment and Wages” available at: [http://www.bls.gov/osmr/pdf/st140020.pdf](http://www.bls.gov/osmr/pdf/st140020.pdf). The Business Employment Dynamics (BED) program updated annual data and establishment age and survival data on May 14, 2015. With this update, BLS revised previously published data to reflect an administrative change that occurred in first quarter 2013. This administrative change resulted from some establishments moving into scope. BLS previously classified these establishments as private households (NAICS 814110), and they were out of scope. BLS now classify them in scope as services for the elderly and persons with disabilities (NAICS 624120). BLS also updated historical data to incorporate improved records that were previously not assigned an industry code. These records now have an industry code, which improves the accuracy of the BED industry data. BLS revised historical data from third quarter 1992 through fourth quarter 2012 to include these improvements. BLS will update quarterly BED data, incorporating these changes with their normal revision cycle, when they release first quarter 2015 data on November 18, 2015. Previous Labor Market Review articles on BED were published in Volume 43, Number 8 (August 2014), Volume 43, Number 11 (November 2014), Volume 44, Number 2 (February 2015), and Volume 44, Number 4 (April 2015).