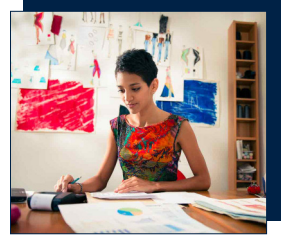




National Association
of Professional Employer Organizations
NAPEO White Paper Series



Professional Employer Organizations: Keeping Turnover Low and Survival High

By Laurie Bassi and Dan McMurrer
McBassi & Company

September 2014

Professional Employer Organizations: Keeping Turnover Low and Survival High

Executive Summary

In the 2013 report, “Professional Employer Organizations: Fueling Small Business Growth,” a comprehensive analysis of existing economic data showed that small businesses in PEO arrangements have higher growth rates than other small businesses, and small business executives who use PEOs are better able to focus their attention on the core business. In further exploring the impact of PEOs and their potential to help small businesses better meet the challenges of today’s demanding economic conditions, this follow-up study examines

employee turnover and business survival rates for businesses using PEOs and compares them to national data available from the U.S. Bureau of Labor Statistics (BLS). Applying a variety of different data specifications, we consistently found that PEO clients have lower employee turnover rates and lower rates of business failure than comparable national averages, after controlling for factors such as industry, size, and state of location.

The employee turnover rate for PEO clients is 10 to 14 percentage points lower per year than that of comparable companies (see Table 1), depending on data specification.

The average overall employee turnover rate in the United States was approximately 42 percent per

year, based on 2012 data. It is 28 to 32 percent for companies that used PEOs for at least four quarters.

Businesses that use PEOs are approximately 50 percent less likely to fail (permanently go “out of business”) from one year to the next when compared to similar companies in the population as a whole (see Table 2). The overall business failure rate among private businesses in the United States as a whole³ is approximately 8 percent per year, based on 2012 data. It is approximately 4 percent per year for those companies that used PEOs for at least four quarters.

Data broken down by specific industries point to “Professional, Scientific, and Technical Services,” “Construction,” and “Finance and Insurance” as being three industry categories that disproportionately benefit from PEO services in both lower employee turnover rates and lower business failure rates.

Across all industries, the results reflect clear advantages for PEO clients on two of the most fundamental issues faced by any business: retention of employees and continued survival. PEOs significantly decrease employee turnover for their clients, allowing them to retain the knowledge and skills of their employees, while simultaneously reducing direct and indirect turnover-related costs (which are substantial). The fact that PEOs significantly increase the likelihood of client survival is likely a result of PEOs providing a combination of services that makes it possible for businesses to focus on their core areas of expertise.

Table 1. Average differences in actual and expected employee turnover rates, PEO clients, 2012.

	2012 (%)
Expected turnover rate (U.S. overall) ¹	41.6
Difference for PEO clients, controlling for industry	-9.7
Difference for PEO clients, controlling for company size group	-13.5

Table 2. Average differences between actual and expected annual business failure rates, PEO clients, using most conservative data specification.

	Annual Business Failure Rate (%)
Expected business failure rate (U.S. overall) ²	8.0
Difference for PEO clients, controlling for industry	-4.0
Difference for PEO clients, controlling for state	-4.1

Findings

Employee Turnover Rates

Employee turnover generates a variety of costs to employers, both direct and indirect. These include all costs related to hiring replacement employees, onboarding costs, and opportunity costs incurred during the period when positions are vacant.

For many positions and many businesses, however, the (indirect) impact of losing the skills, knowledge, and expertise of valued employees may be significantly larger than any other (direct) turnover-related costs.

The exact cost of turnover is difficult to estimate, as it varies so significantly depending on specifics. A frequently cited estimate based on a “Cost of Turnover” worksheet⁴ provided by the Society for Human Resource Management (SHRM) is that costs are roughly 150 percent of the employee’s salary, with other calculations suggesting it is more than 200 percent for certain positions, such as managerial and sales jobs.⁵ At the other end of the spectrum, alternative “conservative” calculations by O’Connell and Kung estimate the average cost of replacing an employee to be roughly \$14,000 each.⁶

Regardless of which estimate is used, it is clear that the costs of employee turnover are quite significant, and that a business that enjoys a higher employee retention rate than its competitors is in a stronger position to survive and thrive over the long term.

Overall annual results for 2012 are reported in Table 3, with results reported by quarter in Table 4. **In 2012, PEO clients had annual employee turnover between 10 and 14 percentage points lower than the national average of 42 percent per year, depending on the comparison group used.**

We also analyzed differences by industry. We did not have sufficient numbers to reliably calculate turnover differences for industries with fewer companies included in the analysis data file, and due to small sample sizes, we view these industry split results as suggestive rather than definitive. Figure 1 presents differences between expected and total employee turnover⁹ by industry for the six largest industries¹⁰ in the analysis data. Among these largest industries, we found that the largest salutary effects of PEOs on turnover rates occurred in “Professional, Scientific, and Technical Services” (23 percentage points lower) and “Construction” (17 percentage points lower). Smaller differences were observed in “Manufacturing” (2 percentage points lower) and “Health Care and Social Assistance” (6 percentage points lower).

Business Survival and Failure Rates

The ranges of aggregated actual versus expected survival values are reported in Table 5. **The positive values throughout the table indicate that PEO clients are more likely to survive, and less likely to fail, than similar companies in the population as a whole (controlling for year of inception, analysis year, and other factors, as indicated in the table), regardless of which analysis specification is being applied.**

The survival data indicate that 8 percent of all businesses fail each year. For PEO clients, the comparable percentage is between 2.1 and 4 percent, depending on the exact specification. Thus, annual business failure rates among PEO clients range from 4 to 5.9 percentage points lower than the

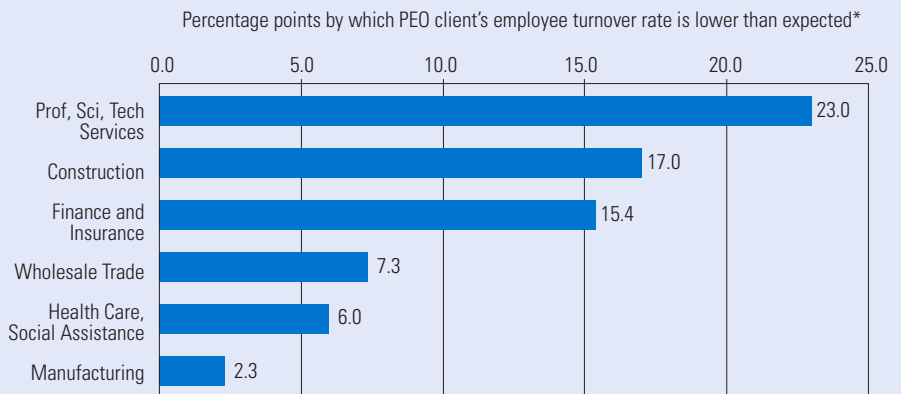
Table 3. Average differences in actual and expected employee turnover rates, PEO clients, 2012.

	2012 (%)
<i>Expected turnover rate (U.S. overall)</i> ⁷	41.6
Difference for PEO clients, controlling for industry	-9.7
Difference for PEO clients, controlling for company size group	-13.5

Table 4. Average differences in actual and expected employee turnover rates, PEO clients, by quarter.

	2012 Q1	2012 Q2	2012 Q3	2012 Q4
<i>Expected turnover rate (U.S. overall)</i> ⁸	9.9	10.5	11.3	9.9
Difference for PEO clients, controlling for industry	-3.1	-2.5	-3.3	-0.8
Difference for PEO clients, controlling for company size group	-4.4	-3.6	-3.4	-2.1

Figure 1. Differences between actual and expected employee turnover rates, PEO clients, by industry.



* Larger numbers indicate greater advantage for PEO clients in that industry (i.e., lower employee turnover).

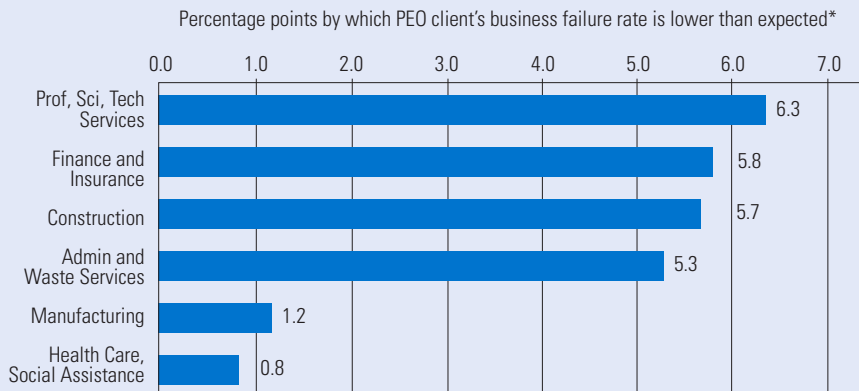
Table 5. Average differences between actual and expected business failure rates (%), PEO clients, multiple specifications.

	Data Used in Analysis		
	Only companies with fully valid corporate status data	More conservative specification (also includes invalid inactives)	Most conservative specification (also includes additional unknowns)
Expected business failure rate (U.S. overall) ¹¹	8.0	8.0	8.0
Difference for PEO clients, controlling for industry	-5.8	-4.3	-4.0
Difference for PEO clients, controlling for state	-5.9	-4.4	-4.1

Table 6. Average differences between actual and expected business failure rates (%), PEO clients, by year, using most conservative specification.

	2010	2011	2012	2013
Expected business failure rate (U.S. overall) ¹²	9.2	7.8	7.7	7.6
Difference for PEO clients, controlling for industry	-6.2	-2.7	-4.2	-3.6
Difference for PEO clients, controlling for state	-6.4	-2.8	-4.6	-3.3

Figure 2. Differences in actual and expected annual business failure rates, PEO clients, by industry, using most conservative specification.



* Larger numbers indicate greater advantage for PEO clients in that industry (i.e., lower business failure rates).

the largest effects of PEOs on business failure rates occurred in “Professional, Scientific, and Technical Services” (business failure rate 6.3 percentage points lower than expected) and “Finance and Insurance” (5.8 percentage points lower). Smaller differences were observed in “Health Care and Social Assistance” (0.8 percentage points lower) and “Manufacturing” (1.2 percentage points lower).

Analysis Specifications

Employee Turnover Rates

We selected a stratified random sample of 1,000 companies from the Slavic database for analysis of employee turnover rates. (Because Slavic firms tend to be larger than average establishments nationally, we chose a sample designed to include a larger percentage of the smaller firms in the Slavic database). To enable quarterly turnover analysis, all companies in the sample were required to have at least one employee payroll record in each quarter from 2012 Q1 to 2013 Q1. This allowed us to analyze employee turnover for 2012, the most recent full calendar year available for analysis in the Slavic database.¹⁰ Based on this definition, turnover is being calculated only for companies that are current PEO clients.

We examined employee-level records from 2012 Q1 to 2013 Q1 for all employees for each company included in the sample. The periodicity of payroll records varied across companies; some reported multiple times per month for each employee, while others reported less frequently. We

rates for the population as a whole (50 percent or more lower). The results are quite consistent whether companies are compared to expected survival for their respective industries or states. Even using the most conservative analytic approach, the business failure rate is 50 percent lower for businesses using PEOs than for businesses overall, as highlighted in Table 6.

It should be noted that the survival rates calculated for PEO clients reflect a relatively short-term effect of using PEO services (for example, the longest difference in the analysis file between

PEO use and calculated survival would be slightly over four years, for a firm using PEOs for four quarters in 2008, and then having its survival assessed in 2013 Q1).

We also examined industry-specific differences to identify which industries see the largest and smallest impacts from PEO services. We did not have sufficient numbers to reliably calculate survival variations for industries with fewer companies included in the analysis data file. Figure 2 presents differences between expected and total business failure rates¹³ by industry for the six largest industries available¹⁴ in the analysis data. Even for these larger industries, due to the smaller sample sizes, we recommend viewing these results as suggestive rather than definitive.

Among these largest industries, we found that

chose to conduct a quarterly analysis based on the expectation (from guidance provided by Slavic401k) that companies would report at least one payroll record per quarter for each individual employee.

Any quarter in which an employee had a payroll record in the Slavic database was interpreted as a quarter in which that employee was employed by a given company. Any quarter in which an employee did not have a payroll record in the Slavic database was interpreted as a quarter in which that employee was not employed. If an employee went from employed status in one quarter to not employed status in the following quarter, that was considered a “separation” (or turnover) for the first quarter. For example, if an employee was employed by Company 1 in 2012 Q1 and 2012 Q2, but not employed in 2012 Q3, that employee was classified as having separated (left the employment of) Company 1 sometime in 2012 Q2.

Consistent with the BLS definition of separation rate, we then divided the total number of separations in each quarter by the total level of employment (number of different employees) for each company to calculate a quarterly turnover rate.

We then compared each company’s turnover rate to the overall national average broken down by two variables. For turnover data, national data are available by industry and by size (but not by state). There are a number of key differences in the BLS industry data and the BLS size data. The industry data are official BLS data and are not seasonally adjusted to account for regular seasonal fluctuations in employment levels. In this way, they are a better match for the data derived from the Slavic file, which are also not seasonally adjusted. However, some of the industry groups used for the BLS industry data do not precisely match the standard industry categories available for the companies in the data file.

The data by size are relatively new and are classified as “experimental” (unpublished) data by BLS and are seasonally adjusted.¹⁹ It should also be noted that these data are calculated at the “establishment” (typically location) level, while the Slavic data are primarily at the firm level (and could therefore include multiple establishments). This should not affect the capacity to compare turnover rates overall, although there could be some effect on specific size-based breakdowns.

The analysis by company size was conducted on the full 1,000-company sample. The analysis by industry includes 742 companies, excluding those firms for which available industry information from the Dun & Bradstreet corporate database was either not available or did not align with the BLS industry groups used for reporting turnover.

Business Survival and Failure Rates

We analyzed annual year-over-year business survival and failure from 2010 to 2013 for all “company-years” (e.g., Company 1 in 2012, Company 1 in 2013, Company 2 in 2013) in the Slavic database that had the following characteristics:

- Starting in 2008 Q1 (the beginning of the available data from Slavic), at least four consecutive quarters of using PEO services at any point *prior to* the year being analyzed;²⁰
- Located in one of the 24 states with the largest number of company records in the Slavic database and company status data available through state databases;²¹ and
- Incorporated in 1994 or later (1994 is the earliest year for which BLS has survival rates available for later years).

For each company-year that met the criteria above, we then determined the firm’s survival status and assigned a “survival status value.” Companies that were still active in the Slavic file at the end of 2013 or those classified as “active” (or similar, such as “good standing”) in the state

Methodology

Data Used

The foundation of our data analysis was based on data provided by Slavic401k, a major third-party administrator of 401(k) retirement plans that specializes in providing such plans for PEO clients. Slavic’s large scope ensured that these data represented a broad cross-section of companies that use PEO services. The data included more than 12 million employee payroll records and more than 5,000 PEO client companies from 2008 to 2013.

The Slavic data were used to determine the following information about PEO client companies:

- When PEO services were used;
- The number of unique employees, by quarter (including information on whether each employee remained employed from one quarter to the next);
- Whether the company was known to be active (i.e., still a Slavic client) as of the end of 2013; and
- Basic company information (name, location, and date of incorporation).

The data were then matched with additional company-level information, drawn from the following sources:

- Dun & Bradstreet corporate database for information on each company’s industry, as well as supplemental information about date of incorporation; and
- Separate state-level databases (typically maintained by the office of the secretary of state in each state)¹⁵ for information about the current corporate

status of those companies that exited the Slavic database before the end of 2013 (i.e., whether the company is currently “active” or “inactive”).¹⁶

Finally, we compared aggregated results from the company-level data above to national averages drawn from the following publicly available BLS data:

- Business Employment Dynamics statistics for year-to-year firm survival rates, based on firm date of inception, and including breakdowns by year, state, and industry; and
- Job Openings and Labor Turnover Survey (JOLTS) data for average turnover rates by month, including breakdowns by firm size and industry.

While we took a variety of steps in the analyses described below to ensure that the comparisons between the Slavic companies and the overall U.S. population were as valid as possible, it should still be noted that it is possible that Slavic clients are not representative of PEO clients as a whole. Most notably, it may be that clients that offer 401(k) retirement plans to their employees vary in other respects as well when compared to clients that do not offer such retirement plans. However, because nearly all PEOs (98 percent) offer some type of retirement plan to their clients,¹⁷ we are comfortable that the Slavic401k data are indeed reasonably representative of the clients of the PEO industry overall.

corporate database through the first quarter of a given year were considered to have “survived” and were assigned a survival status value of 100 (percent).

Companies that were classified as “inactive” (or “not in good standing”) were assigned a survival status value of 0 for the first calendar Q1 in which they were no longer active (this date was determined based on state-provided information on last date of corporate activity). A survival status value of 0 is assigned for a single year to each inactive company for the year in which the business was determined to have failed and the company is then excluded from analysis in all subsequent years.

Because the characteristics of the companies available for analysis from the Slavic database do not match national averages (for factors such as year of inception, state, industry, and size), we compared each company’s survival status value with BLS’s reported average national “survival rate of previous year’s survivors” for the appropriate analysis year and inception year cohort, broken down by either industry or state. This allowed us to calculate, for each company-year, the difference between its actual survival status and its expected survival status. Calculating the rates in this way ensures that differences in industry or state distribution across companies in the analysis database do not affect aggregate results. Finally, when we aggregated the company data to overall averages, we weighted the sample by size group to be consistent with the size distribution of companies in the United States.

So, for example, if Company 1 survived into 2012, its survival status value would be 100 for 2012. If the average survival rate of previous year’s survivors was 95.5 percent in Company 1’s industry, the difference between actual and expected survival status, based on industry, for Company 1 would be 4.5 for 2012. If Company 1 did not survive into 2013 and the average industry survival rate of previous year’s survivors was 97.1, the difference between actual and expected survival status would be -97.1 for 2013. We then convert these survival numbers into their corresponding business failure rates for purposes of discussion.

When differences between actual and expected survival rates are averaged across all firms in the analysis database, a positive average survival number indicates that PEO clients have a higher-than-expected rate of survival and a lower-than-expected rate of business failure. A negative average survival number would indicate that PEO clients have a lower-than-expected rate of survival and a higher-than-expected rate of business failure.

Data Issues

We calculated survival rates using multiple specifications that were designed to account for the effects of various imperfections in the available data. There were two major categories of imperfections:

- Some inactive firms had apparent mismatches between date of incorporation and date of corporate failure (e.g., the listed failure date was earlier than the listed date of incorporation); and
- The status of some companies was not available or could not be found in the state corporate databases; these companies were classified as “unknown” in the original analysis file while additional adjustments were made subsequently, based on further company-by-company research.

Multiple analysis specifications

The alternative specifications we used were designed specifically to adjust for factors that could be overstating advantages for PEO clients.

In particular, because the first category of mismatches cited above only affected inactive firms (it affected approximately one-third of all inactive firms in the analysis file), it would have the effect of overestimating survival rates and underestimating failure rates for PEO clients when those invalid records were (of necessity) excluded from the original analysis file. So, for one (more conservative) alternative specification, we calculated a “worst case scenario” in which *all* of the affected firms were classified as “business failures” that had failed in one of the four analysis years (randomly assigned to occur equally across the four years, with no corresponding survival in any previous years added to the database).

The underlying effect of the second data issue above (companies with an operational status of “unknown”) was less clear, as it was not known whether these “unknown” companies were primarily active or inactive. Nevertheless, it seemed likely that some significant percentage of this set of companies would be inactive. For companies affected by this issue, we therefore conducted additional research in an attempt to ascertain the status of those companies not available through the state databases. This research included web searches as well as telephone calls to business phone numbers in an attempt to ascertain current status. A second (“most conservative”) alternative specification included as many as possible of these “unknown” companies, classified as either active or inactive. For inactive companies,

we followed the same conservative technique as we did for the mismatched invalid companies—we assigned business failure to each firm in one of the four analysis years (and did not consider the firms to have survived in any other years).

In addition, apart from the issues above, the BLS data on survival rates also had quality issues that primarily affected certain industries and certain data for the year 2013.²² We communicated directly with BLS to understand the source of the issues, with a particular focus on some reported BLS data that were clearly erroneous. Based on their explanation and guidance, we chose to exclude certain data points from the analysis, although it was not possible to entirely remove the effects of the problem from the BLS data in this area.²³ It should be noted that all of these errors tended to overestimate national survival rates as reported by BLS (and thus *reduce* the estimation of any advantage PEOs might provide to their clients).

Overall impact of data issues and multiple analysis specifications

The data uncertainties described above make it unclear which analysis specification is most accurate. Taken together, however, the three specifications (as well as separate calculations using state and industry comparisons) provide a range of estimates of survival rates among PEO clients that can be viewed as providing a floor and ceiling on the actual number. The first specification in Table 5 overstates survival (because we know it excludes some inactive companies due to inconsistencies in their data). The second and third specifications, however, likely understate actual survival, because they assign corporate failure dates to inactive companies without allowing for the possibility that they had first survived for any years prior to their failure. As noted, the unquantifiable errors in the BLS data also have the effect of understating any advantage that PEO clients might have in terms of reducing business failure.

We rely on the most conservative specification (listed in the right column of Table 3 as the most analytically responsible for summarizing the analysis results) because it yields the lowest estimates of the advantage generated by PEOs. We use this specification as the basis for all of Tables 2 and 6. This file is also the largest sample, including 4,508 company-years when compared with industry survival rates and 4,798 company-years when compared with state survival rates.

Endnotes

- 1 Sum of monthly turnover rate average for all private employers, as reported by BLS.
- 2 U.S. overall number controls for year of inception, year of analysis, and industry, and is weighted identically to the sample weighting described in this report.
- 3 For purposes of this paper, we define “business failure rate” as the percentage of businesses that do not survive in a given year. On average, 92 percent of all businesses from one year survive into the following year, so the business failure rate is, correspondingly, 8 percent annually.
- 4 The SHRM worksheet is available at www.shrm.org/templatestools/samples/hrforms/articles/pages/1cms_011163.aspx.
- 5 William G. Bliss, “Cost of employee turnover,” *The Advisor* (2004). <http://hrtogo.com/pdf/turnover-cost.pdf>.
- 6 Matthew O’Connell and Mei-Chuan Kung, “The Cost of Employee Turnover,” *Industrial Management* 49:1 (January/February 2007).
- 7 Sum of monthly turnover rate average for all private employers, as reported by BLS.
- 8 Sum of monthly turnover rate average for all private employers, as reported by BLS.
- 9 Reported differences are the averages of company differences from expected turnover compared to industry averages and size group averages. They are calculated only for companies with expected values based on both their industry and size group (this excludes some industries for which comparable data are not available in the BLS-reported industry turnover data; “Administration and Waste Services” is the largest such industry in the data file).
- 10 Sample sizes for these industries (based on the size group analysis) were: “Professional, Scientific, and Technical Services” (172); “Health Care and Social Assistance” (112); “Finance and Insurance” (86); “Manufacturing” (81); “Wholesale Trade” (61); and “Construction” (60).
- 11 U.S. overall number controls for year of inception, year, and industry, and is weighted identically to the sample weighting described above.
- 12 U.S. overall number controls for year of inception, year, and industry, and is weighted identically to the sample weighting described above.
- 13 Reported differences are the averages of company differences from expected failure rates compared to industry averages and size group averages. They are calculated only for companies with expected values based on both their industry and size group (this excludes some industries for which comparable data are not available in the BLS-reported industry data; “Administration and Waste Services” is the largest such industry in the data file).
- 14 Unweighted sample sizes for these industries were: “Professional, Scientific, and Technical Services” (1,105); “Health Care and Social Assistance” (461); “Administrative and Waste Services” (458); “Manufacturing” (400); “Finance and Insurance” (354); “Construction” (335).
- 15 This process involved searching state records by company name and location. In those cases in which exact matches were not found, we examined a variety of other measures, including date of incorporation, similarity of name, and geographic proximity of reported location. We used a conservative methodology in which we did not classify a company as a match unless we had significant certainty that we had located the same entity, even if some specifics were not exact matches.
- 16 All companies still active in the Slavic database at the end of 2013 were, by definition, classified as active for purposes of the analysis in this paper, which ends in 2013.
- 17 NAPEO, *2013 Financial Ratio & Operating Statistics Survey*.
- 18 As discussed below, to determine employee separations, turnover analysis requires employee data from at least one quarter after the analysis period, so 2013 analysis was not possible based on the available data.
- 19 The firm size data break companies into six categories: 1 to 9 employees; 10 to 49; 50 to 249; 250 to 999; 1,000 to 4,999; and 5,000 or more employees.
- 20 Use of PEO services for a given quarter was determined by the presence of at least one payroll record in the Slavic database.
- 21 Because company status needed to be determined through manual research in each state’s unique online corporate database, we selected the 25 states with the largest numbers of companies to maximize the number of companies included while reducing the number of states where it would be necessary to learn database details. Massachusetts was included in the original 25 states, but companies in that state were ultimately excluded from the analysis because corporate information provided by Massachusetts is insufficient to determine a company’s current status.
- 22 BLS indicated that the data problems stemmed primarily from two issues: year-to-year counts for companies with multiple establishments in a given state; and reclassification of some establishments from one industry category to another that had not been treated consistently across states.
- 23 We removed all BLS data reporting a survival rate of over 100 percent (a mathematical impossibility) as well as all data from a small number of industries classified by BLS as most affected by the error. Other data also overstated survival rates, but it was not possible to quantify the extent of the error, so we used all remaining data.

About McBassi & Company

McBassi is an independent analytics and research firm that helps clients create consistently profitable and enlightened workplaces. McBassi uses the language and tools of business—metrics and analysis—to build successful organizations by optimizing the power of their people. McBassi's principals (Dr. Laurie Bassi and Dan McMurrer) are co-authors of "Good Company: Business Success in the Worthiness Era" (winner of the 2012 Nautilus Gold Award for Business/Leadership) and the "HR Analytics Handbook."

About the Authors

Dr. Laurie Bassi is CEO of McBassi and a global leader in the field of applying analytics in the world of HR. Laurie is the author of more than 90 published papers and books and was previously a tenured professor of economics and public policy at Georgetown University. She holds a Ph.D. in economics from Princeton University.

Dan McMurrer is the chief analyst at McBassi. An analytics expert, Dan focuses on researching the relationship between organizations' work and learning environments and their business results. He holds an M.P.P. in public policy from Georgetown University.



National Association of Professional Employer Organizations

707 North Saint Asaph Street

Alexandria, VA 22314

703/836-0466

www.napeo.org