What Matters More: Business Exit Rates or Business Survival Rates?

By Brian Headd, Alfred Nucci and Richard Boden

One of the most frequent questions asked of a small business researcher is: "What percent of businesses fail?" This most often comes from policymakers, the press, or others interested in the overall health or weakness of the economy. The response starts with, "Do you mean how many businesses fail every year, or do you mean what percent of new businesses fail after a certain period of time?"

Good answers to both questions used to be much harder to come by. The U.S. Census Bureau Center for Economic Studies' recently released Business Dynamics Statistics (BDS) has made answering both of these questions easier, and it has made interesting conclusions apparent as well. The technical answer to the first question is given by the business exit rate, which shows the rate of exit of all existing businesses. The second question is addressed by the business survival rate, or the percentage of a cohort of businesses that started at the same time that remain in business for a set length of time.[1]

For this analysis, establishments (employer locations) are used as a proxy for firms (aggregations of all establishments owned by a parent company). BDS uses establishments as its unit of analysis but does segment them by employment size of firm and firm age. While an imperfect proxy, the bulk of firms, and particularly young firms, have only one establishment, are small and more prone to turnover than larger, multi-establishment firms.

Chart 1 below shows establishment turnover declined from 1977 to the early 1990s, and except for a few spikes in exit rates around economic downturns (1980-1982, 1990-1991, 2001), entry rates (new / total establishments) and exit rates (closed / total establishments) moved together.[2] Spikes also occur around Economic Census years (years ending in 2 and 7) because of improved data collection.[3] Establishment entry rates seem to decline a few years before business downturns but with only a handful of downturns from 1977 to 2005, it is difficult to establish a definitive pattern. Entry rates have been generally higher than exit rates causing the number of establishments to increase over time. The entry rate for 2005 was 12.4 percent and the exit rate was 10 percent.

Establishment entry and exit (turnover) rates can show the speed with which outdated business ideas are replaced by new ideas and vigor; they may also reflect changing barriers to entry and exit, a response to current economic

[1] Using the BDS, we compare and contrast the concepts of business exit rates and business survival rates. One could use a corollary term for business survival such as business closure, but "survival" has the advantage of conveying a length of time in business and thus differentiating itself from a term representing all exits/deaths/closures/dissolutions in a quarter, year, etc.
[2] An establishment could be started or closed by a small firm or large firm and it could be started or closed by an independent single-location new firm or by a multi-location existing firm. In 2006, 99.7 percent of firms were firms with fewer than 500 employees and these firms averaged 1.08 establishments (compared to firms with 500 plus employees averaging 62.4 establishments per firm). And from 2005 to 2006, 86 percent of all establishment openings and closings were from firms with fewer than 500 employees.
[3] BDS includes almost all industries; similar to Census' County Business Patterns, but the Economic Census adding industries over the years, slowly improved the quality of the data from 1977 to 1992.

conditions such as how the credit market is changing and how the demand for goods and services is changing (i.e. growth and decline of specific industries), etc.

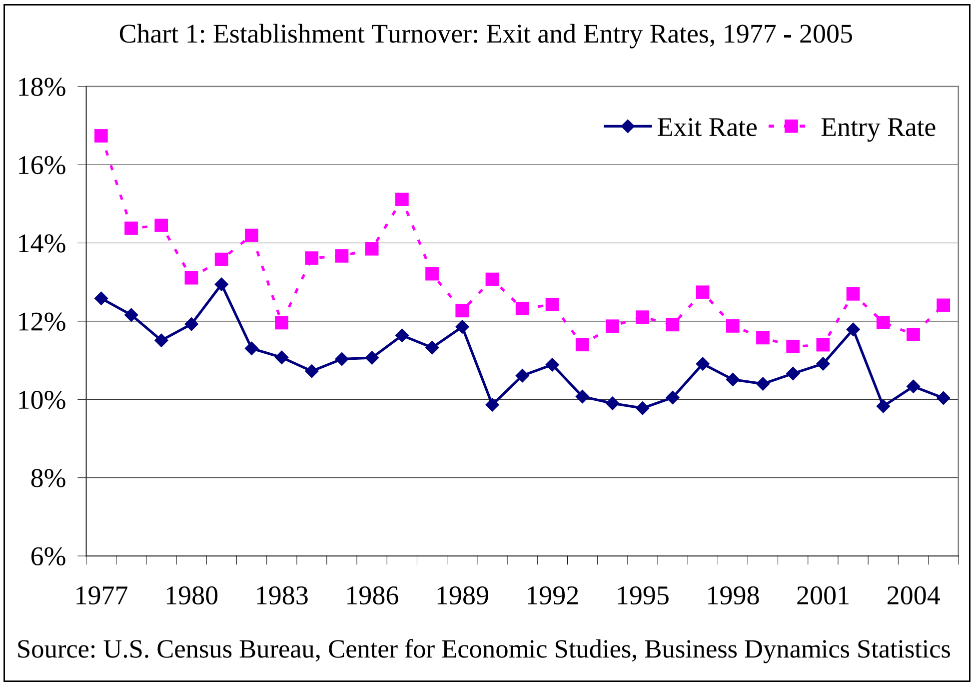

Chart 2 shows one-year and five-year establishment survival rates by firm birth year.[4] Survival rates (establishments started in beginning period that remain open by the end period / establishments started in beginning period) were volatile from the late 1970s to the late 1980s but have since become relatively stable. High or low survival rates in the first year were maintained through five years, meaning survival rate volatility compared to other ages occurs in the first year or so, but going forward, firms surviving beyond a year or so maintain similar survival prospects. One-year and five-year survival rates peak around downturns, showing an expected business cycle effect. The one-year survival rates for establishments born to firms started in 2004 was 76.4 percent and the five-year survival rates for establishments born to firms started in 2000 was 50.7 percent.[5]

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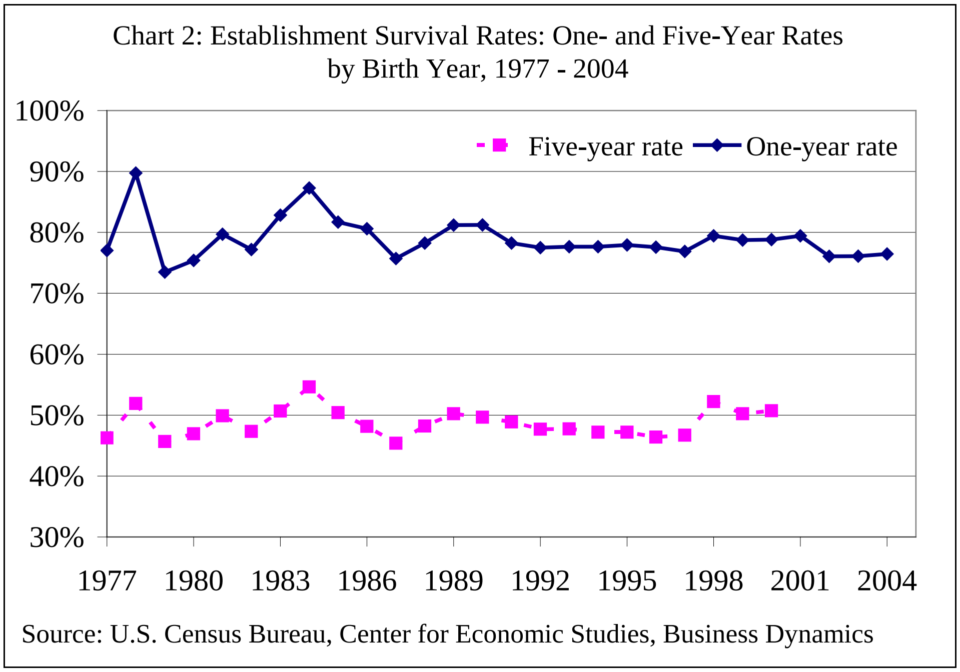
[4] The survival rates could be skewed by the rare occurrence of new firms opening multiple establishments in their first few years. However, Headd and Kirchhoff ("The Growth, Decline and Survival of Small Businesses: An Exploratory Study of Life-cycles," Journal of Small Business Management, forthcoming 2009) find only about one percent of new single-establishment firms become part of multiple establishment firms during the first five years.

[5] Technically, because the data is on an annual basis, one-year survival could be up to two-year survival.



Business survival rates, as a measure of the length of a business's life, can indicate the risks associated with starting a business, how the economy affects firms at different ages or life-stages, and so forth.

Both exit rates and survival rates are affected by the business cycle and shocks around Economic Census years in similar ways.

What matters more—business exit rates or business survival rates? It depends on whether you are an economist trying to determine the impact of the economy on existing businesses or a business management specialist trying to determine how the economy affects a business' survival. Fortunately, the U.S. Census Bureau's Business Dynamics Statistics contains data to evaluate both types of questions.

About the Business Dynamics Statistics

The Business Dynamics Statistics (BDS) is a product of the U.S. Census Bureau that measures business openings and closings, startups, job creation and job destruction by firm size, age, industrial sector, and state. The U.S. economy is comprised of more than 6 million establishments with paid employees. The population of these businesses is constantly churning — some businesses grow, others decline, and yet others close. New businesses constantly replenish this pool. The BDS monitors this activity to provide a picture of the dynamics underlying aggregate net employment growth. More information about the BDS can be found at www.ces.census.gov/index.php/bds/bds_home.

Author Bios

Brian Headd is an economist with the Office of Advocacy, U.S. Small Business Administration; Alfred Nucci is a former employee of the U.S. Census Bureau; and Richard Boden is an associate professor at the University of Toledo. The opinions expressed here are the authors' own.