### **BUSINESS DYNAMICS STATISTICS BRIEFING:**

# **Entrepreneurship Across States**

Third in a series of reports using data from the U.S. Census Bureau's Business Dynamics Statistics

#### February 2009

John Haltiwanger University of Maryland

Ron Jarmin U.S. Bureau of the Census

Javier Miranda U.S. Bureau of the Census



#### **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 http://www.ces.census.gov/index.php/bds/bds\_home

## **Entrepreneurial Activity Across States**

Newly released data from the U.S. Census Bureau, the Business Dynamics Statistics (BDS)<sup>1</sup>, permit unprecedented tracking of business dynamics for U.S. firms and establishments. This is one of several briefings to be released over the coming months to highlight some key features of these new data.

Analysts and policymakers want to understand entrepreneurial activity and the process of job creation, especially at the sub-national level. While it's generally accepted that entrepreneurial activity is crucial for innovation and growth, there are currently very few reliable data sources that permit comparison of different policy regimes across time and space on entrepreneurial success. One possible measure of entrepreneurial activity is the fraction of private sector, non-agricultural employment accounted for by young firms. This statistic can be measured across states in the BDS.

Figure 1 depicts the average percent of employment accounted for by young firms (less than three years old) for each of the fifty states and the District of Columbia over the years 2000-2005. This entrepreneurial activity statistic varies substantially across states. States at the top of Figure 1 (mostly from the Western and Southwestern regions of the country) have as much as 12 percent of employment accounted for by young firms. In contrast, states at the bottom of Figure 1 (mostly in the East and Midwest regions) have about 6 percent of employment accounted for by young firms.<sup>2</sup>

The entrepreneurial activity statistic depicted in Figure 1 is only one of many possible such statistics that can be constructed from the BDS or other

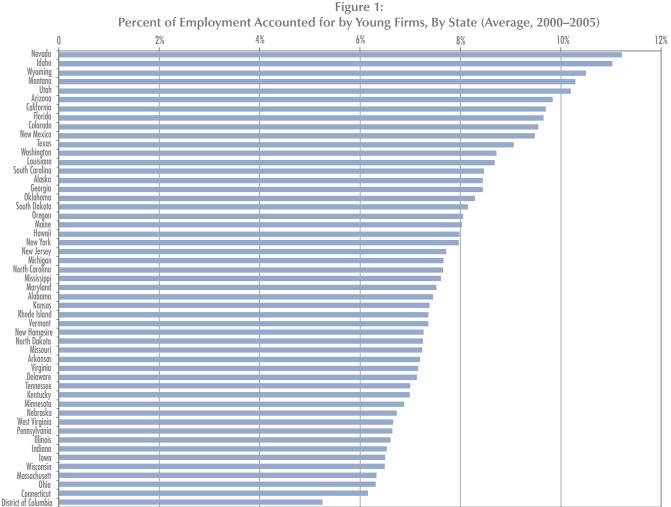
data sources. The purpose of this briefing is not to develop an "official" or even preferred measure of entrepreneurial activity, but to show the utility of the BDS for such purposes.

Further analysis shows that the entrepreneurial rankings in Figure 1 correspond closely to a ranking of states by average net employment growth. The simple correlation between the entrepreneurial activity statistic in Figure 1 and the average net employment growth of the state is 0.66. As such, caution must be used in interpreting this close relationship, as it is a correlation and not a causal relationship. Still it is interesting since employment growth comes from the expansion of existing firms as well as the opening of new ones.

A high fraction of employment accounted for by young entrepreneurial firms also is related to the overall (i.e., across all business age groups) dynamism of the businesses in the state. A measure of business dynamism for the state is readily available from the BDS by decomposing the net employment growth into the component from new and expanding establishments, and the component from exiting and contracting establishments. In the BDS, following the economics literature, the former is called gross job creation and the latter is called gross job destruction.<sup>3</sup> For the U.S. private sector, the BDS show that the average annual gross job creation rate over the 2000-2005 period is 16.4 percent of employment and that the average annual gross job destruction rate over the same period is 15.1 percent. Hence, the net employment growth rate for the U.S. private sector in any given year is accounted for by some

<sup>1.</sup> The BDS was developed at the Census Bureau's Center for Economic Studies with support from the Census Bureau and the Ewing Marion Kauffman Foundation.

<sup>2.</sup> The BDS permits examining the contribution of young firms defined in a variety of ways. For example, we also have ranked states based upon the fraction of employment from business startups. This alternative yields a ranking very similar to Figure 1. We also have looked at the analogue to Figure 1 by year and for longer sub-periods. The general pattern of Figure 1 with states from the West and Southwest at the top of the list is robust. There is variation in the ranking across years, which is obviously of interest. However, appropriate caution is required about the interpretation, because the variation across years in the ranking is highly correlated with variation in the net growth of employment in states across years.



establishments growing at a high rate while another

group of establishments are contracting at a high rate. These measures of job churning also are available on the BDS by state. Comparing these gross job flow measures at the state level along with the entrepreneurial activity statistic depicted in Figure 1 yields interesting patterns. High-entrepreneurial-activity states are also states that have high rates of gross job creation and job destruction. In other words, highentrepreneurial-activity states have a high degree of business dynamism as measured by the churning of jobs. At the state level, the correlation between the entrepreneurial activity statistic in Figure 1 and gross job creation is 0.83 and the correlation between the

entrepreneurial activity statistic and gross job destruction is 0.64.

This briefing highlights only one dimension of the Census Bureau's new Business Dynamics Statistics. The BDS includes measures of business startups, establishment openings and closings, and establishment expansions and contractions in terms of both the number of establishments and the number of jobs. The BDS data provide these new statistics for the 1977-2005 period on an annual basis with classifications for the total U.S. private sector, by broad industrial sector, by firm size, by firm age, and by state. Further information about the BDS can be found at: http://www.ces.census.gov/index.php/bds/bds\_home

<sup>3.</sup> For further discussion of the concepts of job creation and destruction, see "The Flow Approach to Labor Markets, Micro-Macro Links, and the Recent Downturn," (Steven J. Davis, R. Jason Faberman and John Haltiwanger), Journal of Economic Perspectives, Summer 2006

