

Using Census BITS To Explore Entrepreneurship, Geography, and Economic Growth

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This paper discusses three related research projects that used the Business Information Tracking Series (BITS). This set of data was developed by the U.S. Bureau of the Census with support from the U.S. Small Business Administration Office of Advocacy. The purpose of the report is to demonstrate the importance and usability of large micro databases such as the BITS that cover almost all U.S. private sector businesses, and track their employment and firm ownership annually from 1988 through 2001. It represents all industries, distinguishes between establishments and firms, identifies start-ups of both new firms and new secondary locations of old firms, and specifies the location, industry, and changing employment of each establishment through time.

Overall Findings

Empirical results using BITS data in three studies bore out the authors' contention that models of economic growth would be substantially improved by greater incorporation of theories of entrepreneurial activity. Variation in firm formation rates (defined as the number of net new firm divided by 1,000 labor force in a particular year) is substantially explained by regional differences in industry specialization, human capital, and local population and income growth rates.

Highlights

- The underlying theoretical framework for the empirical analysis includes three components: spatially constrained externalities, increasing returns in the production of goods, and decreasing returns in the production of knowledge.
- Using annual data on firm formation for 384 labor market areas, in six industry sectors between 1991-1998, the researchers found considerable variation in the new firm formation rate across regions, but little variation over time.
- The results suggest that the regional differences in service firm formation rates depend to a large degree on the educational requirements and the market served by the newly formed firms.
- From 1996-1999, new firm formation rate increases are associated with higher employment rate growth. This relationship holds for all periods examined and for all sectors of the economy, except for manufacturing.
- An increase in the number of high school graduates tended to increase overall growth rates for the period of 1996-1999. The research also find evidence that raising the overall level of education (high school graduation) has a greater impact on economic growth than raising the proportion of the adult population with college degrees, if new firm formation rates are held constant.

- Firm formation rates tend to be higher in regions with higher business specialization rates. In addition, it finds that greater physical density, defined as the number of establishments per square mile, of businesses in a region is also associated with less, not more, growth.

- Other longitudinal business microdata bases are available, but none is as useful as the BITS for tracking firms, and their establishments and employment dynamics. No other can detect new firm formations properly, since the United States lacks a national system for public registration of businesses. In addition, more and more businesses are not bothering with Yellow Page subscriptions or commercial credit applications.

- The primary limitation of the BITS data is that they are only available from 1988, with longitudinal linkage from 1989. As with all large business databases, the BITS inevitably has some imperfections in its tracking of establishments that are changing their ownership or legal form over time, and of firms that are creating, divesting, or closing secondary locations. Despite these weaknesses, the BITS provide far more accurate and comprehensive data on U.S. private sector businesses than any other source.

Data Sources and Methodology

The current Business Information Tracking Series data for 1990 to 1999 have been used to estimate regression models to test hypotheses from recent lit-

erature that are related to variables such as entrepreneurial activities, industrial specialization, human capital, localities, and economic growth. The final report was peer reviewed consistent with the Office of Advocacy's data quality guidelines. More information on this process can be obtained by contacting the director of economic research at advocacy@sba.gov or (202) 205-6533.

Ordering Information

The full text of this report and summaries of other studies performed under contract to the U.S. Small Business Administration's Office of Advocacy are available at www.sba.gov/advo/research. Copies are also available from:

National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161
(703) 487-4650, (703) 487-4639 (TDD)
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