

# Entrepreneurship in Western Kentucky

Bureau of Business and Economic Research

Spring/Summer 2008

## Why Entrepreneurship?

*Our focus this issue of the newsletter is entrepreneurship. There are several reasons for adopting this theme. First, entrepreneurship is an increasingly popular economic development strategy in rural communities across the country, and small businesses represent a growing proportion of the economic base in rural places. Second, we demonstrate some common techniques used to quantify the role of entrepreneurship in the local economy, as it can be difficult to measure. Third, we hope this data will be used as benchmarks in strategic planning throughout the region.*

Entrepreneurship is difficult to measure because of a lack of consensus on its definition. For most, entrepreneurship is associated with small, fast-growing firms producing technological products; according to this perspective, entrepreneurship is characterized by highly-educated persons, innovation and patents, and venture capital. A Kauffman Foundation study<sup>1</sup> tracking firms established in 2004 documents how this perspective might be misguided. Of surveyed firms:

- 2 percent owned patents in their first year of operation; 9 percent held copyrights;
- 60 percent had no employees, and less than 4 percent had 10 or more employees in the first year;
- 44 percent were started with no debt and only 11 percent had debt levels in excess of \$100,000;
- 80 percent had positive equity investment, but only 10 percent used external equity investments.

Two additional studies<sup>2</sup> of self-employment point to the fact that self-employment in rural communities has

<sup>1</sup> Ballou, Janice et al. 2008. "Kauffman Firm Survey: Results from the Baseline and First Follow-Up Surveys." <http://www.kauffman.org/kfs>

<sup>2</sup> Partridge, Mark, Ayesha Enver, and Jill K. Clark. 2008. "Growth and Change: Does Enhancing Ohio's Small Businesses and Entrepreneurs Provide the Key to Growth?" Swank Program in Rural-Urban Policy and The Exurban Change Project Summary Report. [http://aede.osu.edu/Programs/Swank/self\\_employment\\_2007.pdf](http://aede.osu.edu/Programs/Swank/self_employment_2007.pdf)

Goetz, Stephan J. 2008. "Self-Employment in Rural America: The New Economic Reality," *Rural Realities*, 2(3): 1-13.

been significantly increasing, especially since 2000. These reports also note that the average rural income of proprietors is less than one-half that of wage and salary workers. Collectively, these findings suggest that new businesses transcend high-technology industries, do not necessarily require vast financial resources, are increasing, and may not generate high incomes. In light of these results, we take a broader view of entrepreneurship that acknowledges all businesses start small, all self-employed persons and business proprietors incur risks associated with their businesses, and all successful businesses add value to the local economy. Under this view, any small business owner is an entrepreneur.

We use a combination of datasets available online for our analysis. The U.S. Census Bureau's Nonemployer Survey and County Business Patterns datasets contain firm data by employment class and industry. We exploit these datasets to present figures on self-employment and small business growth by industry. (When data for a particular industry is missing from a chart, it is because adequate data is not available to compute the information.) The U.S. Department of Commerce's Bureau of Economic Analysis also publishes data on proprietor income and employment, which we also utilize to compute measures of entrepreneurial breadth and depth. The Bureau has the county-level data for these datasets; please contact us if you would like this data for your county.

Several ways in which we hope you will use the data in this issue include:

1. Acknowledge the importance of small businesses;
2. Determine how your organization/local government can enhance small business success;
3. Identify opportunities for new business establishments based on growth trends and local needs;
4. Track small business statistics and local dynamics that affect entrepreneurs using the methodologies described.

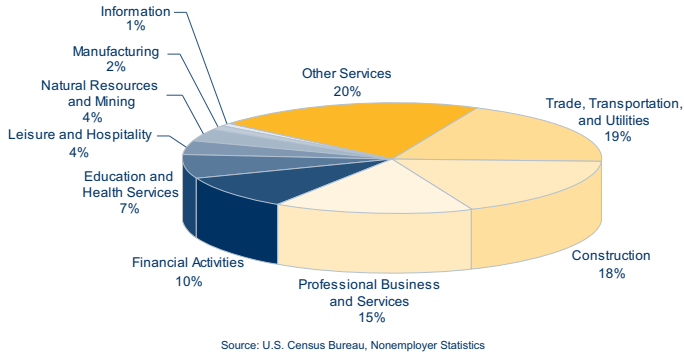
As you act upon these suggestions, know that Murray State University has numerous resources to equip local organizations to work with entrepreneurs and to enhance the success of entrepreneurs directly. We welcome you to contact the Bureau to learn more about putting these resources to work in your community.

## Contact BBER:

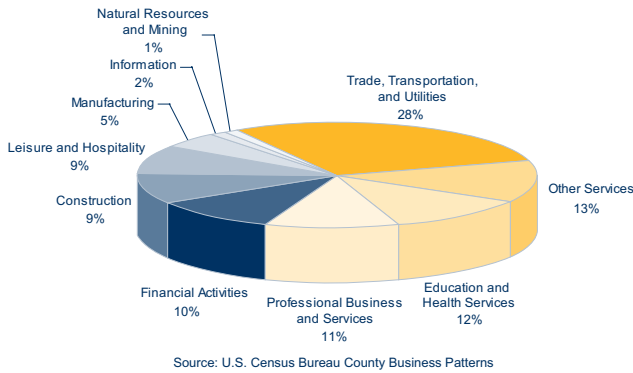
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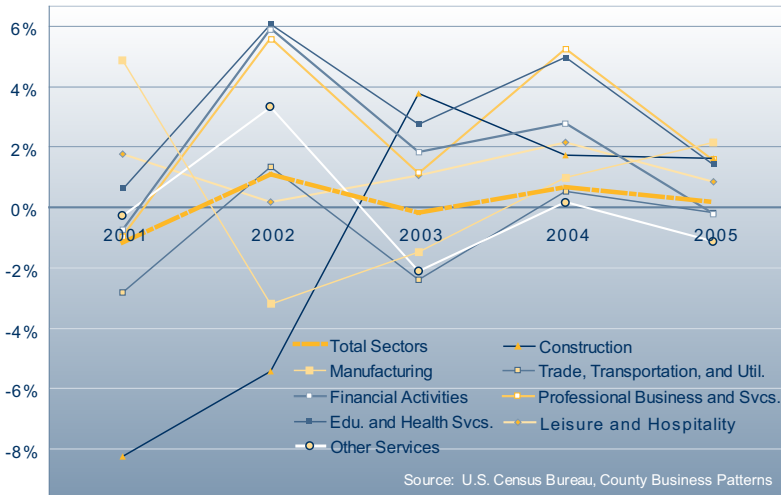
# Measuring Entrepreneurship



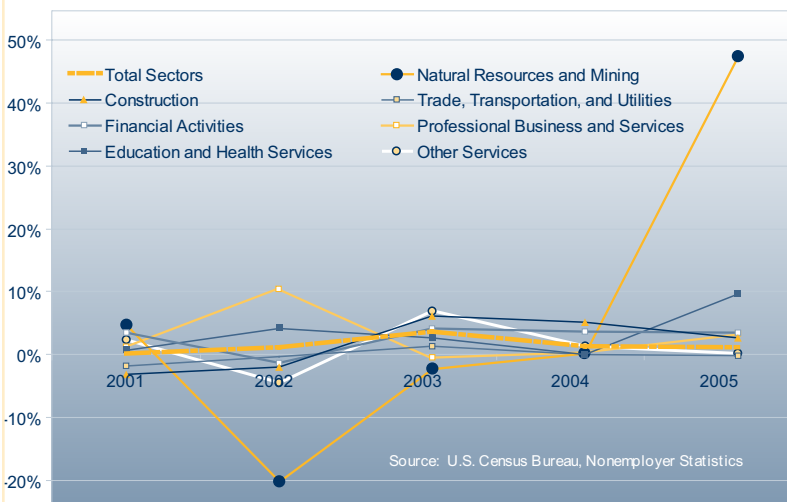
**Figure 1.**  
*Self-employment by industrial classification in western Kentucky*



**Figure 2.**  
*Small establishments by industrial classification in western Kentucky*



**Figure 3.**  
*Annual growth rates of small businesses by industrial sector.*



**Figure 4.**  
*Annual growth rates for self-employment by industrial sector.*

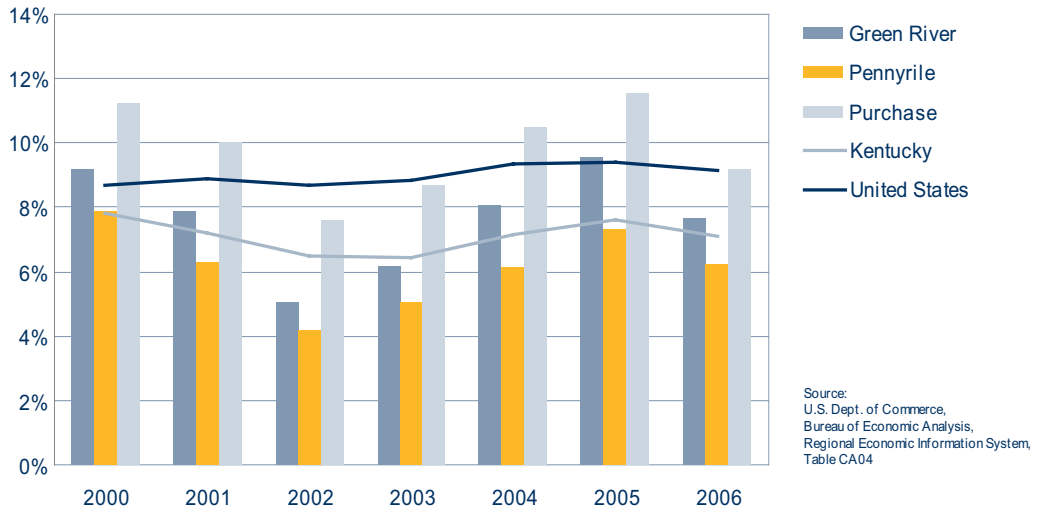
## Small Business and Self-Employment

— One way to measure entrepreneurial activity in a region is to report the number of firms that either have no employees (i.e., they represent self-employed individuals) or are “small” (for our purposes, small firms are those with 1-100 employees). In 2005, more than 99 percent of western Kentucky firms had less than 100 employees, so clearly this is an important component to our economy. Below, the industrial composition and growth in these segments of the economy are described. All data is for western Kentucky as a region, since the composition and growth trends across ADDs were very similar; the data is available at the county and area development district upon request. The self-employment data comes from the U.S. Census Bureau’s Nonemployer Statistics series, while the small business data comes from Census’ County Business Patterns.

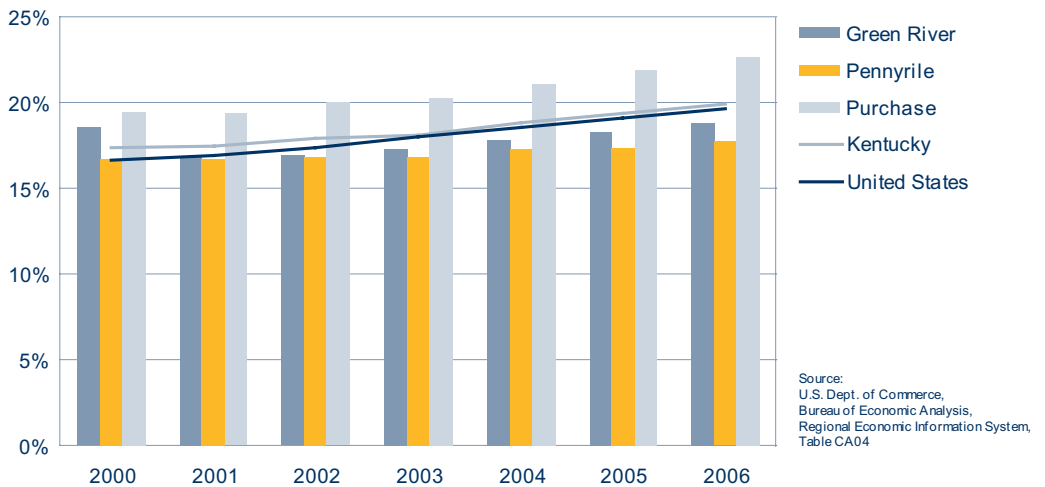
*Entrepreneurship is an important component to western Kentucky economy and is becoming more service-oriented.*

**Proprietors' income** — Available in the U.S. Bureau of Economic Analysis' Regional Economic Information System (REIS; <http://www.bea.gov/bea/regional/reis/>), proprietors' income is yet another way to measure entrepreneurial activity in a community. Two indicators, entrepreneurial breadth and depth, are discussed in the article on the back page. However, two additional indicators of entrepreneurship that provides insight into the value of business owners to the local economy are presented below: the proportion of total personal income generated by proprietors and income generated per proprietor.

**Figure 1. Percentage of total income generated by business owners by ADD.**



**Figure 2. Percentage of total employment that are proprietors.**



Comparing the employment and income trends of proprietors yields a shocking result: **proprietors represent proportionately more of the local employment than income.** The implication is that proprietors' income lag those in wage and salary positions in this region.

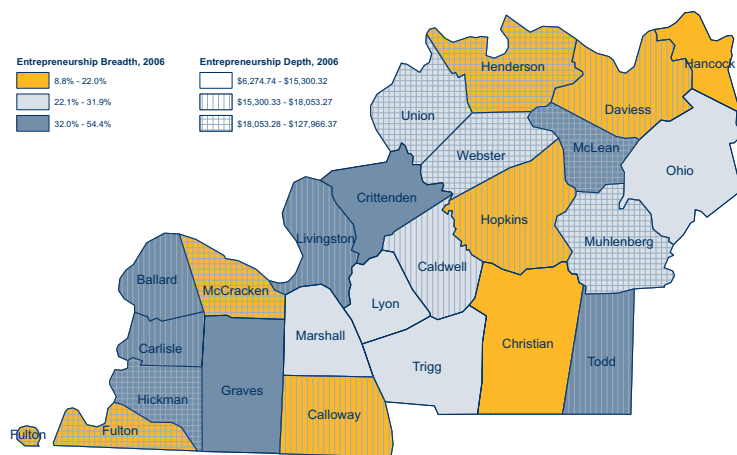
**STOP THE PRESS** -- Dr David Shideler has accepted a new position at Oklahoma State University. He is leaving his post as the Director of Bureau of Business and Economic Research. The Bureau appreciates his service for the last three years and wishes him success in his new position.

## Entrepreneurial Depth and Breadth

Common measures of entrepreneurship include the breadth and depth of entrepreneurial activity. Entrepreneurial breadth measures the proportion of employment that is proprietors in a community, and it gives insight into the general level of self-employment in the community. This measure is used to capture the quality of life dimension of entrepreneurship: coffee shops, antique stores, personal services. Higher entrepreneurial breadth suggests greater potential for entrepreneurial activity. Entrepreneurial depth indicates the income generating power of entrepreneurs in a locality. Calculated as the ratio of proprietor income to the number of proprietors, it measures the income-generating power of entrepreneurs in a locality. Higher per proprietor income indicates higher-value activity by the entrepreneurs, and this is the type of activity which generates economic prosperity. Together, breadth and depth describe the entrepreneurial climate of a community, capturing both the quality of life enhancing and high-value production of entrepreneurs. These measures are calculated for each county in the BBER region and interpreted below.

The figure below presents the most recent values of entrepreneurial breadth and depth for the 24 counties in the Bureau's service region. One will note that breadth was highest in the more rural counties of the region; Carlisle County had the highest breadth at 53.4% of employment, while Henderson County had the lowest breadth at 8.8% of employment. Breadth values for Kentucky and the United States were 19.9% and 19.7%, respectively. These trends are expected, as rural communities tend to rely more heavily on self-employment than their urban counterparts. Because of this dependence, it is important that rural communities seek to encourage self-employment to increase the quality of life and make the community more attractive to new residents and firms.

The geographic trends for entrepreneurial depth, however, do not follow



**Figure 1. Entrepreneurial Breadth and Depth by County, 2006**

the expected trend. High entrepreneurial depth was expected in the more urban counties, such as McCracken and Henderson Counties, because these locations have greater access to input suppliers and customers. However, Hickman County had the highest depth level for the region at \$127,966. In comparison, Henderson County has the highest depth among the urban counties at \$32,694. These results are likely due to the fact that they include

farm-based income. Per proprietor income for Kentucky in 2006 was \$18,350, and \$28,608 for the United States. Thus, entrepreneurs in our region are earning incomes higher than those of their counterparts across the commonwealth and the nation.

The entrepreneurial breadth and depth suggest some opportunities for growth/expansion. Local governments can be proactive in encouraging their self-employed, and in turn boosting their local economies.

For example, local governments can affect the risks associated with self-employment by ensuring technical assistance is available to entrepreneurs in their communities. Such technical assistance can also enhance the efficiency and productivity of small businesses, helping them to expand their output and achieve higher profits. The Bureau has contacts and resources available to aid you in bolstering entrepreneurship in your communities.