

Small Business Research Summary

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The Dynamic Relationship between Entrepreneurship, Unemployment, and Growth: Evidence from U.S. Industries

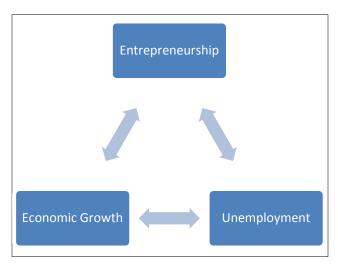
By Jose M. Plehn-Dujowich, Plehn Analytical Economic Solutions, LLC, Willow Grove, PA [30] pages. Under contract number SBAHQ-10-M-0204.

Purpose

Entrepreneurship, economic growth, and unemployment are interrelated: exactly how is the subject of this research. Does entrepreneurship lead to economic growth or vice versa? Does entrepreneurship lower unemployment, or does unemployment lead to entrepreneurship? Without the answers to such questions, policymakers may be attempting to treat the symptoms of economic problems rather than devising real solutions for unemployment or slow growth. Moreover, whereas economic growth and unemployment are often the focus of academic and media attention, the importance of entrepreneurship in this triad is often overlooked. The researcher examined ten U.S. industry sectors to determine whether there are "Granger-causal" relationships between entrepreneurship, economic growth, and unemployment.

Overall Findings

In about half of the industries tested, entrepreneurship and growth dampened unemployment, while unemployment spurred entrepreneurship and growth. The results indicate that entrepreneurship may be the spark for economic growth. Although the results are promising, the research shows that the three economic components are intertwined and that it is not consistently clear which component ignites or slows the cycle of entrepreneurship, economic growth, and employment. In many of the industries studied, the results were indeterminate and circular. Support for entrepreneurship can be a key to jumpstarting the economy, however.



Highlights

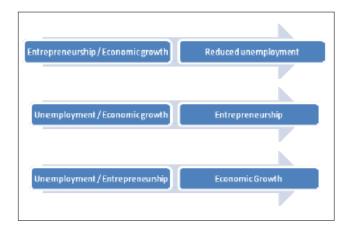
- Positive entrepreneurship from the previous year led to economic growth and decreasing unemployment in four of the ten industries studied. (Results were indeterminate in the remaining six sectors.) Clearly, one would expect that an increase in the number of businesses would lead to increased sales and hiring.
- But past growth also led to increases in entrepreneurship in four of the ten industries and decreased unemployment in six of the ten industries.
- And unemployment led to increases in entrepreneurship in three of the ten industries. This may suggest that increases in the number of unemployed led to lower wages, which in turn led to increases in the quantity of labor sought by employers.

This report was developed under a contract with the U.S. Small Business Administration, Office of Advocacy, and contains information and analysis that were reviewed and edited by officials of the Office of Advocacy. However, the final conclusions of the report do not necessarily reflect the views of the Office of Advocacy.

- Surprisingly, unemployment also led to growth in four of the ten industries. This result may reflect a business cycle effect in which economic growth tends to be strong just after a downturn following a period of high unemployment.
- Construction is most sensitive to the business cycle and was the leading indication of a slowdown in the most recent downturn. Construction exhibited declining employment in 2005, well before the National Bureau of Economic Research pegged the start of the recession at December 2007.

Scope and Methodology

The study estimates three equations, for entrepreneurship, growth, and unemployment, where the variables (lagged by one year) of the other two are used as dependent variables. This method is used to see what variable causes the cycle and which moves in reaction to the other variables.



The equations are run for ten major industries. The method is referred to as a Granger causality test, where a system of equations is used to show causation, rather than merely correlations. Data used for the report consisted of establishment entry and exit data from the Business Employment Dynamics database of the Bureau of Labor Statistics (BLS) to measure entrepreneurship, Census/BLS Current Population Survey data to create major industry-level unemployment rates, and value-added data by industry from the Bureau of Economic Analysis to track economic growth. The time period studied was 2000-2009, quarterly.

This report was peer-reviewed consistent with Advocacy's data quality guidelines. More information on this process can be obtained by contacting the director of economic research by email at advocacy@sba.gov or by phone at (202) 205-6533.

Ordering Information

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