The Journal of Entrepreneurial Finance

Volume 3
Issue 2 *Spring 2004*

Article 8

December 1994

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I. INTRODUCTION

Small businesses are the backbone of the economy and special attention to the needs of small businesses will lead to economic growth and job creation. There has been little research, however, on the economic factors that promote new business creation and survival. Most is focused on financial and human capital (see Brown, Hamilton, & Medoff, 1990 and Bruderl, Preisendorfer, & Ziegler, 1992). Only recently has attention turned to the identification of relevant economic factors.

Several researchers focus on one or two variables as being significant. Williamson (1987) found higher unemployment to be associated with higher business failures, a fact substantiated by Johnson (1986) and Evans and Leighton (1989). Hambrick and D'Aveni (1988) said that interest rates were positively correlated to business failures. Hudson (1989) looked at both unemployment and interest rates. He found the latter to be unrelated to business formations, but positively related to business failures. Unemployment was found to be significant in both instances.

II. CURRENT STUDY

The current study was undertaken to identify economic variables that could be identified as influential in new business formations and failures. Monthly formations and failures for each state, summed by regions and the entire USA, as reported by Dun & Bradstreet, are used. The time period is from January,

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The Journal of Small Business Finance, 3(2):177–179
ISSN: 1057-2287

1980 to October, 1991. Fourteen economic variables were selected from six categories: interest rates (Fed Funds, 180-day T-Bills, 30 year Treasury Bonds, Moodys Aaa corporate bonds), market performance measures (NYSE Index, S&P 500, DJIA), labor (total civilian labor force, unemployment rate), output (Industrial Production Index), prices (CPI, PPI), and other (U.S. Budget deficit or surplus, foreign trade balance). These data were collected from monthly Federal Reserve Bulletins as revised. The data were examined using four time periods: the entire data set, the recession of the early 1980's (January, 1980–December, 1982), the mid-80's growth period (January, 1983–December, 1988), and the recession just ended (January, 1989–October, 1991).

III. METHODS

Each economic factor was first used as an independent variable and regressed against the dependent variables of formations and failures to determine individual influence. Then, combinations of variables were used in multiple regressions. Each test was repeated lagging the variables six and 12 months to see if greater explanatory power was evident. A correlation matrix was created to examine relationships between economic variables and formations and failures.

IV. RESULTS

Interesting patterns of impact between time periods and between formations and failures are found. Contrary to other studies, unemployment was found to be negatively correlated to business formations over the 12 years and particularly so during both the growth period of the mid-1980's and the recent recession. This was also observed when the variables were lagged. A negative correlation in the 0.48 to 0.50 range was noted for interest rates during the growth period but a positive correlation exists during recessions. Of particular note is the fact that the U.S. Budget deficit had no impact on business formations. A "jump start" to the economy by increasing the deficit to create new jobs and businesses seems to be ineffective.

The combination of economic variables found to be most effective in explaining new business formations was Federal Funds, Aaa bonds, NYSE Index, Unemployment, IPI, PPI, and Foreign Trade Balance. When lagged 12 months, these variables explained 45 percent of new business formations.

Economic variables are found to be much more effective in explaining failures than formations. The combination of the 180-day T-Bill, 30 year Treasury rate, S&P 500, US Budget Deficit, Unemployment, IPI, CPI, and Foreign Trade Balance were able to explain over 80 percent of failures during recessions and 50 percent during the mid-80's growth period. Lagging these variables actually decreased the ability to explain failures. The variables with greatest impact on business failures are long-term interest rates, unemployment, and inflation.

V. SUMMARY

Fourteen economic variables are used to explain business formations and failures. While interest rates and unemployment are important, as previously found, they are not the only significant factors. It is noted that current government policy may actually work against new business formations and may marginally hurt the survival chances of current small businesses.

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