Entrepreneurs and Recessions: Do Downturns Matter?

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INTRODUCTION

The relationship between company success and economic conditions at the time of a company's founding is ill-understood. Do weak economic conditions at the start lead to fewer companies founded? Do weak conditions lead to fewer successful companies? Do companies founded in better economic times fare better than those founded during recessions? The answers to these questions are important because of the central role that entrepreneurial ventures play in our economy, from job creation, to innovation, to improvements in our overall standard of living and GDP.

RESEARCH QUESTION

To what extent is a company's founding date—with a particular focus on company cohorts from weak economic periods—related to its eventual financial success?

BACKGROUND

A cross-section of successful public companies were founded during recessions, including such recent examples as Genentech, Microsoft, Southwest Airlines, Genzyme, and many others. And prominent companies being founded during a recession are not just a recent phenomenon, with Morgan Stanley, Allstate, Krispy Kreme, and Knoll, among others, all able to trace their founding dates to the Great Depression.

This is an exceedingly complex issue, however, given the dearth of data and the level of granularity required. Nevertheless, at a high level we essentially are concerned with the relationship between the supply of companies ("births") by founding period, and the outcome achieved by those date-based founding cohorts over time.

To deal with this supply aspect, a few broad points can be made. The first is what we might call the scarcity argument. It says that fewer companies are founded during difficult economic times, so we can expect disproportionately fewer successful companies to emerge from that economically constrained population. Why might we expect fewer companies founded during recessions, for example? There are several reasons. First, entrepreneurs might decide to delay creating companies until the economy into which they anticipate selling products or services is more robust. This argument applies most strongly to entrepreneurs in service industries where there is little lag time from company founding until first product/service sale. If there is a longer lag between company founding and product launch, we might not expect entrepreneurs, all else being equal, to hesitate as much in starting their new ventures. Why? Because first revenues might be anticipated to more likely coincide with a resurgent economy.

There are other reasons to expect fewer companies to be founded during economic downturns. One has to do with entrepreneurs' unwillingness to leave their current places of employment during a weak economy. Another, and perhaps more compelling, obstacle to company founding in weak economic periods might be the limited availability of risk capital during such periods. To the extent that it is difficult to raise money for a new entrepreneurial venture, we might expect fewer companies founded during such periods.

The preceding touches mostly on supply issues—why we might (or might not) expect more companies to be founded during weaker economic periods. There also is a demand issue. Even if similar numbers of companies are founded, it is plausible that more of these companies do not achieve material financial success due to the poor economy at founding, thus leading to poorer longer-term outcomes for cohorts of companies founded during weak economic periods.

In summary, we can plausibly make three broad points. First, it is reasonable to expect that fewer companies will be founded during weak economic periods. Second, companies founded during those periods might be expected to fail at higher rates than companies founded during more economically receptive periods. Third, the combination of lower birth rates and higher failure rates would conspire to deplete company cohorts founded during recessionary periods.

DATA

The data set used for this study was a comprehensive list of all 8,464 companies that have gone public on U.S. markets from 1975 to 2006, inclusive.[1] It consisted of each company's name, founding date, initial public offering (IPO) date, and Corporate Reservation Service Provider (CRSP) identification. The founding dates of these companies ranged from 1831 to 2006.

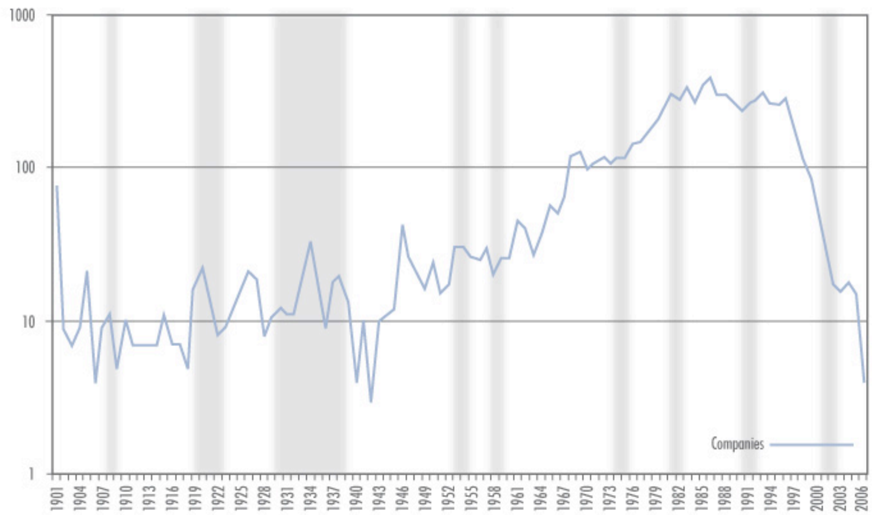
We also obtained a list of economic recessions from the National Bureau of Economic Research. There were nine such periods in the timeframe in question: 1907–1908, 1918–1921, 1929–1939, 1953–1954, 1957–1958, 1973–1975, 1980–1982, 1990–1991, and 2001–2003. All of these were matched against public company founding dates to create an organized data set to be analyzed.

[1] Source: The Field-Ritter data set of company founding dates, as used in Laura C. Field and Jonathan Karpoff, "Takeover Defenses of IPO Firms," in the October 2002 *Journal of Finance*, Vol. 57, No. 5, pp. 1857-1889, and Tim Loughran and Jay R. Ritter, "Why Has IPO Underpricing Changed Over Time?" in the Autumn 2004 *Financial Management*, Vol. 33, No. 3, pp. 5-37.

ANALYSIS

The following graph shows the number of companies that went public per founding year across each expansionary and recessionary economic period (which are marked with gray bars). Note that the y-axis scale is logarithmic.

Figure 1: Economic Downturns and IPOs:
1900-2006



As the preceding graph shows, when viewed through the lens of companies that went public after 1975, there is seemingly little discriminate power in comparing companies in recessionary and non-recessionary periods. We can’t know, of course, how many companies were founded in those respective periods, which would help us understand the death rate of companies founded during recessionary and non-recessionary periods, but at least in terms of their eventual propensity to do an initial public offering, there is no obvious difference at this level of analysis.

Another way of studying the data is to look more closely at the number of companies from recessionary and non-recessionary periods in the post-1975 IPO data. By comparing the relative numbers from each founding cohort we can see whether there is a material difference in terms of expansionary and recessionary entrepreneurship years in producing more companies in the post-1975 IPO group.

The following table summarizes the analysis. We stratified the data along two lines—All Years and Post-War—to better eliminate the impact of WWII and the Great Depression. The resulting figures are companies per year from expansion- and recession-year cohorts.

Figure 2: Companies by Founding-Year Economic Cohort

Conditions	All Years	Post-War
Expansion	83	138
Recession	70	140

Across all years, the results show that it is slightly more likely a post-1975 IPO came from a non-recessionary period. That group's productivity was eighty-three companies per year, while the recession subset's productivity was seventy companies per year that went public. If, however, we remove the Great Depression and WWII, both of which introduce some unrepresentativeness, we end up with 138 companies/year from expansion periods, and 140 from recession periods. In other words, these data suggest that the likelihood of a company being part of the public IPO set post-1975 is unrelated to whether it came from a recessionary or non-recessionary period.

CONCLUSION

The relationship between when a company is founded and its eventual success is little-explored, but interesting and important. Should we expect fewer companies of lasting significance to be founded during economic downturns? Or, should we expect that tough economic times produce quality companies in similar numbers as other periods? The answers to these questions touch on issues in policy, economics, and entrepreneurship research.

While the research summarized in this short paper is only preliminary, it suggests some possible early answers. Knowing that a company was successful—at least as evidenced by having gone public—does not give us any information about whether that company was founded during a recessionary or non-recessionary period. At least in a general sense, that is suggestive in that, given smaller numbers of companies founded during recessionary periods, the implication is that companies founded in such times have a higher likelihood of turning out to be economically important.

There is much more work that could be done. It would be useful to combine the Bureau of Labor Statistics' longitudinal company birth/death data with the above data set to make a more direct statement about birth/death rates during recessions for growth companies. It also would be helpful to bring the data up to present—it currently stops in 1975. We also could consider other measures of success, such as sales, sales group, and private sales to acquirers.