FAT-TAILED DISTRIBUTIONS: A LOOK AT HIGH PERFORMING NEW VENTURES (SUMMARY)

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SUMMARY

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Principal Topic

New venture creation is an important driver of both job growth and innovation in the U.S. economy (Birch, 1979; Acs and Audretsch, 1988). Yet, among those firms that become up-and-running business, many never grow beyond the founder’s intention to supplement other income or live a certain life-style (Reynolds and Curtin, 2007). Taken individually, it is unlikely that these types of ventures will significantly impact the greater economy.

Recent attention has therefore focused on the importance of “high impact” firms (Acs, 2008). These firms are few in number, yet they create a disproportionately greater number of jobs and make greater contributions to GDP. Investigations into firm sizes in the U.S. reveal that their distribution follows a power, or scaling law – as firm size increases, their number decreases exponentially (Axtell, 2001; 2006). These high impact firms reside in the “fat tail” of highly skewed distribution curves where “inequalities are such that one single observation can disproportionately affect the aggregate” (Taleb, 2007).

This study attempts to identify high performing new ventures in the United States, determine whether these firms qualify as “extreme events,” and investigates differences among the high-performers and other start-up attempts.

Method

Our sample is the Panel Study of Entrepreneurial Dynamics II (PSED II). The PSED II is a longitudinal data set of individuals in the process of starting a business, identified in 2005. Primarily descriptive in nature, we identify “high-performers” based on a number of criteria (e.g., number of employees, money raised, revenue). We use multinomial logistic regression to determine whether characteristics of the founder (education, experience, net worth, level of optimism), the firm (industry, legal form, etc.), and the environment (location, support for entrepreneurship from the community, government, or family) affect the likelihood of high performance at the nascent stage.

Results and Implications

Preliminary analyses indicate that nascent ventures do display characteristics of power laws, or exponentially increasing distribution curves, along various dimensions of new venture performance. This finding in and of itself has important implications for entrepreneurship research. Models that reproduce these scaling relationships are better representations of empirical reality, and any acceptable theory of the firm must account for such scalability (Axtell, 2001; Stanley et al., 2007).

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