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THE ENTREPRENEURIAL BOOM AND BUST PHENOMENON

SUSTAINING SUPERIOR PERFORMANCE THROUGH A BOOM AND BUST CYCLE: INTER-FIRM DIFFERENCES

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June 1, 2003

Abstract

Empirical research has shown that many industries experience, soon after their inception, a cycle of rapid growth followed by severe contraction. This dissertation explores the mechanisms behind the 'entrepreneurial boom and bust' phenomenon (EBB) and studies in depth—in the context of two industries, e-consulting in the 1990s and investment management in the 1920s—the performance consequences of differences in (a) founding team characteristics, (b) initial endowments and (c) strategic decisions of new firms facing a bubble period. Based on the analysis of both archive and field data, it suggests that firm's initial endowments before the boom period shape firm strategy in the expansion phase of the EBB cycle, and both—initial endowments and strategy—predict firm survival at the end of the EBB period. It also finds that new firms that are successful over the long-term, independent of industry conditions, follow distinctly different growth and organizational strategies than new firms that are successful only when the industry is expanding. They tend to grow less rapidly, more through organic and local development than through acquisitions and internationalization expansion. These companies also specialize in a more valued set of skills and wider service portfolios than those that succeed during industry expansion but fail during industry contraction. This exploratory study indicates that the path to sustained superior performance might well be significantly distinct from the path to quick success during boom times.

This research is funded in part by the Ewing Marion Kauffman Foundation. The contents of this publication are solely the responsibility of M. Julia Prats.
1. INTRODUCTION

The emerging phase of an industry is usually accompanied by the presence of the greatest proportion of newly formed companies that the industry will ever experience. However, a large proportion of new business organizations fails shortly after being formed. This study suggests that a context of rapid expansion and sharp decline adds unforeseen complexities to the founding and development of new ventures, which deserve special attention. Although considerable research has been conducted at the industry level as to why the boom-and-bust phenomenon exists, we do not have yet an understanding of the basic mechanisms by which some firms deal successfully with such an acute environmental shift and others fail to do so. The dramatic and surprisingly unexplored consequences of those cycles for individual firms have triggered this research project.

The rapid rise and sudden decline of the e-consulting industry during the 1990s, and the explosion and crash of the investment management industry during the 1920s in the United States allows a study on the drivers of entrepreneurial firms’ performance as industry prospects shift dramatically. Within this context, we focus on how the three potential drivers – organizational strategy, resources, and environmental conditions – interact to determine the performance of entrepreneurial firms. To examine these factors, we collected data regarding resources, firm strategy, and firm performance for 104 e-consulting firms, and 85 investment management firms. The findings of this research fill a gap in entrepreneurship and strategy literatures and contribute to the few studies on professional service firms. Moreover it offers new insights to entrepreneurs and other constituencies about the advantages and downsides of sharp environmental shifts at industry inception.

2. WHAT IS THE BOOM AND BUST ENTREPRENEURIAL PHENOMENON?

Empirical research has shown that many industries – including railroads, disk drives and biotechnology – have undergone, soon after their inception, a cycle of rapid growth followed by severe contraction. A closer historical observation of those industries suggests that patterns arise because entrepreneurial activity depends on the
collective actions of entrepreneurs, venture capitalists, public capital markets, media, lawyers, and industry professionals, who together actively create and sustain legitimate market space for new products, services, and technologies. However, those actions are shaped by social and economic mechanisms that alter the normal evolution of the industry offering difficult challenges for new firms.

The cycle starts with an exogenous event – the commercialization of a new technology, industry deregulation, or the spread of a new business model – that triggers a new opportunity for profits. Initially the opportunity is identified and exploited by a few insightful entrepreneurs who are able to gather resources and, in many cases, start a new firm. Capital markets, potential entrepreneurs, and other constituencies, observe the initial success of those individuals. Social construction mechanisms create a shared expectation that the opportunity will quickly expand. Projected growth triggers a racing behavior among entrepreneurs and investors and valuation of firms that are already exploiting the opportunity increases. The illusion of infinite availability of resources acts as an isolating mechanism helping new ventures to enjoy a period of protected prosperity although for a short period of time. Furthermore, many firms push their expansion to unreasonable limits based on the sustainability of market expectations.

Even as many new projects are initiated and the valuation of existing businesses rises, new information about the size of the opportunity begins to set limits on that size and call the socially constructed enthusiasm into question. Expectations are revised and prospects for growth lowered leading investors to rush to cut financing and public markets to trade down the valuations of existing firms. Firms then face a double challenge: on the one hand, a cutback in resources making it difficult to sustain previous commitments, and on the other hand, a decline in product/service demand. As a consequence, the industry experiences a shakeout with several of the entrepreneurial firms exiting the industry.

In sum, the cycle may be characterized by two phases. First comes the expansion phase in which firms enjoy an abundance of resources and the reinforcement of positive expectations about opportunity prospects. Then in the contraction phase expectations fall, and subsequently resources are reallocated to other opportunities. I have called this cycle "the entrepreneurial boom and bust phenomenon (EBB)."
phenomenon belongs to a larger category of economic phenomena, collectively called speculative bubbles.

3. RESEARCH SETTINGS

The e-consulting industry (1997-2001)

A new consulting segment was born in the mid-1990s as firms began seeking management consulting advice to capitalize on the new business opportunities made possible by the Internet. This segment consisted of the services consulting firms provided to help conceive and launch e-commerce business models and to integrate them, if necessary, with existing businesses.

E-consulting companies were born and went public in a bull market. In 1999 Kennedy Information Group expected the global market for e-consulting to reach $37.5 billion by 2003; Forrester Research estimated that the U.S. market alone would reach $47.7 billion in 2002; International Data Corporation estimated that within four years the worldwide market for e-consulting would grow 753% versus an increase of 83% in the traditional systems integration market. In parallel, resources to start firms were available in large amounts. In 1999, revenues from publicly traded new ventures accounted for 60 percent of the e-consulting market. However, on April 14, 2000 NASDAQ suffered its biggest point loss in history. From mid-March to late May 2000, the high technology sector experienced a substantial decline in market value, with the NASDAQ dropping 34.7% and the Internet Stock Index (ISDEX) falling 55.3%. The stock prices of most of the newly public e-consulting firms were grievously hurt by this correction in tech stocks.

To identify the industry participants, I reviewed the pronouncements of 12 different industry experts over four consecutive years. After narrowing the set by selecting public firms born after 1990 companies the final population set of the sample for our study, comprised of 104 firms. Three levels of quarterly data from 11 different sources were recorded: macroeconomic, firm-level and founder-level.

In January 1998, e-consulting firms in the sample were on average three years old, and went public 3.5 years after founding. Forty four percent were venture backed
firms. As of December 2001, of the 104 firms tracked since their inception in the 1990s, 67 were still independent, 20 had been acquired and 17 had gone bankrupt. The low survival rate suggests that firms born in the context of an EBB are exposed to bigger challenges than firms started in milder environments.

The total market value of those firms rose from $8,262 million in January 1998 to $118,211 million in December 1999, a growth of 1,331 percent over two years. From December 1999 to January 2001, however, the total market value decreased by 90 percent. On average, quarterly market to book ratio per firm went from an average of 8.03 during the expansion phase to 3.71 during the decline phase. This data reflects the adjustment of expectations that investors carried out over Internet stocks after the spring of 2000 as it was described in section 2.

Aggregate quarterly revenues of the e-consulting firms grew a 194 percent from $903.34 million for the first quarter of 1998 to a maximum of $2,653.9 million for the quarter ending in June 2000. Sales decreased by 55 percent from June 2000 to December 2001. On average, firms grew at a quarterly rate of 130 percent (median of 41 percent). For the expansion phase the average rate growth was 213 percent (median 73 percent) while for the decline phase was 21 percent (median of -6 percent). Fifty-five of the firms expanded internationally.

24 e-consulting firms were classified as pure players, that is, firms that more than 75 percent of their revenues were coming from consulting on strategy and implementation of internet based business models. 38 firms combined those services with the implementation of proprietary software and integration of legacy systems. 42 firms based their revenues through a combination of consulting services as well as others subscription-based services such as outsourcing of IT services. The proportion of technical professionals in each organization varied by firm reflecting their origin and posterior evolution.

There was a total of 199 founders for the 104 new ventures in our sample. In 48 firms, founders were serial entrepreneurs. 46 percent of ventures had founders coming from information technology related firms. 93 percent of the entrepreneurs had at least
a bachelor degree, and 48 percent of them were technical degrees. 29 founders from 23 firms had an MBA degree and five had a Ph.D. from top tier universities.

**The Investment Management Industry (1926-1931)**

Although organizations which might be characterized as investment companies had made a sporadic appearance prior to 1921, it was during the succeeding 6 years that organizations of this type definitely developed as public investment media. During this 6-year period, many enterprises were organized expressly as investment trusts or investment companies. Practically all of the present types of investment trusts and investment companies which were subsequently to become important in the 1940s were already in operation or made their appearance in these years.

The economic and psychological conditions essential to the rapid propagation of this type of organization were concurrently present during this period. These conditions not only predisposed the investing public to participate in these relatively new enterprises but, as could have been expected, were exploited in the formation of investment companies and in the distribution of their securities, by numerous sponsors who were attracted by the profits from launching and operating the new industry. From 1921 to 1928, several hundred articles appeared in newspapers and magazines, and a number of books were published, relating to investment trusts and investment companies.

The 1921 to 1926 period was one of great activity in finance and industry. National income grew at a rapid pace from approximately $58,000 millions in 1921 to over $79,000 million in 1926, while corporate profits were at a high level. A long and steady rise in the prices of common stocks accompanied this business improvement. Profits from investment in common stock appeared easy. This growing business prosperity and sustained rise in stock prices encouraged and made popular investment policies predicated upon continuing growth in industry and common stock appreciation.

A few dozen investment companies were formed in the early and middle twenties. It was not until 1927, however, that the pace accelerated, and in 1928 and, especially, 1929 new investment companies came in a veritable flood. In 1926 the total number of investment management firms was 86. In 1927 90 new firms were founded,
103 in 1928 and 203 in 1929. Thus according to the Report on the Study of Investment Trusts and Investment Companies the total population of firms went from 12 in 1920 to 509 in 1929.

As the end of the decade neared optimism was rampant, speculation was frenzied, fortunes on paper were made in a few months. However, The New York Stock Exchange, the National Association of Securities Commissioners, the Attorney General of New York state and the Investment Bankers Association of America had taken a position that the investment company industry might be going too far too fast. In October 1929 the crash of the stock market put the whole industry in jeopardy.

To identify the industry participants, we reviewed The Report on the Study of Investment Trusts and Investment Companies, 1939-1942. The study of investment trusts and investment companies was conducted by the Securities and Exchange Commission in compliance with section 30 of the Public Utility Holding company Act of 1935. The period covered by the study is 1927 to 1935, for the year 1927 marks the beginning of the period during which investment companies were of real significance in the United States. The sample includes 85 investment companies of the management type. We gathered three levels of data: macroeconomic, firm-level and founder-level. Yearly data on five different variables – firm economic and financial performance, firm’s origin, type of firm, international investments, portfolio composition, board composition and macroeconomic conditions – were collected for the 85 companies. Data sources included the United States. Securities and Exchange Commission Report (1942) and Keane’s Manual of Investment Trust (1928).

On average, firms in the sample were 2.6 years old in 1929. Firms managed an average of $7.8 million in 1927 (median of $4.5 million), increased to an average of $17.5 million in 1930 and got back to $9.4 million in 1931. As of 1937, of the 85 firms tracked since their inception in the 1920s, 42 were still independent, 31 had been acquired, and 12 had gone bankrupt. Not surprisingly, the survival rate is extremely low compared to industries in regular environmental conditions. These firms were completely linked to the evolution of the capital markets and the crash was severe.
The total market value of those firms rose from $38.5 million 1926 to $607.5 million in December 1929, a growth of 549% over three years. From December 1929 to December 1931, however, the total market value decreased by 94%, from $607.5 million to $37.6 million. This data reflects the adjustment of expectations that investors carried out over Internet stocks after the spring of 2000 as it was described in section 2.

Aggregate asset management of the investment management firms grew from $351 million in 1926 to a maximum of $1,103 million at the end of 1929, a growth of 214 percent in three years. Average firm growth during the expansion period (1927-1929) was 91.5 percent (median 23.5 percent). At the end of 1931 aggregate assets for the sample firms was $75 million. Average firm growth during the decline phase (1929-1931) was −6.6 percent (median −4.7 percent). Firms had varied investment portfolios. Fifty-five of the firms had international investments at some point between 1926 and 1931.

Investment management firms had diverse origins. Individuals with a background on investment banking, brokerage houses, securities distribution firms or investment counseling started 54 of the firms in our sample. The rest of firms were extensions or transformation of other type of businesses. On average, firms had 9 people in the Board of Directors. 40 firms had international members on their boards. Firms widely differed regarding to their board member industry backgrounds.

4. HOW DO INITIAL RESOURCE ENDOWMENTS, ORGANIZATION RESOURCES AND STRATEGIES AFFECT NEW VENTURE PERFORMANCE?

Results from the analysis of both industries reveal some common features on how resources and strategy during the boom and bust period interact to determine firm performance at the end of the decline period. First, initial resource endowments influenced new venture strategy during the expansion phase of the industry. Specifically, differences in the background of the founder, organizational knowledge and skills at the beginning of the expansion period, influenced firm growth and scope strategies during the expansion period. For instance, in the e-consulting industry I identified a typology of four different strategies that correspond to two identifiable
resource bases. *Expansionists* and *Aggressive Acquirers* type of firms - that is firms that grew an average of 1821 percent and acquired 13 companies during the expansion period respectively - were mainly venture backed with a founder that had previous entrepreneurial experience. Thus, available economic resources and networks fueled aggressive growth during the expansion period. In contrast, *Conservative Growers* and *Focused Consultants* - that is firms that grew moderately with wide service portfolio or fast but with a focused service portfolio respectively - were older firms that have more specialized, and hence higher value-added, professionals.

Second, resources and strategies during the expansion phase both affect directly and indirectly the performance outcome of the firm at the end of the decline period. In particular, 1) hyper growth during the expansion period hurt the survival prospects of the new venture; 2) wide scope of services increased the chances of firm survival, yet, to sustain a wide range of products, it was necessary to have networks to access key resources (clients, providers and financial); 3) international expansion had a different effect on firm performance, depending on whether the service was scalable; 4) new venture reputation increased the likelihood of firm survival, and finally 5) founder’s background influenced firm performance only indirectly, concretely through having better products or/and better professionals in their firms.

Finally, archive data and personal interviews with new venture’s founders revealed that managerial discretion in deciding the pace and growth model during the expansion phase was a critical element of firm success. Founders and managerial teams that were able to resist growth and short term pressures from venture capitalists, public markets and their own professionals during the expansion phase of the EBB were in a better position to deal with the contraction phase when resources were suddenly scarce and demand tumble down abruptly. Noteworthy consequences of being able to pace their growth are crucial attention to hiring processes as well as better service delivery processes.

6. **CONCLUSION**

Research on new ventures has often assumed that new firms entering an industry face limited financial and human resources, have no reputation, and that
against great odds founders of new ventures must seek opportunities and implement ways of competing in industries usually served by established, often large businesses. Although it may be true in some cases those assumptions do not hold for all. Many firms at industry inception first enjoy an abundance of resources and the reinforcement of positive expectations about opportunity prospects. New ventures configure the incipient industry. Capital and human resources are attracted by widely publicized initial successes. Competition is not settled yet, and for a period of time they are the only relevant players. Hence, firms enjoy an artificial isolation from any competitive pressure. Consequences of strategic decisions during this period are not obvious because errors may be mitigated by pouring more resources into the problem. Unhappy poor served clients are changed by new ones; lack of coordination is solved by duplicating processes and resources; overworked professionals are bought with expensive option plans and ownership incentives. However, in a sudden turn, expectations on the opportunity prospects fall, and subsequently, resources are reallocated to other opportunities. Then the race for survival starts finding firms at very different ground.

I identify two strategies in the expansion phase of the industry, which increase the likelihood of firm survival. Furthermore, those strategies spring from the same resource base. New firms that are successful over the long-term, independent of industry conditions, follow distinctly different growth and organizational strategies than new firms that are successful only when the industry is expanding. They tend to grow less rapidly, more through organic development than through acquisitions. International expansion had a positive effect on firm performance only if the service was scalable otherwise it was negative. These companies also specialize in a more valued set of skills and wider service portfolios than those that succeed during industry expansion but fail during industry contraction. This exploratory study indicates that the path to sustained superior performance might well be significantly distinct from the path to quick success during boom times.

Future research should replicate this study in other industries that experience a boom and bust period at inception to validate this results.