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Abstract

Agency theory is used to study the effectiveness of ownership proliferation throughout entrepreneurial organizations. Hypotheses are developed to understand the effect of CEO, top management, and all employee ownership on firm performance. The research is conducted with a sample of IPO firms followed for five years to study ownership and firm performance (survival and stock performance). The results indicate that all employee ownership has a positive effect on survival, while CEO and management ownership have no effect. However, CEO and top management ownership do affect stock price. Ownership significantly interacts with firm risk, indicating riskier firms benefit less from ownership.

Keywords

work, business, organization, company, ownership, incentive, team, executive, employee, performance, CEO, stock, price

Comments

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WORKING PAPER SERIES

Using Ownership as an Incentive: Does the “Too Many Chiefs” Rule Apply in Initial Public Offering Firms?

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This paper has not undergone formal review or approval of the faculty of the ILR School. It is intended to make results of research, conferences, and projects available to others interested in human resource management in preliminary form to encourage discussion and suggestions.

ABSTRACT

Agency theory is used to study the effectiveness of ownership proliferation throughout entrepreneurial organizations. Hypotheses are developed to understand the effect of CEO, top management, and all employee ownership on firm performance. The research is conducted with a sample of IPO firms followed for five years to study ownership and firm performance (survival and stock performance). The results indicate that all employee ownership has a positive effect on survival, while CEO and management ownership have no effect. However, CEO and top management ownership do affect stock price. Ownership significantly interacts with firm risk, indicating riskier firms benefit less from ownership.

INTRODUCTION

Agency theory assumes that the best organizational form is one where the leader (CEO or president) owns 100 per cent of the company; in this case, the top executive is also the principal (owner). When the top executive is not the sole owner, then that individual becomes an agent (employee) of the firm, at which point agency problems begin to ensue. Agency problems are said to occur when agents pursue individual goals, which are not necessarily consistent with those of the organization. In addition, risk preferences of agents are different from those of the principal, resulting in decision making that is less than optimal. Agency theory differentiates principals from agents in a very simplistic manner because it treats ownership as a dichotomous variable, and it also considers ownership at the individual level. This had led to fairly basic notions about goal congruence and risk taking behavior. Owners pursue organizational goals and are risk neutral, while agents pursue personal goals and are risk averse.

In reality, ownership should be measured as a continuous variable because in many cases, particularly in entrepreneurial firms, management continues to retain partial ownership in the firm (through stock grants, options). Agency theory does specifically recognize stocks for executives because it views these programs as a form of monitoring (incentive alignment) that helps to mitigate the agency problem. However, the concept of a continuous ownership variable is important because it also allows for consideration of ownership level *within* the organization. Ownership is often extended beyond the CEO to the top management team, and in many cases, to all employees. When this occurs, the phenomenon is not how much one person is encouraged to act like an owner but how many people within the firm are behaving like owners. Even though ownership is dispersed, a large percentage of firm ownership might be retained within the organization rather than with outside shareholders or with one executive. Thus, not only can the extent of CEO or top management team ownership be studied, but proliferation of ownership throughout the organization can also be investigated. In this case, the entire organization moves toward the "principal" point on the continuum, and the focus of study is firm performance, which is affected by ownership proliferation.

This paper extends agency theory research by considering the effect of three different forms of ownership on firm performance. Rather than studying the degree of ownership of only one person (such as the CEO), this research considers the proliferation of ownership throughout the organization and how different levels of ownership affect short and long-term firm performance. In addition, the moderating effect of firm level risk is investigated.

AGENCY THEORY AND OWNERSHIP

Agency theory has been used to understand situations where an individual delegates responsibility for a task to other persons (Fama, 1980). Agency theory has been classically applied to study the relationship between owners of an organization and the managers who run those firms (Fama & Jensen, 1983). In practice, it has been most often employed in research on the mechanisms used by owners to align CEO interests with those of the organization (Gomez-Mejia, 1994). The exception has been a few studies that have extended agency theory to other positions such as university faculty (Gomez-Mejia & Balkin, 1992), sales representatives (Eisenhardt, 1985), and production workers (Welbourne, Balkin & Gomez-Mejia, 1995).

In all cases, agency theory was used to explicate alternative ways of controlling behavior of individuals who have been delegated work by someone. The person delegating the work is called the principal, and the individual to whom tasks are assigned is referred to as the agent. Since most agency theory research has involved top management, much of the work has dealt with the study of incentive systems used to align the interests of executives (agents) with those of the owners (shareholders). Executives have been the focal point of study because their behavior is difficult to monitor through more traditional mechanisms (i.e. direct supervision, close monitoring of behaviors). Agency theory assumes that the best way of aligning employees' interests with those of the principal is through formal monitoring, and only when the cost of monitoring is high should a company consider alternatives to formal monitoring. In the case of executives, formal monitoring is assumed to be impossible, therefore the study of executive compensation, as a form of monitoring, has been pursued by a number of researchers from a variety of academic fields (e.g. organization behavior, accounting, finance, human resource management) (for a review see Gomez-Mejia, 1994).

One form of incentive is firm ownership, which serves to create a situation where the goals of the agent are identical to those of the principal (Tosi & Gomez-Mejia, 1994). By aligning goals, stock plans help mitigate problems associated with risk taking propensities of the agents. Agency theory assumes that principals are risk neutral because their portfolios are not 100 per cent tied to one firm, however, agents, who cannot diversify their employment portfolios, are considered to be risk averse. Being risk averse, agents will make decisions that minimize risk in order to assure continued employment. According to Jones and Butler (1992: 73), "risk aversion encourages managers to select safe projects that provide normal rates of return." By providing executives with some form of ownership in the firm, it is assumed that they might be more willing to take risks that optimize long-term

performance of the organization. Assuring an adequate level of risk taking is important in entrepreneurial firms where risk taking is necessary in order to pursue opportunities.

Agency theory has been applied to the study of top executives because their behavior is not easily monitored, but the theory should be equally applicable to any situation where work is delegated, and particularly applicable when jobs are not easily monitored. In fact, agency theory has been used to understand organizational control for the overall employee population. According to Becker and Olson (1989: 247): "Two management strategies are possible. First, managers can attempt to allocate some of the firm's business risk to labor, with the aim of increasing workers incentive to act as owners. The current support for profit sharing and employee stock ownership plans by firms is due, in part, to a belief that these plans will reduce agency costs by aligning the interests of the workers with the current and future profitability of the firm. A second strategy is to closely supervise and control employees, allocating the greater share of the firm's business risk (and associated returns) to the shareholders." These two forms of control parallel the types of control strategies that are suggested by organizational theorists (Ouchi, 1979; 1980; Thompson, 1967). Organizational theorists argue that control mechanisms can be described as focusing on behaviors versus outcomes, where behavioral control results when policies and procedures (or compliance) are used as the dominant method of operating, and outcome control ensues through the use of incentives (alignment). Recently Eisenhardt (1985) combined the agency theory and organizational theory approaches to organizational control and noted that two underlying control strategies emerge from both theoretical perspectives.

As noted by Becker and Olson (1989), stock option programs, which provide a form of ownership in the firm, can increase alignment among all employees within an organization. These programs provide individual employees with incentives to work toward the organization's goals in the same way that CEO stock plans are incentives for executives to make decisions that will support the interests of the shareholders or owners. These systems attempt to create an environment where employees are part owners of the business.

It has been suggested that in entrepreneurial firms, where rapid change is occurring and bureaucratic structures have not been established, basically all jobs are difficult to monitor (Jones & Butler, 1992). Entrepreneurism has been defined as the process by which firms notice opportunities and act on those opportunities (Kirzner, 1993). If a firm (rather than an individual) is to remain entrepreneurial, then all employees in the company need to pursue and act upon opportunity, and this requires all personnel to be somewhat willing to take risks and pursue opportunities that enhance the organization's goals. Thus, entrepreneurial firms

should be more successful if ownership is widely dispersed throughout the organization. The argument is not that the CEO have an enhanced stake in the firm but that more employees share in the ownership of the company. Thus, this paper suggests that as ownership is expanded to others in the firm (top management and all employees), firm performance will increase.

Hypothesis 1: Proliferation of ownership throughout the workforce positively affects firm performance in entrepreneurial organizations.

Ownership can only be dispersed if the CEO has less ownership in the firm, therefore, it is expected that high levels of CEO ownership will have a negative impact on firm performance.

Hypothesis 2: High levels of CEO ownership will have a negative effect on firm performance in entrepreneurial organizations.

The advantage of ownership is that goal alignment will ensue and agents will be more likely to take risks. Therefore, it seems that the "gain" from ownership should be more significant in higher risk firms. In fact, research on strategic human resource management suggests that newer, dynamic, growth firms are more successful when they use compensation packages that have lower base pay and a higher incentive component (Jackson, Schuler & Rivero, 1980; Miles & Snow, 1984).

Hypothesis 3: Proliferation of ownership will have a greater impact on firm performance for higher risk firms.

Because agency theory focuses on problems that arise when ownership is separate from management, most of the research done has been conducted within large, established organizations where data on the top executives can be easily obtained and studied. However, agency theory has unique and particularly interesting applications for the study of smaller, entrepreneurial firms (Jones & Butler, 1992). In addition, smaller, newer organizations present a unique opportunity in which to study the issue of ownership and more adequately address causation. As Romanelli (1989: 369) notes, "new organizations are notoriously poor at surviving their early years." Thus, samples of smaller and younger firms have more variation in performance, including firm survival.

IPO firms are organizations that offer their stock to the public market for the first time; they are moving from being a privately owned firm to a publicly owned company. The move is not an easy one, and it requires at least one year of the company's time (particularly that of

the top management team) in preparing and "marketing" the company. In addition, the firm undergoes numerous internal changes as it prepares to become "professional" and submit to the scrutiny of shareholders, investment bankers, and the Securities and Exchange Commission. IPO firms might be considered more successful than other small organizations because they have survived to this stage. However, they still face a high risk of failure that is comparable to that encountered by other start-up organizations. Of the 3,186 companies that went public in the 1980s, with stock listed on the NYSE, AMEX, or NASDAQ, only 58% were still listed by 12/31/89 (Zeune, 1993). Comparably, a Dunn and Bradstreet study showed that 53% of all failures and bankruptcies of firms in 1980 occurred less than five years after founding, and 80% failed in less than ten years (Romanelli, 1989).

RESEARCH METHOD

The sample used for this study contains 128 non-financial companies that initiated their IPO in 1988. A total of about 250 firms filed securities registrations with the Securities and Exchange Commission (SEC) to conduct an IPO, and the list was pared down to 170 by deleting those that were listed as closed-end funds, real estate investment trusts, and other firms not producing a good or service. Upon receipt of the 170 prospectuses, those firms in the "not producing a good or service" category were dropped. As a result, the final sample, after deleting cases based on missing data, includes a total of 128 non-financial companies. The year, 1988, was chosen because it allowed for five years of follow-up data, and because it had a 60% survival rate as of 1993, permitting a comparison between survivors and non-survivors.

Data were gathered from the prospectus of each firm. The prospectus is the document provided to the Securities and Exchange Commission (SEC) prior to the public offering, and it is also the document circulated by the underwriter to assess demand for the firm's stock. The SEC requires firms to follow strict guidelines in the format. The document itself is usually written by members of the management team, investment bankers, and lawyers for both parties; it is then scrutinized by other lawyers and accountants. While the potential for positive bias exists in the prospectus, the firm is liable for any information that might mislead investors (O'Flaherty, 1984). The Securities and Exchange Act of 1934 (with amendments) sets the requirements for the prospectus, thus assuring consistency in the type of information that is included in the document. The SEC also requires that the prospectus be accurate to the best knowledge of management. Given this requirement and the fact that the SEC requires a tremendous amount of detail

regarding company operations, the prospectus is a useful data source (Marino, Castaldi, & Dollinger, 1989).

Data Collection and Coding

Prospectuses from 1988 are not readily available in public sources, therefore, copies were obtained from Disclosure, which is a data clearing house for the Securities and Exchange Commission. Data were coded using a two-step process with two coders who were unaware of the survival status of the companies as they coded. First, a five-page summary of each prospectus was constructed. Given the fact that the prospectus is not a traditional data source, this first step allowed for careful reading of each document, cross checking at the second stage of coding, and notation of any unusual firm characteristics. The second step involved numerically coding each five-page summary for specific information. Researchers cross-coded a sample of companies (two people coded the same prospectus), and they switched companies for the second stage of coding. Any questions about codes were resolved through group consensus, which involved meetings with the coders and an additional researcher.

Sample Characteristics

The average age of the firms as of 1993 was 11.17 years, with a standard deviation of 12.12. The median was 8 years. Half the firms employed fewer than 110 workers, however, 20% had 700 or more employees. The firms had an average of 6 executive officers and 3 outside directors. The businesses were located throughout the United States but were most heavily concentrated in the Pacific states. The sample includes companies from numerous industries, ranging from food service retailing to biotechnology to steel minimills. As of 1993, 77 firms still survived (60% survival rate).

Independent Variables

CEO ownership is coded as the percentage of the company owned by the CEO after the initial public offering. The mean is 15.64 percent, with a standard deviation of 17.79, and the median was 10. The percent ownership ranges from 0 to 89. The number is logged in order to correct for skewness. Top executive team ownership is coded by including the total percentage ownership of all individuals listed in the prospectus as part of the top management team, and this number includes CEO ownership.¹ Given that ownership proliferation is the focus of the study, this variable shows the extent of total management team ownership. The mean for executive team ownership is 38.33 percent, with a standard

¹ Separate analyses were run for CEO and executive team ownership, and the results are noted in Table 4.

deviation of 22.39. The median is 38.90 per cent, and the range is between 0 and 89 per cent.

All employee ownership is coded as a dichotomous variable, and companies that have incentive stock options for all employees (including the CEO and management team) or employee stock ownership plans for all employees are coded as a 1, and those without such plans are coded as a zero. The mean is .61 with a standard deviation of .49 (See Table 1).

Dependent Variables

All firms still in business at year-end in 1993 were coded as survivors. Survival status is not easily determined, therefore, several steps were taken to assure correct identification of survivors. First, an on-line data base of current public firms was searched to **find** current information on the companies. Supplemental information was gathered from Disclosure, a data clearing-house for the Securities and Exchange Commission (SEC). Disclosure was able to identify many of the active and inactive companies. The Directory of Obsolete Securities (1994) also was searched to identify bankruptcy, name changes, recapitalization, and mergers. In addition, phone calls were made to the numbers provided in the prospectus.

Fourteen firms (10%) changed their names. These firms were called to find out whether the name changes were cosmetic, or whether the businesses had undergone other major transformations. Mergers were considered non-survivors under the logic that the firm, as coded in 1988, had been joined with another set of management and organizational culture (Aldrich & Marsden, 1988; Kalleberg & Leicht, 1991). In addition, the stock price of the mergers was tracked, and 7 out of 8 mergers had stock prices that had decreased prior to the merger. Eight mergers (6%) occurred among the IPO firms. Overall, 77 companies, or 60% of the sample, were coded as survivors.

Each company's year-end stock price (from 1989 to 1993) was obtained from Disclosure. Given that these companies went public at different times (with some finalizing in 1989), year-end 1990 was chosen as the first year for analysis in an effort to equalize all firms.

Control Variables

Based on a review of the initial public offering and strategic human resource management (due to risk hypotheses) literatures (e.g. Beatty & Zajac, 1994; Huselid, 1995) several control variables were used in the analysis. The total number of employees, logged to correct for skewness, was included as a measure of size. Net profit at the time of the IPO was added as a performance measure. Net profit was used as a measure of performance because many firms had net losses reported, which indicated variance in performance. Other

measures of performance, such as sales, presented the problem of zero sales for many organizations in the sample. A dichotomous measure coded "1" for service industry and "0" for manufacturing was used to control for industry. This code was limited to manufacturing versus service firms in the analyses reported due to sample size restrictions. For the stock analysis, an additional control variable, year-end stock price 1989, was included.

A final control variable indicated the level of risk of the firm. Each prospectus contains a section listing all risk factors faced by the firm, which must be disclosed to meet the requirements of the Securities and Exchange Commission. Prior research on initial public offering firms found that this measure was a useful way to code risk (Beatty & Zajac, 1994; Rasheed & Datta, 1994). The presence of the following risk factors were included in this measure: technological obsolescence, new product, few or limited products, limited number of years in operation, inexperienced management, technical risk, seasonality, customer dependence, supplier dependence, inexperienced underwriters, competition, legal proceedings against company, liability, and government regulation. The summated risk measure ran from 1 to 11, with a mean of 4.18 and a standard deviation of 1.80. Table 1 includes the means and standard deviations for all of the dependent variables and control variables. Table 2 includes the correlation matrix for all variables included in the analyses. (See Table 2)

RESULTS

Table 3 includes the results of the analysis for survival, and as can be seen, the overall model is significant, and the only significant terms in the full model are stock for all employees and the interaction of employee stock and risk. The interaction was interpreted by plotting the probability of survival for firms in the low, medium, and high-risk categories (developed by dividing the risk variable into three categories). Figure 1 shows the results of that analysis, and as can be seen, firms with low and medium risk benefit by having stock plans for all employees, however, firms with high risk do not seem to receive a gain or loss from stock programs for all employees. (See Table 3.)

FIGURE 1
INTERACTION EFFECT FOR ALL EMPLOYEE STOCK AND RISK
ON THE PROBABILITY OF SURVIVAL

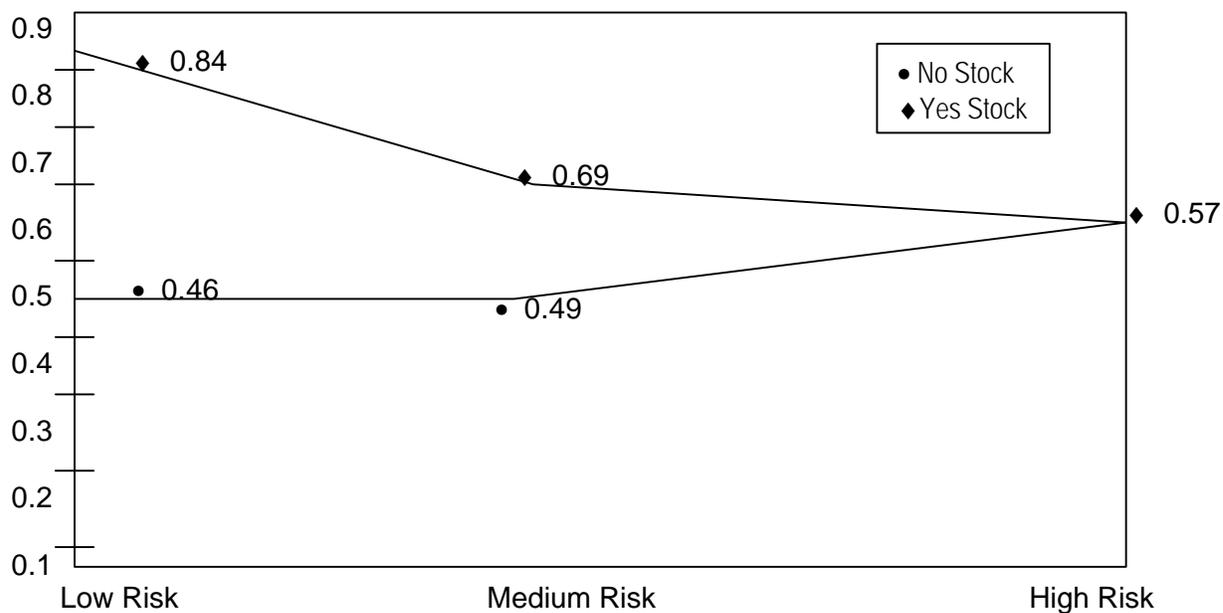
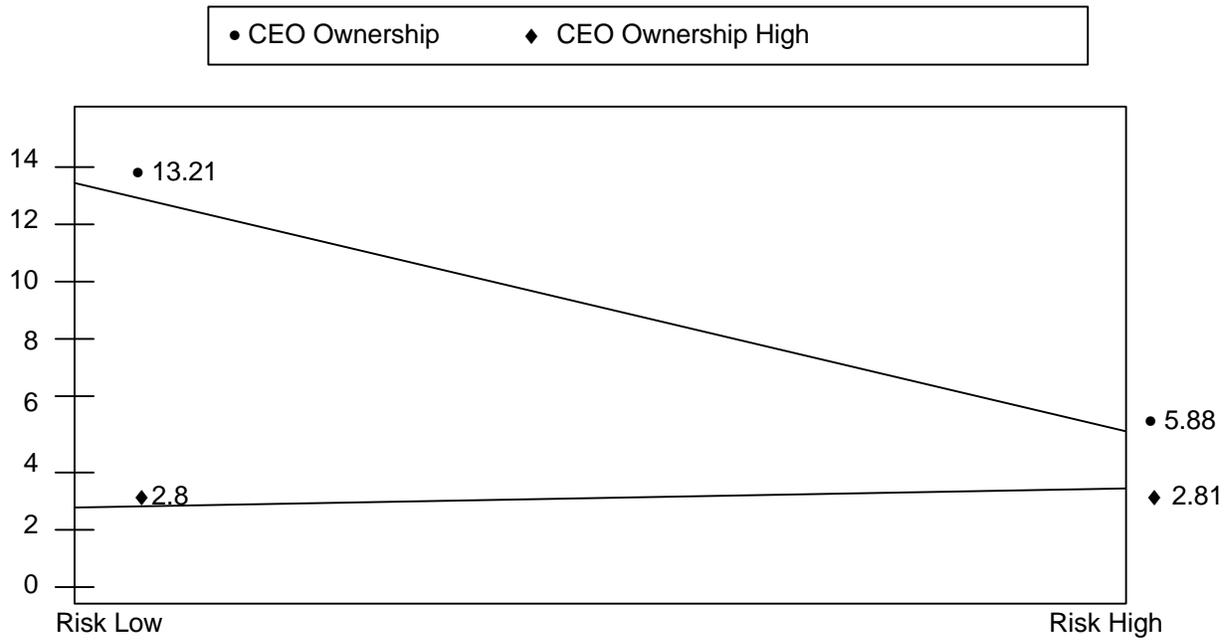
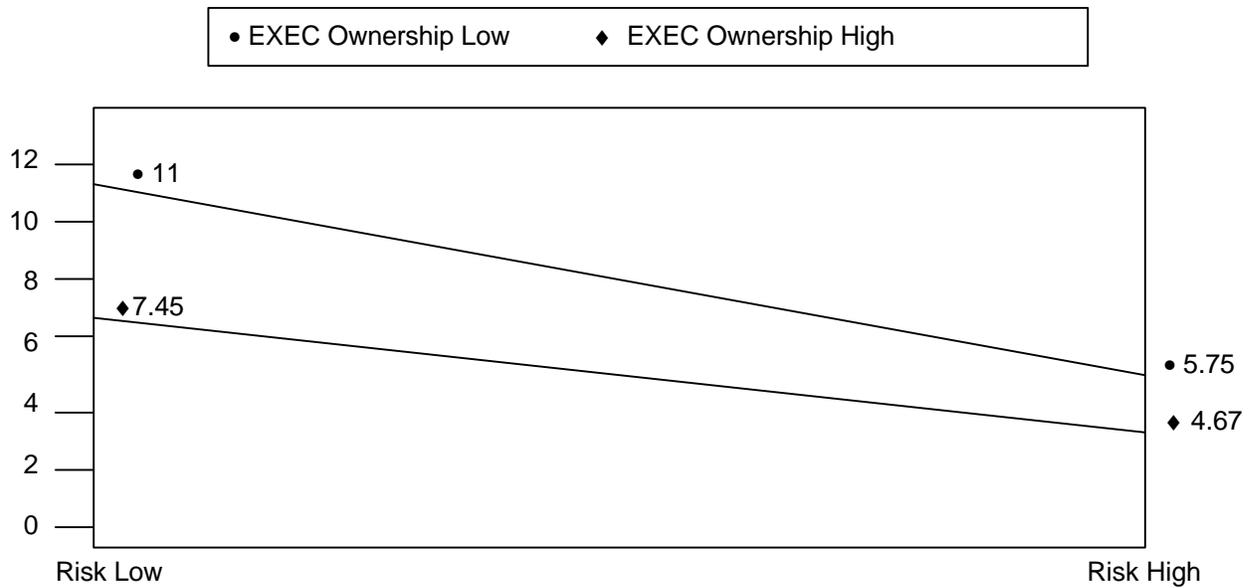


Table 4 includes the results of the regression analyses for stock price for years 1990 through 1993. Two interaction terms are significant for year end 1990, and those are executive team and risk and CEO and risk. The data were plotted by creating two categories of risk (high and low), and the results are shown in Figure 2. The results indicate that both high and low risk firms obtain higher stock prices when the CEO and executive team have lower levels of firm ownership. The benefit is greater for CEO ownership.

FIGURE 2
INTERACTION EFFECT BETWEEN CEO OWNERSHIP AND RISK ON 1990 STOCK PRICE



INTERACTION EFFECT BETWEEN EXECUTIVE OWNERSHIP AND RISK ON 1990 STOCK PRICE



DISCUSSION

The primary hypothesis of this study is that proliferation of ownership throughout the organization has a positive effect on performance of entrepreneurial firms. The results of the logistic regression support that hypothesis in that the only variables significantly predicting survival are those related to employee ownership for all employees. The hypothesis that all employee ownership should be most effective for high-risk firms, however, was not supported. In fact, the results of the interaction effect seem to indicate that low and medium risk firms benefit most from utilizing ownership throughout the business.

Perhaps the higher risk firms cannot really afford everyone in the organization taking risks. In addition, employees in these companies might not view ownership as an incentive because the likelihood of their ownership being worth anything might be perceived as very low. Agency theory claims that agents are naturally risk averse, and it might be that the use of ownership in high risk firms places too much risk with the employees, thus resulting in the type of risk averse behavior that is not supportive of organizational goals.

The results of the analyses with stock price paint a very different picture, where stock for all employees is not significant, but CEO ownership and top team ownership are both significant for stock price in 1990. The interaction effects are also significant, and the results seem to indicate that regardless of risk level faced by the firm, companies are better off with CEOs and top management teams that have lower levels of ownership in the firm. These results might be the reaction of investors who see CEO ownership, particularly, as a potential problem for assuring firm growth. It might also be the result of these owners making decisions that are best for long-term business performance while risking short-term quarterly returns, which are rewarded by the stock market. The findings might also reflect the fact that high CEO and management team ownership leave less stock for others in the company. If this interpretation is correct, it supports the hypothesis that ownership proliferation, rather than ownership concentration, is important for firm performance.

The longer-term stock results only show an effect for CEO ownership in 1991; after that point in time, there is no effect for CEO or top management team ownership. Of course, the data for later years become difficult to interpret because sample size begins to decrease (companies begin to "die"), and the data utilized as the independent variables represent the company at the time of the IPO. The present analysis includes no information on change that took place between 1988 and the subsequent years.

There are, of course, several limitations that should be considered when interpreting the findings. The sample of IPO firms might not be representative of all firms at this stage. In

fact, it could be argued that this particular sample is made up of companies with greater chances of survival as the 1988 IPO companies were somewhat affected by the stock market crash of 1987 (investors being more cautious). There is also a possibility of positive bias in the reporting of data in the prospectus. In addition, the coding process, which has been called "cruel and unusual punishment" (Marino et. al., 1989), could also be prone to errors in interpretation even though measures were taken to minimize these problems.

There's a saying that "too many chiefs and not enough indians" is bad for business; the results of this research suggest that many chiefs, at least many internal owners, is good for business in entrepreneurial firms. Additional research that further evaluates the effect of proliferation of ownership on firm performance in entrepreneurial firms and the process by which this phenomenon helps or deters organizational growth should be pursued.

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TABLE 1
MEANS AND STANDARD DEVIATIONS

<u>Variable Name</u>	<u>Mean</u>	<u>Standard Deviation</u>
Industry (0=manufacturing, 1= service)	.47	.50
Log number of employees	4.53	2.69
Log of net profit	16.07	.53
Log of risk	.28	.23
Log of CEO ownership after to the IPO	2.16	1.28
Log of top executive team ownership after IPO	3.32	1.12
All employee stock (0/1)	.45	.50
Survive (0/1)	.61	.49
Initial stock price	6.90	5.15
Seven day stock price	8.26	5.46
Stock price, year end 1988 (n=107)	8.29	5.39
Stock price, year end 1989 (n=100)	8.94	14.67
Stock price, year end 1990 (n=98)	8.01	9.57
Stock price, year end 1991 (n=86)	10.40	11.23
Stock price, year end 1992 (n=76)	10.40	10.76
Stock price, year end 1993 (n=71)	12.29	11.94

TABLE 2
CORRELATIONS FOR VARIABLES USED IN THE ANALYSES

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Industry	1.00												
2. Log # of employees	.02	1.00											
3. Log of Net profit	-.08	.46***	1.00										
4. Log of Risk level	-.02	-.47***	-.42***	1.00									
5. Log of CEO ownership	.09	-.22**	-.21	**.08	1.00								
6. Log of team ownership	.03	-.17	-.20*	.04	.64***	1.00							
7. Stock for all employees	-.04	-.04	-.16	.19*	-.03	.00	1.00						
8. Survival status	-.11	.08	.21*	-.01	-.04	-.03	.12	1.00					
9. Stock price year end 1989	.00	.29**	.52***	-.24*	-.29**	-.31	-.07	.03	1.00				
10. Stock price year end 1990	.02	.32***	.48***	-.23*	-.25*	-.18	.00	.13	.71***	1.00			
11. Stock price year end 1991	.16	.32**	.34***	-.12	-.33***	-.21	.11	.26**	.35***	.74***	1.00		
12. Stock price year end 1992	.02	.38***	.24*	-.06	-.26*	-.27	.17	.18	.11	.54***	.78***	1.00	
13. Stock price year end 1993	-.01	.32**	.15	-.02	-.31	-.20	.21	.14	.08	.49***	.66**	.85***	1.00

* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

TABLE 3
LOGISTIC REGRESSION ANALYSIS FOR SURVIVAL

<u>Variables</u>	<u>Controls Only</u>		<u>Ownership & Risk</u>		<u>Full Model</u>	
	<u>b</u>	<u>s.e.</u>	<u>b</u>	<u>s.e.</u>	<u>b</u>	<u>s.e.</u>
Intercept	-22.73	9.30	1.13	.72	-18.51	10.87
Industry	-.05	.38			-.07	.42
Log risk	1.76	.97			4.15	3.59
Log of # employees	.04	.08			.04	.09
Log net profit	1.41**	.58			-.09	.12
Log CEO Ownership			-.58	.41	-.35	.46
Log of exec. team Ownership			-.07	.38	.09	.48
Stock for all emps.			2.01**	.76	1.99**	.77
Risk interaction 1 (Stock for all * risk)			-4.07*	1.91	-3.96*	2.01
Risk interaction 2 (Exec. team & risk)			-.89	.89	1.39	1.31
Risk interaction 3 (CEO & risk)			1.13	.72	1.49	1.21
Chit ²	10.38**		14.73*		19.54*	
*** p ≤ .01						
** p ≤ .05						
* p ≤ .10						

Unstandardized logistic regression coefficients reported.

Table 4
Results of Regression Analysis for Year End Stock Price

Variables	1990. n=100 <u>Beta</u>	1991. n=98 <u>Beta</u>	1992. n=86 <u>Beta</u>	1993. n=71 <u>Beta</u>
Stock price 1989	.65***	.19	-.17	-.14
Industry	.06	.22*	.04	.02
Log of risk	.30	.29	-.43	-.34
Log employees	.06	.14	.35**	.32*
Log net profit	.11	.20	.18	.10
Stock for all employees	-.02	.04	.01	.04
Risk interaction (stock all & risk)	.14	.16	.27	.25
Log of executive team ownership	.50**	.36	-.42	-.26
Log of CEO ownership	-.45*	-.51*	.05	.07
Risk interaction (team & risk)	-.92**	-.68	.66	.67
Risk interaction (CEO & risk)	.60**	.41	-.22	-.33
R ²	.58 10.23***	.32 3.07**	.29 2.29*	.26 1.85

*** $p \leq .01$; ** $p \leq .05$; * $p \leq .10$

Note: Standardized regression coefficients are reported.

Note: Separate analyses were run for stock all and related interaction; CEO ownership and related interaction, and team ownership and related interaction. In those equations, only executive team ownership was significantly related to 1990 stock price (positive direction). It was unrelated to 1991 stock price, negatively related to 1992 stock price, and unrelated to 1993 stock price. CEO ownership was unrelated to stock price in any year, and stock for all was also unrelated to stock prices.