

**EXECUTIVE COMPENSATION IN ENTREPRENEURIAL TEAMS:
THE FOUNDER GAP, BOARD MEMBERSHIP, & PAY FOR MILESTONES**

NOAM WASSERMAN¹
Harvard Business School
Rock Center 210
Cambridge, MA 02163
noam@hbs.edu

ABSTRACT

This study examines executive compensation in entrepreneurial teams, using a dataset of 529 private companies (1,218 CEOs, CFOs, and CTOs) from 2000, 2001, and 2002. Founders make less than non-founders, even after controlling for human capital, equity holdings, and board membership. The impact of formal position is greater in older private companies, and achieving operating and financing milestones increases compensation.

INTRODUCTION

Research has suggested that the founders of companies are among the most powerful executives in TMTs (Levinson 1971) to the extent of being “revered” in their companies (Zaleznik and Kets de Vries 1975). Furthermore, consistent with managerial-power theory (Lambert, Larcker et al. 1993), managers with longer tenure in their firms have been found to have greater power than newer managers (Fisher and Govindarajan 1992). By definition, founders have the longest tenure in their firms and should therefore have greater power than other executives. Yet studies of power and compensation have not focused on company founders, largely due to the fact that past studies have examined compensation and incentives in public companies, where founders are rarely still members of the TMT. (Even Beatty and Zajac’s (1994) study of compensation in “younger” companies focused on public companies.)

In addition to examining founder versus non-founder compensation, this study uses private companies to explore three other compensation factors. First, because of the focus of past studies on public companies, where it is difficult to separate formal position from inside board membership because CEOs are almost always the lone inside board member (Lorsch 1989), we lack empirical evidence that inside board members are paid more than executives who do not also serve on the board. In private companies, non-CEO inside directors are much more common (Wasserman and Boeker 2003), enabling us to examine the effects of board membership on compensation. Second, compensation studies have focused almost exclusively on CEOs, paying little attention to differences in the broader TMT (Combs and Skill 2003), or have focused on managers below the TMT (e.g., Lambert, Larcker et al. 1993; Stroh, Brett et al. 1996). This study includes both CEOs and the main members of the TMT who report to them.

¹ I would like to thank Nitin Nohria, Brian Hall, Josh Lerner, Teresa Amabile, Ranjay Gulati, Ezra Zuckerman, Bill Sahlman, Jesse Fried, Lynda Applegate, Juan Florin, Warren Boeker, David Scharfstein, Hillary Elfenbein, Vishesh Kumar, and participants in the Harvard Work-in-Process Seminar for comments on an earlier version of this paper. I would also like to thank Aaron Lapat, Mike DiPierro, and Bill Holodnak for their assistance with collecting data.

Finally, consistent with power theories, the literature on pay-for-performance (e.g., Baker, Jensen et al. 1988; Jensen and Murphy 1990; Hall and Liebman 1998) has focused on how managers gain power by leading their companies to excellent performance, which in turn leads to higher pay. However, in organizations that lack the standard pay-for-performance metrics, such as new ventures that are not traded on public stock markets and do not have revenues for much of their early lives, managers should be hindered in their ability to build power, and boards should be hindered in their ability to link compensation to performance. This study therefore proposes the concept of “pay for milestones,” whereby executive compensation increases with the achievement of such milestones as the completion of product development (Schoonhoven, Eisenhardt et al. 1990) or the raising of a new round of outside financing (Gompers and Lerner 1999). Achieving these milestones should help the TMT gain power by proving its ability to cope with the company’s critical contingencies (Emerson 1962; Hickson, Hinings et al. 1971).

HYPOTHESES

In his study of CEO compensation, Allen emphasized, “The compensation received by a chief executive officer is directly related to his power within the corporation in relation to the power of other directors” (Allen 1981:1116). This is particularly true of the cash component of executive compensation, for boards of directors have direct control over the cash compensation of a company’s top executives (Fama and Jensen 1983). Cash compensation is the component most affected by the variables of interest to studies examining the balance of power at the top of companies (Carpenter and Wade 2002) and is therefore the metric on which this study focuses.

At the same time, some of the alternative explanations for this study’s hypotheses include issues related to executive equity holdings. Therefore, to test these explanations, the empirical analyses control for multiple measures of equity holdings.

Founders

There are at least two major reasons why we would expect founders to receive higher compensation than non-founders. First, founders often have status in their companies beyond the formal position that they hold, to the extent that they are referred to as “revered founders” (Zaleznik and Kets de Vries 1975). This increased status may bring with it added power to influence their compensation. In fact, in academic studies, in addition to tenure and the percentage of equity owned, founder status has been taken to be an indicator of greater executive power (Combs and Skill 2003). Second, according to social-influence theory, a CEO has more control over board members who joined after the hiring of the CEO (Main, O’Reilly et al. 1995). However, by definition, founders of companies precede the outside board members and can play an important role in choosing who will join their boards (Wasserman and Boeker 2003). In contrast, non-founders will have less of a role in selecting board members and should therefore have less influence over their boards than founders.

The strength of these factors, however, should change over time. For instance, as companies grow and add other key executives, their dependence on founders should decrease, and the influence of long-serving non-founders may approach that of founders. Therefore, the gap between founders and non-founders should be wider in younger companies.

H1a: Founders will have higher cash compensation than non-founders. This gap will be wider in younger companies than in older companies.

At the same time, there are also reasons why founders may receive less compensation than non-founders. First, entrepreneurs' decisions are affected by their alternative employment opportunities (Gimeno, Folta et al. 1997). Executives with high levels of firm-specific human capital should be less likely to exit their companies than executives with lower levels of firm-specific human capital (Becker 1964; Gimeno, Folta et al. 1997; Castanias and Helfat 2001). Most pertinent to this study, founders may possess and develop skills that are more firm-specific than non-founders (Wasserman 2003), making them relatively less valuable to other companies and less likely to receive attractive outside offers.

Considering founders' stronger attachment to the companies they start (Dobrev and Barnett 2003), boards may perceive them as less likely to leave for an outside offer, further enabling boards to give them lower compensation than a similar non-founder would receive. Founders might also voluntarily accept lower compensation at the companies they founded. Recent researchers have emphasized the "psychic income" entrepreneurs earn from the companies they founded (Gimeno, Folta et al. 1997) and the fact that, in contrast to the identity of people who join an existing company, the identity of organizational founders is "tightly linked" to that of the company they founded (Handler 1990; Dobrev and Barnett 2003). Accepting less compensation may also be more acceptable to founders who became accustomed to acting very frugally while their newly founded companies were cash poor and needed every possible dollar to be spent on building the company. It may also be more acceptable to founders who believe that their compensation anchors the compensation of the rest of the TMT (Allen 1981).

Founders and boards may also have to pay more compensation to attract non-founders. Although company founders have deep knowledge of their companies, executives recruited from the outside know far less, and companies therefore may need to pay them more to attract them to an unfamiliar environment. The information asymmetry between founders and non-founders would therefore lead to compensation differences even if they were equally risk averse.

It should be noted that the strength of many of these factors is likely to weaken over time. For instance, on the founder side we might expect the degree of founder attachment to decrease as the company matures, more people get involved with shaping the company, and it becomes more formalized and less founder-dependent. On the non-founder side, as a company matures, it becomes easier for outsiders to assess the company's quality and performance (Wasserman 2002), and it should be less necessary to pay a large risk premium to attract them. Thus, we might expect any "founder gap" to be smaller in older companies than in younger ones.

H1b: Founders will have lower cash compensation than non-founders. This gap will be wider in younger companies than in older companies.

An alternative explanation for a difference in founder versus non-founder compensation is that, rather than having different levels of influence over compensation, founders and non-founders have different levels of risk aversion. Therefore, we might expect founders to prefer a different mix of equity versus cash compensation. To control for differences in preferences and for equity effects on compensation, the models control for equity held by each executive.

Board Membership

In public companies, CEOs almost always serve on boards, while non-CEOs rarely do (Lorsch 1989). In contrast, many private companies also have non-CEO managers who serve on

their boards (Wasserman and Boeker 2003). Because the scope of this study includes non-CEO managers who may or may not also serve as directors, we can assess the impact of board membership on the compensation of executives.

H2: Top executives who serve on the board of directors will have higher cash compensation than top executives who do not serve on the board.

Some executives may have already developed ties to outside directors before joining the company, rather than by serving on the board alongside them. To control for this possibility, I control for whether the executive was hired because of a tie to a VC on the company's board.

Formal Position

Formal position has been a central factor in studies of large-company executive compensation (e.g., Lazear and Rosen 1981; Lambert, Larcker et al. 1993). A major difference between the start-ups that are the focus of this paper and the large companies studied in past research is that the division of labor between members of the TMT is usually much less distinct in start-ups than in large companies (Gartner, Shaver et al. 1994). As these companies mature, the division of labor among the members of the TMT deepens and becomes more distinct. This suggests that there may be a smaller difference in pay between CEOs and their direct reports in younger companies but that this "CEO gap" will be wider in older companies.

H3: CEOs will have higher cash compensation than CTOs and CFOs. This gap will be wider in older companies than in younger companies.

An alternative explanation for H1a, H1b, H2, and H3 is that executives may differ in their human capital and that it is those differences that affect their compensation, rather than whether they are founders, board members, or CEOs, CFOs, and CTOs. Therefore, in testing these hypotheses, I control for each executive's educational degrees and years of prior experience, following past studies (e.g., Gimeno, Folta et al. 1997) that measured the general human capital of entrepreneurs using the constructs of formal education and prior work experience.

Pay for Milestones

In public companies, the existence of performance metrics enables management to show performance gains and gives the board a relatively objective way to tie pay to performance (Baker, Jensen et al. 1988; Jensen and Murphy 1990; Hall and Liebman 1998). These company-performance metrics most often include measures of profitability, sales revenues, or increases in market value. In new private ventures, however, these "pay-for-performance" measures cannot be used. Because they are private, these companies do not have a liquid public market on which their shares are traded and therefore cannot base pay on stock-market performance. Also, until they complete development of their first product or service and begin selling it to customers, they have no revenues, and it is difficult to judge company profitability. As a result, measures of new small-firm performance are "notoriously unreliable" (Birley and Westhead 1990:539), and the achievement of concrete milestones takes on added importance (Wasserman 2003), which may affect compensation. These milestones include both operating and financing milestones.

In new ventures, the major early-stage operating milestone is the completion of product development (Eisenhardt and Schoonhoven 1990; Sahlman, Stevenson et al. 1999; Wasserman

2003). Strategic-contingencies theory, the concept of salience (e.g., Taylor and Fiske 1978), and contract theory all point to the same conclusion: reaching the completion-of-product-development milestone should be associated with higher compensation.

H4: Cash compensation will be higher in companies that have completed development of their initial product or service.

With regard to financing milestones, given that new companies usually face severe capital constraints, the major financial challenge is to secure capital from outside investors (Gompers and Lerner 2001; Wasserman 2003). Managers who raise a new round of financing have secured capital for their companies to invest in product development, to build their organization, to increase their investment in marketing, and other activities. In addition, they have gained a “stamp of approval” from outside investors (Gompers 1995; Wasserman 2003). Having proven their ability to cope with the financing uncertainties facing their companies, these managers should gain more power (Landsberger 1961; Fligstein 1987) and compensation.

H5: Cash compensation will increase with the completion of new rounds of financing.

An alternative explanation for H4 and H5 is that shipping products and raising rounds of financing change the resources available to pay compensation. Therefore, the tests of H4 and H5 include controls for revenues and for the amount of capital raised in the most recent round.

METHODS, DATA, AND RESULTS

The data for this study come from an annual “Compensation and Entrepreneurship” survey of private information-technology companies across the United States. To help eliminate artifacts introduced by the ups and downs of the market, this study uses datasets from 2000, 2001, and 2002, while controlling for the year in which the data were collected. The full dataset includes 529 private technology companies and 1,218 CEOs, CFOs, and CTOs. Clustered regressions (with robust standard errors) adjust for companies with more than one executive. The median age of the companies is 39 months, and the median number of employees is 54.

In summary, H1b (founders receive less salary than non-founders, especially in younger companies) is very strongly supported over competing hypothesis H1a, even after controlling for differences in equity holdings and executive backgrounds. H2 (board membership) is very strongly supported, even after controlling for whether the executive was hired because of a connection to a venture capitalist. Regarding formal positions (H3), CEOs make significantly more than CFOs and CTOs, and this gap is wider in more-mature companies. Both of the achieving-milestones hypotheses (H4, completing product development, and H5, rounds of financing) are supported, even after controlling for the additional revenues and capital received, which were both significant controls. Auxiliary analyses focused on executive equity holdings, bonuses, alternative formulations of the dependent variable, and other robustness checks.

DISCUSSION

In contrast to past compensation research, which focused on public companies and on CEOs, this study examined the compensation of the broader TMT in private companies. The results suggest that founders receive significantly less compensation than non-founders, even

after controlling for differences in executive equity holdings and human capital. One might say that “founders pay to be founders,” much in the way that wine hobbyists accept lower profits to maximize their non-financial benefits as owners of wineries (Morton and Podolny 2002). Founders may also be hampered by the perception that they cannot use credible threats to leave the company due to compensation-related grievances, a possibility that was supported by field research described above. More generally, in other organizations, even when they are not founders, executives who have a strong attachment to their companies may not be able to build the same level of power as executives who can credibly threaten to leave.

In addition, executives who serve on the board of directors – alongside the company’s outside board members, who determine salaries – receive significantly higher salaries. Interestingly, one implication of these findings is that it is possible for a private-company CEO to receive less compensation than one of that CEO’s direct reports. For instance, if the CEO is a founder (and director) of the company and the CTO is a non-founder who serves on the board, then the CTO may out-earn the CEO. In fact, among the 529 companies in the dataset, there were 77 companies (15%) in which the CTO or CFO out-earned the CEO, and another 69 companies (13%) in which the CEO was paid the same amount as the CTO or CFO.

The results also suggest that executives can gain higher salaries by achieving key operating and financing milestones and thereby showing that they can cope with the company’s key uncertainties (Hickson, Hinings et al. 1971). Further exploration of the link between pay and the achievement of milestones is warranted. In addition, in this study, some of the human-capital variables – most significantly, the years of prior experience, but also whether the executive had earned a Ph.D. degree – had an important impact on executive compensation. Large-company compensation studies have found an overall lack of empirical support for the proposition that human capital affects compensation (Finkelstein and Hambrick 1996). Evans and Leighton, however, found that education had greater returns in self-employment than in wage work (Evans and Leighton 1989). This study’s results lend support to their assertion and suggest the added importance of human capital to executives in the entrepreneurial sector.

To comprehend the existing structures of larger organizations, we must first understand the processes that created and developed them when they were still small organizations (Aldrich 1999) and should “trace the processes by which power is won” (Hinings, Hickson et al. 1974:40). The ability to do so has been hampered by the fact that researchers have studied only relatively mature companies. Rather than focusing on compensation in public companies, by studying the evolution of executive compensation throughout the founding, growth and development of companies, we should gain deeper insights into their dynamics. For instance, this study provides insights into how the compensation of both CEOs and non-CEOs changes as entrepreneurial companies develop. More specifically, analyses of the differences between the younger and older companies in the dataset suggested that more-mature start-ups, in which the division of labor in the TMT has often increased, show a wider compensation gap between CEOs and their direct reports. Is the emergence of these differences linked to the different contingencies increasingly addressed by individual executives as the division of labor grows? How strong are those position-specific effects? Are there contexts and industries in which they emerge earlier or more strongly?

References Available from the Author