CEO Compensation in Private Venture-Backed Firms

Ola Bengtsson
Johnson School
Cornell University
Ithaca, NY 14853-6201
Tel.: 607.254.8807
lob2@cornell.edu

John R. M. Hand
Kenan-Flagler Business School
UNC Chapel Hill
Chapel Hill, NC 27599-3490
Tel.: 919.962.3173
hand@unc.edu

We study the pay earned by CEOs during the early life-stages of private venture-backed firms. The typical venture-backed startup needs considerable external financing to survive and flourish, but faces illiquid and informationally opaque capital markets. This makes fundraising a vital but difficult CEO task. We therefore expect that CEO compensation will be linked to how successfully the firm raises capital. Using a new compensation database on 1,585 U.S. venture-backed firms, we show that CEO cash pay is indeed higher for companies that have recently raised more equity, and that have attracted more experienced VCs. We argue that the observed elasticity on fundraising is unlikely to simply reflect differences in firm size because it is robust to controls for firm characteristics, firm operating performance, and firm valuation. CEO cash pay is also larger when fundraising is more difficult, and is smaller for executives who are not involved in fundraising. In the time-series, CEO cash pay increases markedly in the year after a financing and increases more if the company raised more capital. Finally, we show that while successful fundraising dilutes the CEO's percentage ownership, it increases the dollar value of that ownership. Our findings suggest that cash and equity compensation help align CEO incentives even when sophisticated investors such as VCs are active monitors and hold strong control rights.

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This paper studies the compensation of the Chief Executive Officer (CEO) in private venture-backed companies. In doing so, we seek to contribute to the extant literature on executive compensation in two ways. First, we analyze cash and equity compensation during the formative or "cradle" years of firms' lives. Second, we evaluate the effects on CEO pay of the interactions between the characteristics of innovation-intensive, high-growth venture-backed companies and the private capital markets that supply them with equity financing. Consistent with fundraising being a vital but difficult CEO task, our key finding is that CEO cash and equity compensation are robustly higher for firms that have been more successful in raising venture capital.

Many of today's biggest and most globally renowned companies—such as AmGen, Apple, Cisco, FedEx, Genentech, Google and YouTube to name but a few—were backed by venture capitalists. However, in the early startup phases of its life, the typical venture-backed firm cannot generate sufficient internal cash flows to support its fast growth and intangible-intensive asset structure, and the external capital markets it faces are private, illiquid and informationally opaque. This makes raising capital a critical task that requires significant skill and effort on the part of the CEO. Without multiple injections of new capital, a startup technology firm is likely to go bankrupt rather than realize its goal going public or being acquired. As such, we expect to observe that CEO compensation in private venture-backed companies will be an increasing function of fundraising success. Adding weight to this expectation is that the early-stage nature of venture-backed firms makes conventional performance metrics such as revenues, profits and employees somewhat imperfect measures of CEO effort and ability.

The dataset we use to test this conjecture covers the period 2002 to 2006 and spans 1,585 private U.S. venture-backed firms. The median CEO of a firm that has raised its first venture financing round is paid $189,000 in cash compensation and holds 7% of the firm' fully diluted equity. Average CEO cash pay then increases steadily as companies mature and secure more financing, such that the median CEO of a company that has raised its seventh venture financing round is paid $277,000 in yearly cash pay and holds 5% of the firm's fully diluted equity.

Empirically, our regression analysis indicates that CEO cash compensation is strongly linked to the quantity and quality of the firm's fundraising success. We find that firms that raise larger amounts of VC financing and attract more experienced VCs subsequently pay their CEOs more in yearly cash compensation. We conduct several different empirical tests aimed at

identifying the direct effects of fundraising success and ruling out the argument that the elasticity on fundraising we observe only reflects differences in firm size.

First, we show that the elasticity of CEO cash pay to financing success remains strong after including a battery of controls for CEO and company characteristics, current and future operating performance, and the firm's equity value at its last financing round. Second, consistent with the view that fundraising is a critical but difficult task, we find that fundraising success increases CEO compensation more when fundraising is harder. Specifically, the elasticity on fundraising amount is significantly higher for companies with smaller revenues and fewer employees. Third, fundraising success increases the distance between the cash pay earned by CEOs and the cash pay earned by executives who are not as actively involved in fundraising. Our fourth and probably most convincing evidence for a direct link between cash compensation and fundraising is found in the time-series—CEO cash compensation increases considerably when a company raises capital, and this increase is larger when the amount raised is larger. We also study how the equity ownership of the CEO is linked to fundraising. We find that the positive elasticity of CEO cash pay with respect to financing success does not reflect a negative elasticity of CEO equity pay with respect to financing success. That is, while fundraising dilutes the CEO's ownership stake, it typically increases the dollar value of that stake.

In total, our findings contribute to the literature on executive compensation in general, and CEO pay in private companies in particular, by demonstrating that the CEOs of innovation-intensive, high-growth are rewarded for successfully raising new equity in the illiquid private capital markets they face. While this type of pay-for-performance relation has been observed for not-for-profit organizations (Baber, Daniel and Roberts, 2002; Core, Guay and Verdi, 2006), our research is the first to analyze the *rewards to financing* in for-profit private companies. We also add to research that studies the economics of private firms (Baker and Gompers 1999; Hellmann, 2000; Hellmann and Puri, 2002; Hsu, 2004; Wasserman, 2006; Kaplan, Sensoy and Strömberg, 2007; Puri and Zarutskie, 2007; Chemmanur, Krishnan and Nandy, 2007; Cole and Mehran, 2008) by focusing on CEO compensation during the "cradle" years of private firms' lives.

The remainder of the paper is organized as follows. Section I explains why we expect CEO cash pay to be linked to financing success in venture-backed companies. Section II describes the data we use, while Section III presents a variety of summary statistics on CEO

compensation. Section IV reports and discusses empirical results on cash pay. Section V analyzes results related to CEOs' equity ownership. A concluding discussion is in Section VI.

I. Financing Success and CEO Cash Compensation

It is reasonable to expect that CEO compensation in venture-backed firms should share many features with that of mature public companies, including a link between compensation and variables that capture firm size and operating performance. However, the key thrust of our study is the argument that in private venture-backed firms we *also* expect to observe a special link between CEO compensation and fundraising success. We motivate the special link in two ways.

First, public firms exist in deep, liquid and information-rich capital markets. But venture-backed companies operate in private financial markets that are rife with information asymmetries and asset/equity illiquidity. Raising money in the venture-capital market is therefore a difficult and non-standardized task that requires a great deal of CEO time, effort and skill. The CEO's fundraising task is vital, though, because venture-backed firms normally need a great deal of external financing simply to survive, let alone flourish. The voracious demand for external financing that venture-backed startups exhibit derives from the innovative nature of their assets. Specifically, new technologies require large, rapid and risky investments in R&D, intellectual capital and patents. However, the unformed markets toward which the new technologies are targeted mean that revenues follow investments with a significant lag. This fundamental cash flow mismatch, exacerbated by rapid growth, results in venture-backed companies experiencing long periods of large negative free cash flows before positive free cash flows emerge.

Second, the quantity and quality of capital raised by venture-backed firms are likely to be more reliable measures of value creation than are revenues or net income. Not only are the typical R&D and human capital assets of a venture-backed company intangibles whose value derives from long-term expected cash flows—making near-term profits poor predictors of ultimate equity value—but the "immediately expense, never capitalize" rules that dictate how firms' must account for intangible assets are such that venture-backed firms' reported profits are biased and/or noisy measures of economic performance. In contrast to operating metrics like revenues, reported profits or the number of employees, the amount of capital a firm raises cannot be deliberately mistimed, distorted or fudged by the CEO.

The combination of fast-growing, intangible-intensive young firms and private capital markets leads us to expect that CEOs who successfully convince venture funds to invest in their company will earn higher total cash compensation, either because the board of directors directly reward them for their effort, or because the CEOs' proven ability and willingness to make value-enhancing effort increases their value on the external labor market. This leads to the empirical expectation that, unlike for public companies where fundraising is typically not needed for the short-term survival of the company and requires only limited CEO attention, CEO compensation in private venture-backed companies should be increasing in fundraising success.

CEO compensation typically includes base salary, cash bonuses, and equity in the form of stock options and/or common stock. Although there is little doubt that CEOs of venture-backed firms are primarily incentivized by their equity holdings, cash pay nevertheless has several positive attributes that leads us to focus our attention on it in this study. First, cash pay is less expensive than equity because equity transfers risk from less diversified VC investor to a more risk-avert CEO (Holmström, 1979). Second, it is very difficult for a CEO of an early stage company to liquidate any of his or her options or shares prior to an IPO or sale of the business. Cash pay therefore directly affects the CEO's current level of consumption. The importance of cash compensation can be illustrated by our finding that the yearly cash pay of the median CEO in our sample corresponds to about 22% of the total value of the CEO's equity stake.

Third, the value of cash compensation is unambiguous and not affected by dilution and the weak cash flow rights of the common equity that CEOs almost always hold. In contrast, the complex ownership structures of most venture-backed companies, together with the provisions attached to VCs' convertible preferred stock, make putting a neat dollar value on the CEO's equity holdings quite difficult. Lastly, the CEOs of many venture-backed companies are fired or voluntarily replaced prior to an exit (Hellmann and Puri, 2002; Kaplan, Sensoy and Strömberg, 2007). If terminated, CEOs are entitled to keep the cash compensation they have been paid but typically lose most or all of their unvested shares, and they have no protection against future dilutive events.

In its totality, our discussion in this section leads us to conclude that there are legitimate reasons for supposing that the prediction that the CEO of a private venture-backed firm will be rewarded for raising new venture capital, particularly high quality new venture capital, is a

reasonable one. We now turn to whether the prediction is supported or rejected empirically, using a new survey-based dataset generously provided to us by VentureOne.

II. Data

A. Sample

Our data come from detailed surveys conducted by VentureOne, a primary worldwide provider of data on VC investments and VC funds.[1] A total of eight CompensationPro™ surveys covering the period 2002–2006 make up our sample.[2] In each proprietary survey, VentureOne emailed a multipage, web-based compensation questionnaire to the approximately 7,000 venture- backed U.S. companies in its financing database that were classified at the time as being private and independent. The questionnaire asked companies to provide a broad set of compensation-

and business-related information. For example, companies were asked to report the dollar values of the base salary, bonuses, and other cash compensation of every employee (up to a maximum of 50 people from the most senior person down); the total shares of founders' stock and exercised and unexercised options that each held; and the total fully diluted and common shares the companies had outstanding. In terms of business information, VentureOne asked each company to provide actual revenues for its most recent fiscal year; expected revenues for its current fiscal year; the number of employees at the end of its most recent fiscal year; and the number of employees it expected to have at the end of its current fiscal year.

As reported in Table I, panel A, a total of 2,975 venture-backed companies responded to one or more of the VentureOne surveys, yielding compensation data on 61,005 executive-survey pairs. We limit our sample to CEOs or Presidents (we denote such executives as CEOs). For firms that responded to both spring and fall surveys in a given year, only the spring survey is used. These restrictions limit the sample to 4,921 CEO-year observations for 2,913 companies.

We then match the compensation survey data to VentureOne's financing and general support databases. To be included in the final sample, a company needed to provide information about location (U.S. state), industry, prior year revenues and employees, and equity ownership

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[1] The authors were generously granted access to VentureOne's data after signing strict nondisclosure agreements. [2] The surveys were undertaken in spring 2002, spring and fall 2003, spring and fall 2004, spring and fall 2005, and spring 2006.

for both the CEO and VCs as a group. Also, each firm must have closed at least one seed or VC financing round prior to the survey date.[3] Companies were excluded if one or more VC investors could not be identified, if the financing amount of the last round was not disclosed, if data were obviously incorrect, or if the firm was founded before 1980.

The final sample comprises 2,816 observations from 1,585 companies. Imposing the additional restriction that the sample firm disclose it pre-money valuation at its last VC financing round reduces the dataset to 1,247 observations from 755 companies. We use the latter subsample when calculating the implied value of the CEO's equity ownership, or when we include the firm's pre-money valuation in regressions as a proxy for future value-creating growth. Table I, panel B tabulates the final sample by survey year. Some firms list more than one CEO or list both a president and a CEO. Approximately 88% (2,471/2,816) data points are unique company/year observations (Table I, panel C).

B. Selection Bias

The fact that both compensation and performance data are collected from surveys that firms complete on voluntary basis may lead to selection biases. While we are unable to measure the magnitude of such biases, three considerations lead us to believe that selection bias is not likely to materially affect the inferences we draw from our tests. First, our sample of 1,585 companies covers a substantial proportion (approximately 20%) of U.S. venture-backed companies in the period 2002–2006. Second, by including geographical location, industry and company maturity as independent variables in our regressions, we control to some degree for selection effects related to these factors. Lastly, while it is possible that the VentureOne dataset oversamples companies with good operating and/or financial performance, we believe it is unlikely that such oversampling would be confined to companies with both good performance and high CEO compensation. Thus, whereas the potential oversampling of successful companies in our sample could lead to an overstatement of the average and median compensation levels, we suggest that it is unlikely to affect cross-sectional regression results.

[3] Firms for which the last VC round was number 7 or more were excluded, because such companies are likely to have different characteristics than startup-type venture-backed firms.

C. Descriptive Statistics for General Variables

We report descriptive statistics for non-CEO-compensation variables in Table II, panel A. The identity of the CEO is not revealed in the surveys, but we are able to determine whether the CEO is a *Founder*; is currently *Chairman of the Board*; or was *Hired in Prior 6 Months*. CEO turnover is low, with only 5% of CEOs being hired in the six months leading up to the survey. Almost half of all CEOs (42%) are founders and 5% served as Chairman of the Board.[4]

VentureOne asks companies to provide data on how many *Employees* they have at the end of the calendar year prior to the survey. We match each such interval with the median number of employees from a subsample where the actual number of employees is known. The variable *Revenues* in the previous calendar year is also only given in dollar intervals, and we translate each survey response to the median value for each such interval. The companies also input whether they are *Profitable*, but they provided no numerical estimate of the magnitude of their net income (or loss).[5] The average *Company Age* was 3.7 years at the time of the survey.

The surveys do not ask for data about VC financing, but VentureOne collects such data from other public and private sources. We identify the last seed or VC financing round prior to the survey date, and from it we created a *Round Number* variable that is equal to 1 for a seed stage round, 2 for the first VC round, 3 for the second VC round, and so on. As of the survey date, the typical company had closed its second VC round. Two variables were created that measure the amount of financing that the company had received. *VC Financing Raised in Last Round* is the financing the company received in its most recent round of VC financing. The average amount for *VC Financing Raised in Last Round* is $11.7 million, reflecting a right-skewness with several companies having raised more than $100 million. In addition, the variable *VC Financing Except Last Round* measures the cumulative amount of financing received from VCs and other investors in all rounds prior to the last round of VC financing, including rounds in which only corporate VCs participated, non-VC rounds such as debt financing, etc. .

[4] VentureOne's surveys do not include questions about CEO personal characteristics such as age, gender, education and prior work experience. The surveys also do not reveal the identity of the CEO.

[5] VentureOne reports the variables *Employees*, *Revenues*, and *Profitable* by interval(s), not their continuous values. As shown by Irwin and McClelland (2003), when two or more intervaled variables are included in a multiple regression, the estimated coefficients on those variables may

be biased. However, the direction of such biases cannot be determined without knowledge of the properties of the underlying continuous variables.
[6]

Of firms' most recent VC financings, 89% were syndicated, and 63% included a VC who was not an investor in any previous round. We created two experience variables for the experience of the lead investor of the round: *Experience of Lead VC* and *Age of Lead VC.* The former is defined as the number of portfolio companies in which the VC had ever invested, as of the survey date. As shown by Seppä (2003), Sorensen (2007) and Hochberg, Ljungqvist and Lu (2007), *Experience of Lead VC* is positively correlated with the performance of the VC's portfolio companies.

III. CEO Compensation: Descriptive Statistics

A. Definitions of Compensation Variables

CEO total compensation has two major components—equity ownership and cash pay. Neither fringe benefits nor lavish pension plans are a major part of CEO compensation for the type of firms we study (Hand, 2006). VentureOne's surveys ask each company to give detailed information on the *Base Salary*, *Bonus* and *Other Compensation* elements of CEO cash compensation. We define *CEO Total Cash Compensation* to be the sum of these parts, and use it as our primary measure of CEO cash pay. In doing so, we note that *CEO Total Cash Compensation* excludes noncash compensation such as stock option grants and share grants.

While the data on cash compensation are very detailed, much less information is available on equity compensation. VentureOne's survey does not ask companies to provide information on stock options and vested shares they have granted to individual employees. Thus, we are unable to calculate the yearly change in the CEO's equity ownership. Even if data on options and equity grants were available, it would be difficult to separate out the part of such compensation that pertains to current-period performance from the part that pertains to dilutive events, from the part that follows from a predetermined vesting schedule.[6] Moreover, even if it were possible to separate out the work compensation portion of option and equity grants, that portion would be hard to value with much precision. This is because the companies are private

[7] Following a new financing round, executives are often allocated stock options to compensate for the dilution of cash flow rights that follows from the newly issued preferred stock with attached liquidation preferences.

[8]

and do not have common equity values that are set in a liquid market on a regular basis.[7] Due to these limitations, we are limited in our ability to analyze the equity component of CEO total pay.

VentureOne's surveys do ask firms to report the fraction of total fully diluted firm equity held by the CEO, which we denote as *% Equity Ownership of CEO*. This variable is calculated by dividing the sum of all options and shares owned by the CEO (assuming all options are exercised and all shares vested) with the total number of outstanding shares (common plus preferred, again assuming that all options are exercised and all shares are vested). We define *Implied Value of Equity Ownership* as the product of *% Equity Ownership of CEO* and the post-money valuation of the most recently completed VC round. *Implied Value of Equity Ownership* can be calculated for less than half of our sample.

B. Descriptive Statistics for Cash Compensation

In Table II, panel B we report descriptive statistics for CEO total cash compensation. The average amount of *CEO Total Cash Compensation* is $246,000 per year, of which $35,000 (14%) is in the form of a *Bonus*. As shown in Table III, the CEO of a firm that has raised its first round of venture funding earns an average total cash compensation of $189,000, while the CEO of a firm that has successfully raised a 7^{th} financing round earns $280,000. Bonuses are paid to CEOs about half the time. *Other Compensation* averages only $2,000 annually. Figure 1 displays a histogram of *CEO Total Cash Compensation*. Not unexpectedly, the distribution of *CEO Total Cash Compensation* is right-skewed, with the skewness arising almost entirely from the *Bonus* component. When we do a similar plot of *Bonus*, we find that 49% are zero, with the remaining 51% clustered at smaller, not larger, values.

Overall, CEO cash compensation is relatively narrowly distributed in private venture-backed firms. Per Figure 1, 75% of CEOs earn total cash pay between $150,000 and $350,000. Median CEO cash pay for a firm with revenues above $20 million is only 28% greater that of a

firm with revenues of $0 to $0.5 million (Table III). Similarly small pay spreads exist sorting by

[9] Equity prices based on arms-length transactions between venture-backed private firms and investors are typically only observed at formal financing rounds. Such financing rounds usually occur one to two years apart. This makes estimating the firm-specific inputs of standard option valuation models (the level of the firm's stock price and the volatility of the returns on the firm's common stock) very difficult.

[10]

Firm maturity, number of employees, and fundraising success. The narrowness in the distribution stems primarily from a low upper bound, in that less than 1% (5%) of CEOs earn more than $500,000 ($400,000) of cash compensation. The narrow distribution of cash compensation, in combination with the large variance of variables measuring operating performance and fundraising success, leads to small estimated elasticities.

Since most previous analysis of CEO pay has focused on public companies, it is interesting to compare and contrast the total cash compensation earned by CEOs of venture-backed firms with that earned by CEOs of similar companies that are publicly traded. We use *CapitalIQ* to obtain compensation data for CEOs of Life Science and High-Tech companies (which are the two major industry groups in our sample of private venture-backed companies).[8] The average benchmark public company CEO receives $791,000 in *Total Cash Compensation*. This is 221% more than the average venture-backed company CEO (in Life Science or High-Teach industries), including 104% more in *Base Salary* and 735% more in *Bonus*. We then restricted the benchmark sample to companies that went public in the last five years and were venture-backed prior to their IPO. For such firms, the average CEO received $519,000 or 111% more in *Total Cash Compensation*—66% more in *Base Salary* and 307% more in *Bonus*. These differences are even smaller when the benchmark sample is limited to public companies with revenues of less than $50 million—the CEO made $420,000 in *Total Cash Compensation*, or 70% more than the average CEO of a private venture-backed company. Overall, the comparison with public company CEOs indicates that the CEOs of venture-backed firms earn less cash compensation but that a large part of this difference is due to firm size. While both *Base Salary* and *Bonus* are higher in public companies than in venture-backed companies, this difference is significantly more pronounced for *Bonus*.

D. Descriptive Statistics for CEO Equity Compensation

The average percentage of fully diluted equity held by CEOs in our sample is 9% (see Figure 2), an amount that is significantly lower than the 19% CEO ownership for venture-backed

[11] CapitalIQ does not report year-by-year CEO equity ownership.

[12]

Companies found by Baker and Gompers (1999).[9] The difference likely reflects the fact that the sample of Baker and Gompers includes only companies that go public, while our sample includes all types of venture-backed firms. The mean CEO implied ownership value is $4.63 million, but the median is substantially lower at $1.70 million. As discussed above, these figures are likely overstated due to selection bias. About 10% of all sample CEOs have more than $10 million in equity ownership value. For them, *CEO Total Cash Compensation* is clearly small relative to the value of their equity stake. Thus, if the levels of cash compensation and equity value were to remain unchanged over the company's life cycle, the equity value held by the median CEO would equal about 8 years of cash compensation. Unfortunately, because CapitalIQ does not report historical ownership data, we cannot benchmark equity compensation to a selected group of public company CEOs.

<< Figure 2 about here >>

In the next section we discuss our regression results pertaining to CEO cash pay, and in Section V present results on CEO equity ownership.

IV. CEO Cash Compensation: Empirical Results

A. Success in Raising Equity Financing

Table IV reports the results of cross-sectional regressions aimed at testing whether CEO cash compensation is higher for companies with greater success in fundraising. The dependent variable is *Total Cash Compensation.* Dollar-denominated variables are all logged so as to yield coefficient estimates that are elasticities, and to mitigate the impact of outliers. Year, state and industry dummies are included to control for common macroeconomic factors. To reduce the likelihood that standard errors will be affected by time-series correlation, regression residuals are

clustered by company.[10] All specifications incorporate state and industry dummies to control for systematic differences in firms' production functions, investment opportunity sets, and information environments.

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[13] This ownership fraction typically translates into a lower fraction of actual cash flows due to frequent use of convertible participating preferred securities by investing VCs.

[14] See Petersen (2006) for an overview of solutions to estimation problems in panel datasets.

[15]

We use several fundraising proxies. The most primitive quantity measure is *Round Number*, simply the number of times the company has received financing from VCs. As suggested by the descriptive statistics in Table III, at the univariate level model IV.1 shows that *CEO Total Cash Compensation* is strongly increasing in *Round Number* (t-statistic = 10.4).

<< Table IV about here>>

Our second and third measures for the quantity of equity raised are *VC Financing Raised in Last Round* and *VC Financing Except Last Round*. The former is the dollar amount raised by the company in its most recent round prior to the VentureOne compensation survey date. The latter is the amount raised in all previous VC rounds except the last. Due to the greater temporal proximity of *VC Financing Raised in Last Round* to the CEO who is in place at the survey date, and the notion that "you're only as good as your last success," we expect the coefficient on *VC Financing Raised in Last Round* to be larger than that on *VC Financing Except Last Round*.

The results reported for model IV.2 are consistent with these predictions and support our main research expectation. The estimated coefficients on *VC Financing Raised in Last Round* and *VC Financing Except Last Round* are significantly positive (t-statistics of 10.0 and 8.5, respectively). From this we conclude that CEOs receive higher cash compensation by raising more VC dollars, not simply by securing more rounds of VC funding. The elasticity of *Financing Raised in Last Round* (9.9%) is also considerably higher than that of *VC Financing Except Last Round* (1.6%). The magnitude of the estimated elasticity on *Financing Raised in Last Round* means that a CEO whose firm raised about $4 million in its most recent financing round earns about $220,000 ($4 million being the 25th percentile amount in our sample), whereas

a CEO whose firm raised more than $15 million (75th percentile) earns about $270,000.

Our fourth and final measure of fundraising success is the quality of the VC financing. Unlike public equity or debt capital, venture capital is often argued to be "smart money" in the sense that VCs typically add operational value to the firm. Hellmann (2000) and Hellmann and Puri (2002) document that VCs take an active role in helping founders to professionalize management by helping in the hiring of key senior-level business, scientific, and technical personnel. However, the ability to add value differs across VCs. Sorensen (2007) shows that older and more experienced VCs provide greater value to their portfolio companies. Wongsunwai (2007) finds that experienced VCs are more involved in their portfolio companies by taking a larger number of board seats, and Hsu (2004) shows evidence of perceived differences in value addition for different VCs, in that entrepreneurs are more likely to accept offers by more experienced VCs even if such VCs give lower valuations.

In model IV.3 of Table IV, we include *Experience of Lead VC* as an additional explanatory variable and observe that *CEO Total Cash Compensation* is significantly higher the greater is the *Experience of Lead VC* (i.e., the higher the total number of companies in which the VC has invested). Similar results are found in untabulated regressions where *Age of Lead VC* is used as proxy for VC quality.[11] The estimated elasticity on *Experience of Lead VC* is relatively low dollar at 1.5%, meaning that a CEO whose firm raised financing from a VC with 7 historical portfolio companies (the 25th percentile in our sample) earns about $239,000, whereas a CEO whose firm raised more than $15 million (75th percentile in our sample) earns about $255,000.

B. Operating Performance and CEO Characteristics

The estimated coefficients on our proxies for the quantity and quality of financing success in models IV.1 - IV.3 could be biased if financing success is correlated with operating performance, immediate growth, or CEO characteristics. The descriptive evidence reported in Table III suggests that at the univariate level, *Total CEO Cash Compensation* is higher for firms with more *Employees*, *Revenues* and *Profitability*. On average, *Total CEO Cash Compensation* is $232,000 for a firm with zero or almost no revenues (< $0.5 million), but $307,000 for a company whose yearly revenues exceed $20 million. Likewise, CEOs of firms with fewer than 10 employees earn an average of $202,000 in total cash compensation, whereas CEOs of firms with more than 100 employees earn an average of $295,000.[12] The CEOs of profitable companies make $261,000, versus $245,000 if the firm is unprofitable.

We therefore re-estimate model IV.3 after including proxies for the firm's performance in its most recent fiscal year (*Employees*, *Revenues* and *Profitability*), state and industry fixed effects, the expected one-year-ahead growth in revenues and employees, and CEO employment

[16] We also obtain a positive and significant coefficient when *VC Number of Successful Exits* (IPO or acquisition) is used as a proxy for VC experience.

[17] One objection to using employee headcount as a positive performance measure is that the CEO could hire more people than needed. While this may be true for an established company, hiring employees for a risky early stage company is a matching process in which prospective employees have to believe in the company's survival in order to motivate their company-specific investment. Moreover, the more employees the CEO hires, the greater is the company's cash burn and so the higher the pressure on the CEO to secure more financing or turn cash-flow positive.

characteristics. While prior work has taken into account the educational background of the CEO (Wasserman, 2006), such data are not in VentureOne's surveys, nor is the identity of the CEO disclosed. What VentureOne provides is whether the CEO was *Hired in the Last 6 Months* as CEO, if he/she also serves as *Chairman of the Board*, and whether the CEO is a *Founder*.

The results show that both *Revenues* and *Employees* are positive and significant. [13] While *CEO Total Cash Compensation* is reliably associated with current and/or expected one-year-ahead growth in *Revenues* and *Employees*, the estimated elasticities on *VC Financing Raised in Last Round, VC Financing Except Last Round* and *Experience of Lead VC* remain significantly positive. The estimated coefficient on *VC Financing Raised in Last Round* (0.07) is similar to that on *Employees* (0.08) and three times as high as the coefficient on *Revenues*. (0.02).

In untabulated robustness tests, we replaced *Employees* and *Revenues* with dummy variables that capture each survey interval. We have also estimated separate elasticities on *Employees*, *Revenues* and *Profitability* for each of the three major industry groups (High-Tech, Life Science and Other). We also included *Time between Survey and Last Round* as a control variable (the estimated coefficient on which was insignificant). The estimated coefficients on fundraising success remain statistically significant in all these robustness specifications.

Another set of untabulated robustness tests we undertook was to examine whether our results on fundraising are driven by differences in CEO human capital. Conversations with venture capital partners strongly indicated that the key professional characteristic venture capital partners are willing to pay more for is whether the CEO had "done it before" in the sense of having had significant and successful experience at another venture-backed firm—particularly if the previous firm had experienced a successful exit such as an IPO or acquisition. We find that while in a univariate setting those CEOs who have previous work experience in a venture-backed company are paid about 14% more than those without such experience, no statistically significant effects on CEO human capital are found when we control for fundraising success and operating performance. Moreover, the significant coefficients on fundraising success are unchanged in these specifications.

[18] In an unreported regression, the coefficient on *Profitable* is positive and weakly significant

when *Profitable* is interacted with *Company Age*. This suggests that while profitability is not an important performance measure early in a private venture-backed company's life cycle, it becomes more important as the firm matures.
[19]

C. Valuation of Last Financing Round

We note that the possibility exists that the estimated coefficients on fundraising success may be biased upwards if fundraising is positive correlated with unobserved performance and growth measures. We address this concern in model IV.5 by re-estimating model IV.4 after additionally including *Pre-Money Valuation of Last Round*, the pre-financing valuation of the company at the most recent financing round. Pre-Money valuation is the value of the company after the infusion of new capital, less the dollar value of the new capital.[14]

Model IV.5 is necessarily limited to the 1,247 observations for which the firm's pre-money valuation is reported in VentureOne. The results indicate that the coefficient on *VC Financing Raised in Last Round* remains reliably positive. From this we infer that neither observed differences in *Revenues*, *Employees* and *Profitability* or unobserved differences in other performance and size variables are likely to explain why cash compensation is higher for companies that have recently secured more external financing. The fact that *Pre-Money Valuation of Last Round* is not significant suggests that CEO cash compensation is tied directly to operating performance measures such as revenues, employees and profitability, rather than indirectly linked to firm value.

D. Founders vs. Non-Founders

Before proceeding with other empirical tests of the link between cash compensation and fundraising, we investigate whether the above results are specific to either founder CEOs or non- founder CEOs. Since founder CEOs have by definition likely been intimately involved with the firm since its inception, founder CEOs may identify closely with, and gain non-material rewards from their ventures (Wasserman, 2006). Founder CEOs also likely represent a different type of agency problem to VCs than do non-founder CEOs (Palia and Ravid, 2002).

In Table V we report the results of including an intercept dummy for CEO founder/non-founder status, and interacting CEO founder/non-founder status with fundraising success and operating performance. As in Wasserman (2006), model V.1 shows that CEOs who are founders on average earn total cash compensation that is 18% (approximately $44,000) lower than do non-

[20] Pre-money value is not a perfect measure of company value because it does not adjust for the specific cash flow rights attached to VCs' convertible preferred stock, e.g., liquidation preferences, participation, and cumulative dividends.

[21]

Founders. Model V.2 indicates that while the elasticity of cash pay to financing success is higher for founder CEOs (0.088 vs. 0.058), it remains significant for non-founder CEOs (0.058). Qualitatively similar differences are found for the elasticities of CEO cash pay to *Revenues* (model V.3) and *Employees* (model V.4). Thus, while both founder and non-founder CEOs have higher cash compensation when the company has more recent financing success and stronger operating performance, this pattern in compensation is more pronounced for founder CEOs.

E. Interaction between Successful Fundraising and Operating Performance

To further test whether cash compensation is linked to fundraising by means of CEO effort and abilities, we explore the implications of fundraising being more important for some companies in our sample than others. We propose that successfully raising VC financing is particularly difficult for firms with weak operating performance because they cannot point to strong growth in revenues or employees to convince investors that their business model is now, or will eventually be, successful. At the same time, the cash flow implications of the immediate lack of operating success make securing new financing all the more crucial for such firms' survival and growth. If cash compensation is linked to fundraising success because fundraising is a difficult task, then CEOs of private venture-backed companies should be more highly rewarded for successful fundraising when their firm's performance is weak, since under such conditions successfully raising new equity is all the more important.

To test this prediction, we use regression specifications similar to those in Table IV, but augmented to include operating/financing interactions. The results are reported in Table VI. Regression VI.1 includes an interaction between *VC Financing Raised in Last Round* and *Revenues*, and we note that the estimated coefficient on this interaction is reliably negative.

A similar result is found in model VI.2 where the interaction is between *VC Financing Raised in Last Round* and *Employees*. However, in model VI.3, where the interaction is between *VC Financing Raised in Last Round* and *Profitability*, the estimated interaction coefficient is insignificant. Overall, we infer from the results reported in Table VI that CEOs of private venture-backed companies are more highly rewarded for successful fundraising when their firm's performance is weak and it is more difficult for the CEO to raise external capital.[15]

F. Difference between CEOs and Other Executives

If our expectation is correct that CEO compensation responds to the effort and skills needed for fundraising, then the link between cash compensation and fundraising should be larger for CEOs than for executives who are not involved in raising capital. But if fundraising variables are merely proxies for company size and company performance, then the elasticity of compensation with respect to financing success for other executives should be similar to the elasticity of the CEO. We test these competing predictions by first calculating the difference between *Total Cash Compensation* for the CEO and the average *Total Cash Compensation* for different levels of executives of the same firm as reported in the same survey. Table VII then presents the results of regressions where this difference, calculated across different levels of executives, is regressed on company characteristics, operating performance and, most importantly, fundraising success.

<< Table VII about here>>

Model VII.1 demonstrates that companies with higher *VC Financing Raised in Last Round* and *VC Financing Except Last Round* exhibit a significantly wider cash compensation difference between the CEO and other non-financial Chiefs such as the Chief Operating and Chief Information Officers. To better interpret magnitudes, we use the percentage difference in compensation, $TCC_{CEO} / TCC_{Chiefs} - 1$, as the dependent variable model in VII.2 and include TCC_{Chiefs} as an independent variable to control for average differences. We find that a doubling of the amount raised in the last financing round increases the compensation gap between the CEO and other Chiefs by about 5% or $4,000. Qualitatively similar results are found in models

VII.3 and VII.4, and VIII.5 and VIII.6, where the executives are Vice Presidents and Directors, respectively.

[22] In the tests reported in Table VI, we do not distinguish between whether the new capital was raised from the company's current investors or from new VCs. In untabulated regressions, we find no evidence that CEOs who raise more capital from a new lead investor (as opposed to an investor that already invested in the company) receive higher cash compensation.

[23]

We interpret the consistently positive and significant elasticities on *VC Financing Raised in Last Round* in models VII.1 - VI.6 as supportive of our proposal that the link between cash compensation and successful fundraising stems from the CEO's effort and skills in raising external financing in opaque and illiquid capital markets.

G. Year-to-Year Changes Evidence

We next explore the relation between CEO cash compensation and financing success in time-series rather than the cross-section. At the cost of a substantially reduced sample size, the time-series analysis arguably allows us to more powerfully assess whether CEO cash pay increases directly after successful fundraising, or instead increases only gradually and indirectly as the company uses the new money it has raised to expand its operations.

We restrict our sample to the 736 observations where we have two surveys that are exactly one year apart. We calculate the one year dollar change in *Total Cash Compensation*, $TCC_t - TCC_{t-1}$, and regress it on one-year changes in key independent variables. Results are presented in Table VII.[16]

In model VIII.1, we find that cash compensation increases more for companies that successfully raise venture capital, as captured by *Dummy Raised Capital*. The estimated coefficient is economically meaningful: Fundraising increases the CEO's cash compensation by about $20,000. As in our cross-sectional analysis, however, fundraising could be correlated with omitted contemporaneous and/or future changes in operating performance. To control for this, model VIII.2 includes the one year changes in *Revenues*, *Employees* and *Profitability*, while model VIII.3 additionally includes current *Round Number*, *Revenues*, and *Employees*.

Table VIII reveals though that these controls do not change the magnitude or statistical significance of the estimated coefficient on *Dummy Raised Capital*. Moreover, such one year changes in operating performance have no significant impact on cash compensation. In model VIII.4 we further include the one-year growth in *Revenues* and *Employees*. While the estimated coefficient on employee growth is positive, the coefficient on *Dummy Raised Capital* remains

[24] In untabulated robustness regressions we obtained qualitatively similar results using the percentage change in
Total Cash Compensation, TCC_t / TCC_{t-1} – 1, as the dependent variable.

significant even after controlling for these growth proxies. From this we conclude that the temporal link between cash compensation and fundraising that we document is unlikely to be only a reflection of immediate changes in company size or operating performance.

We refine the analysis by exploring whether CEO pay increases more if the company raises a larger quantity of venture funding, or if the pay increase is independent of the size of the last financing round. Model VIII.5 replicates model VIII.4 for the subsample of firms that secured a new financing round between the surveys, and includes *VC Financing Raised in Last Round* as an independent variable. We find that the estimated coefficient on *VC Financing Raised in Last Round* is such that a doubling of the financing amount increases the CEO's cash compensation with about $17,000 dollars. When in model VIII.6 we estimate this coefficient for the subsample of firms that did not secure a new financing round between the surveys, we find no significant result. These two findings add further weight to our conclusion that the link between cash pay and *VC Financing Raised in Last Round* reflects a direct contemporaneous relationship, rather than the effects of unobserved changes in company size and/or performance.

H. Base Salary vs. Cash Bonus

The final step of our analysis of CEO cash pay is to explore whether the link between fundraising and compensation is stronger for the CEO's salary or the CEO's bonus. Since we do not observe the actual compensation contracts we cannot make strong statements about how the different compensation components are determined. One possibility is that the bonus is tied to ex-ante performance contingencies outlined in the CEO's compensation contract, while base salary is more driven by ex-post rewards or changes in the CEO bargaining power.

Table IX shows the results of regressions using the *Base Salary* and *Bonus* components of *CEO Total Cash Compensation*. We find that most performance elasticities are markedly higher for *Bonus* pay than they are for *Base Salary* compensation. For example, a comparison of model IX.1 with model IX.2 indicates that better operating performance in the form of a doubling of *Employees* (*Revenues)* increases the CEO's *Base Salary* by 6% (0.3%) but increases his or her *Bonus* by an average of 19% (20%). Most of the generally larger performance elasticities of *Bonus* stems from the decision to grant a bonus, rather than from the size of the

bonus per se. We infer this from observing that the magnitudes of the estimated coefficients on performance variables are larger and more statistically significant in model IX.3 than they are in model IX.4. For example, regression VIII.3 indicates that a doubling of *Employees* increases the probability that the CEO will receive a bonus by 5%, while regression VIII.4 indicates that conditional on the receiving of a bonus, a doubling of *Employees* increases the magnitude of the bonus by a statistically insignificant 1%. The main exception to the pattern that most of the estimated compensation elasticities reflect differences in *Bonus* is that better financing performance in the form of a doubling of *VC Financing Raised in Last Round* increases *Base Salary* by 8% but *Bonus* by only 0.5%. Thus, whereas the increase of cash compensation due to improvements in operating performance could possibly be attributed to ex-ante contracting between CEO's and the board of directors, the increase due to fundraising success is more likely to reflect an ex-post reward or change in the CEO's bargaining power.

F. Summary of Results on Cash Compensation

We summarize our findings on CEO cash compensation as follows. CEO cash pay in private venture-backed firms is higher when more VC financing is raised and when the funds are raised from higher quality VCs, with or without controlling for operating performance, company valuation and observable CEO characteristics. One explanation for this is that the CEO is rewarded for the skills and effort required for fundraising in opaque and illiquid markets. We conclude that this explanation is more likely than the alternative that fundraising is merely a proxy for company size or performance for three reasons. First, the elasticity of CEO cash compensation to fundraising success is higher when it is harder and more important for the CEO to convince VC investors to invest in his company. Second, fundraising success increases the compensation to the CEO more than the compensation to executives that do not play a role in fundraising. Third, the relationship between CEO compensation and fundraising holds in the time-series. CEO cash pay increases directly after a successful fundraising event, even before the company uses the new capital to grow in size and improve operations.

V. CEO Equity Compensation: Empirical Results

We next examine the results for CEO equity compensation. As discussed in Section III.A, we do not have data on the yearly allocation of options and stock to the CEO in a given year and are therefore limited to studying the CEO ownership of the outstanding (fully-diluted and fully-converted) equity, and the dollar value of this equity ownership. Table X presents results.

In models X.1 - X.3 we assess how *% Equity Ownership of CEO* varies with fundraising success. Specifically, we estimate tobit regressions that include controls for operating performance, and year, state and industry dummies. Models X.1 and X.2 indicate that *% Equity Ownership of CEO* is decreasing in both *VC Financing Last Round* and *VC Financing Except Last Round*. A doubling of the fundraising amount in the last round is associated with 0.8% lower CEO equity ownership. This relationship holds when in model X.3 we control for operating performance measures such as maturity, revenues, employees and profitability. We note that CEO ownership is not related to round number, employees or revenues, but is higher for companies that are profitable. This suggests that the finding that the CEO's percentage ownership is primarily determined by fundraising events indicates that equity incentives may not be continuously adjusted to reflect the firm's performance and maturity.

In model X.3, we also include available proxies for CEO characteristics and find that founder CEOs have 2.6% higher equity ownership than do non-founder CEOs. Taken together with our finding that founder CEOs earn lower cash pay, this difference may be an indication that founder CEOs are willing to trade off lower cash compensation for higher equity ownership. We also establish that CEOs who are also Chairman of the Board have higher equity ownership.

Dilution of the CEO's percentage ownership is not the same as dilution in the dollar value of the CEO's equity ownership. If the equity issued in a new financing round is sold at a higher price than in the previous round, then the dollar value of the CEO's ownership increases. Thus, the economically more substantive measure of equity compensation is the interaction between valuation and ownership fraction, that is, the variable *Implied Value of CEO Equity*. In models X.4 - X.6 we restrict the sample to the subset of observations for which firm-valuation

data are available, and we then re-estimate OLS regressions using *Implied Value of CEO Equity* as the dependent variable.[17]

Before proceeding it is worth noting that the *Implied Value of CEO Equity* is overstated because it is calculated using the post-money valuation of the company, which due to the specific cash flow rights held by VCs is lower than the actual valuation of the company. To illustrate this, consider a company that has a post-money valuation of $10 million, has received a total of

$5 million in venture funding and has 10% in CEO ownership. Kaplan and Stromberg (2003) report that 38% of VCs hold "participating" preferred stock, which means that investors get paid back their investment amount before any distributions are made to common stockholders. If this fraction applies to our example, the value of the CEO's equity is not $1 million (10% of $10 million) but $810,000 (10% of $10 million – {0.38 x $5 million}). For our sample, this would mean that the median dollar value of the equity ownership is $1.1 million or about 22% of the yearly total cash compensation. This number is much lower than the median *Implied Value of CEO Equity* value of $1.7 million calculated without taking into account the cash flow rights attached to VC preferred stock.

The results of estimating models X.4 - X.6 show that the *Implied Value of CEO Equity* is determined in a qualitatively similar way to *CEO Total Cash Compensation*; that is, increasing in both fundraising success and operating performance. The estimated coefficient on *VC Financing Raised in Last Round* and *VC Financing Except Last Round* in model X.4 are positive, significant and of sizeable magnitude. A doubling of the financing amount in the last VC round is associated with a 57% increase in the dollar value of CEO equity ownership. This coefficient remains large and significant after controlling for company operating performance in model X.V, and CEO characteristics in model X.6. Moreover, the *Implied Value of CEO Equity* is considerably higher for companies that have raised more rounds of financing (estimated coefficient = 0.22) and have a larger number of employees (estimated coefficient = 0.27).

Taken together, our results with regard to CEO equity ownership show two things. First, even though successful fundraising dilutes the CEO's percentage ownership, the dollar value of

[25] We acknowledge that the subsample for which the firm's post-money value at the last VC financing round is available is likely to be biased toward companies with higher valuations, since failed companies and their VC investors are less willing to report valuations. In unreported regressions we test whether the observations with valuation data differ from other

observations. We find that companies with higher *Revenues,* fewer *Employees,* and larger *VC Financing Raised in Last Round* are more likely to report valuation data. While this selection bias affects the unconditional values of the CEO's cash and equity compensation, it is unlikely to affect the inferences we draw from our estimated regression coefficients, as they measure differences within the sample.
[26]

his or her ownership increases markedly with successful VC fundraising. As such, the increase in cash compensation following successful fundraising is unlikely to be a response to the dilution of the CEO's equity ownership. Second, the coefficients on equity ownership value are considerably higher than those on cash compensation. Thus, not only does the equity compensation have higher average dollar value to the CEO than the cash compensation, but the sensitivity to fundraising success and improved operating performance is larger. From this we conclude that CEOs in venture-backed companies are likely to be primarily motivated by increasing the value of their equity compensation. However, after correctly adjusting for the cash flow effects of VC preferred stock, cash compensation is a non-trivial part of the CEO's total compensation package.

VI. Conclusions and Further Work

Up to now, research into CEO compensation has exclusively understood performance in the phrase "pay for performance" as being operating or investing actions that enhance shareholder value. Our goal in this paper has been to conceptually propose, and empirically test, the idea that *financing* actions may also qualify as "performance". The domain we chose to critically assess our idea is venture capital. In this private market, fundraising is a vital but difficult CEO task. The typical venture-backed startup demands considerable external financing to survive and flourish, but the supply of that financing comes through an illiquid and informationally opaque capital market. Without multiple injections of new capital, a startup technology firm is likely to go bankrupt rather than realize its goal going public or being acquired. As such, we expect to observe that CEO compensation in private venture-backed companies will be an increasing function of fundraising success.

Using a new database supplied by VentureOne on 1,585 U.S. venture-backed firms, we show that CEO cash pay is indeed higher for firms that have recently raised more equity, and that have attracted more experienced VCs. CEO cash pay is also larger when fundraising is more difficult, and is smaller for executives who are not involved in fundraising. In the time-series, CEO cash pay increases markedly in the year after a financing. Finally, we show that

while successful fundraising dilutes the CEO's percentage ownership, it increases the dollar value of that ownership. We argue that the observed elasticity on fundraising is unlikely to simply reflect differences in firm size because it is robust to controls for firm characteristics, firm operating performance, and firm valuation.

While our paper adds to the compensation and entrepreneurial finance literatures, it leaves many questions unanswered. For example, how and why does CEO pay change with the type and intensity of VC ownership? How and why might CEO compensation be related to hiring and firing decisions differently for young venture-backed firms than for mature publicly traded companies? To what degree and why are non-CEO employees compensated with equity and cash pay? Do firms with more VC-friendly deal terms give higher or lower compensation to their CEOs, and if so, why? Are CEOs adequately compensated for the risk that their companies will fail? We believe these are topics worthy of future study.

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Figure 1

Distribution of Total Cash Compensation (in $000s) for 2,816 CEOs of private venture-backed U.S. firms, 2002-2006

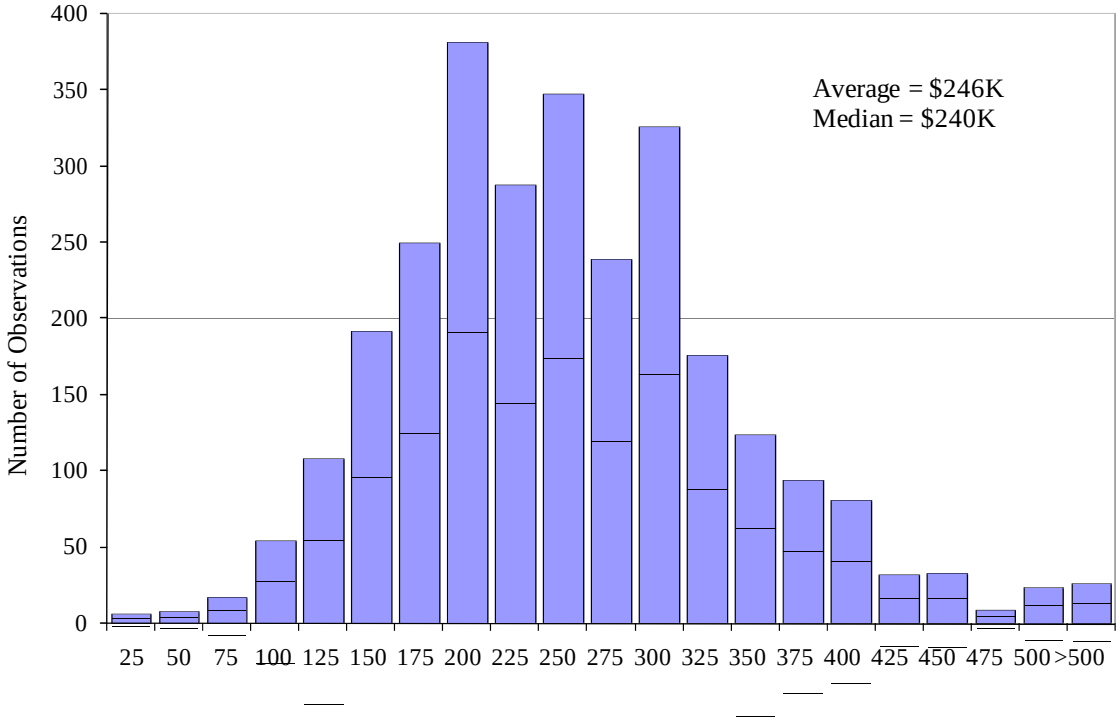

Figure 2

Distribution of Percentage of Fully Diluted Equity Ownership Held by 2,816 CEOs of private venture-backed U.S. firms, 2002-2006

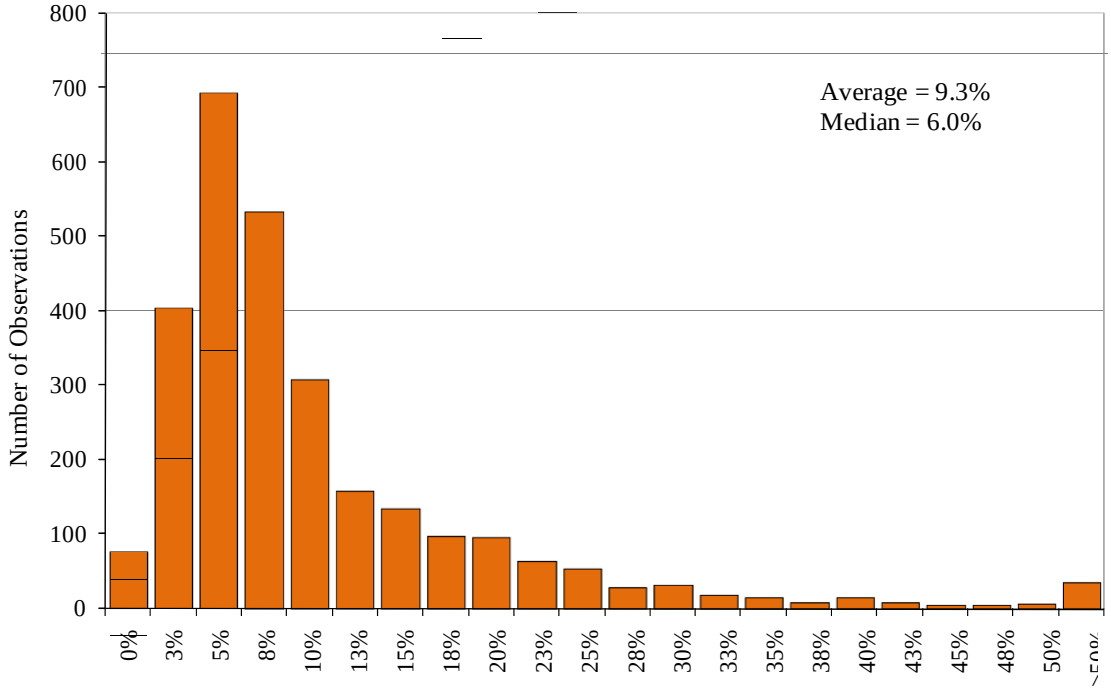

Table I

CEO Sample Overview

Sample comes from surveys of venture-backed U.S. companies conducted by VentureOne from 2002-2006. Each survey asks the company to provide data on company performance and employee compensation. We limit our analysis to CEOs/presidents and keep only one survey per firm per year (starting from 2003, VentureOne sent out 2 surveys per year). We match our sample with data on company characteristics, VC ownership, and financing from VentureOne's financing and general support databases. Finally, we remove any observation with missing or obviously incorrect information. The final sample is a panel dataset with each observation being one individual/year pair. Panel A shows the steps of the sample filtering. Panel B tabulates the final sample by survey. Panel C tabulates the final sample by the number of individual executives per company/year (some companies list both President and CEO, and some list multiple CEOs).

Panel A - Sample Selection

	Individuals	Companies
VentureOne Survey Data	61,005	2,975
Keep CEOs / Presidents only	6,420	2,913
Keep one Survey per Year	4,921	2,913
Match with Company Characteristics	4,084	2,199
Match with VC ownership	3,160	1,754
Match with Round Financing data	2,983	1,656
Final sample	2,816	1,585
Subsample with Valuation data	1,247	755
Subsample with Time-Series data	736	544

Panel B - Tabulation by Survey

Year	Spring Survey	Fall Survey	Total
2002	431	0	431
2003	327	0	327
2004	615	340	955
2005	392	197	589
2006	514	0	514
Total	2,279	537	2,816

Panel C - Tabulation by Number of Observations by Company/Year

Observations by Company/Year	N
1	2,155
2	586
3	54
4	16
5	5
Total	2,816
Unique company-years	2,471

Table II

Descriptive Statistics

See Table 1 for description of sample. One observation is one individual/year pair, and total sample size is 2,816. Variables related to Company Operating Performance, CEO Characteristics and CEO Compensation come from VentureOne surveys. Total Compensation is the sum of Base Salary, Bonus, and Other Compensation. Employees in Previous Year is the median number of actual Employees for the range reported in the survey, and Revenues in Previous Year is the average value of the range reported in the survey. Dummy Profitable is reported in survey (but not actual profit number). Variables related to Company Financing Performance and Characteristics of Lead VC come from VentureOne's financing and general support databases, and refer to the situation of the company prior to filling out the survey. % Equity Ownership by VCs is calculated by dividing the number of preferred shares by the total number of common + preferred shares outstanding.

Panel A	Mean	Std. Dev.	Min.	Max.
Company Financing Performance				
Year of company's first financing round	2000	3	1984	2005
Round number of last round	3.23	1.25	1	7
Pre-money valuation of last round ($000s)	$34,392	$61,969	$100	$1,032,950
VC financing previous rounds except last ($000s)	$12,422	$21,970	$0	$320,280
VC financing last round ($000s)	$11,707	$14,294	$75	$350,000
Experience of lead VC (number of portfolio companies)	66	93	0	539
% Equity Ownership by VCs	64%	24%	0%	100%
Time between survey and last round (months)	21	19	0	171
Company Operating Performance				
Employees at end of previous year	39	37	6	131
Revenues in previous year ($000s)	$8,021	$17,045	$250	$65,000
Dummy Employees higher in current year (1=yes, 0=no)	0.50	0.50	0	1
Dummy Revenues higher in current year (1=yes, 0=no)	0.57	0.49	0	1
Dummy Profitable (1=yes, 0=no)	0.06	0.24	0	1
Company start year	1998	3	1980	2005
Company age (years)	3.69	3.08	0	23
Panel B				
CEO Compensation				
Total cash compensation ($000s)	$246	$90	$12	$800
Base salary ($000s)	$209	$61	$12	$500
Bonus ($000s)	$35	$49	$0	$600
Other compensation ($000s)	$2	$13	$0	$250
Dummy Bonus (1=yes, 0=no)	0.51	0.50	0	1
Time series (one year) difference in Total cash comp ($000s)	$12	$53	-$320	$510
Time series (one year) increase in Total cash comp (%)	8%	27%	-47%	367%
Difference in Total cash comp. between CEO and Chiefs	$75	$69	-$163	$598
Difference in Total cash comp. between CEO and VPs	$80	$74	-$203	$601
Difference in Total cash comp. between CEO and Directors	$134	$82	-$126	$675
% Equity ownership of CEO	9%	10%	0%	83%
Implied value of CEO's % equity ownership ($000s)	$4,632	$12,460	$0	$260,000
CEO Characteristics				
Dummy Founder (1=yes, 0=no)	0.43	0.50	0	1
Dummy Hired in prior 6 months (1=yes, 0=no)	0.05	0.22	0	1
Dummy Chairman of board (1=yes, 0=no)	0.05	0.21	0	1

Table III

CEO Compensation, Ownership and Ownership Value by Firm Characteristics

See Table 1 for description of sample. Each observation is one individual/year pair, and total sample size is 2,816. All compensation variables come from VentureOne surveys and are reported in $000s. Total Cash Compensation is the sum of Base Salary, Bonus, and Other Compensation. Reported statistics are sample means, with medians in parentheses. % Equity is calculated on a fully diluted basis. Implied value of % Equity is the product of % Equity and Post-money valuation of last round (variable only available for subset of sample).

	# obs.	Total Cash Compensation		Base Salary		Bonus		% Equity		Implied Value of % Equity	
Round Number											
1	66	189	(186)	164	(175)	26	(0)	10%	(7%)	405	(185)
2	852	221	(205)	194	(190)	25	(0)	11%	(7%)	2,258	(1,166)
3	903	243	(240)	206	(200)	35	(10)	9%	(6%)	4,016	(1,559)
4	582	269	(260)	225	(225)	42	(25)	8%	(5%)	7,427	(2,727)
5	256	281	(275)	232	(225)	47	(23)	8%	(5%)	8,401	(3,192)
6	103	287	(287)	242	(230)	44	(20)	7%	(4%)	8,451	(3,417)
7	54	280	(277)	224	(223)	50	(38)	9%	(5%)	5,022	(1,678)
Revenues ($)											
0 - 0.5M	1,066	232	(225)	208	(200)	22	(0)	10%	(6%)	3,369	(1,568)
0.5M - 1M	217	224	(210)	195	(200)	27	(0)	10%	(6%)	2,614	(1,471)
1M - 2M	302	222	(205)	191	(200)	29	(0)	10%	(6%)	5,224	(1,368)
2M - 3M	184	247	(238)	201	(200)	44	(30)	8%	(6%)	3,003	(1,350)
3M - 5M	261	240	(235)	197	(200)	41	(25)	8%	(5%)	4,855	(1,730)
5M - 10M	332	266	(250)	220	(220)	43	(25)	10%	(7%)	7,073	(2,666)
10M - 20M	236	284	(290)	227	(224)	54	(48)	8%	(4%)	6,121	(1,864)
>20M	218	307	(290)	243	(239)	63	(50)	9%	(5%)	8,383	(2,751)
Employees											
0 - 10	385	202	(200)	183	(180)	17	(0)	10%	(7%)	1,321	(769)
10 - 20	518	215	(200)	190	(190)	24	(0)	11%	(7%)	2,650	(1,131)
20 - 30	465	239	(230)	204	(200)	32	(0)	9%	(6%)	3,113	(1,822)
30 - 40	324	250	(240)	212	(200)	36	(20)	9%	(6%)	3,481	(1,937)
40 - 50	261	259	(250)	222	(215)	35	(18)	8%	(5%)	4,459	(2,140)
50 - 60	210	269	(268)	224	(225)	43	(30)	8%	(5%)	10,378	(3,194)
60 - 100	324	280	(280)	231	(225)	48	(30)	9%	(5%)	6,895	(2,726)
>100	329	295	(285)	237	(225)	56	(50)	9%	(5%)	9,070	(3,114)
Last Financing Amount ($)											
0 - 3M	626	210	(193)	178	(175)	30	(0)	11%	(7%)	1,253	(566)
3M - 6M	585	236	(225)	196	(200)	38	(25)	10%	(7%)	3,653	(1,117)
6M - 10M	500	240	(230)	207	(200)	32	(0)	9%	(6%)	2,573	(1,350)
10M - 17M	546	259	(250)	223	(225)	35	(6)	8%	(5%)	4,008	(2,098)
>17M	559	290	(280)	248	(247)	39	(10)	8%	(5%)	9,865	(4,232)
Year											
2002	431	239	(225)	201	(200)	36	(0)	13%	(11%)	6,050	(3,066)
2003	327	253	(240)	210	(200)	40	(10)	16%	(13%)	10,271	(3,499)
2004	955	238	(230)	207	(200)	29	(0)	7%	(5%)	3,290	(1,232)
2005	589	246	(240)	210	(200)	34	(18)	8%	(5%)	2,641	(1,274)
2006	514	261	(250)	219	(220)	40	(25)	7%	(5%)	2,526	(1,177)
Industry											
Healthcare/Biotechnology	806	264	(260)	232	(234)	30	(10)	9%	(5%)	3,656	(1,827)
Information Technology	1,475	237	(225)	199	(200)	35	(0)	10%	(6%)	5,569	(1,801)
Retail/Services + Other	535	245	(225)	203	(200)	40	(19)	9%	(6%)	4,235	(1,239)

Table IV

CEO Total Cash Compensation Regressed on Fundraising Success, Operating Performance and CEO Characteristics

*See Table 1 for description of sample. Each observation is one individual/year pair. Dependent variable is log (1 + CEO Total Cash Compensation), defined as the sum of Base Salary, Bonus, and Other Compensation, in $000s. Standard errors are clustered by company. T-stats are in square brackets. Two-tailed test significance are marked with * for 10%, ** for 5% and *** for 1%.*

Dependent variable:	ln (1 + CEO Total Cash Compensation)				
Model:	IV.1	IV.2	IV.3	IV.4	IV.5
Round number of most recent VC financing (1 to 7)	0.076 [10.4]***		0.036 [4.1]***	0.004 [0.4]	-0.001 [-0.1]
ln (1 + VC financing raised in last round in $000s)		0.099 [10.0]***	0.094 [9.3]***	0.069 [6.8]***	0.103 [6.4]***
ln (1 + VC financing except last round in $000s)		0.016 [8.5]***	0.010 [3.9]***	0.006 [2.5]**	0.003 [0.8]
Experience of lead VC (# companies)			0.015 [2.6]***	0.015 [2.8]***	0.006 [0.8]
ln (1 + Revenues in previous year in $000s)				0.019 [2.8]***	0.013 [1.4]
ln (1 + #Employees at end of previous year)				0.083 [5.7]***	0.094 [4.3]***
Dummy Profitable (1=yes, 0=no)				0.055 [1.5]	0.067 [1.5]
Dummy Revenues higher in current year (1=yes, 0=no)				-0.024 [-1.5]	0.051 [2.3]**
Dummy Employees higher in current year (1=yes, 0=no)				0.055 [3.4]***	-0.023 [-1.0]
Pre-money valuation of last round ($000s)					-0.006 [-0.3]
Dummy Hired in Prior 6 months (1=yes, 0=no)				0.024 [0.8]	0.017 [0.3]
Dummy Chairman of Board (1=yes, 0=no)				0.052 [1.0]	0.096 [2.6]***
Dummy Founder (1=yes, 0=no)				-0.181 [-11.0]***	-0.133 [-6.0]***
Constant	4.87 [41]***	4.14 [32]***	4.09 [33]***	4.10 [33]***	3.88 [24]***
# obs.	2,816	2,816	2,816	2,816	1,247
Adj. R-squared	0.16	0.23	0.24	0.33	0.42
Sample	Full	Full	Full	Full	Valid data
Year, State and Industry controls	Yes	Yes	Yes	Yes	Yes

Table V

CEO Total Cash Compensation for Founders vs. Non-Founders Regressed on Company Fundraising Success and Operating Performance

*See Table 1 for description of sample. Each observation is one individual/year pair. Dependent variable is log (1 + CEO Total Cash Compensation), defined as the sum of Base Salary, Bonus, and Other Compensation, in $000s. Standard errors are clustered by company. T-stats are in square brackets. Two-tailed test significance are marked with * for 10%, ** for 5% and *** for 1%. Constant is estimated but not reported.*

Dependent variable:	ln (1 + CEO Total Cash Compensation)			
Model:	V.1	V.2	V.3	V.4
Round number of most recent VC financing (1 to 7)	0.003	0.002	0.004	0.003
	[0.3]	[0.2]	[0.5]	[0.4]
ln (1 + VC financing raised in last round in $000s)	0.071	0.058	0.071	0.071
	[6.9]***	[4.9]***	[6.9]***	[6.9]***
ln (1 + VC financing except last round in $000s)	0.006	0.006	0.005	0.006
	[2.5]**	[2.4]**	[2.3]**	[2.3]**
Experience of lead VC (# companies)	0.016	0.016	0.016	0.016
	[3.0]***	[3.0]***	[3.0]***	[3.0]***
ln (1 + Revenues in previous year in $000s)	0.020	0.020	0.012	0.020
	[3.1]***	[3.0]***	[1.7]*	[3.1]***
ln (1 + #Employees at end of previous year)	0.072	0.071	0.070	0.056
	[5.2]***	[5.1]***	[5.1]***	[3.4]***
Dummy Profitable (1=yes, 0=no)	0.058	0.061	0.056	0.056
	[1.6]	[1.7]*	[1.6]	[1.6]
Dummy Hired in Prior 6 months (1=yes, 0=no)	0.027	0.023	0.022	0.022
	[0.9]	[0.8]	[0.7]	[0.7]
Dummy Chairman of Board (1=yes, 0=no)	0.050	0.048	0.052	0.051
	[1.0]	[1.0]	[1.1]	[1.0]
Dummy Founder (1=yes, 0=no)	-0.180	-0.445	-0.319	-0.289
	[-10.9]***	[-2.8]***	[-4.9]***	[-4.7]***
Founder X ln (1 + VC financing raised in last round in $000s)		0.030		
		[1.7]*		
Founder X ln (1 + Revenues in previous year in $000s)			0.019	
			[2.1]**	
Founder X ln (1 + #Employees at end of previous year)				0.033
				[1.9]*
# obs.	2,816	2,816	2,816	2,816
Adj. R-squared	0.32	0.33	0.33	0.33
Year, State and Industry controls	Yes	Yes	Yes	Yes

Table VI

CEO Total Cash Compensation Regressed on Operating/Fundraising Interactions

*See Table 1 for description of sample. Each observation is one individual/year pair. Dependent variable is log (1 + CEO Total Cash Compensation), defined as the sum of Base Salary, Bonus, and Other Compensation, in $000s. Standard errors are clustered by company. T-stats are in square brackets. Two-tailed test significance are marked with * for 10%, ** for 5% and *** for 1%. Constant is estimated but not reported.*

Dependent variable:	ln (1 + CEO Total Cash Compensation)		
Model:	VI.1	VI.2	VI.3
Round number of most recent VC financing (1 to 7)	0.003 [0.3]	0.002 [0.2]	0.003 [0.4]
ln (1 + VC financing raised in last round in $000s)	0.180 [4.8]***	0.158 [5.1]***	0.073 [7.1]***
ln (1 + VC financing except last round in $000s)	0.005 [2.3]**	0.006 [2.5]**	0.006 [2.4]**
Experience of lead VC (# companies)	0.016 [3.0]***	0.016 [3.0]***	0.016 [3.0]***
ln (1 + Revenues in previous year in $000s)	0.158 [3.4]***	0.022 [3.3]***	0.021 [3.1]***
ln (1 + #Employees at end of previous year)	0.064 [4.5]***	0.311 [3.9]***	0.07 [5.0]***
Dummy Profitable (1=yes, 0=no)	0.037 [1.1]	0.043 [1.2]	0.381 [1.0]
Dummy Hired in Prior 6 months (1=yes, 0=no)	0.027 [0.9]	0.028 [0.9]	0.029 [1.0]
Dummy Chairman of Board (1=yes, 0=no)	0.058 [1.2]	0.053 [1.1]	0.052 [1.1]
Dummy Founder (1=yes, 0=no)	-0.179 [-10.9]***	-0.178 [-10.7]***	-0.181 [-11.0]***
ln (1 + VC financing raised in last round in $000s) X ln (1 + revenues in previous year in $000s)	-0.015 [-3.0]***		
ln (1 + VC financing raised in last round in $000s) X ln (1 + #employees at end of previous year)		-0.027 [-3.1]***	
ln (1 + VC financing raised in last round in $000s) X Dummy Profitable (1=yes, 0=no)			-0.039 [-0.9]
# obs.	2,816	2,816	2,816
Adj. R-squared	0.33	0.33	0.32

Table VII

Difference in Total Cash Compensation between CEOs and Other Executives Regressed on Company Fundraising Success, Operating Performance

*See Table 1 for description of sample. Each observation is one company/year pair. Dependent variable is (CEO Total Cash Compensation - Benchmark Executive Total Cash Compensation), where Total Cash Compensation is defined as the sum of Base Salary, Bonus, and Other Compensation, in $000s, and Benchmark sample is the company/year average of executives within that benchmark group. T-stats are in square brackets. Two-tailed test significance are marked with * for 10%, ** for 5% and *** for 1%.*

Dependent variable:	(CEO Total Cash Comp. - Benchmark Total Cash Comp.)					
	$	%	$	%	$	%
Benchmark Sample:	Chiefs		Vice Presidents		Directors	
Model:	VII.1	VII.2	VII.3	VII.4	VII.5	VII.6
Round number of most recent VC financing (1 to 7)	1.37	0.01	2.27	0.01	3.50	0.03
	[0.8]	[0.5]	[1.2]	[0.8]	[1.6]	[1.4]
ln (1 + VC financing raised in last round in $000s)	3.78	0.05	6.65	0.05	11.30	0.13
	[2.0]**	[2.3]**	[3.3]***	[4.3]***	[4.9]***	[5.8]***
ln (1 + VC financing except last round in $000s)	1.25	0.01	0.27	0.00	0.48	0.00
	[2.5]**	[2.7]***	[0.6]	[1.0]	[0.8]	[0.6]
Experience of lead VC (# companies)	1.39	0.01	-0.06	0.00	2.83	0.04
	[1.1]	[1.1]	[0.1]	[0.2]	[2.1]**	[3.2]***
ln (1 + #Employees at end of previous year)	4.32	0.04	12.14	0.08	12.52	0.13
	[1.4]	[1.8]*	[3.7]***	[4.0]***	[3.5]***	[3.6]***
ln (1 + Revenues in previous year in $000s)	2.91	0.03	3.67	0.02	6.63	0.05
	[2.0]**	[2.5]**	[2.5]**	[2.8]***	[3.9]***	[3.3]***
Dummy Profitable (1=yes, 0=no)	7.16	0.09	10.64	0.08	9.57	0.14
	[0.8]	[1.5]	[1.3]	[1.7]*	[0.9]	[1.2]
Dummy Founder (1=yes, 0=no)	-35.60	-0.26	-34.39	-0.21	-35.78	-0.33
	[-9.6]***	[-9.3]***	[-9.3]***	[-9.5]***	[-8.4]***	[-8.3]***
Chairman of board (1=yes, 0=no)	7.47	0.04	9.20	0.08	5.71	0.02
	[0.8]	[0.6]	[0.9]	[1.3]	[0.4]	[0.2]
Dummy Hired in Last 6 months (1=yes, 0=no)	3.97	0.05	8.13	0.07	-4.62	0.06
	[0.5]	[0.9]	[1.2]	[1.6]	[0.5]	[0.7]
TCC for non-CEO		-0.95		-0.57		-1.65
		[-3.9]***		[-9.4]***		[-14.2]***
Constant	-10.18	4.34	-75.61	2.31	-78.85	6.65
	[-0.4]	[4.4]***	[-2.5]**	[7.2]***	[-2.2]**	[10.9]***
# obs.	1,912	1,912	2,163	2,163	1607	1,607
Adj. R-squared	0.18	0.26	0.22	0.25	0.30	0.41

Table VIII

Year-to-Year Difference in CEO Total Cash Compensation Regressed on Company Fundraising Success, Operating Performance

*See Table 1 for description of sample. Each observation is one company/year pair. Sample is limited to observations that also have a survey in the previous year. Dependent variable is (CEO Total Cash Compensation[T] - CEO Total Cash Compensation[T-1]), where Total Cash Compensation is defined as the sum of Base Salary, Bonus, and Other Compensation, in $000s. T-stats are in square brackets. Full sample in specifications I-IV, companies that raised capital in specification V, and companies that did not raise capital in specification VI. Two-tailed test significance are marked with * for 10%, ** for 5% and *** for 1%.*

Dependent variable:	(CEO Total Cash Comp.[T] - CEO Total Cash Comp.[T-1])					
Model:	VIII.1	VIII.2	VIII.3	VIII.4	VIII.5	VIII.6
Dummy Raised Capital	19.98 [3.9]***	19.75 [3.8]***	20.17 [3.9]***	17.93 [3.5]***		
Change in Profitability		13.25 [0.7]	8.95 [0.5]	9.28 [0.5]	12.90 [0.3]	-6.84 [0.4]
Change in Revenues		-0.03 [-0.1]	-2.03 [-1.1]		-8.49 [-1.4]	0.06 [0.1]
Change in Employees		0.25 [0.1]	-2.59 [-0.5]		-15.79 [-0.9]	0.75 [0.2]
Round number of most recent VC financing (1 to 7)			0.33 [0.2]	0.92 [0.6]	-7.93 [-1.1]	2.16 [1.4]
ln (1 + VC financing raised in last round in $000s)					17.77 [2.2]**	-0.42 [-0.2]
ln (1 + Revenues in previous year in $000s)			3.17 [2.0]**	2.90 [2.1]**	10.65 [1.6]	2.86 [1.8]*
ln (1 + #Employees at end of previous year)			4.59 [1.4]	4.88 [1.6]	-8.07 [-0.6]	4.64 [1.4]
TCC in Previous year			-44.67 [-7.9]***	-44.31 [-7.8]***	-49.82 [-2.6]**	-44.15 [-7.7]***
Dummy Employees higher in current year (1=yes, 0=no)				7.71 [1.8]*	4.51 [0.3]	7.34 [1.7]*
Dummy Revenues higher in current year (1=yes, 0=no)				-2.12 [-0.5]	10.72 [0.7]	-0.67 [-0.2]
Constant	-0.33 [-0.1]	-0.44 [-0.1]	208.24 [6.8]***	201.51 [6.6]***	124.49 [1.0]	196.05 [6.6]***
# obs.	736	736	736	736	138	598
R-squared	0.03	0.03	0.12	0.12	0.13	0.14
Sample	Full	Full	Full	Full	Raised Financing	Did Not Raise Financing

Table IX

CEO Base Salary vs. Cash Bonus Regressed Separately on Company Fundraising Success and Operating Performance

*See Table 1 for description of sample. One observation is one individual/year pair, and total sample size is 2,816. Regressions are OLS except specification III which is probit. Dependent variable in specification I is log of 1 + Base Salary (in $000s), in specification II log of 1 + Bonus, in specification III a dummy equal to 1 if bonus was paid out and zero otherwise, and in specification IV log of 1 + Bonus when sample is restricted to observations where Bonus > 0. Standard errors are clustered by company. T-stats in square brackets. Significance marked with * for 10%, ** for 5% and *** for 1%.*

Dependent variable is ln (1 + X), where X is:	Base salary	Bonus	D(Bonus)	Bonus > 0
Model:	IX.1	IX.2	IX.3	IX.4
Round number of most recent VC financing (1 to 7)	0.008 [1.1]	-0.091 [-1.8]*	-0.026 [-1.9]*	-0.005 [-0.9]
ln (1 + VC financing raised in last round in $000s)	0.076 [8.7]***	0.005 [0.1]	-0.005 [-0.3]	0.010 [1.8]*
ln (1 + VC financing except last round in $000s)	0.003 [1.4]	0.046 [3.3]***	0.012 [3.1]***	0.004 [2.1]**
Experience of lead VC (# companies)	0.017 [3.9]***	-0.004 [-0.1]	-0.002 [-0.3]	0.001 [0.4]
ln (1 + Revenues in previous year in $000s)	0.003 [0.5]	0.203 [5.1]***	0.051 [4.6]***	0.009 [1.8]*
ln (1 + #Employees at end of previous year)	0.063 [5.5]***	0.189 [2.2]**	0.047 [2.0]**	0.013 [1.4]
Dummy Profitable (1=yes, 0=no)	0.029 [1.1]	0.415 [2.0]*	0.131 [2.2]**	0.002 [0.1]
Dummy Hired in Prior 6 months (1=yes, 0=no)	0.025 [1.0]	0.002 [0.0]	-0.006 [-0.1]	0.010 [0.4]
Dummy Chairman of Board (1=yes, 0=no)	0.028 [0.7]	0.075 [0.3]	-0.032 [-0.5]	0.065 [3.3]***
Dummy Founder (1=yes, 0=no)	-0.139 [-10.4]***	-0.478 [-5.2]***	-0.098 [-4.0]***	-0.061 [-5.0]***
Constant	4.09 [30]***	-0.49 [-0.7]	-1.22 [-0.5]	1.18 [8.5]***
# obs.	2,816	2,816	2,816	1,438
Adj. R-squared	0.35	0.16	0.11	0.18
Sample	Full	Full	Full	Bonus > 0
Year, State and Industry controls	Yes	Yes	Yes	Yes

Table X

Implied Value of CEO Equity Regressed on Company Fundraising Success and Operating Performance

*See Table 1 for description of sample. One observation is one individual/year pair. Dependent variable is the implied value of the fully diluted firm equity held by the CEO, defined as product of the fraction of fully diluted equity held by the CEO (see Table VI) and the firm's post-money valuation at its most recent financing round (where available). Standard errors are clustered by company. T-stats are in square brackets. Two-tailed test significance are marked with * for 10%, ** for 5% and *** for 1%.*

Dependent variable:	% Equity ownership of CEO			ln(1 + Implied Value of CEO Equity in $000s)		
Model:	X.1	X.2	X.3	X.4	X.5	X.6
Round number of most recent VC financing (1 to 7)		-0.01	-0.01		0.23	0.22
		[-2.0]*	[-1.2]		[3.9]***	[3.6]***
ln (1 + VC financing except last round in $000s)		-0.01	-0.01		-0.02	-0.02
		[-3.6]***	[-3.2]***		[-1.0]	[-1.0]
ln (1 + VC financing raised in last round in $000s)	-0.01	-0.01	-0.01	0.64	0.49	0.50
	[-6.6]***	[-3.5]***	[-3.3]***	[11.3]***	[7.0]***	[6.9]***
Experience of lead VC (# companies)			0.00			-0.04
			[0.3]			[-0.9]
ln (1 + #Employees at end of previous year)		0.00	0.00		0.28	0.27
		[0.6]	[0.9]		[2.5]**	[2.4]**
ln (1 + Revenues in previous year in $000s)		0.00	0.00		0.00	-0.01
		[0.6]	[0.6]		[0.1]	[-0.2]
Dummy Profitable (1=yes, 0=no)		0.02	0.02		-0.06	-0.03
		[2.2]**	[2.1]**		[-0.2]	[-0.1]
Dummy Founder (1=yes, 0=no)			0.03			-0.13
			[6.9]***			[-1.0]
Chairman of board (1=yes, 0=no)			0.02			0.39
			[1.9]*			[2.0]**
Dummy Hired in Last 6 months (1=yes, 0=no)			-0.01			-0.17
			[-1.4]			[-0.9]
Constant	0.22	0.19	0.17	1.45	2.18	2.25
	[15]***	[5.5]***	[5.0]***	[2.7]***	[2.7]***	[2.7]***
Observations	2,816	2,816	2,816	1,247	1,247	1,247
R-squared	-0.07	-0.11	-0.12	0.17	0.26	0.26

Further Questions:
If you have additional questions or wish to discuss this topic further, you can contact: Ronald J. Adams, CPA, CVA, ABV, CBA, CFF, FVS, CGMA, Managing Director – Valuations, at (774) 719-2236 – office; or at (508) 878-8390 – mobile; or e-mail him at: **adams.r@foxboro-consulting.com .**

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