RICH VERSUS KING: STRATEGIC CHOICE AND THE ENTREPRENEUR

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Working Paper, September 2006

Abstract

Although academic research has long focused on the central role played by the profit motive in entrepreneurial activity, recent economics studies have found that entrepreneurs do not out-earn non-entrepreneurs. This study examines how a second major motivation for starting entrepreneurial ventures, the control motive, should compete with entrepreneurs' abilities to gain financially from the ventures they start, forcing entrepreneurs to trade off financial gains versus control of their ventures. The paper integrates strategic choice and capital theories to examine whether entrepreneurs can avoid this tradeoff by leveraging appropriate capital endowments in the building of their ventures. It tests these hypotheses on a unique dataset of 460 private technology ventures, and finds strong support for the financial gains versus control tradeoff. Implications include the need for researchers to incorporate the effects of both the profit and control motives into their studies of strategic choices, the need for entrepreneurs to consider carefully how their early choices about attracting resources may affect their ability to achieve their motivations for becoming entrepreneurs, and the relevance of human, economic, and social capital for achieving entrepreneurial goals.

Introduction

Researchers have long highlighted the central role of the profit motive in capitalist economies (Schumpeter 1942; Smith 1991 ed.). The opportunity to earn profits creates an incentive for people to produce goods and services, and thus helps drive growth in the economy. In fact, "That the entrepreneur aims at maximizing his profits is one of the most fundamental assumptions of economic theory." (Scitovszky 1943:57) Yet, despite this central assumption, recent studies trying to establish that entrepreneurs gain higher financial rewards than do non-entrepreneurs have failed to do so, calling into question the centrality of the profit motive. For instance, the returns to entrepreneurs are no higher than they could gain by investing in public equity, and are far worse from a risk-return perspective, leading researchers to be "puzzled" by why people pursue entrepreneurial ventures (Moskowitz and Vissing-Jorgensen 2002). Deepening the puzzle, across diverse industries and multiple measurements of earnings, self-employed people have significantly lower initial earnings and lower earnings growth than could be earned in paid employment (Hamilton 2000).

In parallel with these recent studies, a separate body of research (e.g., Amit, MacCrimmon, Zietsma and Oesch 2000; Sapienza, Korsgaard and Forbes 2003) has examined a broader set of motivations for why people engage in private enterprise. The current paper uses the findings from this latter set of studies to propose that another major motivation, the control motive, conflicts with the profit motive and can prevent the achievement of it. More specifically, building valuable equity stakes requires the attraction of resources to the organization (Stevenson and Jarillo 1990; Venkataraman 1997), but resource providers will demand a degree of control as a condition of providing those resources (e.g., Amit, Glosten and Muller 1990; Coff 1999). The entrepreneur's decisions about how much equity and control to give up to resource providers will

affect the degree to which the entrepreneur has to trade off financial gains versus control of the venture. As a result, entrepreneurs who choose to retain more control will tend to have lower financial gains, while entrepreneurs who choose to give up control will tend to have more valuable equity stakes.

This paper uses the organizational literature and empirical results from the economics literature to develop theory about how entrepreneurs' choices affect their mix of financial versus intangible rewards. More specifically, it examines how strategic choices are affected by the challenges of resource attraction and by entrepreneurial motivations, with the result that many entrepreneurs should face a choice between financial gains and decision-making control. To test hypotheses about this tradeoff, this study uses a unique dataset comprised of 460 private technology start-ups.[1] Although the focus of this paper is on entrepreneurs in new ventures, the findings also have implications for the broader literature on strategic choices under competing objectives, and for managerial tradeoffs within larger organizations.

Theory and Hypotheses

Entrepreneurs are attracted to take on the challenge of building new organizations by the profit motive (e.g., Schumpeter 1942; Kirzner 1973) and by the drive to control decision making within the company they started (e.g., Sapienza, Korsgaard et al. 2003). This paper argues that there is an inherent tension between these motivations because the need to attract outside resources to build financial value can conflict with the entrepreneur's being able to maintain control of the venture. As detailed below, rather than our finding that entrepreneurs as a whole earn less than expected (Hamilton 2000; Moskowitz and Vissing-Jorgensen 2002), we should

[1] Auxiliary analyses also assess the degree to which Rich versus King outcomes are due to financing-market conditions rather than entrepreneurial choices, and whether the tradeoff differs between start-ups raising their first outside financing versus later rounds of financing.

find that some entrepreneurs may choose to sacrifice financial gains in order to retain control of their ventures, while other entrepreneurs may choose financial gains at the expense of controlling their ventures. It is also suggested that entrepreneurs can gain financially beyond the amount implied by this tradeoff, by accumulating appropriate human capital prior to founding the venture, providing the venture's initial economic capital, and leveraging their social capital in attracting investors and executive hires.

For instance, the founder of Steria, an information-technology systems and services company, faced such a tradeoff (Abetti 2005). In the end, the entrepreneur's desire "to remain independent and master of his own destiny" led him to refuse to accept capital from outside investors (relying instead on founder capital and bank loans), to maintain control of the company's equity, to not grant stock to Steria's employees, and to remain chief executive officer. As a result, the company's growth was slowed markedly (Abetti 2005). An alternate path for that entrepreneur would have been to take capital from outside investors and to allocate equity to others working for the company, thus potentially gaining financially but endangering his control of it.

Overview of the Tradeoff

> "The hardest decision a founder, inventor or entrepreneur needs to make is 'when do I give up some control to grow the company.' Importantly, not all situations are the same and thus require the same answer."
>
> Brian Bell, chairman of Buffalo Angel Network; March 1, 2006

The values of an organization's most powerful actors have a strong impact on the organization's strategic choices, particularly regarding the attraction and allocation of resources (Tagiuri 1965; Hambrick and Mason 1984:193). In new ventures, the entrepreneur is the critical actor shaping the firm (Hannan and Freeman 1989; Eisenhardt and Schoonhoven 1990), and

entrepreneurs' early choices have a powerful "imprinting" effect on the evolution of the organization (Boeker 1989; Bettis and Prahalad 1995). This paper examines how an entrepreneur's strategic choices affect the tradeoff between financial gains and decision-making control, arguing that choices that increase one should decrease the other. The first section below will develop the theoretical arguments why entrepreneurs should face such a tradeoff.

As an overview, the matrix below summarizes this tradeoff. On the horizontal axis is the value of the entrepreneur's financial stake. The vertical axis shows the degree to which the entrepreneur has kept control of decision making within the firm, varying from keeping little control (being a "minor player") to keeping a lot of control ("major player"). Within a particular type of business, most entrepreneurs will face a tradeoff between financial gains versus keeping decision-making control – i.e., between being "Rich" (a minor player with a valuable stake) versus being "King" (a major player holding a much less valuable stake).

		Financial Gains	
		Low	*High*
Decision-making Control Retained	*Minor player*	Flop	Rich
	Major player	King	Rich & Regal

Just as entrepreneurial firms that pursue multiple strategies can get "stuck in the middle" (Baum, Locke and Smith 2001), so too entrepreneurs who make inconsistent choices should be more likely to end up with a muddled strategy (Porter 1980; Marlin, Lamont and Hoffman 1994) and face increased risk of becoming Flops. However, entrepreneurs who make strategic choices that are consistent with their core motivation should have a higher likelihood of achieving that motivation: entrepreneurs who make choices consistent with a profit motive should be more

likely to become Rich, and entrepreneurs who make choices consistent with a control motive should be more likely to become King. This paper's central argument is that these entrepreneurs will face a tradeoff between these two outcomes, Rich versus King. The paper then examines the role played by endowments of personal and social capital (Lin 1999), factors shown to be important in the strategic choice literature (e.g., Hitt and Tyler 1991). In particular, as described in the second section below, entrepreneurs who have stronger human capital before starting the venture and who use their social and economic capital in starting the venture should have a higher likelihood of becoming Rich & Regal.

In examining entrepreneurs' decisions about this tradeoff, there is an important distinction between the *percentage* owned by the entrepreneur and the *value* of the entrepreneur's equity stake. Although auxiliary models will examine how the entrepreneur's choices will affect the entrepreneur's ownership percentage, entrepreneurs may gain more financially from owning a smaller percentage of a very valuable venture rather than a large percentage of a small venture. Therefore, in examining tradeoffs involving financial gains, the hypotheses focus on the potential value of the entrepreneur's personal holdings – i.e., the value of the venture times the percentage owned by the entrepreneur – rather than simply on the percentage owned. Furthermore, in contrast to studies that have used ownership percentage as a proxy for decision-making control (e.g., Salancik and Pfeffer 1980; Gomez-Mejia, Tosi and Hinken 1987; Finkelstein and Hambrick 1989), the new-ventures context is one in which ownership and decision-making control can diverge markedly (Kaplan and Stromberg 2003), so control of decision making at the CEO and board levels is observed directly, rather than inferred from ownership percentages.

Rich versus King Choices

In contrast to past studies of strategic choices in larger companies, where the linkage between the upper echelon and strategic choices is often "muddied" (Hambrick and Mason 1984:197), in new ventures these linkages are simpler and clearer to establish. New ventures are thus an excellent arena in which to study the impact of actors' strategic choices on them and their organizations. Furthermore, in contrast to large companies with long corporate histories and in which the activities in one unit can significantly affect those in other units, young companies provide simpler environments to study. Thus, by studying new ventures, we may be able to achieve clearer insights into the strategic choices faced by top managers and the financial and intangible results of those choices. Indeed, Ensley et al. (2002:381) argued that: "While the bulk of TMT research has been conducted on existing large firms … the richest and most interesting studies of TMTs are likely to involve new ventures."

Both Adam Smith (1991 ed.) and Joseph Schumpeter (1942) emphasized that the personal profit motive drives private enterprise. More specifically, in the new venture realm, Scitovszky (1943:57) captured this succinctly: "That the entrepreneur aims at maximizing his profits is one of the most fundamental assumptions of economic theory." The result is that entrepreneurs want to build personal wealth by owning equity in a valuable venture (Schumpeter 1942; Kirzner 1973). Supporting this, a recent study found that many founders of new high-technology ventures believe that their chances of becoming wealthy are much greater if they were to start a venture than if they were to pursue non-venture options (Amit, MacCrimmon et al. 2000:120).

However, recent economics studies have called into question whether entrepreneurs achieve higher profits than do non-entrepreneurs. Strikingly, entrepreneurs' financial returns are no higher than if they were to invest in public equity and are far worse from a risk-return

perspective, a "puzzling" result (Moskowitz and Vissing-Jorgensen 2002). Even more extreme, the self employed have significantly lower initial earnings and lower earnings growth than earned in paid employment, a finding that is robust across industries and for multiple metrics of earnings (Hamilton 2000). This latter study found that over a ten-year period, median entrepreneurial earnings were 35 percent lower than the entrepreneur could have earned in a "paid job." The author concludes that, "These models cannot explain why most entrepreneurs ... are willing to enter and remain in business despite lower earnings in self-employment," but speculates that the reason may be "that many entrepreneurs receive substantial non-pecuniary benefits, such as 'being their own boss.'" (Hamilton 2000:622-623)

To help resolve this empirical "puzzle," this paper develops the theoretical argument for why many entrepreneurs should face a tradeoff between achieving financial gains and maintaining control of the ventures they started. A core starting point for the argument focuses on the central challenges involved in assembling the resources necessary to build ventures. Despite the importance of new ventures to economic development, such organizations suffer from a significant liability of newness that results in a high rate of failure (Stinchcombe 1965; Aldrich and Fiol 1994), and the factor that underlies this heightened failure rate is a lack of resources (Stinchcombe 1965). Although an entrepreneur might already control some of the resources necessary to pursue an opportunity, critical resources must almost always be acquired from outside resource providers (Starr and MacMillan 1990; Stevenson and Jarillo 1990). Assembling the necessary resources enables entrepreneurs to increase their organizations' rates of growth and to reduce their risk of failure, potentially increasing dramatically the expected gains from their ventures.

The more resources that a new venture can gain control of, and the quicker it can do so, the better the venture's competitive position (Romanelli 1989:375). The major types of resources required by entrepreneurs are human resources and financial resources (Sapienza, Korsgaard et al. 2003), which may be provided by co-founders, non-founding executive hires, or investors. For instance, co-founders and hires can provide direct help in developing products, selling to customers, and building the organization. Investors can provide valuable guidance about strategic decisions, contacts with potential clients, and assistance with hiring top managers, in addition to financial resources. However, gaining the resources to build a valuable company can also come at a steep cost to the entrepreneur. In order to acquire control of critical resources, organizations have to choose to give up things that are of high value to their resource providers (Emerson 1962; Pfeffer and Salancik 1978). This is particularly true in new ventures, for the high rates of growth of such ventures often require a very high percentage of resources not controlled initially by the entrepreneur (Venkataraman 1997) and the most valuable resources are in limited supply (Peteraf 1993). In their analysis of entrepreneurial choices and financial resources, Evans and Jovanovic (1989) estimated that entrepreneurs were more than 60 times more likely to be resource constrained than to be unconstrained.[2]

Further increasing the challenges of gaining outside resources are information asymmetries and incentive problems between the entrepreneur and the potential resource provider (Hubbard 1998). For instance, resource providers face adverse selection problems because they lack perfect information about the riskiness and potential of the entrepreneur and the venture (Darrough and Stoughton 1986). They face moral hazard problems because the

[2] They state that across their full population of both entrepreneurs and non-entrepreneurs, "The average probability of being a constrained entrepreneur is 3.75 percent, and the average probability of being an unconstrained entrepreneur is 0.06 percent." (Evans and Jovanovic 1989:824)

entrepreneur-agent might opportunistically engage in problematic behavior after the investment is made (Jensen and Meckling 1976). These problems are particularly salient in new ventures because information is more asymmetric in young firms where there is high outcome uncertainty and the evaluation of behaviors is difficult (Eisenhardt 1989). Further exacerbating the problem in private companies, equity holdings are illiquid and thus cannot be sold easily when an investor or executive wishes to exit from the company. The more drastic the information asymmetries, the more attractive the terms demanded by the resource provider (Hubbard 1998).

Among these investment terms, the allocation of control rights plays a very central role (Kaplan and Stromberg 2003). Resource providers demand control rights to help them protect their investments (Tyebjee and Bruno 1984; Sahlman 1990) in ways that cannot be protected by incomplete contracts (Aghion and Bolton 1992). These investment agreements enable resource providers and entrepreneurs to separately allocate ownership and control rights by specifying board rights, "supermajority" voting rights, and other terms (Kaplan and Stromberg 2003). As a result, actual decision-making control can differ markedly from the degree of control that would be expected based on strict ownership percentage.

In making decisions about which resource providers to attract to the venture, entrepreneurs must weigh the value that can be added by those resource providers, and thus the potential personal financial gains from attracting them, versus the control that would have to be surrendered to those providers. Across different types of resource providers, entrepreneurs will have to give up a greater share of the venture's control and its future rents in order to attract the best co-founders and hires (Collis and Montgomery 1995; Coff 1999). The same is true of investors who can add the most value, compared to lower-value investors (Amit, Glosten et al. 1990; Hsu 2004). For entrepreneurs motivated by financial gain, the hope would be that owning

a smaller percentage of equity in a more valuable venture will result in a more valuable equity stake. At the same time, entrepreneurs can refuse to give up a lot of equity and control and instead access "second-tier resources" (Bhide 2000:87) who demand smaller stakes in the venture and less control of decision making, but who often prove less helpful in building the venture (Bhide 2000).

The central problem for entrepreneurs is that giving up control of the venture in order to attract resources conflicts with the second core motivation for becoming entrepreneurs, the control motive. Many entrepreneurs *do not* start ventures to get wealthy (Amit, MacCrimmon et al. 2000:120). Instead, many entrepreneurs are motivated by the chance to play a central role in driving and controlling the growth of the companies they founded (e.g., Carland, Hoy, Boulton and Carland 1984; Begley and Boyd 1987). However, because resource providers also want a measure of control over the venture, there should be an inherent tension between the profit motive and the control motive, for the resource-attraction choices that help increase financial gains endanger the entrepreneur's control of the venture, and vice versa.

These choices are made regarding the human and financial resources provided by potential investors, hires, and co-founders. Regarding the investor choice, related field research helps shed additional light on the issues suggested above by the Steria case (Abetti 2005). One founder of a technology start-up faced a decision of whether to take his firm's first outside investment (A.) from a venture capitalist whose contacts and guidance would have helped build more value but who would have taken control of the board immediately and could later have fired the founder as CEO, or (b) from a "second-tier" investor, an "angel" investor whose assistance would have been much less useful, but who would not have taken control of the board or CEO position. Regarding the executive-hiring choice, another founder of a technology

venture faced a decision between (A.) giving up the CEO position to a more experienced professional-CEO who would be able to grow more value, at the expense of the founder's becoming a marginal player within the venture, or (B.) vetoing the hiring in order to keep control of the CEO position. Finally, both of these entrepreneurs also faced the decision of whether to take on co-founders, with (A.) the first founder deciding to have two co-founders and (B.) the second deciding not to take on any co-founders. In making strategic choices about the attraction of these human and financial resources, these entrepreneurs were choosing between potential financial gains and control gains: in each decision, choice "A" above would have been consistent with "Rich" motivations, and each choice "B" would have been consistent with "King" motivations.

There are two major loci of control at the top of organizations within which control may be contested: controlling whether the entrepreneur remains CEO (Hellman 1998; Wasserman 2003) and whether outsiders or insiders control the board of directors (Sahlman 1990; Lerner 1995). First, on the side of the resource provider, investors who want to grow a more valuable company but anticipate that the entrepreneur is not the right person to do so will often push to bring in a new CEO to replace the entrepreneur (Wasserman 2003). This is particularly true when the entrepreneur's skills do not fit the venture's anticipated needs during its next stage of growth (Greiner 1972). However, such actions to change CEOs run counter to the wishes of an entrepreneur whose primary motivation is being able to control the development of the venture. Reinforcing this, within the top management team, potential co-founders or executive hires who are considering joining the venture, but fear that the founder-CEO will not be able to lead the company effectively, may also be much harder to attract on favorable terms.

For their part, entrepreneurs can make several choices that increase or decrease the chance of having to give up the CEO position, all of which may affect their attraction of needed resources. Entrepreneurs can choose to not take on co-founders, or to focus their resource accumulation on second-tier investors or executive hires (Bhide 2000), and thus be able to maintain more control of key decisions. Which investors they raise capital from, and even whether they raise each round from existing investors or from new investors, also affects the likelihood of being replaced as CEO (Wasserman 2003). In addition, entrepreneurs who raise smaller rounds of financing have a lower hazard of succession. Thus, controlling for company size, age, and other differences, entrepreneurs who do not want to give up the CEO position may either make very different choices about attracting outside human and financial resources, or may be less attractive to investors and potential hires. In both cases, entrepreneurs who keep control of the CEO position may be harming their ability to attract key resources and compromising the value of their equity stakes.

> *Hypothesis 1:* If the entrepreneur still controls the CEO position, the value of the entrepreneur's equity stake will tend to be lower than if the entrepreneur has given up control of the CEO position.

The second arena wherein control may be contested is within the board of directors. The board of directors controls most major decisions within modern companies (Mace 1971), and maintaining control of more than half of the board can give investors powerful influence over those decisions. Given the money and other resources they contribute to the company, investors want to control key decisions as much as possible. Within new ventures, for most corporate decisions, investors know that board control can be critical (Lerner 1995; Kaplan and Stromberg 2004). Because of information asymmetries and agency issues, investors want to monitor the entrepreneur, often as members of the venture's board of directors (Lerner 1995), and to

maintain final say over key organizational decisions. However, such decisions can have fundamental implications for the founders of the company, making it very important to entrepreneurs that they retain control of the board as long as possible (Wasserman and Boeker 2005). Thus, entrepreneurs who resist giving investors control at the board level may harm their own ability to attract the resources of outsiders, reducing their ability to grow the value of their equity stakes.

> *Hypothesis 2:* If the entrepreneur still controls the board of directors, the value of the entrepreneur's equity stake will tend to be lower than if the entrepreneur has given up control of the board.

Beyond Rich vs. King: The Roles of Personal and Social Capital

The hypotheses above focused on how the entrepreneur's choices about attracting resources should affect the chances that the entrepreneur will have to give up control of the venture. Entrepreneurs with higher levels of initial resources should be able to gain more financial and/or control benefits than would be implied by a strict tradeoff between financial gains and control. Lin (1999) categorizes the relevant types of resources into personal capital, which includes human capital and economic capital, and social capital. This section describes how each type of capital should enable entrepreneurs to gain either more financial benefits or greater control than would be implied by the Rich versus King tradeoff examined above.

Past work on strategic choices (e.g., Hitt and Tyler 1991) has found significant impacts of an executive's human capital on organizational outcomes, with specific applications to entrepreneurial contexts. This prior experience should have an important impact on the entrepreneur's ability to build the venture, in ways that may help the entrepreneur achieve his or her motivations beyond what would be expected from the tradeoff described above. More specifically, Becker (1964) highlighted the importance of specific human capital. Applying Becker's insights to new ventures, Bruderl, Preisendorfer and Ziegler (1992) showed that a key

type of entrepreneur-specific human capital is "leadership experience," defined as "experience in managing and directing employees." (Bruderl, Preisendorfer et al. 1992:229) For entrepreneurs, such general-management experience influences the strategies adopted by new firms (Boeker 1988) and the thresholds with which entrepreneurs evaluate firm performance and whether to exit (Gimeno, Folta, Cooper and Woo 1997). Regarding the barriers to attracting resources that we described above, an entrepreneur's having general-management experience also helps reduce information problems by providing resource providers with reassurances about the entrepreneur's organizational abilities, thus helping the entrepreneur access resources on more attractive terms (Bruderl, Preisendorfer et al. 1992; Bhide 2000). Furthermore, in contrast to managers with narrower backgrounds, managers who have general-management experience consistently lead their business units to higher levels of performance (Govindarajan 1989), and may enable the entrepreneur to produce higher profits because of the entrepreneur's higher level of productivity (Bates 1985). Therefore, we would expect entrepreneurs who have general-management experience to have more valuable equity stakes than do entrepreneurs who do not have general-management experience.

> *Hypothesis 3:* Entrepreneurs who had general management experience before founding their ventures will have more valuable equity stakes than do entrepreneurs who lack general management experience.

To the extent that economic capital is a key resource in building new technology ventures, entrepreneurs who provide the initial capital for their ventures should be able to avoid giving up equity stakes to investors for a longer period of time and thus be able to access outside capital on more attractive terms (Gompers and Lerner 1999). The positive signal that entrepreneurs send by investing their own capital in their ventures should also result in more favorable access to outside capital, and both that signal and the fact that the venture has a solid

capital base should also make it easier for an entrepreneur to attract executive hires. In addition, an entrepreneur's initial investment of economic capital can help remove liquidity constraints on the venture (Evans and Jovanovic 1989), and may affect its ultimate level of success (Holtz-Eakin, Joulfaian and Rosen 1994). Thus, we would expect entrepreneurs who provide their ventures with initial economic capital to be able to gain more valuable equity stakes than implied by the profits-versus-control tradeoff.

> *Hypothesis 4:* Entrepreneurs who provide the initial capital for their ventures will have more valuable equity stakes than do entrepreneurs who do not provide the initial capital.

Finally, social capital may affect the extent to which entrepreneurs have to trade off financial gains for control of their ventures. Social capital refers to "resources embedded in a social structure which are accessed and/or mobilized in purposive actions." (Lin 1999:35) Entrepreneurs build social capital, "the contextual complement to human capital" (Burt 1997:339), by establishing ties to resource providers that they can later leverage to access needed resources. The goal of building social capital is "the gaining of added resources, resources not presently possessed by ego" (Lin 1999:36) that will increase the expected returns from instrumental actions. Because it also helps reduce information asymmetries, leveraging social capital can also reduce the amount of control and percentage of equity that the entrepreneur has to give up to attract resource providers.

Social capital may be particularly pertinent to entrepreneurs building new ventures. In fact, Burt phrases his analyses of social capital in explicitly entrepreneurial terms. For instance, higher levels of social capital enable "entrepreneurial managers ... to develop the opportunities" they are pursuing (e.g., Burt 1997:339). He further establishes a linkage between higher levels of social capital and the ability to build more valuable ventures: "Entrepreneurial managers ...

have more opportunity to add value" (Burt 1997:343) and gain higher returns from their efforts if they can leverage their social capital to access resources. (Interestingly, Burt (1997) also describes the "control benefits" enjoyed by entrepreneurial managers who have higher levels of social capital, suggesting that additional social capital should affect positively both the entrepreneur's financial gains and the degree of control over the venture.) Consistent with Lin's (1999) focus on social capital that has actually been "accessed and/or mobilized," this study focuses on the entrepreneur's ties that have actually been used to access resources. Resource providers who help build value could include both outside investors to whom the entrepreneur has prior ties (Bhide 2000) or executive hires to whom the entrepreneur has prior ties (Granovetter 2005), suggesting that entrepreneurs who leverage their ties to either investors or executive hires should be more likely to have more valuable stakes.

Prior ties to investors may also help entrepreneurs keep control of their ventures. For instance, when investors have a prior tie to an entrepreneur, they are willing to take greater risks, and are less likely to do something detrimental to the entrepreneur if the entrepreneur performs badly (Uzzi 1997). The board's allegiance to the CEO, which often comes from prior ties, can delay dismissal of the CEO (Fredrickson, Hambrick and Baumrin 1988). For investors, prior ties help reduce their risks by reducing information asymmetries, potentially making them more willing to invest without the same degree of control provisions. Such ties can also help after the investment has been made, for people with prior ties have a deeper level of trust (Tsai and Ghoshal 1998), and among people with prior ties, information is exchanged more honestly and holistically than if those ties did not exist (Uzzi 1997).

> *Hypothesis 5:* Entrepreneurs who take money from an investor with prior ties to them, will have more valuable equity stakes than entrepreneurs who lack prior ties to their investors.

> *Hypothesis 6:* Entrepreneurs who hire an executive with prior ties to them, will have more valuable equity stakes than entrepreneurs who lack prior ties to their executive hires.

Data and Methods

The data used in this study were collected in annual surveys of private American information-technology firms. The surveys are conducted jointly between the author and three national professional services firms: the Ernst & Young accounting firm, the Hale and Dorr law firm, and the J. Robert Scott executive search firm. The survey was designed, developed, and tested by the author with input from the three professional services firms. The list of target companies is compiled from the membership lists of regional and state-wide technology councils, the VentureOne database, the firms' own client lists, and recommendations from private-company investors. Invitations to participate in the survey are mailed to the CEOs and CFOs of the companies, with the expectation that that a single senior executive will complete the entire survey for each company. The main inducement to the CEOs and CFOs to complete the survey is the promise of a free copy of a detailed, published Compensation Report that draws extensively on the compensation data that is collected through the survey, and which is not available to non-participants. Survey questions cover company founding, dates on which key product development milestones were achieved, financing history, backgrounds of the members of the TMT, executive compensation, and the composition of the board of directors. The instrument was pilot tested before the year 2000 survey. The survey is conducted online so that responses can be validated as they are entered. The 20% response rate across the three years of the I.T. survey was reasonably high considering the level of executives targeted and the sensitivity of the questions asked (Finkelstein, 1992; Waldman et al., 2001). The representativeness of the responses was assessed by comparing respondents to non-respondents

with regard to geographic distribution, industry segment, and stage of company development (the data available for non-respondents). On these dimensions, Wald tests showed that there were no statistically significant differences between respondents and non-respondents.

To reduce the chance that the results are sensitive to the year in which the data were collected, this study uses data from the 2000, 2001, and 2002 surveys, while controlling for the year of collection. Because there are strong industry effects on organizational choices, studies of such choices should focus on a single industry or used matched-pair designs (Hambrick and Mason 1984:197). This study follows the former suggestion, focusing on new ventures within a single industry, the information technology industry, but also controlling for each venture's sub-segment within that industry. To reduce the chances that a venture failed to raise outside capital because of a flawed business rather than because of the entrepreneur's decisions about financial gains versus control, the analyses focus on the ventures that raised at least one round of outside financing, thus indicating that the business was attractive to at least one outside investor. (Doing so also eliminated from the dataset the most extreme control-focused entrepreneurs – i.e., those who refused to raise even one round of outside financing – possibly providing a more conservative test of the Rich vs. King tradeoff.) The final dataset includes 460 private technology companies, with 127 coming from the year-2000 survey, 155 from the 2001 survey, and 178 from the 2002 survey. Fewer than five percent of companies were repeat participants in the surveys, making each year of the survey a largely independent cross-section of companies. Nevertheless, to ensure that repeat respondents did not introduce auto-correlation problems, all core models were rerun excluding the repeat respondents, and no differences were found.

Although it controls for the number of co-founders attracted by the core entrepreneur and for founding-team stability, this study focuses on the choices and resources of the core

entrepreneur who started the new venture, and how that person's choices about attracting co-founders, investors, and executive hires affect the tradeoff of financial gains versus control. For companies where the entrepreneur had no co-founders, identification of the core entrepreneur was straightforward. Where there were one or more co-founders, the core entrepreneur was identified by examining which founder received the highest percentage of initial equity. Where more than one co-founder had the highest percentage, the one who took the initial title of "CEO" was used.

Dependent Variables

The initial hypotheses focus on how the value of the entrepreneur's equity stake will be affected by the entrepreneur's keeping control of the decision-making roles within the company. The first dependent variable, the current value of the entrepreneur's equity holdings, is computed by multiplying two factors. The first factor is the "pre-money" valuation of the company (e.g., Lerner 1994), which is the number of shares outstanding before the most recent round of financing multiplied by the price per share in the most recent round. Consistent with Kaplan and Stromberg's (2004) approach to computing the entrepreneur's claim on the proceeds of the company, I then multiply the company's pre-money valuation times the percentage of equity held by the entrepreneur to estimate the current value of the entrepreneur's equity holdings. The logarithm of this value was the core dependent variable.

An alternative measure of company value could be the cumulative amount of capital raised by the company to date, which can also be multiplied by the percentage of equity held by the entrepreneur. Therefore, auxiliary models were run using (the logarithm of) this alternative dependent variable to check the robustness of the core results to this alternate metric. The

company-valuation and capital-raised variables were highly correlated (r=.7) and the auxiliary results largely matched those from the main models, as shown below.

Independent Variables

The core independent variables included six dummy variables: whether the entrepreneur had given up the CEO position (Hypothesis 1), whether inside executives held fewer than 50% of the seats on the board of directors (Hypothesis 2), whether the entrepreneur had a general management background during prior work experience (Hypothesis 3), whether the entrepreneur provided the initial economic capital (Hypothesis 4), and whether the entrepreneur had prior ties to an investor in the venture (Hypothesis 5) or to an executive hire (Hypothesis 6).

The control variables included general human-capital controls, company controls, and segment and year dummies. Regarding human capital, Hypothesis 3 examines the entrepreneur-specific human capital pertaining to prior general-management experience (Bruderl, Preisendorfer et al. 1992). However, general human capital (Becker 1964) may also affect the entrepreneurial outcomes examined here. Past studies of the linkage between executive characteristics and entrepreneurial choices (e.g., Boeker 1988; Gimeno, Folta et al. 1997) have focused on two types of general human capital: the entrepreneur's years of prior work experience (or age), and formal education. In examining the impact of resource attraction on an entrepreneur's ability to build value while maintaining control of the venture, it is possible that entrepreneurs who have accumulated more years of work experience before starting the venture will face less of a tradeoff between profits and control. Entrepreneurs with more years of prior work experience should already have more of the human and financial resources needed to build their ventures, making it less necessary to give up equity and control to co-founders, hires, and investors in order to attract them to the venture. Thus, the models control for prior years of work

experience. In a similar vein, entrepreneurs with deeper educational backgrounds should already have more of the human capital needed to build their ventures, so the models control for the entrepreneur's educational degrees (BA/BS, MA/MS, JD, MBA, or PhD degrees).

At the company level, the models controlled for the number of original founders and the number of founders still working as executives. Company maturity and size were captured using company age in months, number of employees (log transformed), and current revenues (square-root transformed, to allow for pre-revenue companies).

There are three ways in which the models controlled for differences in the value of the original business idea. First, the value may differ by business segment, with some segments having higher potential than others. Therefore, dummy variables were used to control for business segment (software, communications, computer hardware / semiconductors / electronics, IT services / consulting / systems integrator, content / information provider, and the dropped dummy for "other segment"). Second, value may differ by stage in the business cycle, with different macro-economic conditions causing fluctuations in value. Therefore, dummy variables were used to control for whether the data was from 2000, 2001, or 2002, with the dropped dummy for 2000. Finally, as mentioned above, to ensure that the original business idea was of sufficient quality to attract the attention of professional investors, companies were included that had been able to attract at least one round of outside investment. As described above, this also made for a more conservative test of the core tradeoff hypotheses.

Results

Table 1 presents the means and standard deviations of the dependent and independent variables and the correlations among those variables. Across the full dataset, 31% of companies are based in California and 18% in Massachusetts. Median company age is 39 months, with 25th

and 75th percentiles of 26 and 59 months, respectively, and median number of employees is 47, with 25th and 75th percentiles of 25 and 90 employees, respectively. The possibility of collinearity among the variables was checked using variance-inflation-factor analysis (Belsley, Kuh and Welsch 1980; Mansfield and Helms 1982; Neter, Wasserman and Kutner 1989), which showed no variables with VIF scores of more than 10 (excluding dummy variables, the highest VIF score was 1.91), indicating no problems.

Insert Tables 1 and 2 about here

Before examining the Rich vs. King tradeoff, Table 2 highlights the variables affecting the entrepreneur's ownership percentage, one of the key factors used to compute this paper's core dependent variable. At the company level, the more co-founders ($p<.01$) with whom the entrepreneur had to split the equity, the lower the entrepreneur's percentage, but if those co-founders stayed with the company ($p<.005$) and did not have to be replaced by other hires, the entrepreneur's percentage was higher. Within the core control-related predictor variables, entrepreneurs who gave up control of the CEO position ($p<.005$) and of the board ($p<.10$) had lower percentages. However, entrepreneurs who had leveraged ties to executives during their hiring had higher percentages ($p<.05$). Interestingly, the more years the entrepreneur worked before starting the venture, the lower the entrepreneur's equity percentage ($p<.05$), but entrepreneurs with prior general-management experience had a higher equity percentage ($p<.05$).

To test the hypotheses I used OLS regression. Table 3 presents the core models that use as their dependent variable an estimate of the (log transformed) value of the entrepreneur's equity stake. In the baseline Model 1, the most significant controls are the (logged) number of employees ($p<.005$), whether the entrepreneur has a master's degree ($p<.05$), the two year-dummies (both $p<.05$), and the Services and Content segment dummies (both $p<.10$). In the full

Model 2, all of the hypothesis-related variables are significant to some degree. Most centrally, entrepreneurs who give up the CEO position ($p<.01$) and board control ($p<.005$) hold more valuable equity stakes. This tradeoff is shown in Figure 1, where the more control the entrepreneur has retained, the less valuable the entrepreneur's equity stake, even after controlling for company maturity, size, and industry segment. This is true both for older companies (those in operation for 40 or more months) and for younger companies (less than 40 months old), each of which is plotting in the figure. At the same time, when the entrepreneur has a general-management background ($p<.05$), or has leveraged a prior tie in finding an investor ($p<.05$) or an executive hire ($p<.05$), the entrepreneur's stake is more valuable. When the entrepreneur provided the initial capital, the equity stake is more valuable, but that variable is only marginally significant ($p<.10$). Thus, entrepreneurs with prior "leadership experience" (Bruderl, Preisendorfer et al. 1992) and who leverage prior ties are able to build more valuable equity stakes than entrepreneurs who lack such human and social capital. The R^2 of this model is .457, significantly higher than in the baseline model, and the overall model is highly significant.

Insert Table 3 and Figure 1 about here

Table 4 presents two auxiliary models that were used to test the robustness of the core models.[3] For their dependent variable, the models in this table use the (logarithm of the)

[3] It is possible that the entrepreneur's retention of the CEO position is endogenous to the value of the entrepreneur's equity stake. For instance, the prior value of the entrepreneur's stake may affect whether the entrepreneur remains CEO. An instrumental variables analysis of the core model was used to assess this possibility. Both theoretically and empirically, CEO-Chairman duality, which indicates whether the CEO also serves as the Chairman of the board of directors, is a good candidate to be an instrument for the Gave-Up-CEO variable. There are two major requirements for a variable to be a good instrument: that it be *relevant*, or linked with the independent variable of interest, and that be *exogenous*, or not be correlated with the error term in the core model (e.g., Hall, Rudebusch and Wilcox 1996). Regarding the relevance requirement, CEO-Chairman duality is closely linked to the CEO's characteristics (e.g., Finkelstein and D'Aveni 1994), and in this study's dataset, the CEO-is-Chairman variable was highly correlated with the Gave-Up-CEO independent variable ($r=-.27$, $p<.005$). Furthermore, in a regression that used Gave-Up-CEO as the dependent variable and CEO-is-Chairman and the other predictor variables as

entrepreneur's share of the total capital raised by the company, computed by multiplying the percentage of the company owned by the entrepreneur times the total capital raised by the venture. In the auxiliary baseline model, the number of employees is once again highly significant ($p<.005$). The entrepreneur's having a master's degree and company age are marginally significant (both $p<.10$). As shown in the full model, the CEO and board dummies are again highly significant (both $p<.01$). The general-management and investor-tie variables maintain their significance ($p<.05$), but the executive-tie and initial-capital variables are only marginally significant (both $p<.10$). Once again, the increase in R^2 (from .216 in the baseline model to .359 in the full model) is statistically significantly.

Insert Table 4 about here

Additional analyses also helped shed light on the conditions under which the core results hold. First, are the results driven by market conditions rather than by entrepreneurs' choices? The Steria case (Abetti 2005) and related field research described above suggested that entrepreneurs' choices regarding investors, co-founders, and executive hires have a strong impact on their Rich vs. King outcomes in a variety of conditions. However, it is possible that it is the availability of capital that is driving whether entrepreneurs become Rich versus King, rather than entrepreneurs' own choices. To assess this, separate models were run for the data from the height of the technology boom (i.e., the year 2000 data), when capital was relatively

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independent variables, CEO-is-Chairman was highly significant ($t=-4.73$, $p<.005$). Regarding the second requirement, equity valuations are not affected by changes in a firm's CEO-Chairman duality status (e.g., Baliga, Moyer and Rao 1996) and duality does not affect valuation changes at the time of IPO (Howton, Howton and Olson 2001). An instrumental-variables analysis using CEO-Chairman duality as the instrument showed little change in the coefficients of the core model's independent variables. For more than half of the independent variables, the absolute value of the difference in coefficients was less than .01, and for only 3 coefficients was the difference more than .05. Furthermore, a Hausman (1978) test of the difference in the coefficients of the instrumental variables regression versus the OLS model indicated that OLS was a consistent estimator for the core equation.

plentiful, and from the aftermath of the boom, when it was much more constrained. In the year-2000 model, the CEO variable was not quite significant, but the board-control variable was significant at $p<.05$. In the post-2000 model, control of the CEO position and of the board were both significant at $p<.05$. Thus, financing environment does play a role, but the overall tradeoff between financial gains and decision-making control seems to exist to some degree in both types of environments. Second, is the main tradeoff faced by entrepreneurs in only the first round of financing or also in later rounds of financing? A model that included only companies that had raised a single round of financing showed that the tradeoff with control of the CEO position was significant ($p<.05$) but that the tradeoff with board control was not significant. In the model that included companies that had raised more than one round, both CEO control and board control were significant (both $p<.05$).[4] Third, is the tradeoff different for entrepreneurs who have built the most financial value versus those who have built less value, ceteris paribus? Quantile regressions estimating the 25^{th} and 75^{th} percentiles of the data showed that the CEO and Board variables were significant at both percentiles (in the 25^{th}-percentile model, CEO and Board were both significant at $p<.05$; in the 75^{th}-percentile model, CEO was significant at $p<.10$ and Board was significant at $p<.05$), and Wald tests showed no significant differences between the estimates of those variables across the two models.

In summary, four of the hypotheses are strongly supported and two receive weaker support. The hypotheses about the tradeoff between control and value are very strongly and consistently supported, with a statistically significant inverse relationship between equity value and the entrepreneur's keeping control of the CEO position and/or the board. This suggests that

[4] One other difference across the financing-rounds models is the significance of the founder's providing the initial economic capital for the venture, which has implications for Evans and Jovanovic's (1989) analyses of liquidity constraints. In the first-financing-round model, the variable indicating whether the entrepreneur provided the initial seed capital was highly significant ($p<.005$), but it was not significant at all in the beyond-first-round model.

there is a real tradeoff between becoming Rich or remaining King. (To the extent that entrepreneurs are motivated by other motivations beyond the two examined here – e.g., by "challenge, contribution, and ego" (Amit, MacCrimmon et al. 2000:136) – and to the extent that their corresponding strategic choices are unrelated or even conflicting with the Rich vs. King tradeoff, the existence of such other motivations should make this study's empirical conclusions more conservative.) The results also show that entrepreneurs who have prior general-management experience and who leverage ties to investors are able to build more valuable equity stakes and/or maintain more control of the venture than implied by a strict Rich vs. King tradeoff. Of weaker significance, results show that entrepreneurs who provide the initial economic capital for their ventures or who leverage ties to executive hires are also able to gain more financially or retain more control.

Discussion

This study has examined the conflict between entrepreneurs' two major motivations, the profit motive and the control motive. Entrepreneurs who want to build valuable companies must attract the outside resources that can help them do so. They try to attract talented co-founders who can complement their skills and help them get the company off the ground, non-founding executives who can help build the growing company, and investors who have capital and the ability to add value through their guidance and connections. However, to attract these outside resources, entrepreneurs often have to give up control of decision making, which may have been a major motivation for starting the venture. This requires them to choose between attracting the resources needed to build valuable equity stakes and keeping control of their ventures – i.e., between achieving the profit motive and achieving the control motive.

Hypotheses about this tradeoff were tested on a unique dataset of 460 private ventures in the technology industry. The results show that, controlling for company size, age, and other factors, the more decision-making control kept (at both the CEO and board levels), the lower the value of the entrepreneur's equity stake. This tradeoff was supported when using both the company's pre-money valuation and the cumulative amount of capital raised to compute the value of the entrepreneur's stake. Thus, entrepreneurs can grow more valuable equity stakes by being willing to give up control, or they can keep control, not attract the best resources (people, capital) to the venture, and end up with less-valuable stakes. As shown in Figure 1, the tradeoff exists in both older and younger start-ups. These results help explain the lack of empirical support for the profit motive (Hamilton 2000; Moskowitz and Vissing-Jorgensen 2002), for a focus on financial gains should be balanced by consideration of choices the entrepreneur may have made to trade off control versus financial gains, and by examination of how different choices might lead to different financial outcomes. In addition, the hypotheses were tested with data from both the heights and depths of the technology market (i.e., from 2000, 2001, and 2002), and the findings provide strong support for the existence of the Rich vs. King tradeoff across these very different market conditions.

For entrepreneurs with simple motivations – for instance, entrepreneurs driven primarily by the profit motive and very little by the control motive, or vice versa – the set of choices they face should be more straightforward than if they are driven by both motives. Entrepreneurs with strong profit motives should be willing to give up equity to attract the best co-founders and hires, should share decision making control with them (e.g., by stepping down as CEO and hiring a professional CEO who would be able to build a more valuable company), and be willing to give up both equity and board control to attract the best investors. By consistently making decisions

that attract the best resources, even at the expense of giving up control of the company, these "Rich motivation" entrepreneurs can maximize the chances that they will achieve their major goal of financial gains. In contrast, entrepreneurs with strong control motives should make a very different set of choices in order to maximize the chances that they will achieve their control goal. These entrepreneurs should probably remain solo founders, be very hesitant about giving up equity stakes to non-founding hires and investors, and resist giving up both the CEO position and control of the board. When they need outside capital, they should be more inclined to go to less prestigious and lower-value investors who will take smaller equity stakes, will be less demanding about the entrepreneur's remaining CEO, and will be less demanding about board control, if doing so increases the chances that the entrepreneur can remain in control of the company. Such decisions will help entrepreneurs maximize their chances of becoming "King," though at the expense of failing to grow a more valuable company and ending up with a less valuable equity stake.

Entrepreneurs driven by both major motives face a more complex series of choices (Sapienza, Korsgaard et al. 2003). These are the entrepreneurs that face tougher "dilemmas" in their strategic choices. In the best of all worlds, it would make sense for these entrepreneurs to try to achieve the entrepreneurial ideal of being both "Rich & Regal." However, much as moves to "claim value" harm a person's ability to "create value" (Lax and Sebenius 1986), attempts by entrepreneurs to achieve one goal should harm their ability to achieve the other goal. This is why, despite high profile Rich & Regal entrepreneurs like Larry Ellison (founder of Oracle Corporation) and Marc Benioff (founder of SalesForce.com), most entrepreneurs are not like these extreme exception cases and instead have to sacrifice one goal or risk achieving neither (thus becoming Flops).

This study's results suggest that such Rich & Regal entrepreneurs may have been more likely to have gained human, social, and economic capital prior to founding. By gaining such types of capital before starting their ventures, entrepreneurs may not have to give up as much equity and control to attract co-founders, hires, and investors. Future research could explore other resources that these entrepreneurs accumulate prior to founding that make Rich & Regal status more achievable for them. For instance, the entrepreneur-specific human capital built by serial entrepreneurs (Bruderl, Preisendorfer et al. 1992) may have a strong impact on the tradeoff between financial gain and control, but the information-technology industry during the years examined here did not include sufficient serial entrepreneurs to test such a proposition, which could be examined in future research. Are Rich & Regal entrepreneurs usually serial entrepreneurs who have already founded prior start-ups from which they gained the experiences necessary to build valuable companies without needing to attract as many outside resources? Similarly, entrepreneurs with long time horizons may be more likely to craft value-building agreements with resource providers (Mannix, Tinsley and Bazerman 1995:242; Cable and Shane 1997:143), as may entrepreneurs who treat the goal of becoming Rich & Regal as a multi-venture repeated game. Alternatively, do Rich & Regal entrepreneurs find ways to access debt financing to a greater degree than asset-poor new ventures are usually able to (Sapienza, Korsgaard et al. 2003), as a substitute for the equity financing usually used?

This study's core results are consistent with the argument that firm value should be a function of ownership structure (e.g., Berle and Means 1932; Jensen and Meckling 1976). However, in contrast to past studies, which examined this premise at the level of the overall organization's value and did so with samples from the Fortune 500 (e.g., Morck, Shleifer and Vishny 1988) and other public companies that have dispersed ownership (e.g., Griffith 1999),

the present study examines this premise at the level of the individual entrepreneur's equity stake, and does so in the context of new ventures, where entrepreneurs are much more likely to be found and where ownership is held by relatively concentrated owners. In contrast to other studies that speculated about the effects of maintaining control on building value but were not able to test this proposition (Hamilton 2000; Moskowitz and Vissing-Jorgensen 2002), the data used in this study also enabled a direct test of the tradeoff between financial gains and control. In addition to showing that there is, indeed, a strong tradeoff, it has also been able to highlight some of the levers that entrepreneurs can use to weaken the tradeoff, in particular by accumulating relevant prior experience and by leveraging social capital in attracting investors and executive hires.

It should be noted that this examination of the impact of attracting resources to new ventures has treated all outside resources similarly. However, for a given level of value addition, entrepreneurs may have to give up different amounts of equity and control to attract a resource provider, depending on whether the resource provider is a co-founder, an executive hire, or an investor. This provides further opportunities for future research to enrich our knowledge of the Rich vs. King tradeoff. In particular, is it better to give up an equity stake to attract a co-founder, or would it be better to remain a solo founder and give up the equivalent equity to a venture capital firm or to post-founding hires? Similarly, some resources are tied more closely to the company than are others, which can have implications for economic gains (Collis and Montgomery 1995). For instance, rather than attracting "captive" resources, new ventures sometimes use cooperative agreements to gain technical capabilities (McGee, Dowling and Megginson 1995). In contrast to the more stark forms of control examined here (e.g., the binary

indicator of controlling the CEO position), do these alternate arrangements help entrepreneurs reduce or avoid the Rich vs. King tradeoff?

As indicators of the value that entrepreneurs have built and of the equity stakes they have held, this study used two proxies, the valuation placed on the company in its most recent round of financing and the amount of capital raised by the company. However, because private-company equity is illiquid, it is harder for entrepreneurs to actually realize economic gains from "paper" equity holdings in their private companies than if their companies were publicly traded (Hall and Murphy 2002; Kahl, Liu, Longstaff and Page 2003). Future research could examine new ventures at the stage where entrepreneurs exit from their companies with realized financing gains, such as when the venture is acquired by a larger company for cash payouts, or when the entrepreneur is able to sell stock after the company goes public and any limitations on the entrepreneur's selling stock have expired.

The tension examined in this paper has related parallels in some non-entrepreneurial domains. First, the negotiations literature (e.g., Walton and McKersie 1965; Lax and Sebenius 1986) explores the "negotiator's dilemma" wherein the party to a negotiation faces a tradeoff between the opposing processes of creating value and claiming value. Actions that increase the amount of value claimed by a party hurt the party's ability to build value, much as an entrepreneur's decisions to keep more control and equity hurt the ability to build a valuable company. Second, from a broader organizational perspective, this tradeoff may also exist in non-start-up settings, in which managers have to choose between growth and control. One such case involved Henry Royce after Rolls-Royce had grown into a large, established company. When faced with a choice between merging with another large company or remaining independent, Royce fought to remain independent even though it would hurt Rolls-Royce's

prospects, stating: “From a personal point of view, I prefer to be absolute boss over my own department (even if it was extremely small) rather than to be associated with a much larger technical department over which I had only joint control.” (Botticelli 1997:105)

More broadly, the tradeoff examined here mirrors examinations in the strategy literature (e.g., Coff 1999) of the relationship between rent generation and rent appropriation, and in the overall resource dependency literature, which examines how organizational survival depends on top management’s ability to attract critical resources from the external environment (Pfeffer and Salancik 1978). Further research that examined this tradeoff in non-entrepreneurial domains can shed light on whether it is specifically an entrepreneurial tradeoff or whether it is a more general organizational one. It can also help us understand how entrepreneurs may be able to reduce the drastic “liabilities of newness” that come from a lack of resources, further increasing the impact of entrepreneurs on modern economies.

Table 1. Summary statistics and correlation matrix for core variables

	Variable	#Obs.	Mean	Std.Dev.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	Value of founder's equity stake (L)	449	5.99	1.33							
(2)	Entrep's stake X Total capital raised (L)	446	5.70	1.06	0.74						
(3)	Gave up CEO position	460	0.43	0.50	-0.08	-0.01					
(4)	Gave up board control	460	0.76	0.35	-0.09	-0.11	0.07				
(5)	Entrepreneur has GM background	459	0.54	0.50	-0.10	-0.06	0.20	0.00			
(6)	Entrepreneur provided initial capital	460	0.34	0.47	0.05	0.09	-0.06	0.01	0.04		
(7)	Entrep's tie led to at least one executive	460	0.74	0.44	-0.03	0.03	-0.23	-0.07	-0.06	0.09	
(8)	Entrep's tie led to at least one investor	460	0.28	0.65	0.05	0.11	0.05	0.02	0.05	0.11	0.10
(9)	Entrepreneur's years of prior experience	460	17.01	8.33	-0.10	-0.03	0.35	0.08	0.20	0.03	0.04
(10)	BA/BS degree	460	0.78	0.42	-0.16	-0.05	0.03	-0.03	0.11	0.02	0.04
(11)	MA/MS degree	460	0.26	0.44	0.11	0.10	-0.07	-0.04	0.00	0.03	0.03
(12)	MBA degree	460	0.35	0.48	-0.08	-0.05	0.06	0.02	0.12	-0.05	-0.08
(13)	PhD degree	460	0.07	0.26	0.01	-0.01	-0.13	-0.01	0.02	0.00	0.07
(14)	# of founders (L)	457	0.93	0.53	0.06	0.07	0.00	-0.04	0.06	0.08	0.04
(15)	# of founders still executives	460	1.82	1.25	0.22	0.18	-0.35	-0.12	-0.06	0.06	0.09
(16)	Company age (months)	460	53.01	46.88	0.08	0.11	0.17	0.07	-0.05	-0.05	0.06
(17)	# of employees in company	460	70.79	72.91	0.36	0.34	0.08	0.13	0.00	0.04	-0.21
(18)	Revenues in current year (S)	460	0.05	0.08	-0.01	0.02	-0.01	-0.03	-0.07	0.06	0.06

	Variable	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
(9)	Entrepreneur's years of prior experience	0.08									
(10)	BA/BS degree	0.02	0.06								
(11)	MA/MS degree	0.01	-0.02	-0.07							
(12)	MBA degree	0.03	-0.05	0.15	-0.14						
(13)	PhD degree	0.01	0.05	-0.10	0.10	-0.12					
(14)	# of founders (L)	-0.05	-0.01	-0.02	0.01	0.05	-0.01				
(15)	# of founders still executives	-0.01	-0.19	-0.03	0.05	0.03	0.05	0.54			
(16)	Company age (months)	-0.04	0.16	0.00	0.00	-0.05	-0.03	-0.15	-0.28		
(17)	# of employees in company	0.05	-0.02	-0.22	-0.03	-0.01	-0.07	0.08	0.05	0.11	
(18)	Revenues in current year (S)	0.02	0.01	0.09	0.05	-0.06	-0.09	-0.08	-0.08	0.20	0.13

(L) = natural log
(S) = square-root

Table 2. Regression models with %-ownership as DV.

Dependent variable: % owned by entrepreneur (L)

	Model 1: Baseline Model			Model 2: Full Model		
	Coef.	Std.Err.		Coef.	Std.Err.	
Hypotheses						
H1: Gave up CEO position				-0.338	0.109	****
H2: Gave up board control				-0.163	0.094	*
H3: Entrepreneur has GM experience				0.206	0.101	**
H4: Entrep. provided initial capital				0.093	0.129	
H5: Entrep's tie led to an exec. hire				0.190	0.081	**
H6: Entrep's tie led to an investor				-0.067	0.176	
General Human Capital Controls						
Entrepreneur's years of prior exper'c	-0.014	0.004	****	-0.010	0.004	**
BA/BS degree	-0.028	0.081		-0.016	0.081	
MA/MS degree	0.098	0.076		0.083	0.077	
MBA degree	-0.192	0.070	***	-0.182	0.071	**
PhD degree	0.054	0.103		-0.013	0.102	
Company Controls						
# of founders (L)	-0.262	0.081	****	-0.222	0.080	***
# of founders still executives	0.196	0.034	****	0.150	0.037	****
Company age (months)	0.002	0.001	**	0.002	0.001	***
# of employees in company	-0.003	0.001	****	-0.003	0.001	****
Revenues in current year (S)	-0.407	0.379		-0.535	0.376	
Segment Dummies						
Software	-0.137	0.161		-0.083	0.145	
Communications	-0.348	0.178	*	-0.276	0.166	*
Computer HW/Semic./Electronics	-0.284	0.197		-0.198	0.180	
IT Services/Consulting/Systems Integ.	-0.241	0.190		-0.177	0.176	
Content/Info Provider	-0.315	0.179	*	-0.245	0.165	
Other	(dropped)			(dropped)		
Year Dummies						
Year 2000	(dropped)			(dropped)		
Year 2001	-0.153	0.085	*	-0.200	0.083	**
Year 2002	-0.268	0.098	***	-0.404	0.103	****
Constant	3.680	0.208	****	3.731	0.216	****
	N = 446			N = 445		
	Prob > F = 0.000			Prob > F = 0.000		
	R-squared = 0.215			R-squared = 0.253		

* p<.10 (L) = natural log
** p<.05 (S) = square-root
*** p<.01
**** p<.005

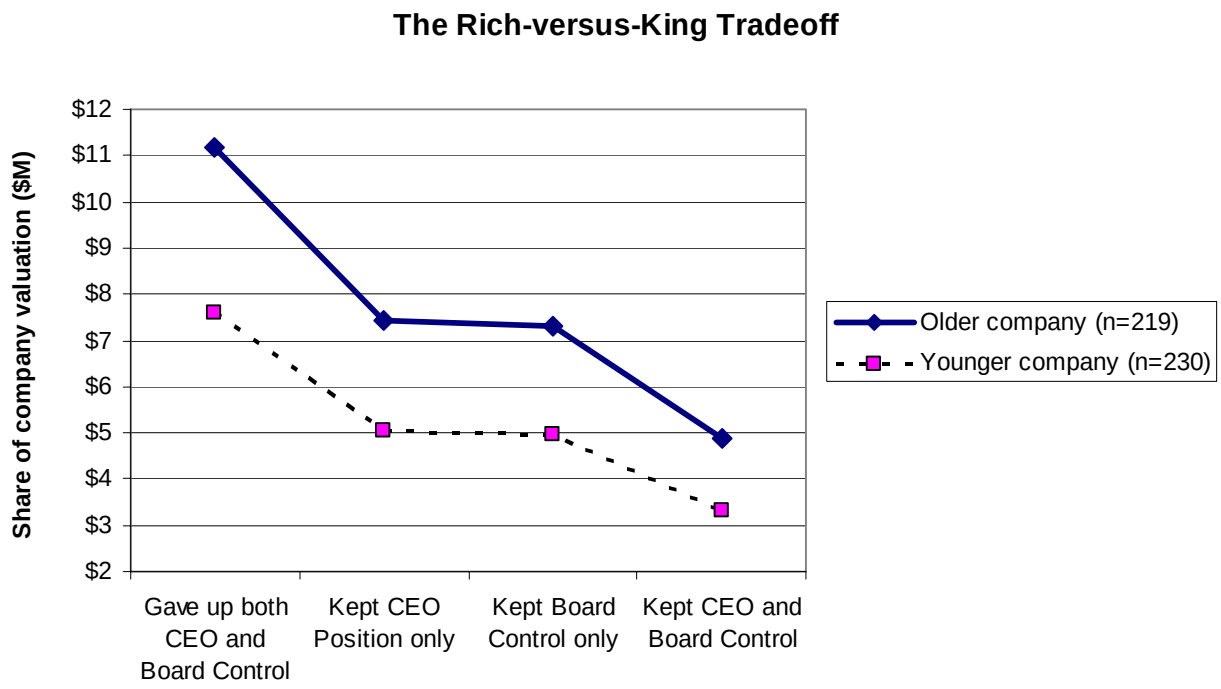
Table 3. Core regression models.

Dependent variable: Value of entrepreneur's equity stake (L)

	Model 1: Baseline Model			**Model 2: Full Model**		
	Coef.	Std.Err.		Coef.	Std.Err.	
Hypotheses						
H1: Gave up CEO position				0.423	0.154	***
H2: Gave up board control				0.406	0.140	****
H3: Entrepreneur has GM experience				0.349	0.149	**
H4: Entrep. provided initial capital				0.278	0.151	*
H5: Entrep's tie led to an exec. hire				0.264	0.133	**
H6: Entrep's tie led to an investor				0.329	0.156	**
General Human Capital Controls						
Entrepreneur's years of prior exper'c	0.003	0.007		-0.001	0.007	
BA/BS degree	-0.100	0.120		-0.098	0.119	
MA/MS degree	0.240	0.119	**	0.271	0.119	**
MBA degree	-0.058	0.111		-0.043	0.108	
PhD degree	-0.053	0.180		0.015	0.179	
Company Controls						
# of founders (L)	0.046	0.116		0.022	0.112	
# of founders still executives	0.089	0.058		0.107	0.058	*
Company age (months)	0.003	0.002		0.002	0.002	
# of employees in company	0.008	0.001	****	0.008	0.001	****
Revenues in current year (S)	0.006	0.580		0.098	0.607	
Segment Dummies						
Software	-0.324	0.260		-0.331	0.277	
Communications	-0.285	0.280		-0.325	0.303	
Computer HW/Semic./Electronics	0.034	0.327		-0.007	0.336	
IT Services/Consulting/Systems Integ.	-0.526	0.302	*	-0.562	0.315	*
Content/Info Provider	-0.490	0.292	*	-0.524	0.307	*
Other	(dropped)			(dropped)		
Year Dummies						
Year 2000	(dropped)			(dropped)		
Year 2001	-0.310	0.144	**	-0.334	0.144	**
Year 2002	-0.387	0.161	**	-0.451	0.174	**
Constant	3.180	0.473	****	2.509	0.504	****
	N = 446			N = 445		
	Prob > F = 0.000			Prob > F = 0.000		
	R-squared = 0.324			R-squared = 0.457		

* p<.10 (L) = natural log
** p<.05 (S) = square-root
*** p<.01
**** p<.005

Figure 1. Graph of value of entrepreneur's equity stake vs. degree of control over CEO position and board, using results from Model 2 in Table 3.



Note: The median company age of 40 months was used to separate "Older companies" from "Younger companies" in this figure.

Table 4. Auxiliary models, using Entrepreneur's Share of Capital Raised as dependent variable.

Dependent variable: Entrepreneur's share of capital raised (L)

	Model 1: Baseline Model			**Model 2: Full Model**		
	Coef.	Std.Err.		Coef.	Std.Err.	
Hypotheses						
H1: Gave up CEO position				0.375	0.132	***
H2: Gave up board control				0.371	0.131	***
H3: Entrepreneur has GM experience				0.233	0.099	**
H4: Entrep. provided initial capital				0.239	0.129	*
H5: Entrep's tie led to an exec. hire				0.229	0.124	*
H6: Entrep's tie led to an investor				0.287	0.122	**
General Human Capital Controls						
Entrepreneur's years of prior exper'c	0.007	0.006		0.002	0.006	
BA/BS degree	0.112	0.116		0.107	0.100	
MA/MS degree	0.160	0.096	*	0.185	0.096	*
MBA degree	0.024	0.092		0.024	0.091	
PhD degree	-0.098	0.167		-0.030	0.165	
Company Controls						
# of founders (L)	0.028	0.100		0.001	0.097	
# of founders still executives	0.071	0.052		0.101	0.053	*
Company age (months)	0.002	0.001	*	0.001	0.001	
# of employees in company	0.007	0.001	****	0.006	0.001	****
Revenues in current year (S)	-0.059	0.413		0.022	0.454	
Segment Dummies						
Software	0.024	0.235		0.012	0.255	
Communications	0.149	0.240		0.090	0.258	
Computer HW/Semic./Electronics	0.199	0.270		0.144	0.290	
IT Services/Consulting/Systems Integ.	-0.213	0.296		-0.237	0.311	
Content/Info Provider	-0.016	0.263		-0.043	0.279	
Other	(dropped)			(dropped)		
Year Dummies						
Year 2000	(dropped)			(dropped)		
Year 2001	-0.099	0.125		-0.110	0.126	
Year 2002	0.163	0.134		0.140	0.155	
Constant	2.976	0.402	****	2.395	0.429	****
	N = 443			N = 442		
	Prob > F = 0.000			Prob > F = 0.000		
	R-squared = 0.216			R-squared = 0.359		

* p<.10 (L) = natural log
** p<.05 (S) = square-root
*** p<.01
**** p<.005

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