

**KEEPING AN EYE ON THE FOUNDERS AND A THUMB ON THE MERCENARIES:
A STUDY OF CORPORATE GOVERNANCE IN IPO FIRMS**

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ABSTRACT

Keeping an Eye on the Founders and a Thumb on the Mercenaries: A Study of Corporate Governance in IPO Firms

Jason F. Moschella

Recent scandals and regulatory activity point to the importance of an empirical investigation into corporate governance and the factors that influence the decisions to adopt various governance practices. This study uses agency theory and stewardship theory to examine differences in governance structures between founder-led and professionally-led IPO firms. I examine firms at the time they are preparing to go public and the various governance provisions adopted at this crucial point in their development. I use a sample of 423 software firms that went public in the U.S. between 1996 and 2000 and examine the governance provisions they employ. I find that founder-led firms are more likely to be less shareholder-friendly than professionally-led firms.

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INTRODUCTION

Recent scandals and regulatory activity point to the importance of an empirical investigation into corporate governance and the factors that influence the decisions to adopt various governance practices. This study uses agency theory and stewardship theory to examine differences in governance structures between founder-led and professionally-led IPO firms. I examine firms at the time they are preparing to go public and the various governance provisions adopted at this crucial restructuring point in their lives (Martens, 2004).

In their review of the literature on agency theory, Gompers, Ishii, and Metrick, (2003) suggest that there are three main methods of addressing agency problems: 1) empowering minority shareholders; 2) giving greater managerial oversight powers to the board of directors; and 3) creating a takeover-friendly environment. Several studies show that the voluntary implementation of shareholder-friendly governance elements adds to firm value and argue that this occurs because the governance provisions reduce agency costs. For example, both Clarkson et al. (1991) and Boehmer (1993) find evidence of a positive relationship between insider ownership retention and firm value. Outsider-dominated boards (Bhagat and Black, 1996) and smaller boards (Monks and Minow, 1995; Yermack, 1996) are found to be positively related to firm value.

The literature on corporate governance in initial public offering (IPO) firms is comparatively small and provides mixed empirical evidence concerning the importance

of strong corporate governance practices. Field and Karpoff (2002) empirically examine the use of takeover defences by IPO firms. They find that, IPO firms, on average, employ fewer defence mechanisms such as staggered boards, supermajority voting requirements, and, to a lesser extent, poison pills relative to more seasoned counterparts. They also note that having takeover defences does not significantly affect underpricing. Certo et al. (2001) find that the presence of firm founders increases underpricing, but that board independence (insiders versus outsiders) moderates this relationship. In addition, they observe that founder-led firms with a higher proportion of insiders actually experience lower underpricing. In contrast, Jayaraman et al. (2000) find no relationship between a founder's presence and underpricing.

These findings suggest that corporate governance choices at the time of the IPO are complex and critical to the viability of the firm as a publicly traded company. As the firm prepares itself for the stock market, it generally undergoes the first major restructuring where it makes choices and enacts provisions that will have a long lasting effect on the firm (Martens, 2004). It is possible that the reasoning for these corporate governance choices may be to alleviate investors' concerns about agency problems by signalling good governance and/or a strong top management team (Baron, Hanna, and Burton, 2001).

Research has pointed to the importance of distinguishing between *founder managed* and *professionally managed* firms (e.g. Wasserman, 2003; Fischer and Pollock, 2004; Martens, Arcand, and Walker, 2007). Within the literature on IPOs and founders,

the term *professional manager* typically is used to refer to hiring an experienced manager from outside the firm to serve as the CEO of the firm. Although authors who use this term likely have no intention of offending founders, the term “professional manager” indirectly implies that founders are not or cannot be professional, especially when the research contrasts firms lead by founders with firms lead by professional managers. As I do not wish to give the impression that founder-led firms are not professionally managed, I will adopt the terminology used by Fischer and Pollock (2004) and Martens, Arcand, and Walker (2007), in which the use of the term *mercenary* refers to outside managers who are brought into the firm just prior to the IPO.

In this paper I address two issues that are critical to understanding corporate governance within the IPO context. First, I examine the idea that while agency theory arguments for strong corporate governance may be more relevant to mercenary-managed firms, stewardship theory may be the more appropriate theoretical framework for founder-managed firms. I contend that this leads firms to employ different governance levels and provisions when the firm is preparing for an IPO. Second, research has also pointed to the important monitoring role played by venture capitalists and underwriters (Barry et al., 1990; Megginson and Weiss, 1991). Therefore, I propose that, regardless of management status, pressures from venture capitalists and prestigious underwriters will also be associated with stronger corporate governance.

A REVIEW OF THE EXTANT LITERATURE ON CORPORATE GOVERNANCE AND IPOS

In this section I provide a review of both theoretical and empirical articles that have contributed to research in the fields of corporate governance and initial public offerings. Areas that have been particularly heavily researched in IPOs include underpricing¹, the long-term performance of firms after they go public², and post-IPO survival³. The area of corporate governance I focus on is the structure between shareholders and management. Many articles in this domain use agency theory to explain management-shareholder relationships⁴; however, I also examine works that challenge the agency theory framework⁵. In addition, many articles suggest that stewardship theory may be more appropriate in evaluating relationships between management, the firm, and other stakeholders⁶. I then continue by examining works that fuse corporate governance and IPOs. Works relevant to this area are divided into three categories: ownership and board structure⁷, top management team legitimacy and founder management⁸, and certification from third parties such as underwriters and venture capitalists⁹.

¹ e.g. Ibbotson (1974) and Loughran and Ritter (2004)

² e.g. Ritter (1991) and Loughran and Ritter (1995)

³ e.g. Fama and French (2004) and Peristiani and Hong (2004)

⁴ e.g. Jensen and Meckling (1976), Fama (1980), and Kosnik (1987)

⁵ e.g. Aguilera and Jackson (2003), Caldwell and Karri (2005), and Roberts, McNulty, and Stiles (2005)

⁶ e.g. Fox and Hamilton (1994) and Davis, Schoorman, and Donaldson (1997)

⁷ e.g. Boehmer (1993), Zingales (1995), Mello and Parsons (1998)

⁸ e.g. Certo et al. (2001), Wasserman (2003), and Zahra and Filatotchev (2004)

⁹ e.g. Barry et al. (1990), Carter and Manaster (1990), Carter, Dark, and Singh (1998), and Baker and Gompers (1999)

Research on Corporate Governance

Until recently, research on corporate governance focused mainly on how to maximize shareholder value through alterations in executive compensation schemes, board membership, and share ownership. Fama (1980) contends that the problems that accompany the separation of firm ownership and control have been discussed for quite some time, and proceeds to argue that ownership in the firm by management is not a necessary condition for creating an efficient organization because although management's current compensation may not be affected by poor firm performance, the negative reputation consequences that follow such performance may dampen future compensation prospects given the presence of a rational factor market for labour. Fama (1980) provides a comprehensive list of works that examine the separation of ownership and control. Fama's arguments are in contrast to Jensen and Meckling's (1976) study, which contains the argument that the most efficient form of contracting between managers and owners is to make managers owners themselves.

Other authors take a different approach, highlighting effective practices and provisions that minimize conflicts of interest between management and stockholders. There is a growing body of literature in which researchers investigate the role of the board of directors as a monitoring and value-preserving mechanism. Kosnik (1987) argues that the board of directors has an integral role to play in monitoring management, and finds that firms whose boards include a higher portion of outside directors and directors with executive experience are more effective in resisting greenmail transactions, even when controlling for varying degrees of managerial resistance. One interesting

feature of this paper is that she integrates both managerial hegemony theory and agency theory to develop her arguments, and observes that both frameworks are complementary because they both allude to structural contingencies in the firm where boards of directors may not be effective. Similarly, Daily and Dalton (1994) find that firms with more independent directors and CEO-Chairman separation are less likely to become bankrupt five years down the road, suggesting that “good” governance may help a firm survive. Still, they caution that the results may be misleading because a firm’s management structure tends to deteriorate as the probability of bankruptcy increases. Rosenstein and Wyatt (1990) examine the wealth effects of adding outside directors to the board and find that, upon announcing the appointment of new outside directors, firms will generally exhibit positive abnormal stock price returns. They suggest that inside director appointments are not necessarily bad – legitimate reasons for insider appointments include grooming a potential successor to be CEO or to help the board add value by including someone with specialized knowledge to aid in the performance of his/her duties.

In addition to evaluating the effectiveness of governance under an agency theory microscope, several articles have used alternate frameworks to evaluate corporate governance in firms. For example, Coase (1937) and Williamson (1988) take a different approach and investigate corporate finance through the lens of transaction cost economics. Within this framework, although there are noticeable similarities between transaction cost economics and agency theory, the crux of the discussion is centered not on incentive alignment, but rather on project selection and asset characteristics. One key

point implied in Williamson's article is that debt is an effective governance mechanism for firms whose assets are readily redeployable, that is, tangible assets that do not necessarily require highly specialized knowledge at the executive level to be used effectively – this applies basically to firms in capital-intensive industries such as mining and manufacturing. For firms with less redeployable assets (service-based or research-intensive firms), the board of directors should only be a tool used by shareholders to replace management when they do not deliver the performance that was expected of them. The one caveat that Williamson leaves us with is that because a firm's equity component can be difficult to value, these deviations from fair value can lead to error on the part of directors, such as intervening when unnecessary or not intruding when it is warranted.

Raheja (2005) synthesizes the extant literature on boards and models the composition of the board of directors using an information asymmetry framework. He posits that an optimally structured board is a function of “the tradeoff between maximizing the incentive for insiders to reveal their private information, minimizing the cost to outsiders to verify projects, and maximizing outsiders' ability to reject inferior projects” (p. 283). Shleifer and Vishny (1997) take this concept one step further and argue that, to be effective, governance measures must be firm specific, and should generally involve some combination of legal protection for investors as well as ownership concentration. Tirole (2001) adds that there are other methods that may be employed to (at least partially) mitigate agency problems such as joint ventures. In addition, John and Senbet (1998) argue that agency problems are not exclusive to management - outside

directors' interests, as well as those of management need to be aligned with those of shareholders, otherwise the monitoring that the former supposedly provide will merely amount to lip service.

Since Jensen and Meckling's (1976) foundational work on principal-agent relationships, there has been considerable debate about the accuracy of the assumption that managers are self-interested. However, it seems plausible to assume that an entrepreneur who starts up a firm may be intrinsically motivated to strive towards making this firm profitable and successful. As such, for founder-led IPO firms, agency problems between management may not exist. This may be further enhanced by the fact that founders often own larger stakes in their firms.

Several works completely discard the agency framework, arguing that it is possible for managers to derive utility by acting in the best interests of their firm. Fox and Hamilton (1994) posit that managers are stewards of the companies they work for, and in maximizing the welfare of the company, they maximize their own utility functions (that is to say that management and the company's interests are perfectly aligned). Davis, Schoorman, and Donaldson (1997) argue that agency theory presents a negative bias of management and that managers are not trustworthy. Angwin, Stern, and Bradley (2004) argue that, in the context of takeovers, CEOs who reject a bidder's offer are acting in the best interests of shareholders by attempting to get a higher offer, and not just trying to keep themselves from being terminated following a change in control. However, contrary to Angwin et al. (2004), Tosi et al. (2003) find that individuals under agency controls

invest more in alternatives that maximize profits of an organization than individuals under stewardship controls.

Caldwell and Karri (2005) explain why the organizational governance theories are fundamentally inadequate to build trust. They advance a conceptual framework based on stewardship theory characterized by contractual relationships and argue that design of governance mechanisms using covenants is more effective in building trust in organizations. A covenantal relationship is a specialized form of a relational contract between an employee and his or her organization. They argue that regardless of incentives and control mechanisms carefully designed through contractual mechanisms, in the absence of covenantal relationships it is extremely difficult to build trust within organizations.

In addition, several pieces highlight that the behavioural aspects that agency theory ignores are too central to the discussion to simply cast to the sidelines. Roberts, McNulty, and Stiles (2005) observe that research on corporate governance lacks understanding of the behavioural processes and effects of boards of directors. Whilst board structure, composition and independence condition board effectiveness it is the actual conduct of the independent directors *vis-à-vis* insiders that determines board effectiveness. The authors challenge the use of agency theory in governance research and support the search for theoretical pluralism and greater understanding of board processes and dynamics. Aguilera and Jackson (2003) also highlight the limitations of agency theory, noting that it is undersocialized and fails to account for cultural and external

facets that often shape a firm's governance structure. The authors also point out that institutional theory is oversocialized and too abstract to be successfully applied to the management of relationships between the firm and its stakeholders. The theory developed in the paper is one based on actor-centered institutionalism, which focuses on the "interplay of institutions and firm-level actors" (p. 448). The three main stakeholders in the firm are management, labour, and capital, and the authors posit that the degree to which each one is involved with the firm is contingent upon the external environment in which the firm operates. Put another way, the features of a country's legal, financial, and educational (formal or informal) systems will weigh heavily on the governance structures that firms adopt (Shleifer and Wolfenzon, 2002). La Porta et al. (2000) investigate the roles that legal systems have in investor protection, and suggest that while financial markets can provide investor protection by themselves, they should not simply be left to their own devices. Instead, markets should have their activities facilitated by having legal foundations that provide some fundamental level of investor protection.

Research on Initial Public Offerings

One of the most central and controversial issues of initial public offerings is that of underpricing, which occurs when an offer price is set lower than its initial market value, whether deliberately or unintentionally. There is a plethora of literature available in this area, and some of it is presented here.

Loughran and Ritter (2004) examine IPO underpricing dynamics and argue that underpricing, on average, has increased significantly over time, especially in the internet

bubble period (1999-2000). They find that the reasoning driving underpricing has shifted over time: in the 1980s, the winner's curse problem and informational asymmetry were the most explanatory, while during the internet bubble, the desire for analyst coverage, side payments, and corruption were the driving forces of underpricing.

Guo (2005) empirically examines a theory proposed by Subrahmanyam and Titman (1999), where an IPO firm's investment decisions are shaped by the diversity of information available in the market. Guo finds evidence supporting this theory, and notes that changes in R&D spending for newly issuing firms are positively related to the level of informational diversity in the market. Purnanandan (2004) finds that, although IPOs are underpriced, they are significantly overvalued, less profitable, and less liquid relative to matched firms.

Booth and Chua (1996) argue that IPOs are underpriced because lower prices will encourage oversubscription and aftermarket liquidity. They note, however, that a lack of concentration in initial ownership increases information costs borne by investors, but that investors are compensated for this via underpricing. Empirical evidence supports their hypothesis. Casares Field and Sheehan (2004) find a weak relationship between underpricing and ownership structure. Certo, Daily, and Dalton (2001), in their study of the relationship between board structure and IPO underpricing, find that both board size and reputation have a negative association with underpricing. However, board composition and leadership structure each do not appear to have a negative effect on underpricing.

Bradley and Jordan (2002) find that almost half of the “variation in IPO underpricing can be predicted using public information known before the offer date” (p. 613) and conclude that IPO offer prices do not sufficiently adjust for publicly-available information. Cliff and Denis (2004) consider the question of whether firms underprice their IPOs in order to “purchase” analyst coverage. They find a significant positive relationship between underpricing and analyst coverage.

Hensler (1995) examines the effect of litigation risk on IPO underpricing and finds that firms facing litigation risk have a greater incentive to underprice their offerings in order to mitigate future litigation costs. However, Hughes and Thakor (1992) find that “given a time-consistency constraint and rational expectations on the part of investors... the ‘standard’ litigation risk argument does not lead to equilibrium underpricing” (p. 709).

Aggarwal and Rivoli (1990) analyze the initial returns of IPOs from 1977-1987 in an attempt to determine whether the large positive returns are the result of systematic underpricing by underwriters or overvaluation (fads) in aftermarket trading. Interestingly, they find that their evidence supports the fads hypothesis, not underpricing by investment banks. Francis and Hasan (2001) analyze what portion of the underpricing observed in venture- and non-venture-backed IPOs was deliberate. Employing a stochastic frontier estimation technique, they find that the presence of deliberate underpricing is highly significant. The authors conclude that the purpose of deliberate underpricing is to reduce

ex-ante pricing uncertainty. Using a similar methodology, Hunt-McCool, Koh, and Francis (1996) also find evidence of deliberate underpricing by underwriters. Reber, Berry, and Toms (2005) use a neural network model to predict IPO underpricing, and note that accounting for variable interactions and non-linear relationships enhances the predictive power of these models.

Hogan and Olsen (2004) study underpricing in equity carveouts and observe no significant differences in price behaviour relative to regular IPOs. Cai, Ranchand, and Warga (2004) examine IPO firms that have already issued debt publicly. They find that lower asymmetric information among these firms (as a result of longer information history) contributes to lower underpricing, narrower price ranges, and smaller price revisions than IPOs of firms whose first round of capital market financing is via equity issuances.

Of great interest to both academics and practitioners, the long-term performance of IPOs over time is well-documented in the literature. It is an important consideration for two major reasons: the long-run performance of IPOs is of serious concern to investors (both institutional and individual), and if predictable patterns can be found in the long-term performance of IPOs, then the efficiency of the market is questionable.

Ritter (1991) examines the long-run performance of 1,526 IPOs occurring over the period 1975-1984 to determine, in part, whether the well-documented underpricing phenomenon persists over time. He finds that, when compared with non-issuing matched

companies, IPOs significantly underperform in the long run. As well, he finds that much of the underperformance stems from young growth companies, indicating over-optimism on the part of the investors and timing by sellers to take advantage of windows of opportunity. Shachmurove (2004) considers the returns earned by venture-backed IPOs over the long term and finds that the average returns are often negative. Loughran and Ritter (1995) document severe underperformance of IPOs, and find that book-to-market effects can explain only a small portion of these results. Schultz (2003) shows that, in an efficient market, it is likely that underperformance will be observed because “more firms issue equity at higher stock prices even though they cannot predict future returns” (p. 483).

Fama and French (2004) find that the lower cost of issuing equity over time has caused a higher number of less profitable, high-growth firms to go public. Like Fama and French (2004), Peristiani and Hong (2004) find that since 1980, newly public firms exhibit a trend of declining financial health. They note that firms with negative earnings are three times as likely to be delisted as compared to other firms. Audretsch and Lehmann (2005) investigate IPO survival for German high-tech firms, and find that good governance and incentive alignment for managers are important to the survival of knowledge-based firms, but that these factors alone do not guarantee success. With regards to producing superior performance, the authors find that human capital and intellectual property are sources of competitive advantages for these types of firms.

Finally, in a study linking theory and practice in the IPO market, Brau and Fawcett (2006) survey CFOs from firms that went public, withdrew an IPO, or were large enough to go public but didn't. They find that CFOs view the IPO primarily as an opportunity to create shares for later use in acquisitions, and that firms choosing to remain private do so to preserve ownership and decision-making control. Also, for venture capital-backed firms and firms with a low degree of share dilution, market timing is viewed as important so that these shareholders can cash out at a higher price. Still, CFOs agree that high levels of insider selling are negative signals for the market, indicating that the firm's prospects may not be promising.

On Ownership and Board Structure at the Time of an IPO

This section focuses on the relationship between companies' ownership structure and their IPO mechanism, and also between ownership structure, board composition, and IPO performance.

Zingales (1995) and Mello and Parsons (1998) argue that there is a relationship between the ownership structure of firms and their decision to go public. The authors argue that an optimal strategy for going public and to increase value for all shareholders is to sell small portion of dispersed shares to dispersed investors, then sell blocks to active investors. Zingales (1995) and Lee (2004) note that a firm's decision to go public or remain private should be the one that maximizes the issuer's wealth.

Several articles provide evidence of equity ownership and firm value in different settings. For example, Boehmer (1993) tests the relation between insider equity ownership and corporate value for 1,128 IPOs between 1980 and 1984, and finds that firm value is a function of the structure of equity ownership. He concludes that there cannot be too much inside ownership. Mikkelsen, Partch and Shah (1997) note that the median ownership of top managers decreases significantly from the year before a company goes public to ten years after the offering. The authors argue operating performance during each period is independent of the level of ownership by management. Chen, Hong, and Stein (2002) argue that reductions in the breadth of ownership should cause firms to have lower returns. Wruck (1989) also finds evidence that the changes in firm value are strongly related to the changes in ownership structure, but mainly in a private equity financing setting.

Certo et al. (2003) investigate the effects of varying CEO compensation schemes on IPO valuation. Because of the payoff schedule on an option, it is in a manager's interest to undertake projects with above-average risk. Pure equity, on the other hand, also involves downside risks. The authors find that the issuance of stock options to executives combined with higher equity stakes results in higher IPO valuations, with the argument being that risky behaviour by managers in the face of negative wealth effects is seen as a positive signal for the offer in the market. In a theoretical work, Certo (2003) suggests that board prestige may be an influential factor for potential IPO investors given that in order to successfully go public, firms must first overcome the "liability of market newness" (p. 432). Using signalling theory, Certo suggests that firms with higher

perceived prestige should fare better in the capital markets. Baker and Gompers (2003) find that venture-backed IPO firms have more independent board members and fewer directors who are insiders. In addition, they find that as the reputation of the VC firm increases, the probability that an IPO-firm founder remains as CEO declines. Contrary to Certo's (2003) theory and Baker and Gompers' (2003) findings, Arugaslan, Cook, and Kieschnick (2004) find no evidence that board structure reduces underpricing, implying that the benefits of increased monitoring help in reducing informational asymmetry. Brown, Dittmar, and Servaes (2005) look at roll-up IPOs, and note that while the initial valuations for the firm are high, operating performance improves after the consolidation. They find that if managers and directors from the predecessor firms stay with the new firm, the news is well received by the market. Furthermore, future acquisitions involving these parties are facilitated. Burton, Helliar, and Power (2004) conduct a survey asking companies what governance changes are made in preparation for an IPO. Like previous studies note, the most significant changes occur at the top with the CEO being replaced or removed.

On Top Management Team (TMT) Legitimacy and Founder Management

As Fama and French (2004) note, the average age for newly public firms has decreased over time. As such, it becomes increasingly likely that, around the time of the IPO, firms will have to manage relationships with their founders. The set of articles reviewed hereafter deals with CEO succession at or around the time of IPOs.

One growing area of research concerns the developments that arise as firms prepare to make the transition from privately held to publicly traded companies. Martens (2004) chronicles the six-year life of Deja.com, and highlights the various organizational changes that happen, as well as the relationships that are developed, in preparation for an IPO. Unfortunately, the story does not have a happy ending and the company ultimately ended up failing. Filatotchev, Toms, and Wright (2006) present a conceptual framework wherein a firm's governance structure is contingent upon the life-cycle stage it is in, and suggest that successful transitions for threshold firms necessitate a rebalancing of the structure and roles of governance. The authors also posit that a firm's strategies may change as the focus between wealth creation and wealth preservation shifts. Frye and Smith (2003) investigate how firms' governance structures evolve following IPOs, and find that the changes in governance can be partially attributed to the level of importance the firm places on maximizing shareholder wealth over fulfilling the interests of other stakeholders. The authors find that shareholder-focused firms are under more pressure to make changes to their governance structures, whereas stakeholder-focused firms do not implement as many changes because union officials and creditors (among others) already have their interests represented on the board of directors.

One issue central to threshold firms is how to manage the relationship between firms and their founders. Zahra and Filatotchev (2004) explore the issue of governance in threshold firms, that is, firms that are transitioning from being founder-managed to being mercenary-managed. The authors argue that the decision is centered on the skills that management needs to have in order to take the firm to the next level. The authors go on

to argue that replacing a founder is vital to the viability of the firm because the founder's skills become outdated as time passes. Furthermore, a firm's governance structure should be used as a tool to facilitate organizational learning and to use it as a source of competitive advantage. Gedajlovic et al. (2004) agree with Zahra and Filatotchev (2004) that governance can be effective in learning and that knowledge management is important. In addition, they argue that resource acquisition and deployment is a more crucial issue for threshold firms. The authors note that mercenary-managed firms are better at attracting capital, but that founder-managed firms are better at identifying unique market opportunities. In a wealth-maximizing construct, the firm's decision to have either a founder or mercenary at the top would be contingent upon the differences in market opportunities that can be found versus the differences in capital that can be attracted under different leadership structures.

Certo et al. (2001) study the effects of founder management on IPO underpricing. They find that investment bankers with higher market share tend to underprice more – the authors speculate that this underpricing is either deliberate or driven by oversubscription. The authors also provide evidence that although having the founder there at the time of the IPO is positively associated with underpricing, the results suggest that, if the founder is present, having more insiders on the board reduces underpricing. In contrast, Jayaraman et al. (2000) find no relationship between the founder's presence and underpricing.

Wasserman (2003) uses data collected from a survey of Internet firms to study the factors that drive founder departure. Consistent with Boeker and Karichalil (2002), he finds that founders leave firms that grow very fast or very slow. Interestingly enough, he finds that companies that successfully finish developing their first product while led by their founders experience an increase in founder departure (this is the ‘paradox’ that is referred to in the title of the paper). Also, the founder is more likely to leave after an infusion of capital from venture capitalists (the larger the round, the more likely the founder will leave). It is plausible that in providing capital, venture capitalists are attempting to “buy out” the founders and encourage them to leave. Barringer, Jones, and Neubaum (2005) compare founder characteristics, firm attributes, and business and hiring practices in rapid- and slow-growth entrepreneurial firms. They find that rapid-growth firms have entrepreneurs with more prior industry experience, include high growth as a part of their mission, offer more customized products, and promote cultures of learning, training, and development for their employees.

Fischer and Pollock (2004) investigate the effects that founder management has on the survival profiles of IPOs. They find that firms with less underpricing tend to survive longer in the aftermarket, which is consistent with Ritter (1991), who finds that firms that are underpriced more do worse in the long run. They also find that having VCs that remain invested in the firm long after the IPO increases the likelihood of survival. Adams, Almeida, and Ferreira (2005) add to the literature by examining the effects of CEO power on stock prices. Although the study does not focus on IPO firms, it is still of interest to IPO researchers because of the insight it provides into founder management

and TMT dynamics. The authors find that as the concentration of decision-making power (measured by board status, title, and founder status) increases, there is no marked difference in absolute price performance; however, the variability of returns increases significantly, suggesting that the projects undertaken by these firms are more risky.

While a firm's founders remain the focus of many studies, the role that a firm's TMT plays in the IPO process is no trivial matter either. Higgins and Gulati (2006) find that biotech firms whose Chief Science Officers have prior industry experience have more success in attracting institutional investors to invest in their IPOs. The authors also find that having managers in roles congruent with prior experience enhances legitimacy. Worded differently, having the right people in the right positions enhances firms' abilities to attract capital. Chemmanur and Paeglis (2005) find that managers with MBAs and previous top management experience add to organization legitimacy, which results in lower underpricing and stronger long-term price performance. Cohen and Dean (2005) produce similar findings, and also note that IPO prices do not experience as much of a run-up for firms with higher legitimacy. Reber, Berry, and Toms (2005) find results consistent with the previous three studies for UK IPOs. Finally, Lester et al. (2006) find that although TMT prestige does influence investor valuations, these effects are moderated by the degree of environmental uncertainty present in the industry in which the firm operates.

On Venture Capitalist Certification in IPOs

In the following section, I review a subset of the IPO literature that examines the role of venture capitalist involvement in various aspects of the initial public offering process and/or subsequent performance.

Francis and Hasan (2001) and Lee and Wahal (2004) examine the effects of venture capitalist involvement on IPO underpricing and find that, inconsistent with certification theory, venture-backed IPOs exhibit greater underpricing than their non-venture-backed counterparts. Similarly, Francis and Hasan (2001) find greater underpricing for venture-backed IPOs as well, and argue that much of it stems from deliberate underpricing by underwriters.

Much literature is devoted to the analysis of long-term IPO performance under venture capitalist involvement and several papers are noted here. Jain and Kini (1995) compare the performance of venture-backed and non-venture backed IPOs and find that venture-backed firms outperform matched non-venture backed counterparts over the long term. In addition, they find a positive relationship between the quality of the venture capitalist and post-IPO performance. Brav and Gompers (1997) find similar results: the venture-backed IPOs outperformed the non-venture-backed sample; however, they note that the performance differentials reduce significantly if value-weighted returns are used. Brau, Brown, and Osteryoung (2004) investigate VC influence on firm success and survival for manufacturing firms. Contrary to previous findings, the authors find no

difference between VC and non-VC backed firms in terms of performance, sales growth, long-term stock performance, and survival.

In a related study, Jain and Kini (2000) consider whether VC involvement has an impact on IPO firm survival profiles, hypothesizing that venture-backed firms going public will survive longer (post-IPO) than non-venture-backed firms. They find that involvement by VCs significantly enhances the survival profile of IPO issuers. Both the probability of an IPO firm surviving longer than a specified period of time and the conditional probability of an IPO firm surviving given that it has survived up to the current time are higher for venture-backed IPOs than for non-venture-backed IPOs. Shachmurove (2004) considers the returns earned to venture-backed IPOs over the long term and finds that the average returns are often negative. In the case of Japanese IPOs, Hamao, Packer, and Ritter (2000) find no difference in performance between venture-backed and non-venture-backed IPOs and attribute this result to the conflicts of interest faced by the underwriters, who are frequently parent companies of the venture capital firms.

There is also a growing body of literature that examines the impact that VCs have on board structure and founder management. Baker and Gompers (1999) find, when comparing venture-backed and non-venture-backed IPOs, that VCs reduce pre-IPO CEO equity holdings, decrease dilution of ownership post-IPO, boost the use of CEO options, and reduce CEO equity sales at the IPO. Overall, the authors conclude that VCs simultaneously attempt to enhance the incentive effects of CEO equity holdings and

mitigate the negative aspects of control. Florin (2005) finds little difference between VC backed and non-VC backed firms; however, founders are less likely to remain as CEO after the IPO in VC backed firms. Filatotchev et al. (2005) examine the relationships between founder ownership, VC involvement and syndication, and board independence, and find that board independence is positively related to VC involvement, but negatively related to ownership retained by founders. Also, the authors find that VC involvement is decreasing with higher founder interlocks, suggesting at the margin that getting a VC involved in a young firm necessitates some detachment from the firm by the founders.

Barry et al. (1990) assert that VC expertise and reputation act as signals – the better quality VCs are perceived to have better information and enhanced firm monitoring ability. If so, less underpricing should be observed for venture-backed IPOs with higher-quality VCs, given that there is less informational asymmetry for which investors must be compensated. They find results consistent with this hypothesis. Overall, the authors conclude that VCs perform a significant role in the evolution and governance of newly public firms. Megginson and Weiss (1991) examine the certification hypothesis through underpricing and underwriter compensation differences among venture- and non-venture-backed IPOs. They hypothesize less underpricing and lower underwriter compensation for the venture-backed sample, based on the idea that VCs reduce the information asymmetry between underwriters and investors. Their results are consistent with the certification hypothesis. Cumming, Fleming, and Suchard (2005) show that VCs with higher expertise in the areas of financial and strategic management receive more capital than those whose specialty is in other areas.

When considering lockup agreements and venture capitalist involvement, some interesting findings have been made. Bradley et al. (2001) find that, at lockup expiration, venture-backed IPO firms experience significantly negative abnormal returns. Kraus and Burghof (2003) argue that lockup expiration is the earliest possible exit point for VCs and constitutes a breakpoint – pre-expiration, VC-backed IPOs outperform, but post-expiration, they underperform. The authors present evidence from the German IPO market that supports their hypothesis. Espenlaub et al. (2003), in their analysis of abnormal returns around lockup expiration for UK IPOs, find similar results – abnormal returns on the VC-backed IPOs are lower than those of non-VC backed IPOs around lockup expiration. The authors note overall that backing by VCs acts as a complement (not a substitute) for lockup agreements. Casares Field and Hanka (2001) find that, at lockup expiration, there is a permanent 40% increase in trading volume and a significant negative abnormal return of 1.5%; these figures are more pronounced for VC backed firms.

AGENTS OR STEWARDS? MANAGEMENT-SHAREHOLDER RELATIONSHIPS IN NEW VENTURES

Hypothesis Development

Fama and Jensen (1983) suggest that strong links between management and the firm may reduce agency conflicts. In essence, this formulation suggests that, under certain circumstances, stewardship motives may dominate agency costs of managerial self-interest. Schultze et al. (2001, 2003) suggest that the motivations of founders and family members may differ from those of outside investors. However, their formulations have largely focused on private firms in which non-economic or ‘altruistic’ motivations may be more relevant. Stewardship theory posits that although the interests of management and shareholders may diverge, managers will still act in the best interest of the organization and its shareholders (Donaldson, 1990a; 1990b; Barney, 1990). Fox and Hamilton (1994) suggest that managers are stewards of the companies they work for, and in maximizing the welfare of the company, maximize their own utility functions (that is to say that management and the company’s interests are perfectly aligned). Davis, Schoorman, and Donaldson (1997) argue that agency theory is biased against management. Within the context of takeovers, Angwin, Stern, and Bradley (2004) argue that CEOs who reject a bidder’s offer are acting in the best interests of shareholders, and are not just trying to keep themselves from being terminated following a change in control. Davis, Schoorman, and Donaldson (1997) argue that agency theory and stewardship theory are not necessarily competing theories – they simply note that there are some situations where agency theory may be more applicable and vice-versa. In this

article I examine a context in which each of the two theories may be more applicable to different situations.

Founder Influence

In the case of founder-led firms at the time of their IPOs, I argue that founders can be considered stewards of the companies they lead. Wasserman (2006) argues that founders are more intrinsically motivated than non-founders and derive more non-monetary benefits from working in the companies they started. In contrast, CEOs who are hired by the board of directors to manage the firm may be more likely to act as agents of the firm's shareholders (the classic agency relationship). Considering the firm founders' entrepreneurial characteristics (Wasserman, 2006), I would expect that founders are more likely to act in the best interest of their firm and their firm's shareholders than mercenary CEOs. Recent research findings suggest that founder management provides performance benefits (Nelson, 2003; Wasserman, 2003; Fischer and Pollock, 2004). Indeed, research points that the positive performance implications of founder management remain even among large Fortune 500 firms (Anderson and Reeb, 2003; 2004). Schulze et al. (2001, 2003) argue that the interests of founders and their families differ from those of other shareholders. Although there is considerable merit to this argument, particularly in privately held firms, the founders of IPO firms have elected to submit themselves and their firms to capital market scrutiny. Since the IPO process may limit a founder's ability to extract private benefits from minority shareholders, non-steward founders may prefer to avoid such scrutiny.

In contrast, the mercenary-led context may be one in which agency theory formulations are more relevant. Specifically, the mercenary lacks the founder's deep ties to the firm (Wasserman, 2006). Indeed, the mercenary's shorter time horizon within which to 'prove themselves' may exacerbate agency problems. Furthermore, the IPO context is characterized by uncertainty and ambiguity and information asymmetry may contribute to agency problems (Beatty and Ritter, 1986).

Having stronger corporate governance in mercenary-led IPO firms may serve as a tool to reassure investors and reduce agency costs; however, particularly given the benefits of founder-management, founder-led IPO firms may choose less stringent corporate governance to allow the founder greater latitude. I therefore offer the following pair of competing hypotheses:

H1a: Founder-led firms will adopt more shareholder-friendly governance provisions than firms led by a mercenary CEO.

H1b: Mercenary-led firms will adopt more shareholder-friendly governance provisions than firms led by a founder CEO.

Kelly and Switzer (2005) find that governance characteristics and bases of power, most notably CEO ownership and CEO duality, are substitutes. Building on this, stewardship theory suggests that managers be empowered to fulfill organizational objectives (Donaldson and Davis, 1991), so, assuming that founders act in the

organization's best interests as advocated by stewardship theory, I anticipate that founders will acquire no more power than is necessary to execute the tasks required by the organization.

H2: Founder-led firms will adopt more shareholder-friendly governance provisions as founder ownership increases.

H3: Founder-led firms will adopt more shareholder-friendly governance provisions if the founder is also the Chairman of the Board.

As previously noted, an agency theory framework appears to be more appropriate when investigating relationships involving mercenary CEOs. Agency theory identifies ownership as a mechanism linking the interests of the CEO with those of other shareholders. However, there is growing evidence that, particularly in high risk firms, large ownership stakes can have significant drawbacks. As CEO ownership (and power) increases, the CEO's personal portfolio, which includes human capital personally invested, becomes less diversified (Morck, Shleifer, and Vishny, 1990; Wright et al, 1996). This has two important implications. First, the CEO tends to *discount* the value of his ownership (Anderson et al., 2000; Meulbroek, 2001). If this is the case, additional ownership provides limited incentive value. These trends are particularly relevant to high risk firms such as the high technology IPOs used in my study. Furthermore, the CEO's lack of diversification choices may result in the firm making sub-optimal investment decisions as a result of the CEO's risk aversion and managerial opportunism (Agrawal

and Mandelker, 1987). Baker and Gompers (2003) find that as CEO power increases, outside board membership decreases. In order to facilitate the making of decisions that favour management, I would expect further efforts on the CEO's part to concentrate power, resulting in the following predictions:

H4: Mercenary-led firms will adopt fewer shareholder-friendly governance provisions as CEO ownership increases.

H5: Mercenary-led firms will adopt fewer shareholder-friendly governance provisions if the CEO is also the Chairman of the Board.

Firm Structure

Dalton et al. (1998) perform a meta-analysis of firms' leadership structures (which include the top management team and the board of directors). The authors argue that as firms grow larger and more complex, they set up more elaborate organizational structures in order to manage the increased number of relationships in the organization. Given the difficulty of informal monitoring, large size may be associated with more stringent corporate governance in IPO firms. Wasserman (2006) finds that managers in larger organizations tend to act more like agents than stewards, and are more likely to extract private benefits if they are able to. Thus, I expect the following:

H6: Larger firms will adopt fewer shareholder-friendly governance provisions.

IPO firms may suffer from a resetting of the “liability of newness” clock (Amburgey, Kelly, and Barnett, 1993). Given that investors have limited history or benchmarks from which to judge the strength of firm management, directors, and corporate governance, new firms may adopt strong corporate governance as a signal. If successful, the need to use strong corporate governance as a signal to investors dissipates. Indeed, the continued success of the firm and its management may reassure investors, and enable the firm to relax its original corporate governance choices. Field and Karpoff (2002) find that, over time, firms are more likely to implement anti-takeover measures. Although the implementation of takeover defences is only one way that managers can take power away from outside shareholders, the authors note that IPO firms that adopt takeover defences also have weak levels of outside monitoring. Thus, I expect that:

H7: Older firms will adopt fewer shareholder-friendly governance provisions.

Third Party Certification

Several works provide evidence of venture capitalists influencing the governance of entrepreneurial firms. Gompers (1995) and Lerner (1995) both find evidence of monitoring activities by VCs. Baker and Gompers (1999) find that VCs simultaneously attempt to enhance the incentive effects of CEO equity holdings and mitigate the negative aspects of control that comes with higher levels of CEO ownership. Baker and Gompers (2003) find that venture-backed firms have more independent board members and fewer directors who are insiders. Based on previous findings, I would expect that:

H8: Venture-backed firms will adopt more shareholder-friendly governance provisions than non venture-backed firms.

Venture capitalists have long investment horizons, often extending several years after the IPO (Barry et al., 1990). As large shareholders, VCs have an incentive to monitor the activities of the firms in their portfolios because the compensation VCs receive, as well as their ability to raise additional funds in the future, is driven by the returns they generate on their current portfolios (Hochberg, 2003). As the stakes that VCs take in a firm increase, so do the incentives of monitoring; therefore, I predict that:

H9: Venture-backed firms will adopt more shareholder-friendly governance provisions as the number of venture capital rounds increases.

Research has also pointed to role of the underwriters, particularly underwriter prestige (Carter, Dark, and Singh, 1998). Lamertz and Martens (2005) investigate the deal networks created between IPO firms by VCs, underwriters, and strategic partners, and find that firms that go public with the same underwriter, as well as firms that have financing from the same VC, have similar characteristics, as proxied by the firm strategies, risks, and uses of proceeds. In effect, VCs, underwriters, and strategic partners mould the firm to their liking in preparation for the IPO. Because firms with more shareholder-friendly provisions (lower governance index scores) perform better (Gompers, Ishii, and Metrick, 2003), firms that go public in the future may use governance as a signal of firm quality. Fernando, Gatchev, and Spindt (2005) suggest that

the matching process between issuers and underwriters is based on mutual choice and find that high quality firms will go public with more reputable underwriters.

There are several reasons why association with a prestigious underwriter is associated with stronger corporate governance. Given that underwriter prestige is a major factor in the success of the IPO (Carter, Dark, and Singh, 1998), use of a prestigious underwriter is a valuable resource for the IPO firm. Therefore, a prestigious underwriter is in a better position to promote strong corporate governance to better attract investors and protect their reputation. Baker and Gompers (2003) find that venture capital backing to be associated with stronger IPO governance and I argue that underwriter prestige will likely have a similar effect. From this, I anticipate that:

H10: Firms associated with more prestigious underwriters will adopt more shareholder-friendly governance provisions.

Environmental Risks and Considerations

Environmental instability is the level of volatility with which changes in the firm's operating environment occur (Mintzberg, 1979). It can greatly influence the ways in which organizations are structured and how they operate (Duncan, 1972). In more uncertain environments, and for tasks that are not well defined, the need to process additional information by decision-makers is heightened (Galbraith, 1973). At the margin, from a risk-return perspective, firms with higher operational risks that do not wish to incur higher costs of issuing equity should offset the higher level of business risk

with a reduction in another type of firm-specific risk. One possibility is to signal lower agency risks to investors via stronger corporate governance. I therefore expect that:

H11: Firms operating in more dynamic environments will adopt more shareholder-friendly governance provisions.

RESEARCH METHODOLOGY

Data

My sample consists of 423 computer software and business service firms that went public between 1996 and 2000. The sample was derived by performing a search for U.S. equity IPOs in the Securities Data Corporation (SDC) Global New Issues database. I excluded spin-offs, roll-ups, and secondary share offerings, and restrict my search to SIC codes 7360-7379 (Software and Business Services). In order to obtain information on firm characteristics, I collected all data from IPO prospectuses, which, starting in mid-1996, are available electronically through the Securities and Exchange Commission's EDGAR database at <http://www.sec.gov>. All information pertaining to information on management characteristics, underwriters, offering sizes, and stock holdings are available within the prospectuses, with distinct sections often presented for each item. I present descriptive statistics for my sample in Table 1. The firms in my sample are, on average, just over seven years old at the time of the IPO and have 353 employees. Founders lead 55% of the firms and, when they do, retain 20% of the total shares of the firm.

Governance Provisions

Gompers, Ishii, and Metrick (2003) find a positive relationship between stronger corporate governance and stock price performance. They test for the significance of this relationship using a governance index originally constructed by the Investor Responsibility Research Center (Rosenbaum, 1998). The index is simple, yet effective and comprehensive. For each provision that a firm adopts that favours management over shareholders, the firm scores a point in the index. It follows that firms with higher scores

Table 1:
Descriptive Statistics and Correlations

The sample consists of 423 software companies that went public between 1996 and 2000. *Gov. Index* is the IRRC governance index score – higher scores indicate less shareholder-friendly governance. *Delay*, *Protection*, *Voting*, *Other*, and *State Laws* represent scores for each sub-section of the IRRC governance index. *Founder-CEO* is a dummy variable that takes a value of 1 if a firm's CEO is also one of its founders and 0 if the CEO is a mercenary. *CEO-Chair* is a dummy variable that takes a value of 1 if a firm's CEO chairs the board of directors and 0 otherwise. *CEO-Own* is the percentage of outstanding equity retained by the CEO after the IPO. *Founder*Chair* is an interaction variable calculated as *Founder-CEO* times *CEO-Chair*. *Mercenary-Chair* is an interaction variable calculated as $[1 - \text{Founder-CEO}] \times \text{CEO-Chair}$. *Founder*CEO-Own* is an interaction variable that takes a value of 1 if a firm went public in 1999 or 2000 and 0 otherwise. $\ln(\text{Firm Age} + 1)$ is the natural logarithm of a firm's age at the time of its IPO (in years) plus one. $\ln(\text{Employees})$ is the natural logarithm of the number of employees at the time of a firm's IPO. *Risk Factors* is an index that scores the degree of business risk associated with a firm. *VC-Backed* is a dummy variable that takes a value of 1 if a firm had at least one round of venture financing before its IPO and 0 otherwise. *VC Rounds* is the number of venture financing rounds that a firm had before going public. *UW-Rank* is the prestige score for an IPO firm's underwriters. For two-tailed correlation tests, values of $|r| \geq 0.09$ are significant at the 5% level, and values of $|r| \geq 0.12$ are significant at the 1% level. Pearson and Spearman Correlations are used where appropriate.

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1 <i>Gov. Index</i>	9.93	2.07																			
2 <i>Delay</i>	2.97	1.10	0.69																		
3 <i>Protection</i>	3.06	1.00	0.47	0.12																	
4 <i>Voting</i>	2.70	0.93	0.54	0.26	-0.11																
5 <i>Other</i>	0.06	0.26	0.18	-0.03	0.00	0.14															
6 <i>State Laws</i>	1.15	0.86	0.36	-0.05	-0.05	0.00	0.08														
7 <i>Founder-CEO</i>	0.55	0.50	0.05	0.10	-0.06	0.06	0.03	-0.02													
8 <i>CEO-Chair</i>	0.56	0.50	0.07	0.09	-0.04	0.11	0.03	-0.03	0.33												
9 <i>Founder*Chair</i>	0.39	0.49	0.08	0.12	-0.03	0.10	0.03	-0.04	0.72	0.71											
10 <i>Mercenary*Chair</i>	0.17	0.37	-0.01	-0.04	-0.01	0.01	0.00	0.02	-0.50	0.40	-0.36										
11 <i>CEO-Own</i>	13.98	15.07	0.03	-0.05	-0.03	0.05	0.04	0.11	0.43	0.33	0.41	-0.10									
12 <i>Founder*CEO-Own</i>	10.95	15.51	0.02	-0.03	-0.02	0.04	0.04	0.07	0.64	0.31	0.56	-0.32	0.89								
13 <i>Merc*CEO-Own</i>	3.03	7.29	0.01	-0.04	-0.01	0.01	0.00	0.08	-0.46	0.03	-0.33	0.48	0.18	-0.29							
14 <i>IPO Bubble</i>	0.75	0.43	0.01	0.17	0.04	-0.07	-0.13	-0.14	0.03	-0.04	0.06	-0.14	-0.12	-0.07	-0.10						
15 $\ln(\text{Firm Age} + 1)$	1.89	0.63	-0.01	-0.16	-0.04	0.07	0.06	0.15	-0.10	0.01	-0.04	0.07	0.14	0.09	0.10	-0.26					
16 $\ln(\text{Employees})$	5.33	0.92	-0.07	-0.10	-0.13	0.07	-0.04	0.06	0.01	0.09	0.05	0.05	0.10	0.06	0.09	-0.22	0.28				
17 <i>Risk Factors</i>	4.20	1.91	-0.02	0.11	0.09	-0.12	-0.03	-0.17	0.01	-0.01	0.03	-0.05	-0.17	-0.11	-0.11	0.33	-0.42	-0.42			
18 <i>VC-Backed</i>	0.78	0.41	0.11	0.31	0.09	-0.03	-0.08	-0.19	-0.02	-0.12	-0.03	-0.11	-0.31	-0.26	-0.09	0.25	-0.35	-0.24	0.43		
19 <i>VC Rounds</i>	2.27	1.82	0.03	0.21	0.07	-0.08	-0.08	-0.19	-0.08	-0.11	-0.09	-0.04	-0.35	-0.31	-0.07	0.25	-0.29	-0.21	0.41	0.66	
20 <i>UW-Rank</i>	8.27	1.24	0.07	0.18	-0.03	0.10	-0.09	-0.11	0.00	0.01	0.01	0.00	-0.10	-0.09	-0.01	0.09	-0.09	0.29	0.05	0.22	0.22

for the governance index impose greater restrictions on shareholder rights and instead give more power to management, whereas firms with lower scores for the governance index promote the rights of shareholders or do not restrict them as much.

The IRRC corporate governance index contains five different categories. *Delay* provisions make it more difficult for large shareholders to acquire a controlling stake in the firm by having a board with staggered terms, or authorizing the board to issue new shares without shareholder approval, among other methods. *Protection* provisions include contracts which limit the personal liability of officers and directors, and compensation packages payable to executives upon termination of their employment. Elements in a company's charter or by-laws that reduce the power of voting shares, such as supermajority requirements to approve mergers or to amend said elements fall into the *Voting* provision category. Companies are also afforded different levels of takeover protection depending on the state they choose to incorporate in. These *State Laws* may contain, among other things, restrictions on the minimum length of time before an interested shareholder can acquire a company, and price provisions for tender offers. There are also *Other* provisions that companies may adopt, such as allowing directors to consider stakeholders other than shareholders when evaluating bids from other firms, and poison pills, which allows the firm to issue new shares at deeply discounted prices to shareholders not soliciting a tender offer. I present a full list of the various provisions firms may employ in the Appendix¹⁰.

¹⁰ For more detailed discussions on governance provisions, please see Rosenbaum (1998) and Gompers, Ishii, and Metrick (2003).

Calculating a firm's governance score is simple; for each provision that limits shareholder rights or provides managers with more power, the firm scores a point. Although there are 28 provisions that make up the governance index, only 24 are unique because four of them (Antigreenmail, Director's Duties, Fair Price, and Supermajority/Business Combinations) may either be state laws, provisions adopted by a firm, or both. To account for this, firms may only score one point for each of the above provisions, resulting in a maximum score of 24.

I construct the governance index for my sample using information from firm's IPO prospectuses. Since IPO prospectuses have a fairly standardized format, governance provisions generally appear exclusively in three sections of the document. In the *Risk Factors* section, there is usually a heading that discusses the potential impact of firm charter and by-law provisions on the stock price. In nearly all of the prospectuses, a firm's *Delay* provisions will be listed in this section. These, along with *Voting* and *Other* provisions, can also be found in the *Description of Capital Stock* section near the end of the prospectus, which follows the *Principal Shareholders* section. The *Management* section contains information on the firm's board structure, as well as any agreements that the company has entered into with its executives (*Protection* provisions). Mentions of limitations of liability and indemnification for directors may appear in this section or in the *Description of Capital Stock* section. Finally, I use the information available in Pinnell (1989) for descriptions of the *State Laws* that concern takeover defences. In Table 2, I present the relative frequency with which firms adopt governance provisions.

Table 2:
Relative Adoption Frequency of Individual Governance Provisions

Provision	Total sample (n=423)	Founder -led firms (n=234)	Merc. -led firms (n=189)	VC backed firms (n=330)	Non-VC backed firms (n=93)
<i>Delay</i>					
<i>Blank Check</i>	96.69%	97.44%	95.77%	98.18%	91.40%
<i>Classified Board</i>	65.72%	67.95%	62.96%	71.21%	46.24%
<i>Special Meeting</i>	73.05%	77.78%	67.20%	76.97%	59.14%
<i>Written Consent</i>	61.70%	64.10%	58.73%	68.79%	36.56%
<i>Protection</i>					
<i>Compensation Agreements</i>	1.89%	0.43%	3.70%	1.52%	3.23%
<i>Golden Parachutes</i>	14.66%	14.53%	14.81%	13.03%	20.43%
<i>Severance</i>	47.28%	45.30%	49.74%	45.76%	52.69%
<i>Indemnification</i>	91.02%	90.60%	91.53%	93.03%	83.87%
<i>Contracts</i>	61.94%	61.54%	62.43%	65.45%	49.46%
<i>Liability</i>	89.13%	88.46%	89.95%	91.82%	79.57%
<i>Voting</i>					
<i>Bylaws</i>	31.44%	34.19%	28.04%	31.82%	30.11%
<i>Charter</i>	33.33%	35.04%	31.22%	33.94%	31.18%
<i>Cumulative Voting*</i>	1.18%	1.28%	1.06%	1.21%	1.08%
<i>Secret Ballot*</i>	0.00%	0.00%	0.00%	0.00%	0.00%
<i>Supermajority</i>	4.73%	3.85%	5.82%	3.64%	8.60%
<i>Unequal Voting</i>	2.13%	3.42%	0.53%	0.91%	6.45%
<i>State Laws</i>					
<i>Antigreenmail</i>	3.31%	2.56%	4.23%	2.42%	6.45%
<i>Directors' Duties</i>	9.69%	10.26%	8.99%	6.97%	19.35%
<i>Fair Price</i>	13.71%	13.25%	14.29%	10.61%	24.73%
<i>Cash-out</i>	1.42%	1.71%	1.06%	1.52%	1.08%
<i>Control Share Acquisitions</i>	9.22%	8.55%	10.05%	6.06%	20.43%
<i>Business Combinations</i>	78.25%	78.21%	78.31%	79.70%	73.12%
<i>Other</i>					
<i>Antigreenmail</i>	0.00%	0.00%	0.00%	0.00%	0.00%
<i>Directors' Duties</i>	3.78%	3.85%	3.70%	3.33%	5.38%
<i>Fair Price</i>	0.95%	0.85%	1.06%	0.30%	3.23%
<i>Poison Pill</i>	0.95%	1.71%	0.00%	0.91%	1.08%
<i>Pension Parachutes</i>	0.00%	0.00%	0.00%	0.00%	0.00%
<i>Silver Parachutes</i>	0.00%	0.00%	0.00%	0.00%	0.00%

Note: Provisions marked with an asterisk (*) are considered favourable for shareholders. Detailed descriptions of each provision are provided in the Appendix.

There are several noteworthy differences between founder-led firms and mercenary-led firms. First, mercenary-led firms appear more likely to adopt a number of the protection provisions, which would appear consistent with my expectations that mercenary CEOs will encourage the adoption of these provisions in order to protect their personal human capital. Interestingly, contrary to my expectations, I observe that founder-led firms adopt delay provisions more frequently. Although I cannot infer with a great deal of confidence that this may be the case, it is possible that they more readily encourage the adoption of these provisions because they want their firm to grow and operate independently. Also, venture-backed firms also appear to adopt more delay provisions, as well as several protection provisions that favour board members. Finally, I note that the high presence of the business combination provision relative to other state law provisions is due to the majority of firms in my sample (64%) being incorporated in Delaware, which has business combination provisions as its only anti-takeover statute.

Empirical Model

Dependent Variables. I am interested in what drives differences in the provisions that firms adopt. As such, my dependent variable is the governance index (*Gov-Index*) score, which is a discrete variable that ranges from zero to 24. As noted earlier, higher governance index scores imply more power for managers and lower scores imply more power for shareholders. I also examine the effects that the independent variables have on the *Delay*, *Voting*, *Protection*, and *Other* sub-sections of the governance index.

Independent Variables. For each firm in my sample, I code firms as being founder-led if, at the time of the IPO, a founder remains as a firm's CEO. The variable *Founder-CEO* is a dummy variable that takes on a value of one where the founder is the CEO and zero when a mercenary is the CEO. The *CEO-Chair* variable is an indicator variable that takes on a value of one if the CEO is also the Chairman of the Board, and zero otherwise. Because I expect the presence of firm founders to moderate the effects of *CEO-Own* on the governance index, I include an interaction variable (*Founder-CEO * CEO-Chair*) to evaluate the data for the relevant hypotheses. The variable *CEO-Own* represents the portion of the voting power of the firm that is retained by a firm's CEO after the IPO, and ranges from zero to 100 percent. As with the *CEO-Chair* variable, because I expect the presence of firm founders to moderate the effects of *CEO-Own* on the governance index, I include an interaction variable (*Founder-CEO * CEO-Own*) to test the hypotheses associated with these variables.

To measure firm size at the time of the IPO I use the natural log of the number of employees ($\ln(\text{Employees})$) as a proxy for IPO firm size. Given that many IPO firms do not have steady streams of revenues and/or profits, *Employees* is an appropriate firm size metric for young and rapidly growing firms. I also use the natural log of the valuation that a firm has at its IPO to proxy for size, but do not present the results because the valuation variable has virtually no predictive power. I measure *Firm Age* as the difference in years between the time the firm went public and when it was founded. On a few occasions no original founding date was specified in the prospectus. To compensate for these missing data points, I used the date of incorporation of the firm. Also, to control for

the skewness in the data, I employ the natural logarithm of the *Firm Age* variable plus one ($\ln(\text{Firm Age}+1)$) in my models.

Venture capitalists' involvement with the firms is measured by *VC-Backed*, a dichotomous variable where a value of 1 indicates that the firm had at least one round of venture financing prior to the IPO and zero otherwise. Because of the possibility of different levels of VC involvement, I also include *VC Rounds*, a discrete variable that measures the number of rounds of venture financing prior to the IPO, as an alternate measure. Finally, I measure underwriter prestige (*UW-Rank*) using the rankings employed by Loughran and Ritter (2004); these rankings are based on the earlier ranking scheme used by Carter and Manaster (1990) and Carter, Dark, and Singh (1998).

To proxy for the degree of risk inherent in investing in IPOs, I build a *Risk Factor* index, which is created by examining the risk factor section of the prospectus for ten specific risk factors (MacCrimmon and Martens, 2001). This result is a value from zero to ten where zero indicates that none of the risks were listed and ten indicates that all ten were listed. This risk measure is more specific than a simple count of all risk factors listed (Beatty & Ritter, 1986; Clarkson and Merkley, 1994) and is similar to ex-ante risk factor measures (Welbourne and Andrews, 1996).

Control Variable. I include a dummy variable (*IPO Bubble*) to control for any potential differences among firms that went public during the dot-com bubble that occurred in 1999 and 2000 (Ritter and Welch, 2002). A value of one indicates that the firm issued the IPO during the 1999–2000 bubble and a zero indicates that the IPO occurred between 1996 and 1998.

Statistical Model. To test my hypotheses, I estimate the following Ordinary Least Squares (OLS) regression model:

$$\begin{aligned}
 \text{Gov-Index} = & \beta_0 + \beta_1(\text{Founder} - \text{CEO}) + \beta_2(\text{CEO} - \text{Chair}) + \beta_3(\text{CEO} - \text{Own}) \\
 & + \beta_4(\text{Founder} - \text{CEO} * \text{CEO} - \text{Chair}) + \\
 & + \beta_5(\text{Founder} - \text{CEO} * \text{CEO} - \text{Own}) + \beta_6(\ln(\text{Employees})) + \\
 & + \beta_7(\ln(\text{Firm Age} + 1)) + \beta_8(\text{VC} - \text{Backed}) + \beta_9(\text{VC Rounds}) + \\
 & + \beta_{10}(\text{UW} - \text{Rank}) + \beta_{11}(\text{IPO} - \text{Bubble}) + \beta_{12}(\text{Risk Factors}) \quad (1)
 \end{aligned}$$

In summary, I expect the coefficients of *Founder-CEO* to be positive, *Founder-CEO * CEO-Chair* and *Founder-CEO * CEO-Own* to be negative, *ln(Employees)* and *Ln(Firm Age+1)* to be positive and *VC-backed*, *VC Rounds*, *UW-Rank*, and *Risk Factors* to be negative.

ANALYSIS AND RESULTS

I present the descriptive statistics and correlation matrix for the variables in my model in Table 1. The matrix provides some initial indications about the relationships among the variables in my model. The first noteworthy results found in this table are the low correlations among the governance provision sub-sections. The highest correlation among the five sub-sections is .26 between the delay and voting provisions. This suggests that the adoption of the various governance sub-sections is largely independent of each other and that firms do not tend to adopt many or few of the provisions but rather select some provisions over others for various reasons. Also, although venture-backed firms are smaller and younger than non-VC backed firms, VC involvement is uncorrelated with the founder remaining CEO at the time of the offering. Still, VCs do have some effect on founder management, as founder ownership is significantly negatively correlated with VC involvement. One last interesting observation is that riskier firms are also younger and smaller when they go public.

Hypothesis Tests

In Table 3, I present the results of the OLS regression models for the overall governance index (*Gov-Index*). In interpreting the results, it is important to keep in mind that the IRRC governance index is essentially derived from a reverse scoring method. High governance index scores reflect the adoption of provisions that favour management over shareholders, implying that a firm has weaker governance. Conversely, a lower governance index score suggests that a firm is more shareholder-friendly and thus

Table 3:
OLS Regression Results for Governance Index Scores

The sample consists of 423 software companies that went public between 1996 and 2000. The dependent variable in each model (*Gov. Index*) is the IRRG governance index score – higher scores indicate less shareholder-friendly governance. *Founder-CEO* is a dummy variable that takes a value of 1 if a firm's CEO is also one of its founders and 0 if the CEO is a mercenary. *CEO-Chair* is a dummy variable that takes a value of 1 if a firm's CEO chairs the board of directors and 0 otherwise. *CEO-Own* is the percentage of outstanding equity retained by the CEO after the IPO. *Founder*Chair* is an interaction variable calculated as *Founder-CEO* times *CEO-Chair*. *Mercenary*Chair* is an interaction variable calculated as $[1 - \text{Founder-CEO}]$ times *CEO-Chair*. *Founder*CEO-Own* is an interaction variable calculated as *Founder-CEO* times *CEO-Own*. *Mercenary*CEO-Own* is an interaction variable calculated as $[1 - \text{Founder-CEO}]$ times *CEO-Own*. *IPO Bubble* is a dummy variable that takes a value of 1 if a firm went public in 1999 or 2000 and 0 otherwise. $\ln(\text{Firm Age} + 1)$ is the natural logarithm of a firm's age at the time of its IPO (in years) plus one. $\ln(\text{Employees})$ is the natural logarithm of the number of employees at the time of a firm's IPO. *Risk Factors* is an index that scores the degree of business risk associated with a firm. *VC-Backed* is a dummy variable that takes a value of 1 if a firm had at least one round of venture financing before its IPO and 0 otherwise. *VC Rounds* is the number of venture financing rounds that a firm had before going public. *UW-Rank* is the prestige score for an IPO firm's underwriters.

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	b	s.e.	b	s.e.	b	s.e.	b	s.e.	b	s.e.
<i>Intercept</i>	9.78 ***	0.23	9.73 ***	0.25	10.70 ***	0.71	9.13 ***	0.92	9.97 ***	1.01
<i>IPO Bubble</i>	0.05	0.23	0.03	0.24	-0.04	0.25	-0.12	0.25	-0.04	0.25
<i>Founder CEO</i>	0.20	0.20								
<i>Founder*CEO-Own</i>			-0.00	0.01	-0.00	0.01	-0.00	0.01	-0.00	0.01
<i>Founder*Chair</i>			0.44 †	0.26	0.48 †	0.26	0.45 †	0.26	0.48 †	0.26
<i>Mercenary*CEO-Own</i>			0.01	0.02	0.01	0.01	0.02	0.02	0.01	0.02
<i>Mercenary*Chair</i>			-0.02	0.32	-0.01	0.32	0.06	0.32	0.10	0.32
$\ln(\text{Firm Age} + 1)$					0.05	0.17	0.11	0.19	0.09	0.18
$\ln(\text{Employees})$					-0.19 †	0.12	-0.24 †	0.13	-0.32 *	0.13
<i>VC-Backed</i>							0.76 *	0.34	0.85 *	0.34
<i>VC Rounds</i>							-0.09	0.08	-0.07	0.08
<i>UW-Rank</i>							0.15 †	0.09	0.16 †	0.09
<i>Risk Factors</i>									-0.13 †	0.07
R ²	0.24%		0.84%		1.50%		3.67%		4.55%	
Adj R ²	-0.23%		-0.34%		-0.16%		1.33%		2.00%	

Note: p-values: *** = p<.001; ** = p<.01; * = p<.05; † = p<.10; n=423 for all models.

indicates stronger governance. In general, the results show very small adjusted R-squared values, however this is fairly typical in IPO research (Beatty and Ritter, 1986; Ritter and Welch, 2002).

I do not find any support for Hypothesis 1 (Founder-led firms), and although the relationship between the governance index score and founder ownership is negative, as expected, the results are too marginal and insignificant to provide support for Hypothesis 2 (Founder ownership). With regards to Hypothesis 3, which posits lower governance index scores for founder CEO-Chairman duality, not only did I find no support for my hypothesis, I find results that are significant and contrary to what I had predicted. Founders who also chair the board are actually less likely to adopt shareholder-friendly governance provisions. My analyses do not support the notion that corporate governance may weaken when additional power is held because either a founder or mercenary CEO hold both the CEO and Chairman positions (Hypotheses 4 and 5).

Hypothesis 6 suggests a positive association between firm size, as measured by the number of employees, and the governance index. The coefficient for this variable is significant in one of the models (Model 3) but the sign is opposite of what I expected. Extending the work of Field and Karpoff (2002), who noted that larger and older firms tend to adopt more anti-takeover defences, I posited that larger firms would be more likely to adopt governance mechanisms that are less shareholder-friendly and thus would produce higher governance index scores. The negative coefficient suggests that larger firm size is associated with lower governance scores and thus more shareholder friendly governance. Although there typically is a positive correlation between firm size and firm

age, the firms in my sample did not display such a relationship. The expected positive coefficient for firm age is there but the results are not significant and thus the results do not support Hypothesis 7.

I included three variables to examine the potential influence of third parties such as venture capitalists or underwriters. I expected to observe stronger corporate governance effects by finding negative coefficients for both the *VC-Backed* and the *VC Rounds* variables. The results do not support either Hypotheses 8 (Venture-backed firms) or 9 (Venture capital rounds). The significant positive coefficient for the *VC-Backed* variable is the contrary to my expectations and indicates that VC backing is associated with weaker corporate governance. Finally, the coefficient for the underwriter prestige variable is significant but positive, thus providing evidence contrary to my expectations for Hypothesis 10.

Finally, in Model 5, I add the *Risk Factors* variable to test for effects that firm-level and environmental risks may have on firms' governance. The negative coefficient, which is also marginally significant, provides some support for Hypothesis 11, which posits that firms operating in more dynamic environments will adopt more shareholder-friendly governance provisions.

Governance Sub-index Provisions

As discussed earlier, adoption of each of the provisions in the governance index sub-sections may be independent from each other. To examine this possibility, I conduct OLS regression analyses for my model using the sub-section scores as the dependent variables to investigate governance differences on a more detailed level. I do not report the results for the OLS regression on *Other* sub-section provisions because none of the variables were found to be significant.

As indicated by the results presented in Table 4, I do find significant and interesting results among the tables presenting the sub-section regressions. For example, VC backing is significantly associated with higher scores on the delay provisions. This finding suggests that VCs appear to be promoting provisions that thwart challenges to their power. Similarly, founders who also chair their firm are also significantly associated with the more frequent adoption of delay and voting provisions. The positive relationship between underwriter prestige and the governance index score from the previous section is confirmed in the sub-section analysis: firms going public via more prestigious underwriters tend to adopt more delay and voting provisions. I also find evidence consistent with my previous analysis in that larger firms tend to adopt fewer delay and protection provisions, and that riskier firms in more dynamic environments will adopt fewer delay and voting provisions. The IPO bubble dummy variable was also marginally significantly positive for the delay provisions, providing mild evidence that firms that went public during the tech bubble adopted less shareholder-friendly governance provisions.

Table 4
OLS Regression Results for Governance Index Sub-sections

The sample consists of 423 software companies that went public between 1996 and 2000. The dependent variables are the *Delay*, *Protection*, and *Voting* sub-section scores of the IRRC governance index – higher scores indicate less shareholder-friendly governance. *Founder-CEO* is a dummy variable that takes a value of 1 if a firm’s CEO is also one of its founders and 0 if the CEO is a mercenary. *CEO-Chair* is a dummy variable that takes a value of 1 if a firm’s CEO chairs the board of directors and 0 otherwise. *CEO-Own* is the percentage of outstanding equity retained by the CEO after the IPO. *Founder*Chair* is an interaction variable calculated as *Founder-CEO* times *CEO-Chair*. *Mercenary*Chair* is an interaction variable calculated as $[1-Founder-CEO]$ times *CEO-Chair*. *Founder*CEO-Own* is an interaction variable calculated as *Founder-CEO* times *CEO-Own*. *Mercenary*CEO-Own* is an interaction variable calculated as $[1-Founder-CEO]$ times *CEO-Own*. *IPO Bubble* is a dummy variable that takes a value of 1 if a firm went public in 1999 or 2000 and 0 otherwise. $Ln(Firm\ Age+1)$ is the natural logarithm of a firm’s age at the time of its IPO (in years) plus one. $Ln(Employees)$ is the natural logarithm of the number of employees at the time of a firm’s IPO. *Risk Factors* is an index that scores the degree of business risk associated with a firm. *VC-Backed* is a dummy variable that takes a value of 1 if a firm had at least one round of venture financing before its IPO and 0 otherwise. *VC Rounds* is the number of venture financing rounds that a firm had before going public. *UW-Rank* is the prestige score for an IPO firm’s underwriters.

Variable	Delay		Protection		Voting	
	b	s.e.	b	s.e.	b	s.e.
<i>Intercept</i>	2.06***	0.51	3.51***	0.49	2.31***	0.45
<i>IPO Bubble</i>	0.22 †	0.13	-0.00	0.12	-0.09	0.11
<i>Founder*CEO-Own</i>	-0.00	0.01	0.00	0.01	-0.00	0.01
<i>Founder*Chair</i>	0.37**	0.13	-0.06	0.13	0.27*	0.12
<i>Mercenary*CEO-Own</i>	0.00	0.01	0.00	0.01	0.00	0.01
<i>Mercenary*Chair</i>	0.14	0.16	-0.03	0.16	0.09	0.14
$Ln(Firm\ Age+1)$	-0.07	0.09	0.03	0.09	0.05	0.08
$Ln(Employees)$	-0.13 †	0.07	-0.11 †	0.06	-0.05	0.05
<i>VC-Backed</i>	0.70***	0.17	0.14	0.17	0.15	0.15
<i>VC Rounds</i>	0.00	0.04	0.01	0.04	-0.05	0.03
<i>UW-Rank</i>	0.13**	0.05	-0.01	0.04	0.09*	0.04
<i>Risk Factors</i>	-0.06 †	0.03	0.01	0.03	-0.06 †	0.03
R ²	14.58%		2.18%		4.71%	
Adj R ²	12.29%		-0.44%		2.16%	

Note: p-values: *** = p<.001; ** = p<.01; * = p<.05; † = p<.10; n=423 for all models.

Individual Governance Provisions

In order to gain an even better understanding of the choices IPO firms make with regards to their governance structures, I continued my analysis by investigating the drivers behind the adoption of individual governance provisions. In Table 5, I present the correlations among the provisions, and find several interesting relationships. The delay provisions (items one through four in the correlation matrix) are all positively correlated, suggesting that firms may prefer to adopt these provisions in groups rather than on an individual basis. There is also a strong positive association between the indemnification and liability provisions. 86% of firms in my sample adopted both provisions, whereas only 8% of firms adopted one of the two provisions. I observe a similar situation for the bylaw and charter modification provisions; although the relative adoption frequency of these provisions was noticeably less common (26% adopted both provisions whereas 12% adopted only one). Finally, it appears less likely that firms will indemnify their directors if there are supermajority voting provisions in place.

I present the results of Logit regressions for the adoption of individual governance provisions in Table 6. I excluded the secret ballot and several *Other* provisions from my analysis because of their low adoption frequency. As I expected, there are several intricacies that lead to the selection of certain provisions, and that the adoption of different provisions will be influenced by different factors.

For the delay provisions (Panel 6a), I observe many of the same factors influencing the adoption of the classified board, special meeting, and written consent

Table 5:
Governance Provision Correlations

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 <i>Blank Check</i>																				
2 <i>Classified Board</i>	0.20																			
3 <i>Special Meeting</i>	0.13	0.27																		
4 <i>Written Consent</i>	0.15	0.28	0.46																	
5 <i>Comp. Agreements</i>	0.03	-0.01	-0.03	-0.10																
6 <i>Golden Parachutes</i>	0.00	-0.01	0.06	-0.03	0.24															
7 <i>Severance</i>	-0.01	0.08	0.07	-0.02	0.08	0.04														
8 <i>Indemnification</i>	0.03	0.09	0.11	0.02	-0.08	-0.06	-0.03													
9 <i>Contracts</i>	0.05	-0.04	0.04	0.13	0.04	-0.01	-0.14	0.20												
10 <i>Liability</i>	0.15	0.13	0.11	0.04	0.05	0.04	0.00	0.55	0.21											
11 <i>Bylaws</i>	0.07	0.18	0.18	0.24	-0.02	-0.04	0.02	0.03	-0.13	-0.03										
12 <i>Charter</i>	0.07	0.24	0.17	0.24	-0.06	-0.05	-0.04	-0.02	-0.02	-0.03	0.73									
13 <i>Cumulative Voting*</i>	0.02	-0.11	-0.08	-0.09	-0.02	-0.05	0.03	-0.04	0.00	-0.03	-0.03	-0.08								
14 <i>Supermajority</i>	-0.15	0.00	0.01	-0.05	-0.03	0.03	0.01	-0.12	-0.10	-0.21	0.09	0.01	-0.02							
15 <i>Unequal Voting</i>	-0.06	-0.14	-0.02	-0.12	-0.02	-0.01	-0.01	-0.13	-0.02	-0.11	0.01	-0.03	-0.02	0.04						
16 <i>Antitakeover</i>	-0.04	0.05	0.05	0.04	-0.03	-0.04	0.12	-0.08	-0.02	-0.02	-0.07	-0.05	-0.02	-0.04	-0.03					
17 <i>Directors' Duties</i>	-0.02	-0.04	-0.03	-0.03	0.03	-0.06	0.04	-0.04	-0.14	-0.07	0.10	0.05	0.01	-0.01	0.07	0.31				
18 <i>Fair Price</i>	-0.11	-0.01	-0.02	-0.04	0.06	0.01	-0.03	0.03	-0.05	0.02	0.03	0.02	0.03	0.10	0.00	-0.02	0.44			
19 <i>Cash-out</i>	-0.09	0.00	-0.02	-0.03	-0.02	0.01	-0.07	-0.10	0.01	-0.09	0.00	0.04	-0.01	-0.03	0.12	-0.02	0.27	-0.04		
20 <i>Control Share Acq.</i>	0.01	-0.03	-0.05	-0.07	0.02	-0.02	0.06	-0.01	-0.14	-0.05	-0.02	-0.03	0.04	-0.03	0.07	0.35	0.45	0.21	-0.04	
21 <i>Business Combinations</i>	0.00	0.08	0.09	0.07	-0.05	-0.09	0.01	0.07	0.11	0.04	0.01	0.07	0.00	0.01	-0.04	0.00	-0.06	-0.04	0.06	-0.27

n = 423 for all variables.

For two-tailed correlation tests, values of $|r| \geq 0.09$ are significant at the 5% level, and values of $|r| \geq 0.12$ are significant at the 1% level. Pearson and Spearman Correlations are used where appropriate.

Note: No firms in the sample adopted the Secret Ballot provision. Analysis performed on *Delay*, *Protection*, *Voting*, and *State Law* provisions. Unique *Other* provisions were excluded because of their low adoption frequency. Provisions marked with an asterisk (*) are considered to favour shareholders. Detailed descriptions of each provision are provided in the Appendix.

provisions, which is consistent with my earlier findings. More specifically, founder-chairman duality, VC involvement, and underwriter prestige are positively associated with the adoption of the three former provisions, while the coefficients in front of the employee (firm size) and risk factor variables are negative. The blank check provision appears to be the black sheep of this bunch, as although VC involvement is still positively related to the adoption of this provision, firm risk is positively associated to this provision's adoption, as is founder equity ownership.

It is worthwhile to divide the protection provisions into two categories, the results for which are presented in Panel 6b, because they cater to different actors in the firm. The compensation agreement, golden parachute, and severance provisions all favour members of the top management team, whereas the indemnification, contract, and liability provisions are all focused on protecting non-executive directors from legal recourse against them. The results suggest that older firms are less likely to have compensation agreements with their managers, and that severance packages are negatively related to VC financing rounds. I also find some evidence that underwriter prestige is negatively related to the implementation of golden parachutes. For non-executive directors, the adoption of both the indemnification and liability provisions increases as the firm gets older. The fact that both provisions are influenced by the same variable follows naturally from the fact that the two provisions' adoptions are highly correlated. A slightly different situation presents itself for the contract provision. Firm size is significantly negatively related to contract adoption, whereas underwriter prestige and firm risk are both positively associated to this provision.

Table 6:
Logit Regression Results for Individual Governance Provisions

The sample consists of 423 software companies that went public between 1996 and 2000. The dependent variables are the individual governance provisions in the IRRC governance index – higher scores indicate less shareholder-friendly governance. The estimations are done using logit regressions. *Founder-CEO* is a dummy variable that takes a value of 1 if a firm's CEO is also one of its founders and 0 if the CEO is a mercenary. *CEO-Chair* is a dummy variable that takes a value of 1 if a firm's CEO chairs the board of directors and 0 otherwise. *CEO-Own* is the percentage of outstanding equity retained by the CEO after the IPO. *Founder*Chair* is an interaction variable calculated as *Founder-CEO* times *CEO-Chair*. *Mercenary*Chair* is an interaction variable calculated as $[1 - \text{Founder-CEO}] \times \text{CEO-Chair}$. *Founder*CEO-Own* is an interaction variable calculated as *Founder-CEO* times *CEO-Own*. *Mercenary*CEO-Own* is an interaction variable calculated as $[1 - \text{Founder-CEO}] \times \text{CEO-Own}$. *IPO Bubble* is a dummy variable that takes a value of 1 if a firm went public in 1999 or 2000 and 0 otherwise. $\ln(\text{Firm Age} + 1)$ is the natural logarithm of a firm's age at the time of its IPO (in years) plus one. $\ln(\text{Employees})$ is the natural logarithm of the number of employees at the time of a firm's IPO. *Risk Factors* is an index that scores the degree of business risk associated with a firm. *VC-Backed* is a dummy variable that takes a value of 1 if a firm had at least one round of venture financing before its IPO and 0 otherwise. *VC Rounds* is the number of venture financing rounds that a firm had before going public. *UW-Rank* is the prestige score for an IPO firm's underwriters.

Panel 6a: Delay Provisions

Variable	<u>Blank Check</u>		<u>Classified Board</u>		<u>Special Meeting</u>		<u>Written Consent</u>	
	b	s.e.	b	s.e.	b	s.e.	b	s.e.
<i>IPO Bubble</i>	-0.45	0.65	0.41	0.26	0.26	0.28	0.38	0.26
<i>Founder*CEO-Own</i>	0.05 †	0.03	-0.01	0.01	0.01	0.01	-0.01	0.01
<i>Founder*Chair</i>	-0.64	0.79	0.69*	0.28	0.68*	0.31	0.59*	0.28
<i>Mercenary*CEO-Own</i>	0.08	0.07	0.01	0.02	0.01	0.02	-0.01	0.02
<i>Mercenary*Chair</i>	-0.53	0.74	0.28	0.34	0.42	0.36	0.10	0.34
$\ln(\text{Firm Age} + 1)$	-0.45	0.48	-0.13	0.17	-0.20	0.18	-0.01	0.17
$\ln(\text{Employees})$	0.35	0.28	-0.17	0.12	-0.26*	0.13	-0.30*	0.12
<i>VC-Backed</i>	2.15*	1.03	1.02**	0.35	0.97*	0.38	0.79*	0.35
<i>VC Rounds</i>	-0.22	0.24	-0.05	0.08	-0.03	0.09	0.12	0.08
<i>UW-Rank</i>	0.03	0.19	0.13	0.08	0.27**	0.09	0.16 †	0.09
<i>Risk Factors</i>	0.34 †	0.18	-0.11 †	0.06	-0.16*	0.07	-0.11 †	0.06
Log Likelihood	-53.6		-255.5		-229.5		-256.8	
Pseudo R ²	12.8%		6.0%		6.9%		8.8%	

Note: p-values: *** = p<.001; ** = p<.01; * = p<.05; † = p<.10; n=423 for all models.

Panel 6b: Protection Provisions

Variable	Compensation Agreements		Golden Parachutes		Severance		Indemnification		Contracts		Liability	
	b	s.e.	b	s.e.	b	s.e.	b	s.e.	b	s.e.	B	s.e.
<i>IPO Bubble</i>	-0.71	0.86	0.24	0.35	0.23	0.25	0.17	0.41	-0.36	0.26	0.16	0.37
<i>Founder*CEO-Owned</i>	-0.70	0.98	-0.00	0.01	-0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.01
<i>Founder*Chair</i>	-34.50	10 ⁶	-0.22	0.36	0.25	0.26	-0.17	0.44	-0.31	0.27	0.05	0.42
<i>Mercenary*CEO-Owned</i>	-0.03	0.05	0.01	0.02	-0.01	0.02	-0.01	0.02	0.01	0.02	0.02	0.02
<i>Mercenary*Chair</i>	-0.46	0.88	-0.25	0.45	0.38	0.32	0.21	0.57	-0.38	0.33	-0.05	0.49
<i>Ln(Firm Age+1)</i>	-1.26 *	0.53	-0.14	0.22	0.03	0.16	0.70 **	0.26	-0.01	0.17	0.47 *	0.23
<i>Ln(Employees)</i>	0.29	0.36	0.07	0.15	0.08	0.11	-0.13	0.18	-0.25 *	0.12	0.26	0.16
<i>VC-Backed</i>	-1.55	1.38	-0.38	0.45	0.27	0.33	0.71	0.56	0.09	0.34	0.47	0.50
<i>VC Rounds</i>	0.08	0.31	-0.02	0.11	-0.14 †	0.08	0.10	0.16	0.07	0.08	0.24	0.15
<i>UW-Rank</i>	-0.12	0.30	-0.17 †	0.10	-0.06	0.08	0.03	0.14	0.17 *	0.08	0.15	0.12
<i>Risk Factors</i>	0.07	0.25	-0.05	0.08	-0.07	0.06	0.16	0.11	0.15 *	0.06	0.07	0.10
Log Likelihood	-30.7		-172.4		-287.2		-121.2		-268.0		-136.8	
Pseudo R ²	22.6%		2.2%		1.8%		5.2%		4.6%		6.0%	

Note: p-values: *** = p<.001; ** = p<.01; * = p<.05; † = p<.10; n=423 for all models.

Panel 6c: Voting / State Law / Other Provisions

Variable	Bylaws		Charter		Supermajority		Unequal Voting		Directors' Duties		Business Comb.	
	b	s.e.	b	s.e.	b	s.e.	b	s.e.	b	s.e.	b	s.e.
<i>IPO Bubble</i>	-0.28	0.26	-0.23	0.26	-0.61	0.52	-0.17	0.79	-1.13*	0.56	-0.22	0.30
<i>Founder*CEO-Owned</i>	-0.01	0.01	-0.01	0.01	-0.02	0.02	0.01	0.02	-0.03	0.03	-0.02†	0.01
<i>Founder*Chair</i>	0.63*	0.28	0.45†	0.27	0.62	0.66	1.13	0.96	0.99	0.71	0.08	0.31
<i>Mercenary*CEO-Owned</i>	0.01	0.02	0.01	0.02	-0.10	0.07	-0.18	0.26	0.01	0.03	-0.02	0.02
<i>Mercenary*Chair</i>	-0.19	0.35	-0.01	0.34	1.42*	0.66	0.42	1.43	0.34	0.78	-0.33	0.37
<i>Ln(Firm Age+1)</i>	0.20	0.18	-0.03	0.17	-0.31	0.39	-1.51**	0.59	0.14	0.40	0.13	0.19
<i>Ln(Employees)</i>	-0.28*	0.12	-0.24*	0.12	-0.21	0.25	0.05	0.34	-0.34	0.28	-0.05	0.13
<i>VC-Backed</i>	0.52	0.36	0.40	0.35	-0.43	0.76	-2.29†	1.37	-0.07	0.81	0.29	0.40
<i>VC Rounds</i>	-0.13	0.08	-0.04	0.08	-0.17	0.21	0.03	0.42	-0.05	0.21	-0.14	0.09
<i>UW-Rank</i>	0.10	0.09	0.16†	0.09	-0.01	0.18	0.11	0.29	-0.10	0.19	0.18†	0.09
<i>Risk Factors</i>	-0.13†	0.06	-0.21***	0.07	-0.08	0.14	-0.29	0.22	-0.07	0.15	0.11	0.07
Log Likelihood	-255.8		-261.4		-74.0		-35.2		-63.5		-214.9	
Pseudo R ²	2.9%		2.9%		8.1%		19.2%		6.7%		3.9%	

Note: p-values: *** = p<.001; ** = p<.01; * = p<.05; † = p<.10; n=423 for all models.

The remaining provisions, shown in Panel 6c, do not have as much in common with each other as in the previous groups – this feature manifests itself in the different factors that influence the adoption of each provision. The bylaw and charter provisions, which were highly correlated, share many of the same factors that influence their adoption. Notably, founder-chairman duality positively influences the adoption of these provisions, while firm size and risk factors play against it. I also find that underwriter prestige is marginally positively related to the adoption of the charter provision. Mercenary-chairman duality is the only factor that is significantly related to the adoption of the supermajority provision, and the positive sign provides some evidence that mercenaries will adopt this provision to strengthen positions in their firms. Upon examination of the business combination provision adoption model, the mildly significant negative coefficient in front of the founder ownership variable, as well as the positively significant coefficient in front of the underwriter prestige variable provides evidence consistent with the fact that firms that have higher founder ownership as well as firms that go public with less prestigious underwriters are less likely to be incorporated in Delaware, which has business combinations as its only anti-takeover statute. I also find that older firms and VC-backed firms are less likely to have multiple classes of shares, and that firms that went public during the tech bubble were less likely to have adopted the directors' duties provision. The latter finding makes intuitive sense, as it is indicative of the excessive focus on generating returns for shareholders present during that time period.

Robustness Checks and Out-of-Sample Tests

I continue by verifying whether the results I had obtained in previous sections were consistent across different industries. For this, I collected the same data for a new set of 168 firms spread almost evenly across the biotechnology, internet content, and semiconductor industries. The firms in the 3-industry sample are approximately the same age and size as the firms from the software sample, and have similar governance structures. Panel 7a in Table 7 contains the descriptive statistics for the firms in the 3-industry sample, in aggregate and broken down by industry. The correlations between the variables in my models are presented in Panel 7b in Table 7. Generally, founder ownership is lower in biotech firms. This is attributable to higher VC participation, both in the percentage of firms attracting financing and a higher number of rounds, as well as the research- and capital-intensive nature of the industry. Internet firms are much younger than their counterparts, which stems from the mania present in these firms during the 1996-2000 period. There do not appear to be any major discrepancies in the relationships between the variables in the software sample and the variables in the 3-industry sample.

I present the results of the OLS regression models on the 3-industry sample in Table 8. The results are very similar to those of the software firms, in that founder-chairman duality, VC involvement, and underwriter prestige are positively linked to governance index scores, whereas firm size remains negatively related to the index scores. The main difference with the 3-industry sample is that the number of venture financing rounds is the variable that significantly influences the index, as opposed to the venture capital dummy for the software sample. Furthermore, I find a significant negative

Table 7:
Descriptive Statistics and Correlations for the 3-Industry Sample

The sample consists of 168 companies from the biotech, semiconductor, and internet content industries that went public between 1996 and 2000. *Gov. Index* is the IRRC governance index score – higher scores indicate less shareholder-friendly governance. *Delay*, *Protection*, *Voting*, *Other*, and *State Laws* represent scores for each sub-section of the IRRC governance index. *Founder-CEO* is a dummy variable that takes a value of 1 if a firm’s CEO is also one of its founders and 0 if the CEO is a mercenary. *CEO-Chair* is a dummy variable that takes a value of 1 if a firm’s CEO chairs the board of directors and 0 otherwise. *CEO-Own* is the percentage of outstanding equity retained by the CEO after the IPO. *Founder*Chair* is an interaction variable calculated as *Founder-CEO* times *CEO-Chair*. *Mercenary-Chair* is an interaction variable calculated as $[1-\text{Founder-CEO}]$ times *CEO-Chair*. *Founder*CEO-Own* is an interaction variable calculated as *Founder-CEO* times *CEO-Own*. *Merc*CEO-Own* is an interaction variable calculated as $[1-\text{Founder-CEO}]$ times *CEO-Own*. *Biotech*, *Internet*, and *Semiconductor* are dummy variables that take a value of 1 if a firm does business in a particular industry and 0 otherwise. $\ln(\text{Firm Age}+1)$ is the natural logarithm of a firm’s age at the time of its IPO (in years) plus one. $\ln(\text{Employees})$ is the natural logarithm of the number of employees at the time of a firm’s IPO. *Risk Factors* is an index that scores the degree of business risk associated with a firm. *VC-Backed* is a dummy variable that takes a value of 1 if a firm had at least one round of venture financing before its IPO and 0 otherwise. *VC Rounds* is the number of venture financing rounds that a firm had before going public. *UW-Rank* is the prestige score for an IPO firm’s underwriters.

Panel 7a: Descriptive Statistics for the 3-Industry Sample

Variable	Total sample (n=168)	Biotech firms (n=56)	Internet firms (n=58)	Semicond. firms (n=54)
<i>Gov. Index</i>	9.46 (2.30)	9.36 (2.19)	9.78 (2.18)	9.21 (2.51)
<i>Delay</i>	2.87 (1.20)	2.93 (1.14)	2.98 (1.15)	2.68 (1.31)
<i>Protection</i>	2.88 (1.17)	2.80 (1.27)	3.02 (1.17)	2.79 (1.06)
<i>Voting</i>	2.55 (0.87)	2.38 (0.70)	2.58 (0.95)	2.70 (0.91)
<i>Other</i>	0.05 (0.24)	0.04 (0.19)	0.08 (0.34)	0.02 (0.14)
<i>State Laws</i>	1.12 (0.70)	1.21 (0.73)	1.12 (0.59)	1.02 (0.77)
<i>Founder-CEO</i>	0.50 (0.50)	0.57 (0.50)	0.51 (0.50)	0.42 (0.50)
<i>CEO-Chair</i>	0.41 (0.49)	0.32 (0.47)	0.51 (0.50)	0.40 (0.49)
<i>Founder * Chair</i>	0.55 (0.50)	0.44 (0.50)	0.67 (0.48)	0.55 (0.51)
<i>Mercenary * Chair</i>	0.27 (0.45)	0.17 (0.38)	0.34 (0.48)	0.29 (0.46)
<i>CEO-Own</i>	8.85 (10.75)	5.91 (7.67)	10.55 (12.81)	10.33 (10.79)
<i>Founder * CEO-Own</i>	12.01 (12.06)	8.14 (9.41)	15.39 (14.89)	13.02 (9.90)
<i>Mercenary * CEO-Own</i>	4.74 (7.48)	2.93 (2.25)	3.73 (5.25)	7.09 (10.77)
$\ln(\text{Firm Age}+1)$	1.64 (0.79)	1.77 (0.59)	1.13 (0.60)	2.06 (0.87)
$\ln(\text{Employees})$	4.56 (1.18)	4.02 (1.05)	4.59 (0.97)	5.12 (1.26)
<i>VC-Backed</i>	0.74 (0.44)	0.77 (0.43)	0.73 (0.45)	0.74 (0.45)
<i>VC Rounds</i>	2.18 (2.05)	2.52 (2.20)	2.03 (1.70)	1.98 (2.21)
<i>UW-Rank</i>	7.30 (1.64)	7.01 (1.79)	7.34 (1.76)	7.56 (1.26)
<i>Risk Factors</i>	5.39 (1.44)	4.93 (0.89)	6.14 (1.49)	5.04 (1.53)

Note: Standard deviations for each variable are presented in parentheses.

Panel 7b: Correlations for the 3-Industry Sample

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
1 Gov Index																						
2 Delay	0.79																					
3 Protection	0.58	0.27																				
4 Voting	0.47	0.32	-0.19																			
5 Other	0.11	-0.08	0.09	-0.07																		
6 State Laws	0.39	0.10	0.00	0.11	0.08																	
7 Founder-CEO	0.02	0.00	-0.02	0.03	0.11	0.01																
8 CEO-Chair	0.14	0.11	0.09	0.04	0.10	0.04	0.25															
9 Founder*Chair	0.13	0.08	0.05	0.08	0.06	0.08	0.59	0.72														
10 Mercenary*	0.04	0.05	0.07	-0.05	0.06	-0.04	-0.40	0.50	-0.24													
11 Chair	-0.09	-0.15	0.01	-0.10	0.24	-0.01	0.36	0.34	0.40	-0.01												
12 CEO-Own	-0.04	-0.09	-0.01	-0.04	0.23	-0.02	0.60	0.31	0.54	-0.24	0.84											
13 Founder*	-0.08	-0.13	0.03	-0.11	0.01	0.03	-0.42	0.06	-0.25	0.40	0.31	-0.25										
14 CEO-Own	-0.02	0.03	-0.03	-0.15	-0.04	0.12	0.10	-0.11	0.00	-0.14	-0.20	-0.12	-0.16									
15 Mercenary*	-0.09	-0.12	-0.06	0.11	-0.08	-0.13	-0.09	-0.02	-0.07	0.06	0.08	-0.05	0.23	-0.48								
16 CEO-Own	0.11	0.08	0.08	0.04	0.12	0.00	-0.02	0.12	0.07	0.09	0.12	0.16	-0.07	-0.54	-0.48							
17 Internet	-0.13	-0.12	-0.16	-0.04	-0.05	0.11	-0.02	0.07	0.05	0.03	0.04	-0.04	0.13	0.15	0.32	-0.46						
18 Ln(Firm Age+1)	-0.06	0.01	-0.16	0.12	-0.02	-0.08	0.01	0.02	0.06	-0.05	0.05	0.03	0.04	-0.31	0.31	0.02	0.15					
19 Ln(Employees)	0.22	0.22	0.16	0.07	0.05	-0.02	0.05	-0.05	0.04	-0.13	-0.07	-0.01	-0.12	0.05	-0.04	-0.02	-0.07	0.01				
20 VC-Backed	0.24	0.26	0.14	0.12	0.09	-0.08	0.00	-0.07	-0.07	-0.01	-0.20	-0.16	-0.07	0.12	-0.01	-0.10	0.08	0.03	0.42			
21 VC Rounds	0.17	0.29	-0.05	0.16	-0.04	-0.05	0.02	-0.07	0.05	-0.16	-0.12	-0.05	-0.13	-0.11	0.11	0.01	0.08	0.51	0.22	0.22		
22 UIV-Rank	0.09	0.06	0.05	0.12	0.14	-0.09	0.07	0.07	0.13	-0.07	0.08	0.11	-0.05	-0.23	-0.14	0.37	-0.33	0.00	0.11	0.00	0.09	
23 Risk Factors																						

n = 168 for all variables.

For two-tailed correlation tests, values of $|r| \geq 0.16$ are significant at the 5% level, and values of $|r| \geq 0.21$ are significant at the 1% level. Pearson and Spearman Correlations are used where appropriate.

Table 8:
OLS Regression Results for Governance Index Scores (3-Industry Sample)

The sample consists of 168 companies from the biotech, semiconductor, and internet content industries that went public between 1996 and 2000. The dependent variable in each model (*Gov. Index*) is the IRRG governance index score – higher scores indicate less shareholder-friendly governance. *Founder-CEO* is a dummy variable that takes a value of 1 if a firm's CEO is also one of its founders and 0 if the CEO is a mercenary. *CEO-Chair* is a dummy variable that takes a value of 1 if a firm's CEO chairs the board of directors and 0 otherwise. *CEO-Own* is the percentage of outstanding equity retained by the CEO after the IPO. *Founder*Chair* is an interaction variable calculated as *Founder-CEO* times *CEO-Chair*. *Mercenary*Chair* is an interaction variable calculated as *1-Founder-CEO* times *CEO-Chair*. *Founder*CEO-Own* is an interaction variable calculated as *Founder-CEO* times *CEO-Own*. *Merc*CEO-Own* is an interaction variable calculated as *[1-Founder-CEO]* times *CEO-Own*. *Biotech*, *Internet*, and *Semiconductor* are dummy variables that take a value of 1 if a firm does business in a particular industry and 0 otherwise. *Ln(Firm Age+1)* is the natural logarithm of a firm's age at the time of its IPO (in years) plus one. *Ln(Employees)* is the natural logarithm of the number of employees at the time of a firm's IPO. *Risk Factors* is an index that scores the degree of business risk associated with a firm. *VC-Rounds* is a dummy variable that takes a value of 1 if a firm had at least one round of venture financing before its IPO and 0 otherwise. *VC Rounds* is the number of venture financing rounds that a firm had before going public. *UW-Rank* is the prestige score for an IPO firm's underwriters.

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	b	s.e.	b	s.e.	b	s.e.	b	s.e.	b	s.e.
<i>Intercept</i>	9.18 ***	0.35	9.15 ***	0.40	10.38 ***	1.11	8.57 ***	1.21	9.97 ***	1.01
<i>Biotech</i>	0.14	0.44	0.15	0.47	-0.02	0.50	-0.14	0.49	-0.14	0.49
<i>Internet</i>	0.57	0.44	0.66	0.46	0.35	0.53	0.29	0.51	0.28	0.52
<i>Founder CEO</i>	0.06	0.35								
<i>Founder*CEO-Own</i>			-0.04 *	0.02	-0.04 *	0.02	-0.03	0.02	-0.03	0.02
<i>Founder*Chair</i>			1.09 *	0.51	1.17 *	0.51	1.19 *	0.50	1.19 *	0.50
<i>Mercenary*CEO-Own</i>			-0.04	0.04	-0.03	0.04	-0.01	0.03	-0.01	0.03
<i>Mercenary*Chair</i>			0.46	0.60	0.46	0.60	0.70	0.58	0.70	0.59
<i>Ln(Firm Age+1)</i>					-0.10	0.17	-0.32	0.19	-0.32 †	0.19
<i>Ln(Employees)</i>					-0.36	0.34	-0.43	0.33	-0.43	0.34
<i>VC-Backed</i>							0.58	0.48	0.58	0.48
<i>VC Rounds</i>							0.19 *	0.10	0.19 *	0.10
<i>UW-Rank</i>							0.27 *	0.13	0.27 *	0.13
<i>Risk Factors</i>									0.01	0.14
R ²	1.16%		5.87%		6.91%		16.75%		16.75%	
Adj R ²	-0.65%		2.16%		1.94%		10.39%		9.77%	

Note: p-values: *** = p<.001; ** = p<.01; * = p<.05; † = p<.10; n=168 for all models.

relationship between founder ownership and the governance index scores in the 3-industry sample, but the variable becomes insignificant upon inclusion of the venture capital and underwriter prestige variables. One positive development with the new sample is the higher R-squared values relative to the software sample.

In Table 9, I present the results of the OLS regressions on the governance index sub-sections for the 3-industry sample, and, again, find results similar to those observed from the software sample. Rounds of venture financing and underwriter prestige are positively related to the adoption of delay provisions, as is founder-chairman duality. Larger firms from this sample tend to adopt fewer protection provisions, and I found biotech firms to adopt fewer voting provisions than firms in other industries. Finally, although the adoption of *Other* provisions was limited, as was in the software sample, I find both founder ownership and the number of venture capital rounds to be positively related to the adoption of *Other* provisions. In summary, the results from the 3-industry sample suggest that my observations are robust and are consistent across industries.

Table 9
 OLS Regression Results for Governance Index Sub-sections (3-Industry Sample)

The sample consists of 168 companies from the biotech, semiconductor, and internet content industries that went public between 1996 and 2000. The dependent variables are the *Delay*, *Protection*, and *Voting* sub-section scores of the IRRC governance index – higher scores indicate less shareholder-friendly governance. *Founder-CEO* is a dummy variable that takes a value of 1 if a firm’s CEO is also one of its founders and 0 if the CEO is a mercenary. *CEO-Chair* is a dummy variable that takes a value of 1 if a firm’s CEO chairs the board of directors and 0 otherwise. *CEO-Own* is the percentage of outstanding equity retained by the CEO after the IPO. *Founder*Chair* is an interaction variable calculated as *Founder-CEO* times *CEO-Chair*. *Mercenary-Chair* is an interaction variable calculated as $[1-Founder-CEO]$ times *CEO-Chair*. *Founder*CEO-Own* is an interaction variable calculated as *Founder-CEO* times *CEO-Own*. *Merc*CEO-Own* is an interaction variable calculated as $[1-Founder-CEO]$ times *CEO-Own*. *Biotech*, *Internet*, and *Semiconductor* are dummy variables that take a value of 1 if a firm does business in a particular industry and 0 otherwise. $\ln(Firm\ Age+1)$ is the natural logarithm of a firm’s age at the time of its IPO (in years) plus one. $\ln(Employees)$ is the natural logarithm of the number of employees at the time of a firm’s IPO. *Risk Factors* is an index that scores the degree of business risk associated with a firm. *VC-Backed* is a dummy variable that takes a value of 1 if a firm had at least one round of venture financing before its IPO and 0 otherwise. *VC Rounds* is the number of venture financing rounds that a firm had before going public. *UW-Rank* is the prestige score for an IPO firm’s underwriters.

Variable	<u>Delay</u>		<u>Protection</u>		<u>Voting</u>		<u>Other</u>	
	b	s.e.	b	s.e.	b	s.e.	B	s.e.
<i>Intercept</i>	1.56 *	0.72	3.78 ***	0.76	2.30 ***	0.57	-0.17	0.16
<i>Biotech</i>	0.15	0.25	-0.17	0.26	-0.39 *	0.19	0.04	0.05
<i>Internet</i>	0.14	0.26	-0.001	0.27	-0.19	0.20	0.04	0.06
<i>Founder*CEO-Own</i>	-0.01	0.01	-0.003	0.01	-0.011	0.008	0.007 ***	0.002
<i>Founder*Chair</i>	0.47 †	0.25	0.34	0.26	0.25	0.20	-0.05	0.05
<i>Mercenary*CEO-Own</i>	-0.02	0.02	0.014	0.02	-0.019	0.014	0.002	0.004
<i>Mercenary*Chair</i>	0.55	0.09	0.21	0.31	-0.003	0.23	0.08	0.06
$\ln(Firm\ Age+1)$	-0.24	0.17	-0.28	0.18	-0.07	0.13	0.004	0.03
$\ln(Employees)$	-0.12	0.09	-0.18 †	0.10	0.01	0.07	0.002	0.02
<i>VC-Backed</i>	0.23	0.05	0.33	0.25	-0.03	0.19	0.004	0.05
<i>VC Rounds</i>	0.09 †	0.05	0.07	0.05	0.05	0.04	0.018 †	0.011
<i>UW-Rank</i>	0.23 ***	0.07	0.00	0.07	0.04	0.05	-0.005	0.015
<i>Risk Factors</i>	0.13	0.07	-0.02	0.07	0.04	0.06	0.02	0.015
R ²	21.66%		10.27%		9.13%		11.90%	
Adj R ²	15.09%		2.75%		1.51%		4.50%	

Note: p-values: *** = p<.001; ** = p<.01; * = p<.05; † = p<.10; n=168 for all models.

DISCUSSION

Perhaps the most surprising outcome from my analyses is the positive relationship between founder-chairman duality and management-friendly governance provision adoption, which was contrary to my expectations. More specifically, the association between founder-chairman duality and more frequent delay and voting provision adoption is suggestive of entrenchment among founders, as they are trying to protect their human capital by making it more difficult for others to instigate organizational changes. Given that founders tend to own larger stakes in their firms, it is also possible that the more frequent adoption of delay and voting provisions is indicative of a principal-principal agency problem, where one group of shareholders attempts to extract private benefits from other shareholders (Young et al., 2002).

Although I found evidence contrary to my expectation of less shareholder-friendly governance in larger firms, the result is not necessarily unreasonable. One possible explanation for this result is that management in larger firms may have an easier time extracting private benefits because of greater dispersion in stockholdings. My finding of stronger corporate governance in larger firms is congruent with my framework that firm size may mitigate CEO stewardship orientation, in that the greater monitoring difficulties associated with large size may also imply the need for more formal and elaborate protection mechanisms for shareholders.

Another interesting result that I obtained was the association between higher underwriter prestige and less shareholder-friendly governance structures. More specifically, I found the former to be positively related to the adoption of delay and voting provisions. Although the results were contrary to my expectations regarding certification and signals of higher firm quality, one could argue that the results provide support for the certification hypothesis. If a firm with less shareholder-friendly provisions can still attract investors to subscribe to its shares with the help of a prestigious underwriter, it naturally follows that the reassurance provided by having a reputable name attached to the offering is at least partially offsetting the additional risks that the firm's less shareholder-friendly governance structure brings.

A similar argument could be made for VC involvement, which I also found to be positively related to delay provision adoption. The fact that investors injected capital into a new venture before taking it public sends a positive signal to prospective IPO investors about the potential of the firm. As with the underwriter situation, the signal may alleviate investors' concerns regarding the firm's governance quality. It is also possible that the increased adoption of delay provisions by VC-backed firms suggest a different kind of principal-principal conflict, where the VCs are attempting to maintain control over the timing of their exit from the investment they made in the firm.

In analyzing the governance index sub-sections, I found that riskier firms in more dynamic environments were less likely to adopt delay and voting provisions, but that the adoption of protection provisions was unaffected by risk factors. The results are intuitive

because while protection provisions focus on protecting managers, delay and voting provisions are meant to protect the firm from change. In more dynamic environments, organizations need to be nimble in order to survive (Romanelli, 1989); therefore, adopting provisions that hinder change would only pose a threat to the firm as a going concern. The reduced level of adoption of the classified board, special meeting, written consent, bylaw, and charter provisions by riskier firms are a testament to this reality.

The unique nature of the Blank Check provision relative to the other individual delay provisions deserves further attention. I found that the adoption of this provision was positively related to VC backing, founder ownership, and firm risk factors. The ability to issue undesignated preferred stock without diluting voting power is another way that founders and/or VCs can maintain control of the firm, thus it would follow naturally that these stakeholders would want to have this option available to them should the need to raise additional capital arise. Building on this, firms in more dynamic market segments are more likely to require additional capital to generate or sustain any competitive advantages, and the ability to issue new shares without a large time lag can provide some degree of reassurance that the operations of the company will continue uninterrupted.

It is entirely possible that individually, governance provisions may be virtually useless, but, when combined, can afford a particular stakeholder (either management or shareholders) some reassurance and/or protection. The positive correlation between the delay provisions and the bylaw and charter provisions indicates that many firms take advantage of the additional delay that can be provided by combining provisions. For

example, necessitating supermajority requirements to remove a classified board system slows the corporate control process. For managers, the positive correlation between the golden parachute and compensation agreement provisions solidifies managers' positions in the organization by guaranteeing them bonuses upon a change in control whether they remain with the firm or not.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Probably the most important issue to take into consideration is that the data I use comes from a specific time period, and thus might not be consistent with different time periods. The IPO market is influenced, to a certain extent, by market patterns that are unstable over time (Tiniç, 1988; Ritter, 1991). Given the uneven distribution of IPOs over time and market cycles, this drawback may be inherent in IPO research. The results obtained in this research may not be extrapolated to firms that are at a different stage of their life cycle. Firms that have not gone through the IPO process or firms that had their IPO decades ago are likely different and will therefore adopt substantially different governance provisions. For example, not all IPOs are start-ups. IPOs can be the result of a decision to spin off a division of a larger company, although this type of firm was not included in my data. Also, although I draw comparisons over firms from three industries, the results may not be generalizable because all three industries are knowledge-intensive. Companies in industries where cost/volume/profit strategies dominate differentiation/R&D strategies may very well structure themselves differently. It is also worthy to note that although the IRRC index weights each governance provision equally, there are likely to be differences in the degree of impact on the firm for each provision. Combinations of provisions complicate the matter further, and the index does not control for synergy effects caused by the interaction between provisions. Finally, it is important to point out the limitations related to the collection of archival data, which may result in biases or errors. However, the contribution of multiple individuals to collect and verify the data should have minimized the errors made during the collection process.

My research examines and contrasts agency theory and stewardship theory within the specific context of firms preparing to become publicly traded companies. Following Davis, Schoorman, and Donaldson's (1997) contention that each of the two theories are more applicable to different situations and are not competing theories, I compared firms within a similar context that have one key difference, the choice of the executive leading the firm at the time of the IPO. My research shows that there appear to be substantive governance differences between founder- and mercenary-led firms, as well as between VC and non-VC backed firms. Future governance research examining this context should explore the reasons for these differences. Although I did find some difference in governance structures between founder- and mercenary-led firms, it is entirely possible that the mild strength of the results obtained were an indication that the agent/steward framework on which I built my work may not be the best lens through which to view governance in IPOs. Researchers examining this context need to further explore and explain the conceptual and empirical differences between founders and mercenaries. Perhaps one possible alternative is to view the firm as a portfolio of risky opportunities that an investor can buy into, and analyze how they make their investment decisions based on the different risks that firms face.

REFERENCES

- Adams, R., Almeida, H., and Ferreira, D., "Powerful CEOs and Their Impact on Corporate Performance," *Review of Financial Studies*, 18, 2005, 1403-1432.
- Aggarwal, R., and Rivoli, P., "Fads in the Initial Public Offering Market?" *Financial Management*, 19(4), 1990, 45-57.
- Agrawal, A. and Mandelker, G., "Managerial Incentives and Corporate Investment and Financing Decisions," *Journal of Finance*, 42, 1987, 823-837.
- Aguilera, R. and Jackson, G., "The Cross-National Diversity of Corporate Governance: Dimensions and Determinants," *Academy of Management Review*, 28, 2003, 447-465.
- Amburgey, T., Kelly, D. and Barnett, W., "Resetting the Clock: The Dynamics of Organizational Change and Failure," *Administrative Science Quarterly*, 38, 1993, 51-73.
- Anderson, R., Bates, T., Bizjak, J., and Lemmon, M., "Corporate Governance and Firm Diversification," *Financial Management*, 29, 2000, 5-22.
- Anderson, R. and Reeb, D., "Founding-family Ownership and Firm Performance: Evidence from the S&P 500," *Journal of Finance*, 58, 2003, 1301-1328.
- Anderson, R. and Reeb, D., "Board Composition: Balancing Family Influence in S&P 500 Firms," *Administrative Science Quarterly*, 49, 2004, 209-237.
- Angwin, D., Stern, P., and Bradley, S., "Agent or Steward: The Target CEO in a Hostile Takeover: Can a Condemned Agent Be Redeemed?" *Long Range Planning*, 37, 2004, 239-258.
- Arugaslan, O., Cook, D., and Kieschnick, R., "Monitoring as Motivation for IPO Underpricing," *Journal of Finance*, 59, 2004, 2403-2420.
- Audretsch, D. and Lehmann, E., "The Effects of Experience, Ownership, and Knowledge on IPO Survival: Empirical Evidence from Germany," *Review of Accounting and Finance*, 4(4), 2005, 13-33.
- Baker, M. and Gompers, P., "Executive Ownership and Control in Newly Public Firms: The Role of Venture Capitalists," SSRN Working Paper, 1999, <http://ssrn.com/abstract=165173>.
- Baker, M. and Gompers, P., "The Determinants of Board Structure at the Initial Public Offering," *Journal of Law and Economics*, 46, 2003, 569-598.

- Baron, J., Hannan, M., and Burton, D., "Labor Pains: Change in Organizational Models and Employee Turnover in Young, High-tech Firms," *American Journal of Sociology*, 106, 2001, 960-1012.
- Barney, J. B., "The Debate Between Traditional Management Theory and Organizational Economics – Substantive Differences or Intergroup Conflict," *Academy of Management Review*, 15, 1990, 382-393.
- Barringer, B., Jones, F., and Neubaum, D., "A Quantitative Content Analysis of the Characteristics of Rapid-Growth Firms and Their Founders," *Journal of Business Venturing*, 20, 2005, 663-687.
- Barry, C., Muscarella, C., Peavy, J. III, and Vetsuypens, M., "The Role of Venture Capital in the Creation of Public Companies: Evidence from the Going-public Process," *Journal of Financial Economics*, 27, 1990, 447-471.
- Beatty, R. and Ritter, J., "Investment Banking, Reputation, and the Underpricing of Initial Public Offerings," *Journal of Financial Economics*, 15, 1986, 213-232.
- Bhagat, S. and Black, B., "Do Independent Directors Matter?" Working paper, Columbia University, 1996.
- Boehmer, E., "The Informational Content of Initial Public Offerings: A Critical Analysis of the Ownership-retention Signalling Model," *International Review of Financial Analysis*, 2, 1993, 77-95.
- Boeker, W. and Karichalil, R., "Entrepreneurial Transitions: Factors Influencing Founder Departure," *Academy of Management Journal*, 45, 2002, 818-826.
- Booth, J., and Chua, L., "Ownership Dispersion, Costly Information, and IPO Underpricing," *Journal of Financial Economics*, 41, 1996, 291-310.
- Boyd, B., "CEO Duality and Firm Performance: A Contingency Model," *Strategic Management Journal*, 16, 1995, 301-312.
- Bradley, D., and Jordan, B., "Partial Adjustment to Public Information and IPO Underpricing," *Journal of Financial and Quantitative Analysis*, 37, 2002, 595-616.
- Bradley, D., Jordan, B., Yi, H., and Roten, I., "Venture Capital and IPO Lockup Expiration," *The Journal of Financial Research*, 24, 2001, 465-492.
- Brau, J., Brown, R., and Osteryoung, J., "Do Venture Capitalists Add Value to Small Manufacturing Firms? An Empirical Analysis of Venture and Nonventure Capital-Backed Initial Public Offerings," *Journal of Small Business Management*, 42, 2004, 78-92.

- Brau, J. and Fawcett, S., "Initial Public Offerings: An Analysis of Theory and Practice," *Journal of Finance*, 61, 2006, 399-436.
- Brav, A., and Gompers, P., "Myth or Reality? The Long-Run Underperformance of Initial Public Offerings: Evidence from Venture and Nonventure Capital-Backed Companies," *Journal of Finance*, 52, 1997, 1791-1821.
- Brown, K., Dittmar, A., and Servaes, H., "Corporate Governance, Incentives, and Industry Consolidations," *Review of Financial Studies*, 18, 2005, 241-270.
- Burton, B., Helliar, C., and Power, D., "The Role of Corporate Governance in the IPO Process: a note," *Corporate Governance* (Oxford), 12, 2004, 353-360.
- Cai, N., Ramchand, L., and Warga, A., "The Pricing of Equity IPOs that Follow Public Debt Offerings," *Financial Management*, 33(4), 2004, 5-26.
- Caldwell, C. and Karri, R., "Organizational Governance and Ethical Systems: A Covenantal Approach to Building Trust," *Journal of Business Ethics*, 58, 2005, 249-260.
- Carter, R. and Manaster, S., "Initial Public Offerings and Underwriter Reputation," *Journal of Finance*, 45, 1990, 1045-1067.
- Carter, R., Dark, F., and Singh, A., "Underwriter Reputation, Initial Returns, and the Long-run Performance of IPO Stocks," *Journal of Finance*, 53, 1998, 285-311.
- Casares Field, L., and Hanka, G.R., "The Expiration of IPO Share Lockups," *Journal of Finance*, 56, 2001, 471-500.
- Casares Field, L., and Sheenan, D., "IPO Underpricing and Outside Blockholdings," *Journal of Corporate Finance*, 10, 2004, 263-280.
- Certo, S., "Influencing Initial Public Offering Investors with Prestige: Signaling with Board Structures," *Academy of Management Review*, 28, 2003, 432-446.
- Certo, S., Covin, J., Daily, C., and Dalton, D., "Wealth and the Effects of Founder Management Among IPO-stage New Ventures," *Strategic Management Journal*, 22, 2001, 641-658.
- Certo, S., Daily, C., Cannella Jr., A., and Dalton, D., "Giving Money to Get Money: How CEO Stock Options and CEO Equity Enhance IPO Valuations," *Academy of Management Journal*, 46, 2003, 643-687.
- Certo, S., Daily, C., and Dalton, D., "Signaling Firm Value through Board Structure: An Investigation of Initial Public Offerings," *Entrepreneurship Theory and Practice*, 26(2), 2001, 33-50.

- Chemmanur, T. and Paeglis, I., "Management Quality, Certification, and Initial Public Offerings," *Journal of Financial Economics*, 76, 2005, 331-368.
- Chen J., Hong, H., and Stein, J., "Breadth of Ownership and Stock Returns," *Journal of Financial Economics*, 66, 2002, 171-205.
- Clarkson, P., Dontoh, A., Richardson, G., and Sefcik, S., "Retained Ownership and the Valuation of Initial Public Offerings: Canadian Evidence," *Contemporary Accounting Research*, 8, 1991, 115-131.
- Clarkson, P., and Merkley, J., "Ex Ante Uncertainty and the Pricing of Initial Public Offerings: Further Canadian Evidence," *Canadian Journal of Administrative Sciences*, 11, 1994, 54-67.
- Cliff, M., and Denis, D., "Do IPO Firms Purchase Analyst Coverage with Underpricing?" *Journal of Finance*, 59, 2004, 2871-2901.
- Coase, R., "The Nature of the Firm," *Economica*, 4, 1937, 386-405.
- Cohen, B. and Dean, T., "Information Asymmetry and Investor Valuation of IPOs: Top Management Team Legitimacy as a Capital Market Signal," *Strategic Management Journal*, 26, 2005, 683-690.
- Cumming, D., Fleming, G., and Suchard, J., "Venture Capitalist Value-added Activities, Fundraising, and Drawdowns," *Journal of Banking and Finance*, 29, 2005, 295-331.
- Daily, C. and Dalton, D., "Bankruptcy and Corporate Governance: The Impact of Board Composition and Structure," *Academy of Management Journal*, 37, 1994, 1603-1617.
- Dalton, D., Daily, C., Ellstrand, A., and Johnson, J., "Meta-analytic Reviews of Board Composition, Leadership Structure, and Financial Performance," *Strategic Management Journal*, 19, 1998, 269-290.
- Davis, J., Schoorman, F., and Donaldson, L., "Toward a Stewardship Theory of Management," *Academy of Management Review*, 22, 1997, 20-47.
- DiMaggio, P. and Powell, W. Eds., *The New Institutionalism in Organizational Analysis*, Chicago: University of Chicago Press, 1991.
- Donaldson, L., "The Ethereal Hand: Organizational Economics and Management Theory," *Academy of Management Review*, 15, 1990a, 369-381.
- Donaldson, L., "A Rational Basis for Criticisms of Organizational Economics: A Reply to Barney," *Academy of Management Review*, 15, 1990b, 394-401.

- Donaldson, L. and Davis, J., "Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns," *Australian Journal of Management*, 16, 1991, 49-65.
- Duncan, R., "Characteristics of Organizational Environments and Perceived Environmental Uncertainty," *Administrative Science Quarterly*, 17, 1972, 313-327.
- Espenlaub, S., Goergen, M., Khurshed, A., and Renneboog, L., "Lock-In Agreements in Venture-Capital Backed UK IPOs," *ECGI – Finance Working Paper No. 26*, September 2003.
- Fama, E., "Agency Problems and the Theory of the Firm," *Journal of Political Economy*, 88, 1980, 288-307.
- Fama, E. and French, K., "New Lists: Fundamentals and Survival Rates," *Journal of Financial Economics*, 73, 2004, 229-269.
- Fama, E. and Jensen, M., "Separation of Ownership and Control," *Journal of Law and Economics*, 26, 1983, 327-349.
- Fernando, C., Gatchev, V., and Spindt, P., "Wanna Dance? How Firms and Underwriters Choose Each Other," *Journal of Finance*, 60, 2005, 2437-2470.
- Field, L. and Karpoff, J., "Takeover Defences of IPO Firms," *Journal of Finance*, 57, 2002, 1857-1889.
- Filatotchev, I., Chahine, S., Wright, M., and Arberk, M., "Founders' Characteristics, Venture Capital Syndication, and Governance in Entrepreneurial IPOs," *International Entrepreneurship and Management Journal*, 1, 2005, 419-439.
- Filatotchev, I., Toms, S., and Wright, M., "The Firm's Strategic Dynamics and Corporate Governance Life Cycle," *International Journal of Managerial Finance*, 2, 2006, 256-279.
- Fischer, H., Pollock, T., "Effects of Social Capital and Power on Surviving Transformational Change: The Case of Initial Public Offerings," *Academy of Management Journal*, 47, 2003, 463-481.
- Florin, J., "Is Venture Capital Worth It? Effects on Firm Performance and Founder Returns," *Journal of Business Venturing*, 20, 2005, 113-135.
- Fox, M. and Hamilton, R., "Ownership and Diversification: Agency Theory or Stewardship Theory," *Journal of Management Studies*, 31, 1994, 69-82.
- Francis, B., and Hasan, J., "The Underpricing of Venture and Nonventure Capital IPOs: An Empirical Investigation," *Journal of Financial Services Research*, 19, 2001, 99-113.

- Frye, M. and Smith, S., "IPO Shocks to Corporate Governance: Stockholder vs. Stakeholder Firms," working paper, University of Central Florida, 2003.
- Galbraith, J., *Designing Complex Organizations*, Reading, MA: Addison-Wesley, 1973.
- Gedaljovic, E., Lubatkin, M., and Schulze, W., "Crossing the Threshold from Founder Management to Professional Management: A Governance Perspective," *Journal of Management Studies*, 41, 2004, 899-912.
- Gompers, P., "Optimal Investment, Monitoring, and the Staging of Venture Capital," *Journal of Finance*, 50, 1995, 1461-1490.
- Gompers, P., Ishii, J., and Metrick, A., "Corporate Governance and Equity Prices," *Quarterly Journal of Economics*, 118, 2003, 107-155.
- Guo, R., "Information Collection and IPO Underpricing," *Review of Quantitative Finance and Accounting*, 25, 2005, 5-19.
- Hamao, Y., Packer, F., and Ritter, J., "Institutional Affiliation and the Role of Venture Capital: Evidence from Initial Public Offerings in Japan," *Working Paper*, March 2000.
- Hensler, D., "Litigation Costs and the Underpricing of Initial Public Offerings," *Managerial and Decision Economics*, 16, 1995, 111-128.
- Higgins, M. and Gulati, R., "Stacking the Deck: The Effects of Top Management Backgrounds on Investor Decisions," *Strategic Management Journal*, 27, 2006, 1-25.
- Hochberg, Y., "Venture Capital and Corporate Governance in the Newly Public Firm," Paper presented at the AFA 2004 San Diego conference, 2004.
- Hogan, K. and Olson, G., "The Pricing of Equity Carve-Outs During the 1990s," *Journal of Financial Research*, 27, 2004, 521-537.
- Hughes, P., and Thakor, A., "Litigation Risk, Intermediation, and the Underpricing of Initial Public Offerings," *Review of Financial Studies*, 5, 1992, 709-742.
- Hunt-McCool, J., Koh, S., and Francis, B., "Testing for Deliberate Underpricing in the IPO Premarket: A Stochastic Frontier Approach," *Review of Financial Studies*, 9, 1996, 1251-1269.
- Ibbotson, R., "Price Performance of Common Stock New Issues," *Journal of Financial Economics*, 2, 1974, 235-272.
- Jain, B., and Kini, O., "Venture Capitalist Participation and the Post-Issue Operating Performance of IPO Firms" *Managerial and Decision Economics*, 16, 1995, 593-606.

- Jain, B., and Kini, O., "Does the Presence of Venture Capitalists Improve the Survival Profile of IPO Firms?" *Journal of Business Finance and Accounting*, 27, 2000, 1139-1176.
- Jayaraman, N., Khorana, A., Nelling, E., and Covin, J., "CEO founder status and firm financial performance," *Strategic Management Journal*, 21, 2000, 1215-1224.
- Jensen, M. and Meckling, W., "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure," *Journal of Financial Economics*, 3, 1976, 305-360.
- John, K. and Senbet, L., "Corporate Governance and Board Effectiveness," *Journal of Banking and Finance*, 22, 1998, 371-403.
- Kelly, C. and Switzer, L., "Corporate Governance Mechanisms and Small Cap Firm Performance: Evidence for Canada," M.Sc. thesis, Concordia University, 2005.
- Kosnik, R., "Greenmail, A Study of Board Performance in Corporate Governance," *Administrative Science Quarterly*, 32, 1987, 163-185.
- Kraus, T., and Burghof, H., "Post-IPO Performance and the Exit of Venture Capitalists," Paper presented at the EFMA 2003 Helsinki Meetings, January 2003.
- Lamertz, K. and Martens, M., "The Socialization of Organizations: Formal and Informal Sources of Strategy Homogeneity Among IPO Firms," Paper presented at the Academy of Management Conference, Honolulu, HI, 2005.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R., "Investor Protection and Corporate Governance," *Journal of Financial Economics*, 58, 2000, 3-27.
- Lee, H., "The Hidden Costs of Private Benefits of Control: Value Shift and Efficiency," *Journal of Corporation Law*, 29, 2004, 719-734.
- Lee, P., and Wahal, S., "Grandstanding, Certification and the Underpricing of Venture Capital Backed IPOs," *Journal of Financial Economics*, 73, August 2004, 375-407.
- Lerner, J., "Venture Capitalists and the Oversight of Private Firms," *Journal of Finance*, 50, 1995, 301-318.
- Lester, R., Certo, S., Dalton, C., Dalton, D., and Cannella, A., "Initial Public Offering Investor Valuations: An Examination of Top Management Team Prestige and Environmental Uncertainty," *Journal of Small Business Management*, 44, 2006, 1-26.
- Loughran, T., and Ritter, J., "The New Issues Puzzle," *Journal of Finance*, 50, 1995, 23-52.

- Loughran, T., and Ritter, J., "Why Has IPO Underpricing Changed Over Time?" *Financial Management*, 33(3), 2004, 5-37.
- MacCrimmon, K. and Martens, M., "Predicting Post-IPO Performance From Ex-Ante Risk Measures," Paper included in the Strategy Division Proceedings, Administrative Sciences Association of Canada Conference, London, Ontario, 2001.
- Martens, M., "IPO Effects: Corporate Restructuring When a Firm Goes Public," *Journal of Public Affairs*, 4, 2004, 125S-139S.
- Martens, M., Walker, T., and Arcand, J-P, "Visionary vs. Mercenary: Short and Long Term Consequences of Founder Transitions in IPO Firms," working paper, Concordia University, 2007.
- Megginson, W., and Weiss, K., "Venture Capitalist Certification in Initial Public Offerings," *The Journal of Finance*, 46, 1991, 879-903.
- Mello, A., and Parsons, J., "Going Public and the Ownership Structure of the Firm," *Journal of Financial Economics*, 49, 1998, 79-109.
- Mintzberg, H., *The Structure of Organizations*, Englewood Cliffs, NJ: Prentice-Hall, 1979.
- Meulbroek, L., "The Efficiency of Equity-linked Compensation: Understanding the Full Cost of Awarding Executive Stock Options," *Financial Management*, 30, 2001, 5-44.
- Mikkelson, W., Partch, M., and Shah, K., "Ownership and Operating Performance of Companies that Go Public," *Journal of Financial Economics*, 44, 1997, 281-307.
- Monks, R. and Minow, N., *Corporate Governance*, Cambridge: Basil Blackwell, 1995.
- Morck, R., Shleifer, A., and Vishny, R., "Do Managerial Objectives Drive Bad Acquisitions?" *Journal of Finance*, 25, 1990, 31-48.
- Nelson, T., "The Persistence of Founder Influence: Management, Ownership, and Performance Effects at the Initial Public Offering," *Strategic Management Journal*, 24, 2003, 707-724.
- Peristiani, S. and Hong, G., "Pre-IPO Financial Performance and Aftermarket Survival," *Current Issues in Economics and Finance*, 10(2), 2004, 1-7.
- Pinnell, M., *State Takeover Laws*, Washington, DC: Investor Responsibility Research Center, Inc., 1989.

- Purnanandam, A., "Are IPOs Really Underpriced?" *Review of Financial Studies*, 17, 2004, 811-848.
- Raheja, C., "Determinants of Board Size and Composition: A Theory of Corporate Boards," *Journal of Financial and Quantitative Analysis*, 40, 2005, 283-306.
- Reber, B., Berry, B., and Toms, S., "Firm resources and quality signalling: evidence from UK initial public offerings," *Applied Financial Economics*, 15, 2005, 575-586.
- Ritter, J., "The Long-run Performance of Initial Public Offerings," *Journal of Finance* 46, 1991, 3-27.
- Ritter, J., Welch, I., "A Review of IPO Activity, Pricing, and Allocations," *Journal of Finance* 57, 2002, 1795-1828.
- Roberts, J., McNulty, T., and Stiles, P., "Beyond Agency Conceptions of the Work of the Non-Executive Director: Creating Accountability in the Boardroom," *British Journal of Management*, 16, 2005, S5-S26.
- Romanelli, E., "Environments and Strategies of Organization Start-up: Effects on Early Survival," *Administrative Science Quarterly*, 34, 1989, 369-387.
- Rosenbaum, V., *Corporate Takeover Defences*, Washington, DC: Investor Responsibility Research Center, Inc., 1998.
- Rosenstein, S. and Wyatt, J., "Outside Directors, Board Independence, and Shareholder Wealth," *Journal of Financial Economics*, 26, 1990, 175-191.
- Shachmurove, Y., "The Reality of IPO Performance: An Empirical Study of Venture-Backed Public Companies," *PIER Working Paper No. 04-030*, July 2004.
- Schultz, P., "Pseudo Market Timing and the Long-Run Performance of IPOs," *Journal of Finance*, 58, 2003, 483-518.
- Schulze, W., Lubatkin, M., and Dino, R., "Exploring the Agency Consequences of Ownership Dispersion Among the Directors of Private Family Firms," *Academy of Management Journal*, 46, 2003, 179-195.
- Schulze, W., Lubatkin, M., Dino, R., and Buchholtz, A., "Agency Relationships in Family Firms: Theory and Evidence," *Organization Science*, 122, 2001, 99-116.
- Shleifer, A. and Vishny, R., "A Survey of Corporate Governance," *Journal of Finance*, 52, 1997, 737-783.
- Shleifer, A. and Wolfenzon, D., "Investor Protection and Equity Markets," *Journal of Financial Economics*, 66, 2002, 3-27.

- Subrahmanyam, A. and Titman, S., "The Going-Public Decision and the Development of Financial Markets," *Journal of Finance*, 54, 1999, 1045-1082.
- Tiniç, S., "Anatomy of Initial Public Offerings of Common Stock," *Journal of Finance* 43, 1988, 789-823.
- Tirole, J., "Corporate Governance," *Econometrica*, 69, 2001, 1-35.
- Tosi, H., Brownlee, A., Silva, P. and Katz, P., "An Empirical Exploration of Decision-making Under Agency Controls and Stewardship Structure," *Journal of Management Studies*, 40, 2003, 2053-2072.
- Wasserman, N., "Founder-CEO Succession and the Paradox of Entrepreneurial Success," *Organization Science*, 14, 2003, 149-172.
- Wasserman, N., "Stewards, Agents, and the Founder Discount: Executive Compensation in New Ventures," Forthcoming, *Academy of Management Journal*, 2006.
- Welbourne, T. and Andrews, A., "Predicting the Performance of Initial Public Offerings: Should Human Resource Management be in the Equation," *Academy of Management Journal*, 39, 1996, 891-919.
- Williamson, O., "Corporate Finance and Corporate Governance," *Journal of Finance*, 43, 1988, 567-591.
- Wright, P., Ferris, S., Sarin, A., and Awasthi, V., "The Impact of Corporate Insider, Blockholder, and Institutional Equity Ownership on Firm Risk-taking," *Academy of Management Journal*, 39, 1996, 441-463.
- Wruck, K., "Equity Ownership Concentration and Firm Value: Evidence from Private Equity Financings," *Journal of Financial Economics*, 23, 1989, 3-28.
- Yermack, D., "Higher Market Valuation of Companies with a Small Board of Directors," *Journal of Financial Economics*, 40, 1996, 185-202.
- Young, M., Peng, M., Ahlstrom, D., and Bruton, G., "Governing the Corporation in Emerging Economies: A Principal-Principal Agency Perspective," Paper presented at the Academy of Management Conference, Denver, CO, 2002.
- Zahra, S. and Filatotchev, I., "Governance of the Entrepreneurial Threshold Firm: A Knowledge-Based Perspective," *Journal of Management Studies*, 41, 2004, 885-897.
- Zingales, L., "Insider Ownership and the Decision to Go Public," *Review of Economic Studies*, 62, 1995, 425-448.

APPENDIX – DESCRIPTION OF GOVERNANCE PROVISIONS

Delay Provisions

Blank Check – The firm’s board of directors has the authority to issue shares of preferred stock without further shareholder approval and can determine the rights and voting associated with said new shares.

Classified Board – The firm’s board of directors is split into two or three classes of directors, with only one class being elected each year.

Special Meeting – Limits ability of stockholders to call emergency meetings of stockholders; examples may include restrictions on who may call such a meeting or a minimum level of shares in the firm required to call a meeting.

Written Consent – Provisions in the firm’s charter or by-laws which limit or forbid stockholder action to be taken outside of meetings.

Protection Provisions

Compensation Plans – Bonuses payable to executives upon a change in control.

Golden Parachutes – Severance packages payable to executives if they are terminated following a change in control.

Severance – Payments made to executives if they are terminated in situations not involving a change of control.

Indemnification – Provisions in the firm’s charter or by-laws that require the company to cover the cost of legal fees and settlements should a director or officer be a party to litigation.

Contracts – Individual contracts between the firm and its directors and/or officers that require the company to cover the cost of legal fees and settlements should a director or officer be a party to litigation.

Liability – Provisions in the firm’s charter or by-laws that limit or eliminate directors’ and officers’ liability for monetary damages.

Voting Provisions

By-Laws – Limits or eliminates shareholders’ ability to modify company by-laws; examples include requiring 75% stockholder approval to amend firm by-laws.

Charter – Limits or eliminates shareholders' ability to modify the company's certificate of incorporation; examples include requiring 75% stockholder approval to amend said certificate.

Cumulative Voting – Allows shareholders to vote their shares for one or more directors. For example, if an investor owns 100 shares in a firm, and there are 5 directors up for election, they may place 500 votes for one director. This is good for shareholders because it requires lower levels of ownership to elect directors of shareholders' choosing.

Secret Ballot – Confidential voting where votes are tallied by a third party and management does not look at completed proxy cards. This is good for shareholders because they do not have to worry about being pressured by management as to how to vote their shares.

Supermajority – Requires the approval of more than 50% of outstanding votes to approve a merger or a change in control.

Unequal Voting – Limits voting rights of some shareholders or classes of shares and expands rights of others; examples include two classes of shares, one of which receives one vote per share and another which receives ten votes per share.

State Laws

Antigreenmail Laws – Restricts the firm from repurchasing shares from corporate raiders.

Directors' Duties Laws – Laws which allow firms' boards of directors to reject a takeover bid based on considerations for other stakeholders; examples include potential adverse effects on employees, suppliers, or customers.

Fair Price Laws – Limits the price range on two-tiered tender offers; an example is when a firm places a bid for 75% of the shares in the firm and a different price for the remaining 25% of the shares.

Cash-Out Laws – Similar to fair-price laws and provisions but applicable outside of takeover and tender offer situations.

Control-Share Acquisition Laws – Similar to supermajority requirements in that the approval of more than 50% of outstanding votes is necessary to approve a merger or a change in control.

Business Combination Laws – Imposes mandatory delays on certain transactions between the firm and interested shareholders (usually two to five years), unless the transaction is approved by the firm's board of directors.

Other Provisions

Antigreenmail – Restricts the firm from repurchasing shares from corporate raiders.

Directors' Duties – Provisions which allow the board of directors to reject a takeover bid based on considerations for other stakeholders; examples include potential adverse effects on employees, suppliers, or customers.

Fair Price – Limits the price range on two-tiered tender offers; an example is when a firm places a bid for 75% of the shares in the firm and a different price for the remaining 25% of the shares.

Poison Pill – Provides management with the opportunity to issue deeply discounted shares to all shareholders except those who have submitted a tender offer for the firm's shares.

Pension Parachutes – Prevents an acquirer from using surplus cash in the firm's pension fund of the target to finance the acquisition.

Silver Parachutes – Severance packages payable to lower-level employees if they are terminated following a change in control.