Control and Exit in Venture Capital Relationships

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Introduction

Before venture capitalists invest, they plan for exit. Exit serves two important functions: (1) it allows venture capitalists to recycle their nonfinancial contributions from successful companies to early stage companies; and (2) it allows fund investors to evaluate the quality of their venture capitalists and, if necessary, to reallocate funds from venture capital to other investments or from less successful venture capitalists to more successful venture capitalists.[1] Although any form of exit would accomplish these functions, the choice among exit options may have important distributional consequences between the entrepreneur and the venture capitalist.[2] This paper peers through the lens of financial contracting theory[3] and uses data from 375 venture-backed companies to analyze the methods employed by venture capitalists and entrepreneurs to mitigate conflicts regarding potential exit strategies.

The existing literature on venture capital exits is limited, but it has been expanding rapidly. Early research focused on the role of venture capitalists in developing companies that could complete an initial public offering.[4] More recent work has expanded to consider the relationships among various exit options. The most ambitious work is by Douglas Cumming and Jeff MacIntosh,[5] which provides a general theory of venture capital exits: "a VC will exit from an investment when the projected marginal value added as a result of its efforts, at any given measurement interval, is less than the projected marginal cost of these efforts." This general theory provides a useful starting point for thinking about venture capital exits. Most importantly for present purposes, the authors recognize the effect of *time* on the exit calculus:

> We posit that VC value added will decline over time until it is equal to or less than maintenance costs. VC value added will be greatest at the start of the investment relationship, when the VC is most likely to be able to bring managerial and financial discipline to the enterprise, help identify and implement product development strategies, identify legal, accounting and marketing expertise, and so on. However, the ability to add value will decline over time as the firm matures, management becomes more seasoned, the most pressing product development and marketing issues have been worked out, and the firm's various business contacts (including legal, accounting, investment banking, marketing channels, suppliers, and customers) have been put in place. In the normal course of events, the value added will decline to the point where it equals or exceeds the maintenance costs.[6]

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[1] Bernard S. Black & Ronald J. Gilson, *Venture capital and the structure of capital markets: banks versus stock markets*, 47 J. Fin. Econ. 243 (1998).

[2] *See, e.g.*, Eric Berglöf, *A Control Theory of Venture Capital*, 10 J. L. Econ. & Org. 247 (1994).

[3] For an introduction to the financial contracting literature, see Oliver Hart, *Financial Contracting*, 34 J. Econ. Lit. 1079 (2001).

[4] Paul Gompers & Josh Lerner, *The Venture Capital Cycle* (1999); William L. Megginson & K.A. Weiss, *Venture Capitalist Certification in Initial Public Offerings*, 46 J. Fin. 879 (1991); Christopher Barry, et al., *The role of venture capitalists in the creation of a public company*, 27 J. Fin. Econ. 447 (1991).

[5] Douglas J. Cumming & Jeffrey G. MacIntosh, *Venture Capital Exits in Canada and the United States*, 53 U. Toronto L. J. 101 (2003).

[6] *Id.* at __.

Despite recognizing that a venture capitalist's incentive to exit will increase with the passage of time, Cumming and MacIntosh do not fully consider the constraints on venture capitalist action. Implicit in their general theory of venture capital exits is an assumption that venture capitalists control the timing of their exit, subject only to market constraints.[7] This is a commonly held view in the academic literature, which often suggests that venture capitalists assume control over the timing and means of exit from the beginning of the relationship, precisely to provide such pressure on the entrepreneur. For example, the account of venture investing offered by Black and Gilson suggests that entrepreneurs routinely surrender control to investors:

> Even if entrepreneurs value control highly, they cannot demand its retention at the time that they are seeking venture financing. The typical entrepreneur has not previously run a startup company. Venture capitalists rationally insist on retaining control to protect themselves against the risk that the entrepreneur would not run the firm successfully or will extract private benefits from the firm instead of maximizing its value to all investors.[8]

While such accounts accurately portray the reality of some venture capital relationships, they significantly overstate the rights of most venture capitalists to control exit decisions. Generally speaking, venture capitalists may exert control over exit in one of two ways: by controlling the board of directors of the portfolio company or by obtaining specific contractual rights of exit.[9] As will be discussed in more detail below, venture capitalists typically do not obtain control over the board of directors from the beginning of the investment relationship, and contractual rights that allow the venture capitalist to initiate – or, perhaps more importantly, *threaten* to initiate – exit typically become available only in later stages of the relationship. In short, venture capitalists seem to be subject to "lock in," at least during the early stages of the investment relationship. What are we to make of this?

The economic model that has attracted the most support in evaluating venture capital contracts was developed by economists Phillippe Aghion and Patrick Bolton ("A&B").[10] A&B

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[7] They describe a number of factors that "determine not merely when, but by what means a VC will exit a particular investment. These include: (1) the ability of the new owners to value the firm and monitor the managers; (2) managerial incentives in the new configuration of share ownership; (3) the potential for the realization of transaction synergies upon combining the firm's product or technology with other products or technologies; (4) the scale of the acquisition, and the ability of the new owner to meet present and future capital requirements; (5) the ability of the new owner(s) to bear risk; (6) the extent to which a particular form of exit enhances the VC's reputation; (7) whether the form of exit turn the VC's investment into cash in a short period of time; (8) the state of IPO markets; and (9) whether the fund termination date is looming." *Id.* at __.

[8] Black & Gilson, *supra* note 2, at 259.

[9] Of course, a venture capitalist possessing neither control over the board of directors nor specific contractual rights of exit can still determine the timing of exit, either by selling shares in a private transaction or by walking away from the investment. In many instances, a private sale of shares is impossible, except at fire sale prices. Given our focus on mitigation of conflicts between venture capitalists and entrepreneurs, therefore, these options suggest no meaningful level of control.

[10] Philippe Aghion & Patrick Bolton, *An Incomplete Contracts Approach to Financial Contracting*, 59 Rev. Econ. Stud. 473 (1992). In the most complete survey of venture capital contracts to date, Steven Kaplan and Per Strömberg conclude that the Aghion & Bolton model provides the most complete theoretical explanation of venture

begin from the premise that conflicts between entrepreneurs and investors may arise because entrepreneurs care about both pecuniary and non-pecuniary returns, whereas investors care only about pecuniary returns.[11] They add to this premise the realistic assumption that complete allocation of decision making control through contract is impossible. They then conclude that potential conflicts between entrepreneurs and investors are best resolved through contingent control allocation. Generally speaking, A&B contend that entrepreneurs should retain control as long as their private benefits are aligned with total investment returns. On the other hand, investors should take control when the entrepreneur's private benefits would inspire choices that reduce the investor's pecuniary returns. According to A&B, this form of contingent control allocation can be accomplished by standard debt financing.

William Bratton has adapted the contingent-control model to venture capital contracting.[12] Given the inevitability of incomplete contracts and the ineffectiveness of *ex post* bargaining, Bratton considers the role of contract law. Relying heavily on the empircal work of Steven Kaplan and Per Strömberg,[13] Bratton assumes that entrepreneurs and venture capitalists *share control* of their companies by placing independent directors on the board as "swing votes."[14]

Under this account of venture capital contracts, "in a majority of venture capital transactions, the venture capitalist takes a cognizable risk of not getting the results it wants on the downside."[15] This conclusion prompts an obvious question: why would venture capitalists place themselves in a position of such inherent vulnerability? After all, the "Golden Rule of Finance" holds that "the person with the gold makes the rules." Bratton speculates that shared control is the governance device that entrepreneurs and venture capitalists use to sort out decision making power in circumstances where contracts are incomplete.[16] This may explain some venture capital investments, but in the broad sweep of venture capital investments, "shared control" is an illusion.

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capital contracts. Steven Kaplan & Per Strömberg, *Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts*, 70 Rev. Econ. Stud. 281 (2003). *See also*, Thomas Hellman, *The Allocation of Control Rights in Venture Capital Contracts*, 29 Rand J. Econ. 57 (1998).

[11] This premise may be flawed in the venture capital context. That venture capitalists care about non-pecuniary returns is well established. For example, Paul Gompers has demonstrated that young venture capital firms are inclined to engage in "grandstanding" to build reputational capital. Paul Gompers, *Grandstanding in the Venture Capital Industry*, 43 J. Fin. Econ. 133 (1991).

[12] William W. Bratton, *Venture Capital on the Downside: Preferred Stock and Corporate Control*, 100 Mich. L. Rev. 891 (2002).

[13] Kaplan & Strömberg, *supra* note 10.

[14] Perhaps the most important revelation from Kaplan and Strömberg's empirical work was that voting rights and board seats are determined separately. The default rules in corporate law allocate board control to the majority stockholder of a corporation. In venture capital investing, however, even venture capitalists who own a majority of a company's shares often do not obtain a majority of the director seats.

[15] Bratton, *supra* note 12, at 895-96.

[16] Bratton, *supra* note 12, at 901 ("This Article's principal assertion is that the value of shared control lies in the fact that it makes [the entrepreneur's] day-to-day control of assets and management contestable, facilitating control transfer at low cost even as it gives [the entrepreneur] a degree of assurance against arbitrary and capricious exercise of that control transfer power.").

When Bratton refers to shared control, he is speaking of shared *board* control. If neither the entrepreneur nor the venture capitalist controls the board, then control in the event of conflict goes to the party who is able to convince the "independent" directors on the merits. The notion that venture capitalists and entrepreneurs regularly structure their relationships to provide for an independent director who alone holds the balance of power is difficult to square with the usual perception of venture capitalists as control freaks, and it does not comport with the empirical evidence presented below, which shows only a handful of companies with shared control provisions of the type described by Bratton. The more common method of allocating board control allows the preferred stockholders and common stockholders to participate in a collective decision making process that gives the ultimate power to the party with the most votes (*e.g.*, by providing for election of the tie-breaking directors by a single class vote).

Another problem with Bratton's account is that the near-universal practice of staged financing provides venture capitalists with substantial control. Staged financing is the process by which venture capitalists invest incrementally in their portfolio companies. By threatening to withhold financing, venture capitalists exert tremendous power over their portfolio companies. Even if the entrepreneur holds all of the formal control rights, this right may ultimately allow the venture capitalists to dictate company strategy.

This paper provides an alternative account of exit in the venture capital context. Combining insights from A&B with more recent work of Aghion, Bolton, and Jean Tirole ("ABT"),[17] this paper describes a relationship in which a combination of staged financing, board control, and contractual protections ensures that venture capitalists are able to pursue the most desirable exit options. The analysis describes a relationship in which venture capitalists initially receive a minority of the votes in the portfolio company and a minority position on the board of directors. As noted above, venture capital contracts often allocate board control roughly evenly among the venture capitalists and entrepreneurs, with outside ("swing") positions being determined by their collective voice. In these early stages of the relationship, the outside directors would usually be selected by consensus, as conflicts between the venture capitalists and entrepreneurs have not yet (fully) surfaced.

During this initial period, venture capitalists appear vulnerable in the sense that they do not formally control the board of directors.[18] Nevertheless, they formally limit their exposure to harm in two important ways. First, they use negative contractual covenants (often called "protective provisions") to limit the ability of the entrepreneur to act opportunistically. These covenants typically prohibit the portfolio company from engaging in fundamental transactions (*e.g.*, mergers) without prior approval of the venture investors, thus cutting off the means by which common stockholders have traditionally taken advantage of preferred stock. Second, even

[17] Phillipe Aghion, Patrick Bolton & Jean Tirole, *Exit Options in Corporate Finance: Liquidity Versus Incentives*, 8 Rev. Fin. 1 (2004).

[18] Venture capitalists may effectively control the board, even if they do not have the right to elect a majority of the directors, by exerting influence over the choice of outside directors and by persuading outside directors on substantive questions. *Cf.* Bratton, *supra* note 3, at 921 ("Information asymmetries and differentials in bargaining power and skill could mean that the 'independent' third director is highly susceptible to the influence of the [venture capitalist].").

if the contractual provisions leave a gap for opportunism by the entrepreneur,[19] venture capitalists typically have limited exposure to harm because they stage their financing of the venture, providing only limited funding during the initial stage, with increased funding at subsequent stages.

Venture capitalists are also protected in this initial phase of the relationship in less formal ways. For example, if outside directors are elected by consensus, one suspects that venture capitalists play a significant role in identifying and recruiting them. In the event of conflict between the venture capitalists and entrepreneur, such outside directors would have a natural inclination to side with the venture capitalists. In the context of large corporations, this inclination to favor those who are part of the "in" group would be called a "structural bias."[20]

In the early stages of the investment, therefore, venture capitalists are less concerned about *initiating* exit than they are about protecting against *forced* exit. As the business matures, new conflicts begin to play a more prominent role. The entrepreneur acquires a taste for the private benefits associated with running a firm, and may not be willing to sacrifice those benefits on the altar of monetary return. For many venture-backed firms, the most important mid-stream decision is the choice between continuing and liquidating, and this decision provides the starkest potential conflict between the venture capitalist and the entrepreneur. Whether the interests of the firm as a whole would best be served by continuing as an independent business or "liquidating" through acquisition depends on myriad factors that are not susceptible to *ex ante* specification in the investment contract. The parties have implicitly agreed to revisit the issue at each stage of financing.

If the venture capitalists want to wrest control from the entrepreneur, they may demand majority board control in exchange for additional financing. In many instances, they will not need to make an explicit demand because board control shifts naturally when the venture capitalists acquire a majority of the voting rights. As implied by Cumming and MacIntosh, venture capitalists increase their control over exit decisions as time passes.

When combined, board control and voting control provide venture capitalists with nearly ironclad protection against entrepreneurial opportunism. Specific contractual protections are largely a forgotten formality. In some instances, however, venture capitalists never obtain board control or voting control. This pattern is most likely to emerge in the so-called "living dead"

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[19] For recent decisions evaluating such claims, see Benchmark Capital Partners IV, L.P. v. Vague, 2002 WL 1732423 (Del. Ch. Jul. 15, 2002), *aff'd* Benchmark Capital Partners IV, L.P. v. Juniper Financial Corp., 822 A.2d 396 (Del. 2003); Elliott Associates, L.P. v. Avatex Corporation, 715 A.2d 843 (Del. 1998); Telecom-SNI Investors, L.L.C. v. Sorrento Networks, Inc., 2001 WL 1117505 (Del. Ch. Sept. 7, 2001).

[20] For the seminal study of structural bias in the corporate context, see James D. Cox & Harry L. Munsinger, *Bias in the Boardroom: Psychological Foundations and Legal Implications of Corporate Cohesion*, 48 Law & Contemp. Probs. 83 (1985). The term "structural bias" is usually employed to suggest a form of self-interestedness that characterizes the deliberations of the board of directors, see Aronson v. Lewis, 473 A.2d 805, 815 fn. 8 (Del. 1984), but the underlying principle suggests a general inclination to return favors. *See* Donald C. Langevoort, *The Human Nature of Corporate Boards: Law, Norms, and the Unintended Consequences of Independence and Accountability*, 89 Geo. L.J. 79, 811 (2001) ("The natural inclination, as we have seen, is to choose those who will "fit" well with existing members. The invitation itself creates a strong pressure: the norm of reciprocity, strongly felt in American culture, inclines people to support those who have favored them in the past.")

companies, where revenues are large enough to sustain the firm, but insufficient to justify an initial public offering.[21] These companies are impervious to the constraints imposed by staged financing because they do not need additional financing to survive. In these circumstances, specific contract provisions allow venture capitalists to exert pressure on the entrepreneur to obtain a favorable exit.

The remainder of this paper proceeds as follows. Part I focuses on the relationship between exit and board control. The A&B model is used as a general framework for discussion, and empirical evidence is employed to show how venture capital relationships conform in principle with that model. Part II explores the relationship between exit and specific contract provisions. In this section, the ABT model is used to describe the incentive effects of liquidity rights. Again, the empirical evidence bolsters the theoretical insights.

I. Exit & Board Control

Exits have long been a subject of concern for legal scholars,[22] but financial economists have only recently begun to formalize a theory of exits. While some of this work relates to exit in the large-firm context,[23] several recent papers explore the nature of exit in the venture capital context.[24] This section of the paper draws primarily from the latter papers and combines those insights with empirical evidence on venture capital contracts to develop a theory of exit for financial contracting.

A. The Financial Contracting Framework

Board control is the most effective method of controlling exit. The board of directors of a corporation is charged with managing the business and affairs of the corporation[25] and initiates the most important exit decisions, including mergers, initial public offerings, and liquidations. While stockholder approval is required for certain transactions, stockholders typically do not have the power to initiate exit events.[26]

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[21] John C. Ruhnka, et al., *The 'Living Dead' Phenomenon in Venture Capital Investments*, 7 J. Bus. Venturing 137 (1992).

[22] *See, e.g.*, John Coffee, *Liquidity versus Control: The Institutional Investor as Corporate Monitor*, 91 Colum. L. Rev., 1278 (1991); Mark Roe, *Political and Legal Restraints on Ownership and Control of Public Companies*, 27 J. Fin. Econ., 7 (1990).

[23] *See, e.g.*, Kahn & Winton, *Ownership Structure, Liquidity Demand, and Shareholder Monitoring*, 53 J. Fin. 99 (1998); Maug, *Large Shareholders as Monitors: Is There a Trade-off Between Liquidity and Control?*, 53 J. Fin. 65 (1998); and Faure-Grimaud & Gromb, *Public Trading and Private Incentives* (working paper [date?]).

[24] *See* Phillipe Aghion, Patrick Bolton & Jean Tirole, *Exit Options in Corporate Finance: Liquidity Versus Incentives* (working paper 2000); Roberta Dessi, *Start-up Finance, Monitoring and Collusion* (working paper 2001); Thomas Hellman, *IPOs, Acquisitions and the Use of Convertible Securities in Venture Capital* (working paper 2001).

[25] 8 Del. C. §141(a); MBCA §8.01.

[26] On the relative rights of stockholders and directors to initiate corporate action, see Robert B. Thompson & D. Gordon Smith, *Toward a New Theory of the Shareholder Role: "Sacred Space" in Corporate Takeovers*, 80

The best evidence available on voting control and board control in venture-backed firms has been developed by Steven Kaplan and Per Strömberg, who studied 213 venture capital financings in 119 portfolio companies by 14 venture capital firms.[27] With respect to voting control, they found that venture capitalists obtained majority control in a "minimum average" of nearly 41% of initial financing rounds.[28] After subsequent rounds of financing, the average venture capitalists owned a substantial majority of the voting rights of the firm.

These data suggest that venture capitalists obtain substantial voting rights in their portfolio companies from the very onset of the relationship. Although most first-round investments place the venture capitalists in the position of a minority stockholder, it appears that venture capitalists sometimes gain majority control of portfolio companies after only one round of financing. Nevertheless, the value of these voting rights – even majority voting rights – in determining the timing and means of exit is constrained by the fact that stockholders cannot initiate transactions that provide for investor exit. Under modern corporation statutes, stockholders are limited to approving a decision by the board of directors to engage in transactions such as a merger.[29]

Interestingly, Kaplan and Strömberg found only a slight correlation between voting rights and board control. Under the rules of plurality voting that are typically applied to corporate elections, majority voting control results in complete domination of the board of directors. In most venture capital relationships, however, the parties routinely contract separately over voting rights and board control. As a result, after one round of financing, venture capitalists controlled the board of directors in only 11.6% of the firms.[30] Venture capitalists obtained (or maintained) board control in 25.4% of all financings. These low numbers should not be taken to imply that entrepreneurs usually control the board of directors. Indeed, entrepreneurs retained board control in only 20% of first-round financings and 13.9% of all rounds. In the majority of financings, therefore, neither venture capitalists nor entrepreneurs controlled the board. Instead, board control was dependent on outside directors.

B. The Financial Contracting Framework

Commentators on venture capital contracts have achieved loose consensus on the descriptive value of the well-known economic model developed by Aghion and Bolton ("A&B")

Tex. L. Rev. 261, 301-03 (2001).

[27] Kaplan & Strömberg, *supra* note 10.

[28] A "minimum average" because voting rights may change based on subsequent management performance and vesting milestones and contingencies. The maximum potential voting rights obtained by venture capitalists after one round of financing was 64.4%. The minimum averages are used in the text because they suggest substantial venture capitalist control, even in the lowest possible outcomes.

[29] Stockholder approval is not required for an initial public offering, but most companies seek stockholder approval for charter amendments in preparation for an initial public offering.

[30] Kaplan and Strömberg also provide data for an "adverse state board," that is, a board that would result if the company performed poorly or reaches an "adverse state" defined in the contracts. Even when such contingencies are considered, half or more of the financings resulted in boards of directors not controlled by the venture capitalists or the entrepreneurs.

when applied to venture capital contracts.[31] The animating feature of the A&B model is its emphasis on control: "It is our contention that the different control rights attached to instruments such as debt or equity may be just as important in determining the financial structure of these firms as the difference in their revenue-streams or tax treatments."[32] The following sections describe this control theory of financial contracting as a preliminary step toward explaining the structure of venture capital contracts.

1. *The Inevitability of Incomplete Contracts*

The A&B model attacks the persistent problem of uncertainty in new ventures. Will the venture succeed or fail? In either event, contracting over the residual financial rights is relatively simple. If the venture is a success, the parties will have allocated the spoils according to their relative bargaining power at the time of investment. If the venture is a failure, the venture capitalists typically are repaid the amount of their investment before the entrepreneur obtains any return.[33] The tricky part of venture capital contracting stems from the need to make mid-stream adjustments which position the company for one exit strategy or another. The potential for conflict between the venture capitalist and the entrepreneur is most visible at these moments, and the key feature of the relationship is *control*.[34]

If the parties could anticipate, bargain over, and describe all possible future contingencies, mid-stream adjustments could be made according to the contractual script. Unfortunately, "financial contracts are inherently incomplete."[35] This incompleteness has prompted a vast literature in financial economics exploring ways that parties allocate control when actions are not decided in advance. Initial work in the field suggested that contracting parties could resolve potential conflicts of interest through integration.[36] The intuition underlying this work is that unified ownership of assets (hierarchy) would eliminate conflicts inherent in market transaction. Even if this intuition were correct, its relies on an unrealistic assumption that the market participants are wealthy enough to purchase any assets they should own. A&B depart from this assumption, constructing a model that takes account of wealth constraints.

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[31] Kaplan and Strömberg conclude that their empirical results are "broadly consistent" with the A&B model. Kaplan & Strömberg, *supra* note 10. Gilson and Schizer concede that the A&B model, along with other so-called "control" models, "explain the substantive characteristics of venture capital structure." Ronald J. Gilson & David M. Schizer, *Understanding Venture Capital Structure: A Tax Explanation for Convertible Preferred Stock* 16 (working paper 2002).

[32] Aghion & Bolton, *supra* note 10, at 474.

[33] Of course, in the event of failure, both parties may lose all or some of their investments. Bratton suggests that the A&B model is directed at "middling outcomes," Bratton, *supra* note 12, at 896, but this is not true. A&B target mid-stream adjustments.

[34] A&B describe their model as "a theory of capital structure based on control rights." Aghion & Bolton, *supra* note 10, at 473.

[35] Aghion & Bolton, *supra* note 10, at 473.

[36] Sanford J. Grossman & Oliver D. Hart, *The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration*, 94 J. Pol. Econ. 691, 692 (1986); Oliver Hart & John Moore, *Incomplete Contracts and Renegotiation*, 56 Econometrica 755 (1988).

2. *Private Benefits & Wealth Constraints*

Contractual incompleteness poses no interesting governance problems as long as the parties' incentives are otherwise aligned.[37] Problems arise, however, when one party receives benefits that cannot be shared with the other. Under the A&B model, these so-called "private benefits" are neither observable nor verifiable by third parties (*i.e.*, judges).[38] In short, these are non-contractable. Nevertheless, they distort the incentives of the parties and produce the conflicts that contracts and governance mechanisms are designed to address.

Private benefits are pervasive in financial contracting. For example, participants in a family owned business may attach value to including other family members in the running of the business[39]; an entrepreneur may enjoy the prestige that accompanies the development of a cutting edge technology company; or and entrepreneur may value the development of human capital. Although private benefits are legitimate part of the overall yield of the project, the person who receives the private benefits may not be able to compensate the counterparty for the value of those benefits because of wealth constraints. One function of control is to limit the extent to which one party pursues private benefits to the detriment of the other party.

One way to allocate control is through capital structure. Investors in common stock share residual control rights over the corporation in proportion to the size of their investments. Creditors, on the other hand, obtain control through contractual covenants, including the right to take control of the company in the event of insolvency. Preferred stock has traditionally been viewed as comprising the "worst of both worlds," lacking the voting power of common stock and the contractual protections of debt.[40]

3. *The A&B Model*

A&B construct a model involving a penniless entrepreneur and a wealthy investor. The entrepreneur seeks funding from the investor. The monetary returns of the project will be divided according to the respective contractual claims of the parties negotiated at the time of the investment.[41] The expected return to the venture capitalist must be at least equal to the initial investment. This limitation defines the venture capitalist's rationality constraint. In addition to

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[37] *See* Oliver Hart, Firms, Contracts, and Financial Structure 146-48 (1995).

[38] Aghion & Bolton, *supra* note 10, at 476.

[39] *See* Aghion & Bolton, *supra* note 10, at 474.

[40] Of course, it is conceivable that investors would obtain no control rights. Traditional preferred stock comes close to this state in some circumstances. The problem is that control is valuable, and the entrepreneur would be required to provide an enormous return to investors who agree to refrain from exercising any control. *See* Aghion & Bolton, *supra* note 10, at 474 (noting that a "no strings-attached" investment "may not be an acceptable arrangement for outside investors").

[41] A&B reasonably assume that monetary returns from the project are verifiable, thus allowing for the possibility of incentive contracting. The one qualification they make is that the entrepreneur's wealth cannot be negative. Aghion & Bolton, *supra* note 10, at 477.

monetary returns, the entrepreneur receives private benefits from the project.[42] The main issue to be illuminated by the model relates to the allocation of control over the project.

The project has a duration of two terms. The investment is made at t=0. At the end of one period (t=1), the parties evaluate the project and determine the "state of nature."[43] Depending on the state of nature, the parties take some action (a), which will determine the monetary returns of the project that are realized at the end of the second period (t=2). The focus of the model is on a – what action should be taken?

Since the appropriate action depends on the state of nature at t=1, the parties might attempt to specify which actions should be taken under the various possible states of nature. Unfortunately, real investment projects are often too complex to allow for such prior specification.[44] As a result, the parties might attempt instead to ensure that the proper action is taken by allocating decision making authority to the person with the right monetary incentives.[45]

The only limitation on this approach is that a project's "state of nature" can be exceptionally difficult to describe. The state of nature is really just a general sense for how the project is doing, and many variables comprise such an evaluation. For these reasons, A&B assume that the state of nature is impossible or very costly to describe in advance.[46] As a result, the contract cannot link a specified decision maker to the appropriate state of nature.

In place of the textured "state of nature," the parties might choose to rely on some publicly verifiable signal (s) about the state of nature. For example, the parties might look to accounting profits as a proxy for the state of nature.[47] Or in the case of indebtedness, the parties might use events of default to signal the state of nature.[48] Although practical, these signals will be imperfectly correlated with the true state of nature, and the possibility of error is introduced by their use.

The model thus identifies three obstacles to complete contracting: (1) actions may be too difficult or costly to specify in advance; (2) states of nature may be too difficult or costly to specify in advance; and (3) even if the parties could identify possible actions and states of nature, specifying a correspondence between the two might be impossible. Of course, if the parties somehow manage to overcome these obstacles, they can rely on the explicit terms of the contract

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[42] A&B describe these private benefits by comparison with the monetary returns, suggesting that private benefits are "less tangible things such as reputation, specific human capital, effort, etc." Aghion & Bolton, *supra* note 10, at 476.

[43] This is really a "state of the project." Aghion & Bolton, *supra* note 10, at 476-77.

[44] Aghion & Bolton, *supra* note 10, at 476.

[45] *Cf.* Hart, *supra* note 1, at 10 ("The financial contracting literature takes the view that, although the contracting parties cannot specify what decisions should be made as a function of (impossible) hard-to-anticipate-and-describe future contingencies, they can choose a decision-making process in advance.").

[46] Aghion & Bolton, *supra* note 10, at 476.

[47] For another example of this type of contracting, see Equity-Linked Investors, L.P. v. Adams, 705 A.2d 1040 (Del. Ch. 1997) (tying liquidation to a delisting of the company's shares from Nasdaq).

[48] Aghion & Bolton, *supra* note 10, at 477.

for direction, rather than worrying about the allocation of control.[49]

Having described the inherent complexity in financial contracting, A&B proceed to simplify the model to make the analysis tractable.[50] They assume only two possible states of nature – a good state and a bad state – and two possible outcomes for the signal (though these outcomes are not perfectly correlated to the states of nature). Likewise, they assume only two possible actions – a_g would be the first-best choice of action in the good state and a_b would be the first-best choice of action in the bad state. In other words, the total returns from the project – which include not only monetary returns, but also private benefits – are always highest when the action taken is appropriate to the state of nature.[51]

4. *Control Allocation and Coasean Bargaining*

Venture capitalists often allow entrepreneurs to try their hand at running the company, but when questions may arise about the direction of the company, control matters. A&B are interested in the question of how to allocate control over such decisions. They consider four possibilities: (1) allocate control to the entrepreneur; (2) allocate control to the venture capitalist; (3) allocate control to one or the other depending on the outcome of future events ("contingent control"); and (4) allocate control to both ("joint control"). Each of these will be considered briefly in turn.

If the entrepreneur is in control, she will attempt to maximize her total benefits from the project, subject to the venture capitalist's rationality constraint. Because the entrepreneur receives private benefits from the project, it is possible that she will have an incentive to choose an action that does not maximize the value of the project.[52] For example, if the state of the project is bad at t=1, the entrepreneur may nevertheless choose to expand operations because she obtains private benefits from working as the chief executive officer of a high growth company. At this point, the venture capitalists might attempt to renegotiate to ensure that the entrepreneur will pursue an action that will maximize the total value of the project. Because the entrepreneur has full control, however, any of the surplus obtained by pursuing a "state appropriate" action will be taken by the entrepreneur. Anticipating this result, the venture capitalist will perceive returns that violate the rationality constraint, thus ensuring that the initial investment is not undertaken.[53]

The only instance in which entrepreneur control ensures the first-best action is when the entrepreneur's private benefits are consistent with the project's total returns. Stated another way, the entrepreneur should have complete control when "the entrepreneur's objectives are perfectly

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[49] *See* Aghion & Bolton, *supra* note 10, at 479 (noting, "a typical contract would either specify an individual control allocation rule, or an action plan (with a joint ownership rule), but not both, since determining an action plan ex ante defeats the purpose of allocating control: if everything is predetermined control becomes vacuous.").

[50] *See* Aghion & Bolton, *supra* note 10, at 479 ("In practice the costs of writing contracts are such that a typical financial contract contains many more gaps than we impose here. Our aim here is to show that even a minimum degree of incompleteness in the financial contract raises issues of control allocation.").

[51] Aghion & Bolton, *supra* note 10, at 478.

[52] Aghion & Bolton, *supra* note 10, at 480.

[53] Aghion & Bolton, *supra* note 10, at 481.

in line with the social objectives."[54] When entrepreneur's benefits are inconsistent with total returns, the parties can still enter into a contract with entrepreneur control, as long as renegotiation is possible and the venture capitalist "gets some protection against the entrepreneur's future opportunistic behavior."[55]

If the venture capitalist is in control, he will attempt to maximize monetary returns and will ignore the entrepreneur's private benefits. For example, if the project is in a good state at t=1, the venture capitalist may nevertheless decide to sell the company so that he may reallocate the proceeds of the sale to a new investment.[56] The entrepreneur may be willing to pay the venture capitalist to forego the immediate harvesting of returns, but the entrepreneur is wealth constrained. As a result, renegotiation may not be possible in this context.

The only instance in which venture capitalist control ensures the first best action is when the venture capitalist's monetary returns are consistent with the project's total returns. Stated another way, the venture capitalist should have complete control when the venture capitalist's "objective is perfectly in line with the social objectives."[57] When the venture capitalist's monetary returns are inconsistent with total returns, the entrepreneur's wealth constraint will preclude renegotition.

The main contribution of A&B to the financial contracting literature is the description of contingent control allocation. As shown above, entrepreneur control is not efficient when the entrepreneur's private benefits are inconsistent with total returns, and venture capitalist control is not efficient when the venture capitalist's monetary returns are inconsistent with total returns. These situations define the domain in which contingent control may provide some value. The usual assumption – reflected in the examples above – is that the controlling entrepreneur might be tempted to take action a_g even though the state of the project is bad and that the controlling venture capitalist might be tempted to take action a_b even though the state of the project is good. If control could be made contingent on the state of the firm, therefore, proper decisions would follow. But, as noted above, the state of the firm is not contractable.

Although the state of the firm is not contractable, the signal (s) regarding the state of the firm is contractable. If s is closely (even if not perfectly) correlated with the state of the firm, contingent control allocation may be preferable to unilateral control. A&B suggest that the real-world application of this insight concerns debt financing:

> If the first-period signal represents a default-no default event, then we have described a control allocation where the entrepreneur gets control as long as he

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[54] Aghion & Bolton, *supra* note 10, at 481.

[55] Aghion & Bolton, *supra* note 10, at 483.

[56] Contrary to the assumptions of the A&B model, it is also possible that the venture capitalists will obtain private benefits that will distort their choices. For example, Paul Gompers has found evidence to suggest that young venture capital firms take their portfolio companies public earlier than more seasoned venture capital firms. The proffered explanation for this phenomenon is that younger venture capital firms are hoping to enhance their reputations by achieving some visible successes. *See* Paul A. Gompers, *Grandstanding in the Venture Capital Industry* 42 J. Fin. Econ. 133 (1996).

[57] Aghion & Bolton, *supra* note 10, at 483.

> does not default on his debt obligations but the creditor gets control in the event of default....[T]he value of debt arises from the control allocation it induces. It allows the entrepreneur to reap some private benefits and at the same time it gives adequate protection to the investor. By giving control to the investor when [the signal is bad], the debt contract can limit the extent of rent extraction through ex post renegotiation. At the same time, when [the signal is good], the investor cannot prevent the entrepreneur from obtaining [her] private benefits.[58]

While A&B use debt financing to illustrate the benefits of contingent control, venture capitalists typically use convertible preferred stock.[59] The primary purpose of William Bratton's paper, discussed below, is to show how this convertible preferred stock achieves the same benefits as debt. Unfortunately, Bratton subtly embraces *joint* control – where both parties have simultaneous decision making authority – rather than *contingent* control – where control rests with one party or the other depending on a specified signal. In most circumstances, contingent control allocation is preferable to unilateral control, but both are preferable to joint control. Joint control "exacerbates ex post hold-up problems to the extent that either party can always threaten to veto any action choice and thus force the firm to a standstill."[60]

5. *Control Through Contract*

The foregoing section described various ways in which parties in a financial contracting relationship could allocate residual control. In some instances, however, the parties can anticipate and contract over specified actions.[61] Whether detailed contract provisions are preferable to contingent control allocations depends on the degree of correspondence between the signal and the true state of the project. When the signal correctly indicates the true state of the project, detailed contract provisions and contingent control allocations should result in the same action.[62]

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[58] Aghion & Bolton, *supra* note 10, at 486.

[59] A&B also mention convertible preferred stock as a potential mechanisms for contingent control allocation. Aghion & Bolton, *supra* note 10, at 490. Indeed, they briefly discuss venture capital investing and offer the following control rationale for financing with convertible preferred stock:

> [I]f it is efficient to allocate control to the entrepreneur when the first-period revenues are zero and to the investor when these returns are high, then the firm might issue convertible preferred stock.... With such a financial arrangement, conversion would only take place if the firm's return prospects improve ... so that the entrepreneur would have to share or give up control only if the firm's future profitability suddenly increases.... Our model suggests another advantage of those securities in terms of control allocation. It may be the case, for instance, that incumbent management performs well when the firm is small, but that it may not be able to handle a much bigger firm. In this case, financing through convertible securities may enable the investors to take control in those contingencies where the firm grows large.

Id. at 491.

[60] Aghion & Bolton, *supra* note 10, at 486.

[61] As described by A&B, a contract with a predetermined action plan "specifies a status-quo action *directly*," while a contract specifying contingent or unilateral control "specifies such a plan only *indirectly* as a result of the anticipated optimal choice of action by the party in control." Aghion & Bolton, *supra* note 10, at 487.

[62] Aghion & Bolton, *supra* note 10, at 487-88.

Where the signal incorrectly indicates the true state of the project, however, contingent control allocations provide more flexibility, thus reducing the likelihood of renegotiation.[63] As a result, A&B conclude that when the action set includes only two possible actions, "any investment contract with some ex ante action restriction is (weakly) dominated by either a unilateral or a contingent control contract without action restrictions."[64]

When the action set becomes larger, however, the entrepreneur may obtain higher renegotiation rents.[65] Some actions may provide the entrepreneur with high private benefits while destroying the monetary benefits to the venture capitalist. For the venture capitalist to dissuade the entrepreneur from pursuing this destructive action, the venture capitalist would be required to make a large transfer payment to the entrepreneur. Contractual covenants restricting the set of available actions can eliminate this potential for opportunism. As a result, A&B conclude, "when actions are verifiable ex post, one should expect to see contractual arrangements with both control allocations between the two parties and action restrictions."[66]

C. The Bratton Hypothesis

The contingent control mechanism described by A&B finds some close parallels in the world of venture investing. For example, a small percentage of venture capital financings exhibit contingent control provisions – usually referred to a "voting switches" – associated with poor performance.[67] In addition, redemption provisions bear some resemblance to events of default, except that redemption is usually triggered by the passage of some specified period of years rather than a certain performance outcome. In the end, it appears that signals are either unavailable or unreliable in the venture capital context. As a result, some other means of allocating control is required.

In a paper that relies on the A&B model for inspiration, William Bratton concludes that venture capitalists and entrepreneurs leave control issues open because they "prefer to grapple with unverifiable facts attending [bad state of nature] in the black box of the boardroom."[68] This is a surprising hypothesis – and one that ultimately lacks empirical support– but Bratton's analysis is worth a closer look.

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[63] Aghion & Bolton, *supra* note 10, at 488. The intuition here is simply that the decision maker – either the entrepreneur or the venture capitalist – may prefer an action that is appropriate to the state of the project (depending on payoff structure), even when that action would not normally be preferred by the particular decision maker.

[64] Aghion & Bolton, *supra* note 10, at 487.

[65] Aghion & Bolton, *supra* note 10, at 489.

[66] Aghion & Bolton, *supra* note 10, at 489.

[67] Kaplan and Strömberg find such provisions in 24.5% of first round financings and 17.8% of total financings. Kaplan & Strömberg, *supra* note 10, at __ (Table 2.D).

[68] Bratton, *supra* note 12, at 918. He goes on to say that the venture capitalist and entrepreneur "will compete to influence the third director.... If the third director is motivated to enhance firm value and [the venture capitalist] persuades the third director that the move is necessary for achievement of [a good state of nature, the entrepreneur] is out. At the same time, [the entrepreneur] also has access to the third director and can state a defense." *Id.* at 919.

Preferred stock has fallen out of favor with most investors, but venture capitalists rely almost exclusively on convertible preferred stock.[69] Bratton attempts to explain why. Like A&B, Bratton relies on the notion of *control*. Where venture capitalists have full control – holding a majority of the votes in a corporation and electing a majority of the board of directors – the venture capitalist may block any potential opportunistic actions by the entrepreneur. On the other hand, where venture capitalists do not control the voting shares or the board of directors and rely exclusively on contractual covenants and other provisions for protection, room for entrepreneurial opportunism exists.[70] These extreme cases – full control on the one hand and bare contractual protection on the other – are uninteresting to Bratton.[71] Instead, he focuses on instances of *shared control*, which he claims comprise the majority of venture capital investments.

Shared control may exist even when the venture capitalist owns a majority of the voting stock of the portfolio company, as long as he does not control a majority of the board of directors. At the same time, the entrepreneur does not control the board of directors. Instead, the parties agree to place representatives of each side on the board alongside a specified number of "independent" – or mutually agreed upon – directors. Bratton suggests that shared control of this sort exposes the venture capitalist to a "cognizable risk of not getting the results it wants on the downside,"[72] and he attempts to explain the venture capitalist's willingness to assume this risk by reference to the A&B model.

Bratton is mainly interested in "downside" protection, which he said is comprised of two powers: (1) the "power to replace the firm's managers (or alternatively, to force sale or liquidation of the firm)"; and (2) the "power to protect the venture capital contract itself from opportunistic amendment."[73] While the A&B model has the potential to explain these powers, the model is limited in two ways. First, because A&B posit a debt security, transfer of control involves the initiation of a bankruptcy proceeding following an event of default. Bratton correctly observes that bankruptcy is an expensive and extreme process that is not be employed lightly to

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[69] The reason for preferred stock's decline is easy enough to understand. Courts generally hold that preferred stock is not protected by fiduciary duty. Where contracts are incomplete, incumbent managers routinely abuse the holders of preferred stock, expropriating the value for the benefit of common stockholders. For an instructive set of cases in which class votes for preferred stockholders in merger transactions turn on very precise readings of contractual covenants, see, Warner Communications Inc. v. Chris-Craft Indus., 583 A.2d 962 (Del. Ch. 1989), *aff'd* 567 A.2d 419 (Del. 1989); Sullivan Money Management, Inc. v. FLS Holdings Inc., 1992 WL 345453 (Del. Ch. November 20, 1992); Elliott Associates, L.P. v. Avatex Corporation, 715 A.2d 843 (Del. 1998); Mariner LDC v. Stone Container Corp., 729 A.2d 267 (Del. Ch. 1998).

[70] Contractual covenants normally do not authorize the venture capitalist to remove incumbent managers or force a liquidation of the business. Moreover, to the extent that contractual protections are incomplete, incumbent managers may be able to act opportunistically. For a well-known case in which the inability to force liquidation combined with lack of control over the board of directors to enable entrepreneurial opportunism, see Equity-Linked Investors, L.P. v. Adams, 705 A.2d 1040 (Del. Ch. 1997).

[71] *See* Bratton, *supra* note 12, at 896 ("Fabulous success ... presents allocational problems but no questions respecting the entrepreneur's control of the assets in the future. Total failure is similarly cut and dried – the contracts trigger liquidation for the benefit of the venture capitalist subject to the constraints of the bankruptcy system.").

[72] Bratton, *supra* note 12, at 895-96.

[73] Bratton, *supra* note 12, at 893.

work a change of control.[74] Second, A&B assumes the existence of a reliable signal that can trigger a shift in control. Bratton assumes that in a substantial number of relationships, such a signal does not exist.[75]

The defining characteristic of Bratton's effort, therefore, is his careful modification of the A&B model to suit his perception of reality in the venture capital context. The key feature of Bratton's interpretation of A&B is the notion of "shared control" – an "open-ended balance of power in the boardroom [where the] venture capitalist ... gets no unilateral power to control the assets and terminate the entrepreneur on the downside."[76] In developing this concept, Bratton relies on empirical evidence from Kaplan and Strömberg,[77] which indicates that most venture capital investments do not vest board control in the hands of the venture capitalists.[78] Instead, most venture-backed companies allow both the venture capitalists and the entrepreneurs to choose some of the directors, with certain tie-breaking seats being reserved for directors "mutually agreed upon" by the venture capitalists and entrepreneurs.[79]

This phrasing – "mutually agreed upon" – contains a crucial ambiguity, which the data in Kaplan and Strömberg's study do not resolve. Are these so-called "outsider seats" filled by unanimous consent of the entrepreneurs and venture capitalists, or do the parties merely vote together as a single class on these seats?[80] In practice, these seats are assuredly filled by consensus when the parties are unified in their purpose. When conflicts arise, however, the voting rules may become important.

Bratton resolves this ambiguity in favor of an interpretation that requires consensus. In a majority of venture capital financings, according to Bratton, selecting the board of directors proceeds as follows: "[E]ach of the [venture capitalist] and the [entrepreneur] designates a director for a seat or seats. They then are to agree on a candidate to fill the remaining seat or

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[74] Bratton, *supra* note 12, at 912.

[75] Bratton, *supra* note 12, at 912.

[76] Bratton, *supra* note 12, at 895.

[77] Kaplan and Strömberg, *supra* note 9.

[78] Venture capitalists obtained board control in only 11.6% of first round financings, while entrepreneurs retained the right to elect a majority of directors in 20% of first round financing. For all rounds of financing, the venture capitalists obtained board control 25.4% of the time, while entrepreneurs retained control only in 13.9% of the financings observed. Kaplan and Strömberg, *supra* note 9, at __ (Table 2.C).

[79] Kaplan and Strömberg, *supra* note 9, at 10.

[80] As will be discussed in some detail below, variations on these theme are myriad. Kaplan and Strömberg do not distinguish among any of the various means of electing outside directors, but they discuss these seats as if both parties must agree on the director nominee. *See* Kaplan and Strömberg, *supra* note 3, at 23 ("in boards where outside, jointly appointed, board members are pivotal, it seems plausible that these members will vote with the VC as founder performance declines."). In response to an email inquiry, Per Strömberg acknowledged that various means of group decision making were collected under the one label, "mutually agreed upon." Strömberg also stated that most of the deals in their sample contained provisions requiring outside directors to be mutually acceptable to both sides, so that a party with the majority of the votes could not simply dictate the outside directors over the objections of the other parties. Email with Per Strömberg (Feb. 11, 2002).

seats."[81]

Why would venture capitalists – who are usually viewed as having substantial bargaining power – cede such control to the uncertain discretion of an independent director?[82] Not only does this decision making structure introduce the possibility that the corporation may take actions contrary to the will of the venture capitalist, a unanimity requirement raises the prospect of deadlock and its twin evil, holdup.[83] For Bratton the redeeming value of placing control in the hands of swing voters is that transfers of control can be effected at a low cost,[84] but he does not consider the costs associated with potential deadlock.

Bratton contends that the shared control structure he describes is similar to the contingent control structure described by A&B. But contingent control contemplates a change in decision makers, not merely a change in decision. Admittedly, having an independent director who will decide "on the merits" whether to favor the entrepreneur's position or the venture capitalist's position sounds appealing at first blush. It has echoes of the outside monitor made famous by Alchian and Demsetz.[85] But just as that monitor cannot solve the task assigned to it, so Bratton's shared control cannot effectively resolve the conflicts between venture capitalists and entrepreneurs.

In addition to inviting deadlock, the outside director has only a limited incentive to maximize the value of the firm. Whether the outside director is a professional consultant or a representative of a supplier or customer, she is unlikely to hold a large equity stake in the corporation. After all, it is her independence that qualifies her to provide the swing vote. The result is that she may be more easily influenced by the non-monetary effects of her actions than the resulting impact on the value of the firm. Bratton relies on reputation to inspire her,[86] but he

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[81] Bratton, *supra* note 12, at 899.

[82] This might be viewed as an attempt to ensure that entrepreneurs are willing to invest their human capital in the enterprise. This is reminiscent of Margaret Blair and Lynn Stout's description of large corporations:

> Participants – including shareholders, employees, and perhaps other stakeholders such as creditors or the local community – enter into a "pactum subjectionis" under which they yield control over outputs and key inputs (time, intellectual skills, or financial capital) to the hierarchy. They enter into this mutual agreement in an effort to reduce wasteful shirking and rent-seeking by relegating to the internal hierarchy the right to determine the division of duties and resources in the joint enterprise.

Margaret M. Blair & Lynn A. Stout, *A Team Production Theory of Corporate Law*, 85 Va. L. Rev. 247, 278 (1999).

[83] Bratton contends, "Without a reliable *s*, the negotiating parties would have a high-powered incentive to find a way to contract around the deadlock the model assumes." Bratton, *supra* note 12, at 918. It is not clear why such incentives appear only when a reliable signal is absent. More importantly, even if the parties have an incentive to negotiate around deadlock, it is far from clear that they will succeed, and the costs of such an attempt may be grave. For more on the problem of hold up, see Benjamin Klein, et al., *Vertical Integration, Appropriable Rents, and the Competitive Contracting Process*, 21 J. L. Econ. 297, 298-302 (1978).

[84] Bratton, *supra* note 12, at 901.

[85] Armen A. Alchian & Harold Demsetz, *Production, Information Costs, and Economic Organization*, 62 Am. Econ. Rev. 777 (1972).

[86] Bratton, *supra* note 12, at 919 ("the ideal third director has a strong reputational interest in being seen as an impartial, expert maker of good-faith business judgments who pursues firm value from a neutral stance and is

does nothing to suggest that the market for reputation in this context is efficient.[87]

Perhaps the biggest problem associated with the shared control envisioned by Bratton is the uncertainty it would induce in projected outcomes of the project. Shared control may have much the same effect on expected returns as entrepreneur control, causing venture capitalists to refrain from investing because expected returns violate the rationality constraint.

D. Allocation of Board Seats in Venture-Backed Companies

To the extent thatBratton is attempting to describe venture capital contracting in practice, all of these arguments about the merits of shared control may be a bit beside the point. The problem is that outside directors imagined by Kaplan, Strömberg, and Bratton exist in [only a small portion of sample venture capital investments]. The overwhelming majority of companies in the sample adopted provisions in which the common stockholders (entrepreneurs) and the preferred stockholders (venture capitalists) voted together as a single class on the tie-breaking directors.

Only 158 of the 375 sample companies included board of director provisions in the publicly filed documents.[88] These provisions may appear in the corporate charters or in a stockholder agreement, and they come in one of three general types: (1) *sole control* provisions in which control of the board of directors is expressly allocated to either the common stockholders or the preferred stockholders; (2) *joint control* provisions in which the common stockholders and preferred stockholders mutually agree on the tie-breaking directors; and (3) *contingent control* provisions in which the identity of the tie-breaking directors is determined by a vote of the common stockholders and the preferred stockholders voting together as a single class. Obviously, at any point in time, the provisions described here as contingent control provisions allocate formal power to whichever class of stockholders holds a majority of the votes. At that point in time, therefore, these provisions are effectively indistinguishable from sole control provisions. Control is only contingent in the sense that it shifts from common stockholders to preferred stockholders over successive stages of financing.[89] The following are

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impervious to Coasian bribes.").

[87] On the efficiency of reputational markets, see D. Gordon Smith, *Venture Capital Contracting in the Information Age*, 2 J. Small & Emerging Bus. L. 133 (1998).

[88] Whether the remaining companies contracted over board composition is unclear. Voting agreements between venture capitalists and entrepreneurs are common, and they would not be required by the SEC as part of an IPO filing if the agreements expire upon consummation of the offering.

[89] Bratton calls this sort of provision "somewhat arbitrary":

> The legal literature suggests that a low-cost but somewhat arbitrary alternative approach is utilized in some venture capital deals. Under this, the charter provides that [the entrepreneur's] class of stock elects one director, [the venture capitalist's] class of stock elects one director, and the third director is elected by all the stock, voting as a single class. Assuming that each of [the entrepreneur and the venture capitalist] have one vote per share and do not hold exactly the same number of shares, the result in a case of disagreement is that the winning third-seat candidate will be nominated by the actor with the larger absolute number of shares. Absent some other arrangement constraining the exercise of voting power, this means that in the event of disagreement, the party with the voting majority controls all significant firm decisions. According to Kaplan and Strömberg's numbers, this contracting solution favors the [venture capitalist] in the majority

examples of each provision:

Sole Control: Rhythms NetConnections

> (i) so long as any shares of Series A Preferred Stock are outstanding, the holders of the then outstanding shares of Series A Preferred Stock, by a majority vote voting as a separate class, *shall be entitled to elect four (4) directors of the corporation* (the "Series A Directors") and the holders of Common Stock and Series A Preferred Stock, by a majority vote voting as a single class, *shall be entitled to elect one (1) director of the corporation* (the "Common/Series A Director"); (ii) so long as any shares of Series B Preferred are outstanding, the holders of the then outstanding shares of Series B Preferred Stock, by a majority vote voting as a separate class, *shall be entitled to elect one (1) director of the corporation* (the "Series B Director"); and ….

The Restated Certificate of Incorporation of Rhythms NetConnections Inc. also contains the sort of catch-all clause that is characteristic of contingent control provisions: "(iii) all remaining directors shall be elected by the holders of the Preferred Stock and the holders of Common Stock, by a majority vote voting [together as a single class.]" In this instance, however, this catch-all clause is irrelevant as there are no "remaining directors." Indeed, the company appears to have allocated more director seats than allowed by its own bylaws: "The number of directors which shall constitute the whole board shall not be less than 2 nor more than 5." In any event, this illustrates the usual method of allocating sole formal control to one party. Drafters of the board composition provision simply fill all of the seats, leaving no room for "remaining directors.'

Joint Control: ?

> [no companies identified yet]

Contingent Control: eBay

> [A]t each annual or special meeting called for the purpose of electing directors, the holders of the Series B Preferred and Series B1 Preferred, voting as a separate class, shall be entitled to elect one (1) member of the Board of Directors, and the holders of the Series A Preferred and Common Stock, voting together as a single class, shall be entitled to elect two (2) members of the Board of Directors. *The remaining directors will be elected by the holders of Preferred Stock and the holders of Common Stock voting together as a single class on an as-converted into Common Stock basis.*[90]

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of cases.

Bratton, *supra* note 12, at 921.

[90] EBay's bargaining power is evident in this provision, as the venture capitalist receive only one reserved seat on the board. A similar allocation of power existed in Amazon.com's Voting Agreement, dated as of June 21, 1996:

In most instances, the total number of directors is determined in accordance with a bylaw provision, which typically establishes a size range and permits the board of directors to determine the exact number. The following provision from the bylaws of eBay is representative: "The Board of Directors shall consist of one or more members. The initial number of directors shall be five (5), and thereafter shall be fixed from time to time by resolution of the Board of Directors."[91] In this instance, therefore, the initial board of directors included two directors who were elected by the holders of Preferred Stock and the holders of Common Stock voting together as a single class. Obviously, under such provisions, the "remaining directors" to be decided by a single-class vote of the common stockholders and the preferred stockholders may vary. Nevertheless, the fundamental point remains constant: formal control of the board of directors lies with those who own a majority of the shares of the company.

a. The Importance of Staged Financing

Even if Kaplan, Strömberg, and Bratton were right about the existence of shared control in venture capital relationships, they overestimate the vulnerability of venture capitalists. The most powerful mechanism of control available to most venture capitalists is not found in the venture capital contracts, but rather in the practice of staging venture capital investments. Staged financing is the process by which venture capitalists invest incrementally in their portfolio companies. Through staged financing, venture capitalists preserve their ability to limit losses by abandoning portfolio companies that are not making satisfactory progress. The threat of abandonment (coupled with the prospect of dilution from repeated investments) provides substantial incentives for the entrepreneur to maximize the potential of the company quickly. And most importantly for present purposes, the threat of abandonment provides venture capitalists with leverage when the time comes to talk exit strategy.

Staged investments typically occur over a relatively short time period – often less than one year apart. They are more important to the balance of control in the early lives of most venture-backed companies than registration rights or redemption rights, which typically are not available to venture capitalists for a period of years after the initial investment. Staged financing also typically involves the staged acquisition of control. More often than not, venture capitalists do not acquire a majority of the votes in the initial round of financing. In subsequent rounds of financing, the venture capitalists build their voting power, and at some time within the first few

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> In elections of Directors of the Company, the Shareholders shall vote for the candidates designated pursuant to this Section 1.3:
>
> (a) One candidate for the Board of Directors shall be designated by the holders of Series A Stock (the "Series A Director").
>
> (b) Two candidates for the Board of Directors shall be designated by the holders of Common Stock ("Common Stock Directors").
>
> (c) Two candidates for the Board of Directors shall be designated by the holders of Series A Stock and Common Stock voting together as a single class.

[91] See also the following provision from the bylaws of Abgenix, Inc.: "The number of the members of the Board of Directors shall be not less than four (4) nor more than eight (8), the actual number to be determined from time to time by resolution of the Board of Directors."

rounds, venture capitalists acquire a majority of the votes.[92]

While staged investments provide powerful incentives to entrepreneurs, there are some venture-backed firms that are able to continue operations without obtaining additional outside financing. Firms that are profitable, but not so profitable as to be good candidates for initial public offerings, are often referred to as the "living dead." In these circumstances, staged financing will have lost its force because the firm obtains necessary financial support from operating income, and demand registration rights or redemption rights may be required to play a forcing role. The fact that this scenario rarely plays out fully is probably evidence of the substantial influence of staged financing at the front end of the relationship.

(j) Exit & Contractual Liquidity Rights

The main focus of exit theory – both in the legal and economic literatures – has been the supposed trade-off between "liquidity" and "control." The core idea animating this work is that investors who have easy exit options will have correspondingly fewer incentives to invest in monitoring that is designed to improve ongoing performance.[93] The corollary holds that investors may be willing to foreclose exit options where monitoring is sufficiently valuable to the firm.[94] The resulting "lock-in" serves to encourage investment in monitoring activities. In crafting an optimal investment contract, investors and entrepreneurs strive to provide incentives for efficient monitoring while allowing investors to obtain the maximum level of liquidity consistent with such monitoring.

Optimal levels of liquidity depend on three factors. First, investors have different liquidity demands, and investors who specialize in monitoring (for example, venture capitalists) presumably value liquidity less than other investors (for example, public stockholders). Second, because investments in monitoring are inherently speculative, the relative costs of those investments as compared to the costs of exiting and reinvesting must be considered. Third, if the valuation of the firm upon exit accurately reflects the fundamental value of the firm, investors will have incentives to exit at the proper time. A recent paper by Phillipe Aghion, Patrick Bolton, and Jean Tirole ("ABT") uses the methodology of mechanism design theory to argue that liquidity and control are not always substitutes.[95] ABT develop a model that is similar to the A&B model in many respects, but which is designed to explore the interaction between exit and

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[92] For an example of such staged acquisitions of voting power, see D. Gordon Smith, *Team Production in Venture Capital Investing*, 24 J. CORP. L. 949, 967-69 (1999) (describing experience of GO Corporation).

[93] For examples of this argument in the context of large firms, see K. KOJIMA, JAPANESE CORPORATE GOVERNANCE: AN INTERNATIONAL PERSPECTIVE (1997); C. Mayer, *New Issues in Corporate Finance*, 32 European Econ. Rev. 1167 (1988); Amar Bhide, *The Hidden Costs of Stock Market Liquidity*, 34 J. Fin. Econ. 31 (1993). For a similar argument in the context of closely held corporations, see Edward B. Rock & Michael L. Wachter, *Waiting for the Omelet to Set: Match-Specific Assets and Minority Oppression in Close Corporations*, 24 J. CORP. L. 913 (1999).

[94] The decision to constrain exit options may be made by the firm or the investors. In either event, the costs of reducing liquidity should be borne by the firm. *See* Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure*, 3 J. Fin. Econ. 305 (1976).

[95] Aghion et al., *supra* note 17.

liquidity. The following sections describe that model, then apply its insights to the venture capital context.

A. The Financial Contracting Framework

ABT consider an investment at three time periods: the start-up stage, the trading stage, and the payback stage.[96] At the start-up stage, financial contracts are negotiated and the investments are made. At the trading stage, the initial investors must decide whether to exit by selling to new investors. At the payback stage, the firm realizes revenues and pays the investors. The start-up stage is characterized by uncertainty over the ultimate payback amounts. From a contracting perspective, the goal is to design mechanisms that encourage the efficient level of monitoring between start-up and payback by providing the proper opportunities for exit during the trading stage.

The first key assumption of the model is that entrepreneurs and investors are compensated in different ways. While both parties receive a financial return from a successful investment, but entrepreneurs also receive private benefits.[97] This is a familiar point from the A&B model discussed above. As in that model, the different sources of compensation lead to conflicts between venture capitalists and entrepreneurs.

The second key assumption of the model is that the entrepreneur can affect cash flows through her actions.[98] For the sake of simplicity, the model assumes only two possible actions: the entrepreneur shirks or the entrepreneur is diligent. When the entrepreneur shirks, she obtains private benefits, but monetary returns are low. The entrepreneur would refrain from shirking if she could be paid for any private benefits foregone by working diligently. ABT assume that a full payment for such private benefits would be too expensive, but that monitoring can provide an added incentive for diligence. Ideally the parties want to provide the active monitor with efficient financial incentives to monitor while maximizing the liquidity of the investment. ABT call the tension between liquidity and monitoring the "core economic issue" in the model.[99]

The third key assumption is that the firm has the potential to attract three types of investors: "uninformed investors" (the limited partners in a venture capital fund), the "active monitor" (the venture capitalist), and the "speculative monitor" (the acquiror or underwriter who gathers information about the firm and makes a speculative investment at the trading stage).[100] The uninformed investors are passive, and their investment is determined by the active monitor. The active monitor invests money on behalf of the uninformed investors and monitors the entrepreneur in an effort to reduce the private benefits derived from shirking. The active monitor has a positive opportunity cost of capital. The speculative investors evaluate the firm at the trading stage, estimate future cash flows, then decide whether to invest. In the simplified world

[96] Aghion et al., *supra* note 17, at 6.

[97] Aghion et al., *supra* note 17, at 7.

[98] Aghion et al., *supra* note 17, at 7.

[99] Aghion et al., *supra* note 17, at 9.

[100] Aghion et al., *supra* note 17, at 7-8.

constructed by the model, the decision to invest is a signal that future cash flows of the firm are expected to be high while a decision not to invest is a signal that future cash flows of the firm are expected to be low.

The fourth key assumption of the model is that the active monitor will prefer to unwind his initial investment during the trading period so that the proceeds of the investment can be reinvested in a more profitable opportunity. This cycling of venture capital is a central feature of the theoretical literature.[101] ABT measure the intensity of the venture capitalist's desire to exit by reference to the probability of a "liquidity shock," which occurs when "a more profitable investment opportunity arises" at the trading date.[102]

Unwinding the active monitor's investment during the trading period poses some special challenges because the portfolio company has not yet realized the total cash flows. Valuing the company is difficult and raises conflicts between the venture capitalist and the entrepreneur. Thus the need for a speculative monitor, who assesses the value of the firm during the trading period.

The entrepreneur, active monitor, and speculative monitor each has at least one incentive problem. The entrepreneur's incentive problem – whether to shirk – depends on the resolution of one of the active monitor's incentive problems – whether to monitor.[103] The active monitor's decision, in turn, depends on the ability to compensate him for his monitoring activity. The active monitor may be compensated at the trading stage or the payback stage.

The speculative monitor has a twofold incentive problem – whether to monitor and whether to reveal his information truthfully. ABT propose a call option to address these incentives. The exercise price of the call option must be high enough that the speculative monitor would exercise it only if the signal obtained by the speculative monitor is high (*i.e.,* the firm is doing well). Exercising the call option is "tantamount to (truthfully) revealing the signal."[104] The real world application of this insight is not literally a call option, but rather the opportunity for an underwriter to participate in an initial public offering of common stock or an acquiror to purchase a majority of the common shares.

Given the foregoing assumptions, the basic outlines of the contract between the entrepreneur and the venture capitalists become clear. The entrepreneur does not have the same potential for a liquidity shock as the entrepreneur, so there is no special reason for the entrepreneur to exit in the trading stage. Moreover, if the signal obtained from the speculative investor is not perfectly correlated with realized cash flows, any compensation paid to the entrepreneur at the trading stage may misstate the entrepreneur's real contribution to the firm. As a result, the entrepreneur should not be allowed to exit during the trading period; any compensation should be deferred until the payback stage.

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[101] Black & Gilson, *supra* note 2.

[102] Aghion et al., *supra* note 17, at 9. It is, of course, the presence of the more profitable opportunity that provokes the active monitor to withdraw his money from the portfolio company.

[103] The author's assume that the entrepreneur observes the active monitor's decision prior to deciding whether to shirk. Aghion et al., *supra* note 17, at 12. The active monitor's other incentive problem is whether to truthfully report a liquidity shock.

[104] Aghion et al., *supra* note 17, at 21.

To provide proper incentives for the entrepreneur to be diligent, she should receive high compensation when realized cash flows are high and low compensation when realized cash flows are low. Absent private benefits, this would be easily accomplished by giving the entrepreneur an equity claim against the firm because the equity claim changes in value according to firm value. The existence of private benefits complicates the compensation structure, however, because these benefits are not directly correlated with the value of the firm. In the end, the reward for high effort (*i.e.*, no shirking) must be greater than the reward for low effort added to the value of private benefits from shirking.

Of course the entrepreneur's private benefits are responsive to efforts by the active monitor. To encourage the venture capitalist to monitor, he should be awarded a high compensation only when the speculative monitor produces a high signal at the trading stage or when high cash flows are realized at the payback stage. The optimal contract minimizes the net expected cost of monitoring, and at the margin, each investment in monitoring should produce an equal or greater payoff to the venture capitalist.

The venture capitalist needs a slightly more complicated arrangement because of the potential for liquidity shock. When the opportunity cost of capital during the trading stage is low (*i.e.*, when there is no liquidity shock), the active monitor is indifferent to exit. In this case, providing the active monitor with an exit option in which is return is positive will actually be counterproductive because it will lead the active monitor to forego monitoring. On the other hand, when the opportunity cost of capital during the trading stage is high (*i.e.*, when there is a liquidity shock), the active monitor will want an exit option. When contracting at the investment stage, predicting the opportunity cost of capital during the trading stage is far from certain. The higher the probability of a liquidity shock, the more the venture capitalist will value an exit option.[105]

B. Venture Capital Contracts

Planning for exit occurs in the face of uncertainty about which method of exit will be optimal. Most venture capitalists exit from investments in one of four ways: (1) sale of shares pursuant to an *acquisition* of the portfolio company; (2) sale or distribution of shares after the portfolio company completes an *initial public offering* ("IPO"); (3) *redemption* of the venture capitalist's shares pursuant to a contractual "put" right; or (4) *liquidation* of the portfolio company and concomitant distribution of cash.[106]

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[105] Aghion et al., *supra* note 17, at 19-20. ABT reason as follows:

> [This] may provide an explanation for recently observed reduction in the average age of technology start-ups before they go public. Our explanation would be that as more money flows into the venture capital industry the terms demanded by Venture Capital funds go down ... and therefore the relative costs of offering the more efficient liquid contracts go down.

[106] Cumming and MacIntosh suggest five means of exit: initial public offering (IPO), acquisition, company buyback, secondary sale, or write-off. Cumming & MacIntosh, *supra* note 5, at __. Secondary sales are rare, and Cumming and MacIntosh state that most secondary sales are made to strategic acquirors. Accordingly, I treat them as functionally equivalent to acquisitions. I use the term "liquidation" in place of "write-off" to suggest that venture capitalists may sometimes receive a distribution of assets from the portfolio company. Cumming and MacIntosh do

Venture capitalists may receive different cash flows, depending on the terms of the contracts: (1) redemptions and liquidations usually entitle the venture capitalist to receive the original issue price of the preferred stock, either as a "redemption price" or "liquidation preference" (of course, the money to pay these amounts may not be available); (2) liquidations – which typically include acquisitions of the portfolio company – often entitle the venture capitalist to a share of any proceeds remaining after the payment of the liquidation preference in proportion to the venture capitalist's ownership of the company on an "as-if converted" basis (this is "participating preferred"); and (3) in some acquisitions and all initial public offerings, the venture capitalist's preferred stock will be converted into common stock, thus enabling the venture capitalist to share in the success of the company to the same extent as the founders. Because the methods of exit are accompanied by different sets of cash flows, the choice among methods may have important distributional consequences for the venture capitalist and the entrepreneur. This potential conflict draws attention to their respective control rights. The primary thrust of this portion of the paper is that venture capitalists and entrepreneurs usually structure their relationships in a manner that affords entrepreneurs some freedom from the threat of exit at the beginning of the relationship and transfers greater control over exit decisions to venture capitalists as time passes.

This study focuses on 375 venture-backed companies that completed initial public offerings between 1997 and the end of the second quarter of 2002, as identified by VentureOne Corporation.[107] During the first stage of the research, the terms of the investments in each company were catalogued using information obtained from the Electronic Data Gathering, Analysis and Retrieval (EDGAR) system established by the Securities & Exchange Commission. Many of the terms are described generally in each company's prospectus, but the information in those summary descriptions was normally insufficient for this study. Fortunately for present purposes, the SEC requires all companies issuing stock to the public to file corporate documents, including material contracts, as exhibits to the registration statement. The corporate charter (which contains the terms of the convertible preferred stock typically purchased by venture capitalists), investors' rights agreements, and registration rights agreements are often included among those exhibits.[108]

Data from these companies, combined with insights from Kaplan & Strömberg, reveal a sophisticated method of control transfer in most venture capital relationships. At the onset of a venture capital relationship – when growth potential for the firm is high and the ultimate success

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not account for such events, but consider instead the possibility of a "write-down."

[107] The initial list of venture-backed companies obtained from VentureOne numbered 673. Of those, only 375 filed with the Securities & Exchange Commission the documents necessary to discover the terms of the last venture investment prior to the initial public offering.

[108] Companies registering for an initial public offering are required to file only documents that are of interest to investors in the IPO. Many of the terms of the preferred stock held by the venture capitalists – which terms are found in corporate charters – are irrelevant to IPO investors because the shares of preferred stock held by the venture capitalists are routinely converted into common stock upon consummation of the IPO. As a result, reporting companies are not required to file the corporate charters containing those terms, and many companies simply omit them. Some of the terms of the venture capital investment, however, survive the IPO. In particular, venture capitalists tend to retain registration rights following the IPO. As a result, registration rights agreements are routinely filed by reporting companies.

of the venture is uncertain – exit options are limited. As noted above, venture capitalists often do not obtain control over the board of directors until several rounds of investment have been made and contractual rights provide only the power to *veto* exit proposals by entrepreneurs rather than the power to *initiate* exit. As time passes, control over exit shifts gradually in favor of venture capitalists and away from entrepreneurs. This story is consistent with Cumming & MacIntosh,[109] but provides a richer connection between the theory and contract structure.

Venture capitalists and entrepreneurs may have incentives to pursue different exit strategies. As noted above, Cumming and MacIntosh sensibly suggest that venture capitalists will exit from an investment when the projected marginal value added by the venture capitalist's efforts equals the projected cost of those efforts.[110] On the other hand, entrepreneurs receive benefits from operating a privately held company that are not available to the investors in that company. These benefits include the freedom and security sometimes associated with operating a privately held company, as contrasted with the severe public scrutiny that often accompanies publicly traded shares. Absent some pressure to provide for investor exit, an entrepreneur may be perfectly happy to maintain the status quo. The potential conflict between venture capitalist's desire to exit and the entrepreneur's desire to maintain the status quo animates the analysis in this paper.

Exit is not optional for venture capitalists. Most venture capital funds have a fixed life, usually ten years with an option to extend for a period up to three years.[111] Any venture capitalist who desires to remain in business, therefore, must successfully raise funds, invest them in portfolio companies, then exit the companies and return the proceeds to the fund investors, who are in turn expected to reinvest in a new fund formed by the same venture capitalist (assuming that the previous investment was successful). All of this suggests that continuation of the status quo – while useful for the thought experiment in the previous section – is not a realistic possibility. In short, the venture capitalist must ensure that exit is available.

1. *The Role of Veto Rights*

In most venture capital contracts, veto rights are designated as "protective provisions." They are also referred to by lawyers as negative covenants. For present purposes, the most important veto rights are those that prevent the company from forcing an exit decision by the venture capitalist. Provisions requiring approval of business combinations or redemptions of preferred stock have obvious application. Because initial public offerings inevitably require an amendment of the corporation's charter, the right to prevent such amendment provides effective control over the timing of such an offering. Finally, several actions by the company could force

[109] Cumming & MacIntosh, *supra* note 5, at __.

[110] Cumming & MacIntosh, *supra* note 5. at __.

[111] Gompers, *supra* note 10.

the venture capitalist to consider exit. Redemptions of common stock, payment of common stock dividends, and issuance of additional preferred stock would all have the effect of decreasing the value of the venture capitalist's investment. The following shows the frequency of these provisions among the entire sample:

Engage in Business Combination	___% (___/375)
Redeem Preferred Stock	___% (___/375)
Amend Charter	___% (___/375)
Redeem Common Stock	___% (___/375)
Pay Common Stock Dividend	___% (___/375)
Issue More Preferred Stock	___% (___/375)

Although most investments contain multiple protective provisions, all but nine of the sample companies had some protective provisions. In about two-thirds of the sample companies, these rights could be exercised by a majority vote of the preferred stockholders (the remaining companies required a supermajority vote). This pattern of contracting suggests that venture capitalists protect their exit rights through the use of negative covenants.

2. *The Role of Redemption Rights*

Redemption is a term that may cover many types of provisions. At its most general, redemption refers to any repurchase of shares by the company for an amount specified in the contract. Venture capital transactions may have up to three different redemption provisions: mandatory redemption, optional investor redemption ("put"), and optional company redemption ("call").

Mandatory redemption requires the company to begin repurchasing shares at a specified date, usually subject to waiver by the venture capitalists. Such redemptions could be staggered over a period of months or years to lesson the impact on the company. The purpose of these provisions would appear to be twofold: (1) to provide the venture capitalist with the means to extract the original investment from a company that seems unlikely to succeed; and (2) to provide the venture capitalist with leverage over the entrepreneur based on the credible threat of withdrawal.[112] These same purposes could be achieved with the more flexible put provisions, and the advantage of requiring the company to begin redemption on a date specified years in advance is not clear. Indeed, such provisions may dissuade future investors from providing additional capital for the simple reason that the capital may be used to finance the redemption rather than the operations of the firm. For these reasons, we would expect mandatory redemptions to be rare. Indeed, only 34 of the sample investments (9.07%) contained fixed mandatory redemption provisions.

Put options allow venture capitalists to force the repurchase of their shares at their discretion. These redemption rights have the same purpose as mandatory redemption rights, but are more flexible. From the entrepreneur's perspective, they are also more dangerous. An unlimited put right would provide venture capitalists with excessive leverage over the

[112] Michael J. Halloran, et al., Venture Capital & Public Offering Negotiation (2000).

entrepreneur. Whenever a disagreement arose, the venture capitalist could simply threaten to exercise the put right, an action that would cause most cash-constrained entrepreneurial firms to succumb to the venture capitalists' demands. For this reason, we would expect such rights to take effect only after the passage of some time from the date of the investment, thus allowing the entrepreneur to predict capital needs with more certainty. Many of the sample firms – 163 firms or 43.47% of the sample – provided optional redemption rights to the venture capitalists,[113] but in nearly every instance the rights were not immediately available. The average term provided [nearly four years] before the redemption rights were exercisable.

Call rights allow the company to redeem the shares owned by the venture capitalists at the company's discretion. This type of provision addresses the entrepreneur's desire to exit. Because call provisions would allow entrepreneurs to redeem the venture capitalists' shares when the company is very successful, we would expect venture capitalists to avoid such provisions if possible. Not surprisingly, only 28 firms (7.47%) had call provisions.

Nearly half of the companies that allowed for optional mandatory redemption in the present study were allowed to pay the redemption price in installments. Such staggering of the redemption is sometimes touted by venture capitalists as an entrepreneur-friendly provision because it implies that the venture capitalist will not leave the entrepreneur without capital. This suggests that the venture capitalist is using these provisions as a signal of its general disposition towards entrepreneurs because it is certainly not the type of provision a venture capitalist would use if serious about redemption. Indeed, skepticism of redemption provisions is common. As noted by Halloran, et al., "Cash redemption of the Preferred Stock is not viewed as a realistic alternative. The foregoing notwithstanding, investors sometimes use mandatory redemption provisions as a forcing device."[114]

The nature of the firms in the sample – firms that completed an initial public offering – precludes effective study of the use of redemption rights here. In the typical venture-backed firm, all shares of preferred stock are converted to common stock upon consummation of the initial public offering. That conversion removes all of the special rights and preferences associated with the preferred stock, including any redemption rights.

3. The Role of Demand Registration Rights

The decision to pursue an initial public offering will often be endorsed by both the entrepreneur and the venture capitalist. Likewise, there are undoubtedly many circumstances when both parties agree to pursue some course other than an initial public offering. In abstract terms, they may differ in two situations: (1) the entrepreneur may wish to pursue a particular exit strategy (or no exit strategy) over the objection of the venture capitalist; or (2) the venture capitalist may wish to pursue a particular exit strategy over the objection of the entrepreneur. Simply stating these two possibilities highlights the potential vulnerabilities. If the decision rests

[113] Kaplan and Strömberg (2001) found put rights in 78.7% of their sample financings. This presumably was the basis for Bratton's claim that venture capital contracts "invariably provide for redemption of the preferred...." Bratton, *supra* note 12, at 912.

[114] Halloran, et al., *supra* note 106.

in the entrepreneur, the potential for harm to the venture capitalist is substantial. In the most extreme case, the entrepreneur would simply continue the status quo, thus altogether depriving the venture capitalist of the ability to exit and preventing the venture capitalist from cycling investment dollars with far-reaching consequences on the venture capitalist's ability to continue in his profession. In the less extreme case, the entrepreneur might postpone an initial public offering to preserve private benefits from the status quo as long as possible, thus reducing the financial return to the venture capitalist that would otherwise be available from the initial public offering.

The calculus is completely different if the venture capitalist has the authority to make the exit decision. Without private benefits from continuation, the most dramatic risk to the entrepreneur is that the venture capitalist will attempt to extract wealth under threat of pursuing an exit strategy that is unfavorable to the entrepreneur. Less dramatically, the venture capitalist might engage in grandstanding, which reduces the financial value of the transaction to all parties, but results in private benefits to the venture capitalist.

All of these ruminations have something otherworldly about them. First, there is no mention of the market for initial public offerings, thus revealing the assumption that an initial public offering is always possible *at some price*. While this may be unrealistic (but see below), it is useful in highlighting the potential vulnerabilities of the parties. A second problem is that, in many instances, neither an entrepreneur nor a venture capitalist would be willing to enter a relationship in which the other had unconstrained power over the exit decision, at least at a valuation that was likely to attract the other party. We should expect, therefore, that the parties would construct a set of checks and balances that roughly account for their respective vulnerabilities. It is in the identification of those vulnerabilities that the foregoing abstract discussion is most valuable. The point is that the party who is most vulnerable should not necessarily have complete authority over the exit strategy, but should possess the complementary rights of *initiation* and *veto*. Both rights would in turn be subject to constraints designed to address the other party's vulnerabilities.

Registration rights occupy an ambiguous position among the panoply of economic and control rights that define the venture capital relationship. As the evidence below confirms, registration rights are almost universal in venture capital investing. The contracts describing the registration rights routinely run in excess of 20 single-spaced pages, and according to practicing lawyers who have written about venture capital contracting, these terms are among the most important in the entire relationship and are heavily negotiated.[115]

Notwithstanding the apparent importance of registration rights, they are often dismissed as having only a limited impact on the venture capital relationship. Demand registration rights are particularly scorned.[116] For example, in discussing the power of venture capitalists to determine the timing of an initial public offering, Lerner mentions board seats, redemption rights, and informal authority, but does not mention registration rights.[117] Also, in the most complete

[115] J. W. Bartlett, Equity Finance, Venture Capital, Buyouts, Restructurings, and Reorganizations (1995).

[116] *But see* Aghion, et al., *supra* note 16, at 27 ("one of the most important issues for VC investors in negotiations with the entrepreneur concerns the allocation of registration rights").

[117] Josh Lerner, *Venture capitalists and the decision to go public*, 35 J. Fin. Econ. 293 (1994).

study of venture capital financing undertaken to date, Kaplan and Strömberg omit any mention of registration rights.

Even the venture capital lawyers who stress the importance of registration rights in their writings frequently dismiss the significance of demand registration rights, noting that such rights are "almost never" exercised. Indeed, as part of a mock term sheet negotiation during a training program for Silicon Valley lawyers, one prominent venture capital lawyer and co-author of the well-regarded treatise[118] –Robert V. Gunderson, Jr. of the law firm Gunderson Detmer Stough Villeneuve Franklin & Hachigian – suggested foregoing registration rights altogether. Although his suggestion was rejected by "opposing counsel" in the exercise, Gunderson later explained in private conversation that registration rights were burdensome to negotiate and offered little value to the venture capitalists.

Given this background, why are registration rights routinely included in venture capital deals? In the United States, whenever securities are offered or sold, the transaction must be registered with the SEC unless it is exempt from registration. The process of registration is heavily regulated and time consuming, especially for an initial public offering. Moreover, the transition from privately held to publicly traded company imposes substantial ancillary costs, including increased exposure to liability; the expense, inconvenience, and possible embarrassment that accompany ongoing disclosure of the company's affairs; the increased formality of corporate decision making; and the heightened expectations to produce returns for investors (measured on a daily basis by the company's stock price). The decision to pursue an initial public offering, therefore, is not one that is lightly made.

Nevertheless, an initial public offering may have numerous advantages for a company and the entrepreneur. The primary justification for an initial public offering is to raise money, usually in anticipation of a substantial expansion in the company's operations, but the initial public offering has many ancillary benefits. In addition to the obvious benefits that accompany the liquidity of public capital markets, companies may find that publicly traded stock is useful in recruiting new managers and acquiring other companies. In addition, many managers enjoy the prestige associated with running a publicly traded firm. Collectively, these factors exert a powerful draw toward the public capital markets for many firms.

Prior to making the decision to go public, most firms discuss the business aspects of the offering with investment bankers, who will act as underwriters. A company that decides to pursue a public offering typically employs a small army of accountants and lawyers to assist the company and the underwriters in drafting a registration statement. The registration statement is the company's disclosure document and it includes a prospectus, which serves as the primary marketing document for the securities.

The contractual right to initiate an initial public offering is commonly called a "demand registration right." It is also sometimes designated "requested registration" or "required registration." Left untempered, the right to demand registration might be a powerful weapon in the hands of the venture capitalist. Given the substantial costs that accompany registration, a threat to invoke the demand registration right could be used to coerce the entrepreneur into

[118] Halloran, et al., *supra* note 106.

pursuing a business strategy favored by the venture capitalist. That leverage would be strongest when venture capitalists have the right to force an initial public offering. Although the costs of registration may be significant at any time, they are typically highest for an initial public offering.

The only problem with this story is the notion of a "forced initial public offering." Generally speaking, an initial public offering is considered a challenging endeavor for the most committed company. An initial public offering usually requires the participation of an underwriter, which is willing to place substantial reputational capital behind the company. Moreover, an initial public offering requires the managers of the company to market their business plan to sophisticated investors. In most instances, therefore, the thought of an entrepreneur being forced to submit to an initial public offering is incongruous.

On the other hand, venture capitalists might use demand registration rights as a threat. The potential for a "penny stock" offering exists if the companies does not change direction. Assuming that demand registration rights present a credible threat by venture capitalists – at least in the limited circumstances when a venture capitalist would be willing to sacrifice much of the value of the investment to force an initial public offering – the issue turns to preventing the potential for abuse. In this regard, we would expect that demand registration rights would be limited in some fashion. Since the potential for abuse is most likely to arise from an early triggering of the right, we might expect parties to provide for a "grace period" before which demand registration rights are not exercisable. Alternatively, some parties might prohibit demand registration altogether prior to the initial public offering of the company, thus reserving the going public decision to the company's board of directors. While this would resolve the problem of early triggering, it would simultaneously remove the primary benefit of demand registration to the venture capitalist, and we would expect this provision to be relatively uncommon.

Another means of protecting against opportunistic triggering is to provide some independent evaluation of the company's prospects in the public capital markets. Premature initial public offerings should be discounted by the market, and companies that are dramatically underdeveloped would likely yield prices that are so low that any threat by the venture capitalist to demand registration in such a context would lack credibility. The obvious source of independent evaluation on these matters is an investment banker. As noted by Black and Gilson:

> Investment bankers have an incentive to seek out (or respond to inquiries from) portfolio companies whose performance has been strong enough to allow a successful public offering. A central feature of the investment banker's role in a public offering is as an informational intermediary who proffers its reputation on behalf of the portfolio company much as the venture capitalist provides credibility to the portfolio company at an earlier stage in its development.[119]

The fact that an investment bank is willing to stake its own capital and reputation on the company provides an independent check on the validity of the venture capitalist's demand. As a result, we would expect the parties to employ investment bankers to mediate their potential conflict.

Even if an investment banker is willing to support a public offering, the entrepreneur may

[119] Black & Gilson, *supra* note 2.

feel that the venture capitalist's request is ill-timed. To the extent that this feeling emanates solely from a general feeling of dissension in the relationship, the entrepreneur's claim is not likely to muster much sympathy. It is possible, however, that the entrepreneur would be concerned about information not disclosed to the investment banker – such as a pending transaction or threatened litigation – that may have a material effect on the appropriate timing of the offering. While it seems unlikely that the entrepreneur would refuse to share such information with a venture capitalist – indeed, the venture capitalist would probably be privy to the information as a director – the parties may have differing interpretations of the importance of the information. In any event, anticipating the possibility of good faith disagreement regarding such business issues, the parties might very well choose to provide the entrepreneur with the authority to defer any registration for a short period to allow for events to develop. In such a circumstance, the board of directors – which has a fiduciary obligation to serve the stockholders of the firm – would be the logical place to vest this authority.

Demand registration rights are pervasive among the sample companies. Over [90]% of the companies provided demand rights. This finding comports with the conventional wisdom that registration rights are an important part of the investment transaction. But how are these demand rights used? Unfortunately, there is no easy method of discerning whether demand rights have been exercised. We can determine, however, whether venture capitalists registered their shares. Of the 375 firms, only __ (___%) included any selling stockholders in the initial public offering. More importantly, in only __ firms (___%) were venture capitalists among the selling stockholders.

In contrast to prior studies, selling by venture capitalists in the present sample seems paltry. Lin and Smith (1998) showed that from 1979 to 1990, venture capitalists sold shares in 27% of initial public offerings. During the last three years of the period studied, venture capitalists sold in 37% of initial public offerings. Megginson and Weiss used a sample of 320 venture-backed initial public offerings from 1983 to 1987 and found that 43.3% involved venture capitalists as selling stockholders. Barry et al. (1990) relied on a set of initial public offerings by venture-backed companies from 1978 to 1987 and found that "in 58% of the cases, none of the venture capitalists sell any shares in the offering."

While these figures may hold some inherent interest – provoking thoughts of a possible shift in the behavior of venture capitalists in the past two decades – their importance to the present topic is that they might reveal something about the function of registration rights. As noted above, venture capitalists in virtually every firm in the sample possessed demand rights, but understanding the more detailed terms underlying those rights is essential to perceiving the role of registration rights in the venture capital relationship.

The venture capital contracts display wide variation in specifying the commencement of demand rights. While some agreements grant demand rights immediately, these constituted a small minority of the total sample. A more common approach, though still a minority, provides that demand rights commence at some specified period (ranging from 90 days to one year) after an initial public offering that meets certain objective criteria. The large majority of the agreements combine this reference to the initial public offering with a fixed date in relation to the venture investment. For example, the Second Amended and Restated Investor Rights Agreement of RealNetworks, Inc. allows for a demand "any time after the earlier of (i) two (2) years after the

date of this Agreement or (ii) six (6) months after the effective date of the Initial Public Offering...." The Agreement was dated July 21, 1997 (to correspond to an investment in the company on that date by Microsoft) and the company filed its first registration statement for the initial public offering on September 26, 1997. The effective date of the RealNetworks registration statement was November 21, 1997.

RealNetworks illustrates a common phenomenon in the sample agreements, namely, that demand rights are structured to commence at a time that is beyond the expected date of the initial public offering. In this regard, it is important to note that they are often triggered by reference to the *most recent venture investment*. In these circumstances, whenever the agreement that contains the registration rights is amended, the commencement date of the demand rights is pushed further towards the horizon because the provision is structured to engage some two to four years after the date of the agreement.

This implies that demand rights are not designed to provide venture capitalists with the right of initiation, as hypothesized above. Halloran, et al. assert that demand registration rights are "rarely used," but suggest that they "often provide Investors with considerable leverage in dealing with management with respect to the nature and timing of Company-initiated registrations." In light of the foregoing, the reasons for their infrequent use are apparent. Under this view, the source of their leverage is not the immediate threat of exit, but rather the impending deadline.

4. *The Significance of Convertible Preferred Stock*

Conversion rights play an important role in exit decisions. As noted above, most venture capitalists invest money in exchange for preferred stock that is convertible into common stock under specified circumstances. Generally speaking, venture capital investments contain two types of conversion provisions: (1) optional conversion allows the venture capitalist to convert at will; and (2) automatic conversion requires the venture capitalist to convert upon the occurrence of specified events, most importantly an initial public offering.

All but nine of the sample companies (97.60%) provided for optional conversion and all but 11 (97.07%) provided for automatic conversion. In nearly every instance, optional conversion was available immediately from the time the preferred shares were issued, and automatic conversion was triggered by an initial public offering of the company's shares. The conversion provisions also contain complex procedures for adjusting the conversion rates to prevent dilution of the venture capitalists' investments, but those provisions are not important to the current study.

Hellman focuses on the differential cash flow rights for an acquisition and an initial public offering. When comparing these two exit options, it makes sense to assume a successful company because initial public offerings are not reasonably available to failures. If the company is able to receive an equal valuation in both contexts, which exit option will the venture capitalist prefer? As noted above, acquisitions are often treated as "liquidations" in venture capital investments. If the venture capitalist receives only a liquidation preference – with no ability to participate in the success of the company like the common stockholders – an acquisition would at first glance seem quite unfavorable when compared with an initial public offering, where the

venture capitalist will own common stock following automatic conversion of the preferred shares. Of course, almost every company would allow the venture capitalists to convert preferred shares into common shares. As a result, even with relatively unfavorable liquidation terms, venture capitalists can do no worse in an acquisition than in an initial public offering.

Approximately 82.13% of the sample companies provided more favorable liquidation terms, allowing the venture capitalist to participate in any success of the company following the payment of the liquidation preference. In these instances, an acquisition would provide the venture capitalist with a larger share of the company than an initial public offering. Importantly, venture capitalists have no power to initiate acquisitions absent control of the board of directors. In light of the evidence discussed above, it appears that most venture capitalists obtain such control only after multiple rounds of financing.

Conclusion

The fact that entrepreneurs and venture capitalists may have incentives to pursue different exit strategies is not obvious. After all, it is widely accepted that the prospect of a lucrative exit via initial public offering has important incentive effects on both parties. Both entrepreneurs and venture capitalists typically own equity securities, which provide strong incentives to both parties to maximize the value of the firm. In addition, substantial evidence suggests that the greatest financial returns are to be found in exiting into the public capital markets.[114] Why, then, must exit decisions be addressed at all in the contracts between venture capitalists and entrepreneurs? Why not rely on the self-interest of both parties to pursue the most favorable exit option?

The analysis above suggests that venture capital investors view exit from their portfolio companies in relatively simple terms. During the initial phase of the investment relationship – perhaps lasting several years – venture capitalists have limited rights to initiate exit. Often lacking either board control or contractual rights to initiate exit, venture capitalists allow entrepreneurs time to prove the business concept. During this initial phase, venture capitalists typically possess veto rights, thus restricting the entrepreneur's ability to force an exit.

After the initial phase, venture capitalists begin to exert more direct control over exit decisions by acquiring control over the board of directors and obtaining contractual exit rights (most importantly, put rights). If the company is a success, the venture capitalist can steer it towards an initial public offering or an acquisition. Failures move toward liquidation or redemption.

This structure suggests that venture capitalists approach their investments with a bifurcated view of the future: if the company is a *success*, the venture capitalist will obtain a payment determined by the market, but if the company is a *failure*, the venture capitalist will

[114] In addition to the possibility of great wealth, an initial public offering may offer substantial private benefits to the entrepreneur, including the increased power and reputation accorded managers of publicly traded firms. These private benefits in combination with the increased liquidity of shares that trade in the public capital markets (which paves the way for the entrepreneur's own exit at some point) explain why entrepreneurs are often eager to pursue an initial public offering regardless of any registration rights held by the venture capitalist.

obtain a payment equal to the original investment or as much as can be extracted before the assets of the portfolio company are exhausted.