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The (Not So) Puzzling Behavior of Angel Investors

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THE (NOT SO) PUZZLING BEHAVIOR OF ANGEL INVESTORS

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Angel investors fund start-ups in their earliest stages, which creates a contracting environment rife with uncertainty, information asymmetry, and agency costs in the form of potential opportunism by entrepreneurs. Venture capitalists also encounter these problems in slightly later-stage funding, and use a combination of staged financing, preferred stock, board seats, negative covenants, and specific exit rights to respond to them. Curiously, however, traditional angel investment contracts employ none of these measures, which appears inconsistent with what financial contracting theory would predict. This Article explains this (not so) puzzling behavior on the part of angel investors, and also explains the recent move toward venture capital-like contracts as angel investing becomes more of a professional endeavor.

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I
INTRODUCTION

Where do entrepreneurs turn for funding once their credit cards are maxed out, friends and family are no longer taking their calls, but it is still too early for venture capitalists to invest? They turn to "angel" investors. Angel investors are wealthy individuals who personally finance the same high-risk, high-growth potential ventures as venture capitalists, but at an earlier stage.[1] Well-known angels include the likes of Microsoft co-founder Paul Allen, EDS founder (and one-time presidential candidate) H. Ross Perot, and Dallas Maverick's owner Mark Cuban. But the prototypical angel may still be rich old Uncle Joe, the wealthy, distant relative or family acquaintance.[2] Angels come in many forms, yet together they constitute an essential source of entrepreneurial finance, providing some *$25 billion* to new ventures each year.[3] Not only are angels important for the amount they provide to new start-ups, but for *when* they provide it – at a crucial stage in the start-up's growth that allows entrepreneurs to build the financial bridge from friends and family funding to venture capital.

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[1] There is no technical definition of an angel investor (sometimes referred to as a "private investor" or "informal venture capitalist"), although most descriptions of angels focus on two characteristics: Wealth and the investment of personal funds. First, an angel typically qualifies as an "accredited investor" under the securities laws, which means she has over $1 million in net worth, or income over $200,000 in each of the last two years (or $300,000 with spouse) and reasonably expects to reach the same income level in the current year. 17 C.F.R. § 230.501(a). Second, an angel invests her own funds, as compared to venture capitalists and other financial intermediaries, who invest the funds of others.

[2] Drawing the line between the "friends and family" and "angel" categories can sometimes be difficult, as in the case of non-immediate family members like Uncle Joe. There is no precise definition of an angel investors, *see supra* note 1, but from what I can gather non-immediate family members are often counted in the angels category.

[3] *See infra* note 57 (on the estimated size of the angels market).

Despite their importance, angels are surprisingly underappreciated in the popular press and in academia, especially legal academia. Venture capitalists are credited for Silicon Valley success stories such as Google, Amazon.com, and Apple Computer. But each of these companies first relied on angels, and might never have attracted venture capital without them.[4] By funding start-ups with no operating history, and by investing their own funds, angels take significant risks. Start-ups benefit from angel risk-taking, obviously, but so do venture capitalists, which use angel funding as a mechanism for sorting among the countless new start-ups that later seek venture capital. Without angels as a sorting mechanism, the venture capital model could not exist in its current form – venture capitalists would have to invest earlier and more often. Even more importantly, without angels our entire innovation-based economy – which relies on start-ups succeeding and has produced over 12.5 million jobs and up to 11% of our gross domestic product in recent years – would be in jeopardy.[5]

Therefore, one contribution of this Article is to reveal the importance of angel investors in entrepreneurial finance. Once we realize how important angels really are, we have good reasons for wanting to know more about them. Therefore, while this Article begins broadly, it quickly hones in on one of the many interesting aspects of angels yet to be explored: the angel investment contract. Angel investment contracts have so far escaped academic attention, yet present an extremely interesting study in contract design that informs the broader financing contracting literature in important ways.

Start-up investments are rife with uncertainty, information asymmetry, and potential agency costs in the form of potential opportunism by entrepreneurs. Venture capitalists mitigate these problems by using their leverage over cash-strapped entrepreneurs to insist on comprehensive investment contracts. These contracts allow venture capitalists to screen, monitor, and control their investments through a combination of staged financing, preferred stock, board seats, negative covenants, and specific exit rights. Traditional angels, on the other hand, are striking in their informality. Despite investing at a time when levels of

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[4] *See* MARK VAN OSNABRUGGE AND ROBERT J. ROBINSON, ANGEL INVESTING: MATCHING START-UP FUNDS WITH START-UP COMPANIES – THE GUIDE FOR ENTREPRENEURS, INDIVIDUAL INVESTORS, AND VENTURE CAPITALISTS 5 (2000) ("Venture capitalists get all the press, but the vast majority of entrepreneurial funds are actually funded by business angels, especially those firms in their earliest stages.").

[5] Testimony of Robert E. Grady Before the U.S. House Committee on Education and the Work Force, March 11, 2004, at 2 (venture-backed firms employed over 12.5 million people and in the year 2000 accounted for approximately 11% of the U.S. Gross Domestic Product). The current president of the Kauffman Foundation, Carl Schramm, contends that in a world of globalization and outsourcing, entrepreneurship is America's remaining comparative advantage. *See generally* CARL J. SCHRAMM, THE ENTREPRENEURIAL IMPERATIVE (2006).

uncertainty, information asymmetry, and agency costs are even higher, angels do not extract *any* of the venture capitalist's common contract protections. The angel's use of simple contracts appears to be a departure from what financial contracting theory would predict, and therefore looks to be puzzling behavior. Indeed, the conventional wisdom is that angels use simple contracts because they lack the sophistication of venture capitalists – in other words, they simply don't know any better.

This Article will show that the conventional wisdom is wrong – that the angel's preference for simple contracts is quite rational from a financial perspective. First, an angel's financial payoff comes from a small number of start-ups that go on to attract venture capital and then exit by initial public offering (IPO) or private sale. Although venture capitalists recognize the importance of angels in entrepreneurial finance, they are hesitant to invest in start-ups where an aggressive angel's preferences must be "unwound" for venture capitalists to receive *their* standard preferences. Because venture capitalists have many potential start-ups to choose from, they may pass on those presenting complications. Therefore, aggressive angels reduce their chances for a large upside by making follow-on venture capital funding unlikely. The rational angel recognizes that she is the first, but not the last, source of outside investment and acts accordingly.

Second, angel investment contracts are financially rational because informal methods of screening and monitoring entrepreneurs substitute for the venture capitalist's formal, contract-based methods. Angels economize on screening through investments that are highly local and relationship-driven, and economize on monitoring through active participation in venture development. Finally, the costly contracting literature supports the financial rationality of angel contracts. It is simply not cost-effective to design, write, monitor, and enforce detailed contracts when smaller dollar amounts are invested and when the duration of the detailed bargains will be short due to venture capital unwinding.

The venture capital story ends here. Venture capital is a purely financial endeavor because venture capitalists must produce returns for venture fund investors within a relatively short time frame. Angels, however, are not bound by such constraints because they invest *personal* funds, and therefore answer to no one for the investment. The use of personal funds gives angels the flexibility to invest for non-financial as well as financial reasons if they so choose, and the evidence is that many angels do have personal motives for investment. Most angels are cashed-out entrepreneurs who miss the excitement of new venture development or wish to give back to the entrepreneurial community through "for-profit philanthropy."[6] These non-financial motivations for angel investment also help to explain the use of informal contracts. Demanding comprehensive,

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[6] *See infra* note 180 and accompanying text.

protective terms would signal a lack of trust in entrepreneurs, and the literature on the relationship between contract and trust tells us that the entrepreneur receiving this signal will be less likely to invite angel participation or receive the altruistic message that the angel hopes to send.

The informal model of angel investing described thus far still comprises the bulk of angel investments, and the primary goal of this Article is to explain it. However, I also observe that a radical transformation in angel investing has begun. Angels are increasingly abandoning informal operation in favor of professional organization. Although angels are still investing personal funds, greater numbers of them are screening and pooling their investments through regional angel investment organizations (AIOs). Jeffrey Sohl, who has studied angels for over a decade, estimates that up to 30% of angel investments might now come from AIOs,[7] although other sources suggest that AIO investments may in fact make up no more than 2% of all angel investments.[8] Whatever the precise figure, the trend toward the professionalization of angel investing is interesting in a number of respects. Keeping with the focus of this paper, I focus on the interesting shift in angel contract design from the traditional angel model to the venture capital model.

In light of the rationality of traditional angel contract design, this new shift in contract design presents the second puzzle that this Article attempts to solve. That is, if the traditional angel's use of simple contracts is indeed rational, can the AIO angel's use of comprehensive contracts also be rational? The answer to this second puzzle is also yes for several reasons, all of which stem from the fact that AIO angels more closely resemble venture capitalists than traditional angels in a number of important ways. First, the AIO angel's more professional nature, higher investment amounts, and slightly later investments (all resembling early stage venture capitalists) allow her to be somewhat more aggressive than the traditional angel without fear of venture capital unwinding. Second, the AIO angel's opportunities for informal screening and monitoring are less than for traditional angels due to the more arms-length relationship

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[7] Hannah Clark, *Are Angel Investors Heaven-Sent?*, Forbes.com, May 4, 2006, http://www.forbes.com/entrepreneurs/2006/05/04/entrepreneurs-finance-angels-cx_hc_0504angel.html.

[8] According to the Angel Capital Association (ACA), the professional alliance of AIOs in the U.S. and Canada, tthere were approximately 114 AIOs that were full members of the ACA in the U.S. in 2006. ACA data shows an average total investment for each AIO at $1.78M for the year (which includes investments by individual AIO members, which is the most common form of AIO investment practice). [2007 ACA Angel Group Confidence Survey]. Multiplying that figure by the number of groups gives a total of $202.9M invested by all AIOs. The largest AIOs are all full members of the ACA, but even if we assumed an equivalent amount of investment outside of ACA-member groups, the total is no more than $406M, or 1.6% of the total $25B angel market. *See infra* note 57 on the total size of the angel market. I thank Luis Villalobos for this observation.

between AIO angels and entrepreneurs. This increases levels of uncertainty, information asymmetry, and agency costs that must then be mitigated by contract. Third, the AIO angel's higher transaction costs are justified by higher investment amounts and a longer duration for preferences. Finally, from a non-financial perspective, AIO angels derive private benefits in ways that detailed investment contracts do not hinder.

This Article's explanations for the rationality of traditional angel contracts and AIO contracts fill important gaps in both the entrepreneurial finance and financial contracting literatures. They also inform the contract and trust and costly contracting literatures. The remainder of the Article is organized as follows. Part II examines the typical venture capital investment contract and reviews its mechanisms for reducing extreme levels of uncertainty, information asymmetry, and agency costs in start-up investments. Part III reveals the unique nature of angel investing, which explains what otherwise appears to be puzzling contract design on the part of traditional angels. Part IV examines changes in angel contract design corresponding to the recent professionalization of the field, and shows that it is rational for these contracts to include more comprehensive terms. Part V concludes.

II
THE VENTURE CAPITAL INVESTMENT MODEL

Venture capital has been the financial engine driving most successful start-up companies over the past several decades. Venture capital has had its greatest successes in Internet investments in the mid- to late-1990s, including the funding of Google in 1999 by leading Silicon Valley firms Kleiner Perkins and Sequoia Capital[9] and the funding of Yahoo in 1995 by Sequoia.[10] Household name companies Apple Computer, Genetech, Intel, and Microsoft are all likewise the product of venture capital.[11] It is almost axiomatic to observe that a start-up's chances for success will increase if it can attract venture capital. Paul Gompers and Josh Lerner attempted to quantify the venture capital effect. They found that 90% of start-ups that were unable to attract venture capital within the first three years failed, while the failure rate dropped to 33% for those that did attract venture capital.[12] In addition to financial capital, venture capitalists provide crucial value-added services. They use

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[9] http://www.google.com/corporate/history.html#1999.

[10] http://docs.yahoo.com/info/misc/history.html.

[11] PAUL A. GOMPERS AND JOSH LERNER, THE VENTURE CAPITAL CYCLE 1 (2000).

[12] PAUL A. GOMPERS AND JOSH LERNER, THE MONEY OF INVENTION: HOW VENTURE CAPITAL CREATES NEW WEALTH 10-11 (2001).

their connections to bring in professional managerial talent[13] and they can offer seasoned expertise; e.g., on the most profitable exit strategy.[14]

Infusions of venture capital are coupled with investment contracts that set forth the venture capitalist's rights and obligations in the start-up.[15] Like angel investment contracts, venture capital investment contracts are necessarily incomplete, which gives rise to problems of uncertainty, information asymmetry, and agency costs in the form of potential opportunism (i.e. moral hazard) by entrepreneurs.[16] Start-up investments are particularly interesting to financial economists because they present extreme forms of these problems.[17] Start-ups have little to no operating history or tangible assets as a predictor of future performance, while scientific or technological novelty in the typical Silicon Valley start-up adds another layer of uncertainty.[18] This uncertainty provides entrepreneurs with significant informational advantages over venture capitalists and increases agency costs by making it more difficult for venture capitalists to sort between good and bad entrepreneurs and monitor their investments.[19]

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[13] Michael Klausner and Kate Litvak, W*hat Economists Have Taught Us About Venture Capital Contracting*, *in* BRIDGING THE ENTREPRENEURIAL FINANCING GAP 54, 58-59 (Michael J. Whincop ed., 2001) [hereinafter BRIDGING THE ENTREPRENEURIAL FINANCING GAP] . Value-added services can be as important as financial capital. eBay, for instance, was a profitable start-up that did not require outside funding. Yet it sought venture capital, which was provided by Benchmark Partners, in recognition that a venture capitalist's connections and expertise would be essential in securing a seasoned CEO and other executives. *See* RANDALL E. STROSS, EBOYS: THE TRUE STORY OF THE SIX TALL MEN WHO BACKED EBAY AND OTHER BILLION-DOLLAR START-UPS 22 (2000).

[14] *See* Joshua Lerner, *Venture Capitalists and the Decision to Go Public*, 35 J. FIN. ECON. 293, 314 (1994) (experienced venture capitalists appear better able to time IPOs than their less experienced counterparts).

[15] The investment contracts might include an amendment to the start-up's corporate charter (to create and designate preferred stock), a stock purchase agreement, and an investor's rights agreement.

[16] *See, e.g.,* Philippe Aghion & Patrick Bolton, *An Incomplete Contracts Approach to Financial Contracting*, 59 AM. REV. ECON. STUD. 473 (1992).

[17] *See* Ronald J. Gilson, *Engineering a Venture Capital Market: Lessons from the American Experience*, 55 STAN. L. REV. 1067, 1076 (2003) ("The special character of venture capital contracting is shaped by the fact that investing in early stage, high technology companies presents [uncertainty, information asymmetry, and opportunism] in extreme form."); George G. Triantis, *Financial Contract Design in the World of Venture Capital*, 68 U. CHI. L. REV. 305, 311-12 (2001) (observing that financial contracting is more difficult in venture capital than in bank lending).

[18] Gilson, *supra* note 17, at 1077.

[19] While most academics have focused on the potential conflicts between venture capitalists and entrepreneurs, there are other notable conflicts present in this setting. *See* Kate Litvak, *Venture Capital Limited Partnership Agreements: Understanding Compensation Arrangements*, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=555626 (on conflicts between venture

Although it is impossible for venture capitalists to eliminate these problems, they mitigate them by syndicating their investments among other venture capitalists and by investing in a diverse portfolio of start-ups.[20] They also use incentive-aligning compensation arrangements with entrepreneurs, such as stock options and stock grants that vest over time.[21] And, most pertinent to this Article, venture capitalists mitigate these problems by designing comprehensive investment contracts that give venture capitalists far more control than their percentage ownership warrants, which under the conventional wisdom cash-strapped entrepreneurs are forced to accept.[22]

The typical venture capital investment contract employs five protective measures. First, the contract provides for the disbursement of funds to the entrepreneur in stages. Staged financing reduces uncertainty by delaying funding until the entrepreneur proves herself though the achievement of performance milestones set by the venture capitalist.[23] Venture capitalists can cut their losses by refusing to fund entrepreneurs who do not reach these milestones. Staging reduces information asymmetry and agency costs by allowing venture capitalists to better screen and spend less time monitoring their investments. Screening of potential investments is facilitated through signaling. The theory is that good entrepreneurs will signal their quality by agreeing to condition funds

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capitalists and venture fund investors); Robert P. Bartlett, III, *Venture Capital, Agency Costs, and the False Dichotomy of the Corporation*, 54 UCLA L. REV. 37 (2006) (on conflicts between different venture capitalists investing in the same start-up); Jeffrey N. Leavitt, *Burned Angels*: *The Coming Wave of Minority Shareholder Oppression Claims in Venture Capital Start-up Companies*, 6 N.C. J. L. & TECH. 223 (2005) (on conflicts between angels and venture capitalists).

[20] *See* GOMPERS AND LERNER, *supra* note 11, at 134 (syndication "allows the venture capital firm to diversify its portfolio, thereby reducing the exposure to any single investment….By syndicating investments, the venture capitalist can invest in more projects and diversify away some of the firm-specific risk").

[21] *See id*. at 131; Klausner and Litvak, *supra* note 13, at 62-63.

[22] Venture capitalists typically enjoy bargaining power over entrepreneurs, although bargaining power can shift over competition to fund the most desirable start-ups or in times of flush times for private equity, when more cash is available to spend. *See* William W. Bratton, *Venture Capital on the Downside: Preferred Stock and Corporate Control*, 100 MICH. L. REV. 891, 897-98 (2002) (reciting the "once-prevailing story about venture capital transactions [is that] entrepreneurs so need venture capital that they cede both a majority of stock and control of the boardroom," but calling the once-prevailing story "incomplete"); STROSS, *supra* note 13, at 25 (in competitions to fund the most attractive start-ups, the bargaining power shifts in favor of the entrepreneur); Theresa Sullivan Barger, *How to Dance with Angels*, CFO.com (April 30, 2007), available at http://www.cfo.com/article.cfm/9097739/c_9098309?f=home_todayinfinance (current market where large amounts of both venture capital and angel finance are available shifts bargaining power to start-ups to decide whose funding to accept).

[23] *See* Steven N. Kaplan & Per Strömberg, *Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts*, 70 REV. ECON. STUD. 281, 304 (2003) (discussing staged financing).

upon performance while bad entrepreneurs will not.[24] There is also less need to monitor entrepreneurs because staging strongly aligns their interests with the venture capitalist's interests. The entrepreneur who needs the next cash infusion to survive has a strong performance incentive and is unlikely to shirk or seek private benefits at the expense of the venture capitalist, which reduces agency costs.[25] Indeed, for all of these reasons staged financing is thought to work so well that Gompers and Lerner describe it as "the most potent control mechanism a venture capitalist can employ."[26]

Second, venture capitalists take convertible preferred stock in exchange for their cash infusion, in contrast to the entrepreneur's and friends and family's common stock.[27] The use of preferred stock offers several advantages for venture capitalists.[28] Perhaps most notably it provides downside protection, meaning the preferred stock is paid first in the event of a liquidation or sale – a common end result for new start-ups.[29] The liquidation preference also facilitates entrepreneurial signaling – the theory is that entrepreneurs who are willing to grant venture capitalists the first payout signal their belief that the venture will be worth more than the venture capitalist's preference; a positive signal for the venture capitalist looking to invest.[30] Preferred stock's preferences also allow it to receive a higher valuation, and by comparison common stock

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[24] Gilson, *supra* note 17, at 1080. As Klausner and Litvak observe, however, this signal only works if the entrepreneur can accurately gauge the value of his business. Klausner and Litvak, *supra* note 13, at 56.

[25] Gilson, *supra* note 17, at 1079; Darwin V. Neher, *Staged Financing: An Agency Perspective*, 66 REV. ECON. STUD. 255, 255-256 (1999) (observing that staged financing mitigates the entrepreneur's holdup potential).

[26] GOMPERS AND LERNER, *supra* note 11, at 139; *see also* Klausner and Litvak, *supra* note 13, at 56 ("Most important among these contract terms is the staged nature of venture capital investment.").

[27] Kaplan and Strömberg's survey of 213 venture capital investments in 119 portfolio companies during the late 1990s found that 95.8% of all rounds used convertible preferred stock, with convertible preferred stock being the sole security in 79.8% of all rounds. Kaplan and Strömberg, *supra* note 23, at 284 tbl.1. 38.5 % of the rounds used participating preferred stock, which entitles the holder not only to its preferential return, but also to share in the proceeds of the common stockholders on an as-if-converted basis. *Id.*

[28] On the other hand, preferred stock receives disfavored treatment in litigation. *See* Bartlett, *supra* note 19, at 101-107 (on Delaware's narrow approach to construing preferred stock rights).

[29] A sale is commonly counted as a liquidating event for purposes of triggering the venture capitalist's preference. Preferred stock also carries a dividend preference, but since start-ups rarely pay dividends during their life, the dividend preference is only valuable if it is cumulative, thereby entitling the venture capitalist to a greater payout upon liquidation or sale. Klausner and Litvak, *supra* note 13, at 64.

[30] *Id.*

and stock options can receive a lower valuation. The lower valuation provides tax advantages that can be helpful in recruiting new employees.[31]

The third and fourth common features of investment contracts are intended to allocate decisionmaking control to venture capitalists, which reduces the potential for opportunistic behavior by entrepreneurs (who otherwise would have such control due to their majority ownership).[32] Venture capitalists secure board seats in increasing number with each round of investment.[33] Control of the board entitles the venture capitalist to significant control of the start-up because of the board's broad authority under corporate law.[34] Although academics have found that venture capitalists control the board (i.e., have a majority of board seats) less often than is commonly assumed,[35] Jesse Fried and Mira Ganor contend that the numbers are deceiving – that "independent" directors chosen by the venture capitalist are likely to side with the venture capitalist in any contested board vote, giving the venture capitalist effective control of the board in more cases.[36] Another allocation of control comes from negative covenants. Negative covenants require venture capitalist approval for major decisions.[37] These covenants are complementary when venture capitalists control the board and are more important when they do not. For

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[31] *See* Ronald J. Gilson and David M. Schizer, *Understanding Venture Capital Structure: A Tax Explanation for Convertible Preferred Stock*, 116 HARV. L. REV. 874 (2003).

[32] *See* William A. Sahlman, *The Structure and Governance of Venture-Capital Organizations*, 27 J. FIN. ECON. 473, 506-514 (1990) (venture capitalist control rights minimize agency costs).

[33] *See* D. Gordon Smith, *The Exit Structure of Venture Capital*, 53 UCLA L. REV. 315, 326 (2005) ("Because venture capitalists typically gain additional board seats with each round of investment, over time the board composition provisions of venture-backed companies tend to move from 'entrepreneur control' or 'contingent control' to 'investor control'.").

[34] Del. Code Ann. tit. 8 § 141(a) (2006) ("The business and affairs of every corporation organized under this chapter shall be managed by or under the direction of a board of directors…"); Stephen M. Bainbridge, *Director Primacy: The Means and Ends of Corporate Governance*, 97 NW. L. REV. 547 (2003) (arguing in favor of "director primacy").

[35] *See* Kaplan and Strömberg, *supra* note 23, at 289-290 (venture capitalists control start-up boards only 25% of the time, with contingent or shared control in 62% of the cases); *see also* Bratton, *supra* note 22 (using the Kaplan and Stromberg findings to theorize that the parties prefer shared control to effectuate low-cost transfers of control).

[36] Jesse M. Fried and Mira Ganor, *Agency Costs of Venture Capitalist Control in Startups*, 81 NYU L. REV. 967, 988-989 (2006).

[37] Gordon Smith's recent empirical study found that the vast majority of venture capital investment contracts contained negative covenants against engaging in business combinations (81.47%), amending the charter in ways adverse to the venture capitalist (91.01%), redeeming or paying dividends to the common stock (70.84%), and issuing more preferred stock (80.38%) without the venture capitalist's approval. Smith, *supra* note 33, at 346.

instance, the venture capitalist probably has a minority of board seats after its first round of investment, and negative covenants prevent the entrepreneur from acting opportunistically during that time (e.g., by issuing additional preferred stock that dilutes the venture capitalist's share).

Finally, investment contracts provide venture capitalists with specific exit rights, which are always important in private corporations with illiquid shares. These exit rights include redemption (or put) rights, demand registration rights, and conversion rights.[38] Agency costs may be high when it comes to timing an exit because the preferences of venture capitalists and entrepreneurs can differ. As a general rule, venture capitalists require earlier exits due to the short life of venture funds and the need to make distributions to fund investors,[39] while the conventional wisdom is that entrepreneurs wish to delay exit to continue to receive private benefits such as a steady salary.[40] Redemption and other specific exit rights address these potential conflicts by allocating the exit decision to venture capitalists. Again, these rights are complementary when the venture capitalist already controls the exit decision through a majority of board seats or voting power and are more important when it does not.[41]

III
THE ANGEL INVESTMENT MODEL: A DEPARTURE FROM FINANCIAL CONTRACTING THEORY?

A. The Need for Angels

Venture capital is crucial to a start-up's success, but it is not immediately available to most start-ups. Most venture capitalists fund start-ups that have survived their earliest stages and are expanding, for instance by delivering products and services to customers, or are preparing

[38] *Id*. at 348-355.

[39] *See infra* note 164 and accompanying text. The push for an early exit may be even more pronounced with inexperienced venture firms looking to "grandstand" to establish a reputation. *See* Paul A. Gompers, *Grandstanding in the Venture Capital Industry*, 42 J. FIN. ECON. 133 (1996).

[40] *See* Klausner and Litvak, *supra* note 13, at 57 (an entrepreneur's private benefits from delaying exit may include "salary and other compensation, social status, and psychic benefits of managing a business").

[41] It should also be noted that the venture capital investment contract between may reduce uncertainty, information asymmetry, and agency costs in the form of opportunism by entrepreneurs, but in doing so it may allow opportunism by *venture capitalists*. Whether reputational constraints can serve as an adequate deterrent to a venture capitalist's opportunistic temptations is the subject of debate. *See infra* notes 150-153 and accompanying text.

for an IPO or private sale.[42] Nor is venture capital readily available in the smaller amounts that might be appropriate for very young companies.[43] A typical venture round averages between $2 million and $10 million, although it can be much higher.[44] Therefore, venture capitalists leave a critical funding gap that has both time and capital components. The time gap is present during the earliest stages of a start-up's life, which last at least one year.[45] The capital gap exists for funding in amounts less than $2 million. Of course, friends, family, and the entrepreneur's own efforts may provide some funding (up to $100,000 or so), but this is hardly enough to sustain the rapid-growth start-up for very long.[46]

Venture capitalists do not fill the funding gaps as to time or capital for several reasons.[47] First, because risk and uncertainty decrease as a

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[42] For commonly used staging terminology, *see* Jeffrey Sohl, *The Early Stage Equity Market in the USA*, 1 VENTURE CAP. 101, 106 [hereinafter *Early Stage Equity Market*].

[43] *See* Joshua Lerner, *"Angel" Financing and Public Policy: An Overview*, 22 J. BANK. & FIN. 773, 778 (1998); Hans Severiens, *The Band of Angels: The Origins of Collaboration*, *in* STATE OF THE ART: AN EXECUTIVE BRIEFING ON CUTTING-EDGE PRACTICES IN AMERICAN ANGEL INVESTING 21 (John May and Elizabeth F. O'Halloran, eds., 2003) [hereinafter, STATE OF THE ART] (observing that "while some hot companies could absorb these larger sums [provided by venture capitalists], the average unproven start-ups that needed $1 million to build a prototype and hire a couple of people were left out of consideration").

[44] *See* Sohl, *Early Stage Equity Market*, *supra* note 42, at 109 ("handoff" from angel investors to venture capitalists typically occurs in the $2-3 million range). The recent litigation between venture capitalist Benchmark Partners and start-up Juniper Financial reveals an instance of more substantial venture capital investment. Juniper received a first venture round of $20 million, a second round of $95.5 million, and a third round of $145 million. *No. Civ. A. 19719, 2002 WL 1732423* (Del. Ch. July 15, 2002), aff'd sub. nom. *Benchmark Capital Partners IV, L.P. vs. Juniper Fin. Corp.*, 822 A.2d 396 (Del. 2003).

[45] Paul A. Gompers, *Optimal Investment, Monitoring, and the Staging of Venture Capital*, 50 J. FIN. 1461, 1473 (1995) (most venture capitalist investments are made after the first year).

[46] *See* Jeffrey E. Sohl, *The U.S. Angel and Venture Capital Market: Recent Trends and Developments*, J. OF PRIVATE EQUITY 7, 14 (2003) [hereinafter *Recent Trends and Developments*]:

> The [capital] gap ranges from $100,000 at the low end, the point at which the money raised from friends and families and bootstrapping runs out, to the $2 million range on the high end, the time when the venture would historically become attractive enough to catch the eye of venture fund investors.

[47] There are exceptions, such as specific venture funds devoted to early stage investments, but early-stage investments are not the industry norm. To underscore this observation, Van Osnabrugge and Robinson found that in 1998, during the height of the dot.com era when venture capitalists were said to move into earlier-stage investments, still only 28% of all venture capital was invested in early stage deals. VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 49.

start-up grows, venture capitalists will sit out the earliest stages in favor of slightly later ones. Second, venture funds attract large amounts of capital from fund investors, and spending this capital efficiently requires making large investments than may be appropriate for very young companies. Finally, venture capitalists screen and monitor their investments closely, which imposes significant costs.[48] For instance, a partner from the venture capital firm typically sits on the board of each start-up that the firm funds.[49] This intensive use of human resources limits the number of start-ups that can be funded. The need for selectivity exacerbates the tendency to fund start-ups with some operating history and to supply them with larger investments.

The funding gap poses a serious problem for start-ups. Without financial and non-financial assistance during their first year, many start-ups will fail to develop to the point of attractiveness for venture capitalists.[50] This is where angels are so critical. Angels fill the funding gap as to both time and capital, and by doing so function as a "conveyor belt" that moves young start-ups along toward waiting venture capitalists.[51]

First, angels fill the time gap by investing when venture capitalists will not. Jeffrey Sohl estimates that angels provide 80% of the early stage

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[48] On the decision to invest, Gompers and Lerner write:

> The typical venture organization receives many dozens of business plans for each one it funds. Although most proposals are swiftly discarded, serious candidates are extensively scrutinized through both formal studies of technology and market strategy and informal assessment of the management team. (It is not unusual for a venture team to complete 100 or more reference checks before deciding to invest in a firm.).

GOMPERS AND LERNER, *supra* note 11, at 5. *See also* John L. Orcutt, *Improving the Efficiency of the Angel Finance Market: A Proposal to Expand the Intermediary Role of Finders in the Private Capital Raising Setting*, 37 ARIZ. ST. L.J. 861, 873-74 (2005) (it is more cost-effective to spread sizeable due diligence costs over a larger investment). On monitoring, *see* GOMPERS AND LERNER, *supra* note 11, at 171 ("Venture capitalists' oversight of new firms involves substantial costs."); John Freear et al., *Angels on Angels: Financing Technology-Based Ventures – A Historical Perspective*, 4 VENTURE CAP. 275, 278 (2002) [hereinafter, *Angels on Angels*].

[49] GOMPERS AND LERNER, *supra* note 11, at 171-184 (discussing how venture capital board membership varies with geographic proximity to the start-up and during times where greater oversight is needed).

[50] Sohl, *Recent Trends and Developments*, *supra* note 46, at 15 ("without seed and start-up capital, many of these high-tech ventures do not even get past the initial stages of development").

[51] *See* Tony Stanco and Uto Akah, *The Relationship Between Angels and Venture Capitalists in the Venture Industry* 6 (2005), http://lab2ipo.org/A2VCSurvey/VC%20Angel%20Survey%20v.final.pdf (using the conveyor belt analogy).

capital to high-tech start-ups.[52] Andrew Wong's empirical study of angel investment found that when angels invested in early rounds, 73% of the time they did so without venture capitalists as co-investors.[53] With venture capitalists moving toward even later stage investments, the need for angels in the earlier rounds is even more pronounced.[54] Because they direct their investments at start-ups in different stages of development, angels and venture capitalists mostly serve complementary rather than competitive functions.[55]

Second, angels fill the capital gap by providing appropriate amounts of funding to early stage start-ups. A typical angel round ranges from $100,000 to $1 million or even $2 million at the high end – the very size of the capital gap.[56] This financing allows early stage companies to accomplish a variety of objectives that will make them attractive to venture capitalists, including: proving a concept through product development; beginning marketing; securing customers; and obtaining patent protection. The aggregate angel market is estimated to be as large as, or even larger than, the venture capital market.[57] But because each

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[52] Sohl, *Recent Trends and Developments*, *supra* note 46, at 14.

[53] Andrew Wong, *Angel Finance: The Other Venture Capital* (2002), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=941228&high=%20andrew%20wong , at 12 & 43 tbl.2; *id.* at 11 ("Most firms that receive [angel] funding are less than 12 months old. In comparison, the average age of first funding for venture-backed firms is greater than one year.") (citation omitted).

[54] *See infra* notes 209-210 and accompanying text.

[55] *See* John Freear and Jeffrey Sohl, *The Characteristics and Value-Added Contributions of Private Investors to Entrepreneurial Software Ventures*, 6 J. ENTREPRENEURIAL FIN. 84, 89 (2001) ("the research [on the funding of software ventures] provides added evidence to support the existence of a complementary relationship between private investors and venture capital funds"); *Cf.* Brent Goldfarb et al., *Are Angels Preferred Venture Investors?*, draft available at http://www.smith.umd.edu/seminars/Papers/angelsv1.11.pdf (arguing that in those "Series A" financing rounds where angels and venture capitalists compete to fund, entrepreneurs will prefer angels for reasons suggested in this Article, creating an adverse selection or "lemons" problem for venture capitalists).

[56] Sohl, *Recent Trends and Developments*, *supra* note 46, at 13 ("The typical angel deal is an early-stage round (seed or start-up) in the $100,000 to $2 million range"); Wong, *supra* note 53, at 12 & 43 tbl. 2 (angel rounds averaged $1 million). Some accounts from the early to mid-1990s suggest that the transition from angel to venture capital financing occurred sooner, around $500,000 to $1 million. *See* John Freear and William E. Wetzel, Jr., *Who Bankrolls High-Tech Entrepreneurs?*, 5 J. BUS. VENTURING 77, 87 (1990); John Freear et al., *The Private Investor Market for Venture Capital*, 1 FINANCIER 7, 8 (1994) [hereinafter *Private Investor Market*].

[57] Although it is difficult to estimate the total size of the angel market due to its informality, studies suggest that during modern times it has ranged from an average of about $25 billion per year to a peak of $50-$60 billion during the height of the dot.com era in 2000. *See* VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 69; Freear et al., *Private Investor Market*, *supra* note 56, at 7. The venture capital market also rose sharply during the dot.com era. Venture capitalists invested $3.8 billion in start-ups in

angel round is smaller, angels fund more significantly more start-ups than venture capitalists – perhaps thirty to forty times more.[58] Therefore, while angels provide a filtering function for venture capitalists, they do not use too fine a filter, which reduces the chances that a promising prospect will fail prematurely.

Finally, angels provide value-added services to entrepreneurs. These are non-financial services of a different type than venture capitalists provide. While venture capitalists take a more formal role and offer benefits such as connections to professional managers, angels provide informal advice and counseling. Most angels are ex-entrepreneurs themselves, which allows for seasoned advice and empathy on the many difficulties faced in advancing an early-stage venture.[59] Angels typically invest in companies that are a short drive away to facilitate regular interactions with entrepreneurs and active participation in the venture's growth.[60] Many entrepreneurs believe that an angel's advice is as important as her financial capital.[61]

For all of these reasons, not only do angels help start-ups grow, but they allow the venture capital model to work in its present form. The venture capital model relies on start-ups surviving their earliest stages, and this relies on angels. Without angels, venture capitalists would have to invest earlier and more often – earlier so start-ups would have the cash necessary for initial growth, and more often because angels would not have provided an early stage sorting or filtering function among the countless start-ups that seek funding.

Although the need for angels is clear from a theoretical perspective, the histories of leading companies such as Amazon.com and Google firmly illustrate the point as a practical matter. Amazon.com

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1995, followed by $10 billion in 1997, $35.6 billion in 1999, and over $100 billion in 2000. *See* Sohl, *Recent Trends and Developments*, *supra* note 46, at 13. The years since the dot.com bust have seen a return to average venture capital investments of around $20 billion per year. ANDREW METRICK, VENTURE CAPITAL AND THE FINANCE OF INNOVATION 13 (2007). In 2006, angels and venture capitalists each invested approximately $25 billion. See *The Angel Investor Market in 2006: The Angel Market Continues Steady Growth*, available at www.unh.edu/cvr (citing total angel investments in 2006 at $25.6B); [cite VC stats; update both with 2007 figures if available].

[58] VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 69.

[59] *Id*. at 108 (75-83% of angels have prior start-up experience); John Freear et al., *Angels and Non-Angels: Are There Differences?*, 9 J. BUS. VENTURING 109, 111 (1994) (citing studies for the proposition that a majority of angels "have entrepreneurial experience as owners or managers").

[60] *See infra* note 135 and accompanying text.

[61] Sohl, *Early Stage Equity Market*, *supra* note 42, at 112 (entrepreneurs described the mentoring they received from angels "to be as valuable as the capital"); Freear and Wetzel, *supra* note 56, at 96-97 (70% of entrepreneurs considered the value-added services of angels to be very or moderately productive).

founder Jeff Bezos approached venture capitalists early on, but was told that his company was not ready for venture funds. Instead, a dozen angels were willing to invest $1.2 million, which was crucial in positioning the company for its later $8 million venture round.[62] Google similarly benefited from an early $100,000 investment from angel Andy Bechtolsheim, one of the founders of Sun Microsystems. This cash infusion allowed Google co-founders Larry Page and Sergey Brin to "move out of their dorm rooms and into the marketplace."[63]

B. Angel Investment Contracts

Like venture capitalists, angels enter into investment contracts with entrepreneurs that set forth the angel's rights and obligations in the start-up. For the reasons discussed earlier, extreme levels of uncertainty, information asymmetry, and agency costs in the form of potential entrepreneurial opportunism also plague angel investments.[64] In fact, because angels invest at an even earlier stage, when a start-up has no operating history whatsoever, these problems are even more acute than at the time venture capitalists invest. Therefore, financial contracting theory would seem to predict an angel contract modeled after the venture capital contract, perhaps with even *more* protections. This would include, among other things, the use of a convertible, preferred security and significant control rights.[65] But what we know reveals that the investment contracts used by traditional angels differ dramatically from those used by venture capitalists.

What we know must be pieced together from various sources because angels are very difficult to study.[66] The angels market has long been reference-driven and characterized by its informality, with angels operating behind the scenes and generating deal flow from trusted

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[62] Sohl, *Early Stage Equity Market*, *supra* note 42, at 102.

[63] Michael V. Copeland, *How to Find Your Angel Investor*, BUS. 2.0 MAG., February 28, 2006, http://money.cnn.com/2006/02/28/magazines/business2/angelinvestor/index.htm; *see also* http://www.google.com/corporate/history.html#1998.

[64] *See supra* notes 16-19 and accompanying text.

[65] *See* F. Cornelli and O. Yosha, *Stage Financing and the Role of Convertible Debt* (1998); Jeffrey J. Trester, *Venture Capital Contracting Under Asymmetric Information*, 22 J. BANK. & FIN. 675 (1998); Dirk Bergemann and Ulrich Hege, *Venture Capital Financing, Moral Hazard, and Learning*, 22 J. BANK. & FIN. 703 (1998); Neher, *supra* note 25.

[66] *See* Wong, *supra* note 53, at 2 ("Despite the importance of angel funding, much of what is known about angels is incomplete and not well understood. Very few academic studies have examined angels, in part because data on angel investment is difficult to obtain.").

referrals.[67] Angels have a penchant for secrecy to avoid being inundated with funding requests from the multitudes of new start-ups that require capital.[68] That angels prefer to operate through back channels makes finding them as difficult for academics as it is for entrepreneurs.[69] Therefore, studies of angel contract design are largely missing from the literature.[70]

Andrew Wong gives us the best study of angel contract design to date.[71] Wong's sample consists of 215 angel investment rounds in 143 companies from across the United States during the period 1994-2001.[72] Although they are few in number, Wong's study, other studies,[73] and anecdotal accounts present a fairly consistent picture of angel contract design. They reveal that traditional angels use simpler contracts than

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[67] VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 144 ("studies have found that business angels usually learn of investment opportunities through a network of friends and family, business associates, accountants, and lawyers as referrals"); *Venture Support Systems Project: Angel Investors* (MIT Entrepreneurship Center, February 2000), available at http://entrepreneurship.mit.edu/Downloads/AngelReport.pdf [hereinafter "MIT Study"], at 28 ("The angels we interviewed said they received their highest quality deals from their network of trusted business associates."). In what is credited as the earliest article on angels, William Wetzel observed that the angels market is "virtually invisible, inefficient, and often misunderstood." William E. Wetzel, Jr., *Angels and Informal Risk Capital*, SLOAN MANAGEMENT REVIEW 23, 24 (1983).

[68] VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 46 ("if it becomes widely known that an individual has money to invest, then he or she may be besieged with hundreds of proposals per year, when his or her desire may be only for three or four").

[69] *Id*. at 84 (noting that in their attempts to interview angels, angels often asked for an extensive explanation as to how they were found, with a number refusing to participate).

[70] *See* Jeffrey E. Sohl, *The Private Equity Market in the USA*, 5 VENTURE CAP. 29, 42 (2003) (research on the "terms and conditions" of angel investment contracts is "acutely missing from the current knowledge base"). On the types of studies that comprise the existing literature on angels, *see* Wong, *supra* note 53, at 8 (most studies of angels "focus mainly on descriptive statistics of investment size while my paper focuses on the control aspects of angel investment"); Freear et al., *Angels on Angels*, *supra* note 48, at 279 ("The majority of the research output…has been empirically based, seeking to learn more about the attitudes, behaviour and characteristics of the angel population (often known as the 'ABCs' of angels)."). Much of what we currently know about angels comes from the University of New Hampshire's Center for Venture Research and its affiliated academics, including John Freear, Jeffrey Sohl, and William Wetzel. The Center's website address is http://wsbe.unh.edu/cvr/.

[71] *See generally* Wong, *supra* note 53.

[72] *Id*. at 4.

[73] For example, Stephen Prowse offers a small study of Dallas-area angels. *See* Stephen Prowse, *Angel Investors and the Market for Angel Investments*, 22 J. BANKING & FIN. 785 (1998).

venture capitalists that are comprised of entrepreneur-friendly terms.[74] As a general rule, these contracts employ none of the five methods venture capitalists have devised to mitigate uncertainty, information asymmetry, and agency costs in start-up investments.

First, traditional angels do not stage their investments. Wong's survey found that when a venture capital round followed an angel round, angels were unlikely to participate.[75] Even when angels did participate in future rounds, Wong found that less than half of those angels who initially invested did so again.[76] These findings track the conventional wisdom that angels provide early stage funding to grow the start-up for the first year or so, after which venture capitalists take over. When an angel does follow-on her own investment in a later round, it has been shown to correlate with a lower return,[77] suggesting that the angel provided the subsequent funding as a last resort to keep a struggling venture afloat rather than to obtain a larger piece of a good investment.

Second, the traditional angel receives common instead of preferred stock in exchange for her investment. Wong's survey found that the greatest number of angels took straight common stock,[78] which tracks anecdotal accounts. For example, Stephen Prowse states that "unlike in the organized private equity market, many angels are content to take common stock,"[79] while Jesse Fried and Mira Ganor observe that "angels frequently invest through common equity."[80]

Third, while board seats are commonly granted in venture capital rounds, they do not appear common in angel rounds. Wong's study found

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[74] VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 175 ("angels often use relatively simple investment contracts"); Sohl, *Early Stage Equity Market*, *supra* note 42, at 112 (angel "[d]eal structure, as stated in their terms and conditions, tend to be briefer and more informal than those of venture capital funds"); MIT Study, *supra* note 67, at 36 (angels who invest in a small number of deals, are new to angel investing, or who invest primarily for non-financial reasons "use informal or simple term sheets, or in some cases, there is no term sheet").

[75] Wong, *supra* note 53, at 18 ("staging is not a frequently used control mechanism by angels").

[76] *Id*.

[77] Robert Wiltbank & Warren Boeker, *Return to Angel Investors in Groups*, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1028592, at 8. *See also* Bob Goff, *The Sierra Angels: Broadening the Charter*, *in* STATE OF THE ART, *supra* note 43, at 83 (during tough times, angels "must be prepared to help fund subsequent rounds for portfolio companies").

[78] Wong, *supra* note 53, at 19 ("Common equity is the most prevalent security, used in 34% of all [early-stage] rounds and 39.5% of angel-only rounds.").

[79] See Prowse, *supra* note 73, at 790.

[80] Fried and Ganor, *supra* note 36, at 1009.

that a single board seat was granted in less than half of all angel rounds.[81] Another study of angel investment in software ventures put the figure even lower, at only 20%.[82] On the other hand, one older study and some anecdotal accounts suggest that board representation is more common in angel investments than the other venture capital protective devices.[83]

Fourth, few angels contract for negative covenants. Wong's study found that negative covenants allowing veto of management decisions were included in only 5.1% of angel contracts.[84] In a study of Dallas-area angels, Stephen Prowse observed that "control mechanisms used in the organized private equity market, such as covenants preventing mergers, asset sales or entering into long-term contracts without outside investor approval, appear rare in the angel market."[85]

Finally, like negative covenants, specific exit rights may also be used less frequently by angels than any of the other venture capital protective devices. For instance, Wong's study found that a provision granting angels the right to force bankruptcy was included in only 4.6% of angel contracts.[86] This tracks with Van Osnabrugge and Robinson's observation that angels are unlikely to specify a method of liquidation at the time of investment.[87] Wong's study also revealed no contracts where the angel was allowed to put her shares to the entrepreneur for redemption, but 38 contracts that allowed the entrepreneur to exercise a call option and redeem the angel's shares.[88]

Traditional angels do, however, use at least one of the venture capitalist's non-contractual risk-spreading devices. That is, angels have

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[81] Wong, *supra* note 53, at 15 (board seat granted in only 42.5% of angel rounds).

[82] *See* Freear and Sohl, *supra* note 55, at 96 (only 20% of angels funding software ventures had representation on the board).

[83] *See* John Freer et al., *Raising Venture Capital: Entrepreneurs' View of the Process*, *in* FRONTIERS OF ENTREPRENEURSHIP (1990), (71% of angels were on boards); Prowse, *supra* note 73, at 790 ("Angels are very often on the board."); Jeffrey E. Sohl and Jill Areson-Perkins, *Current Trends in the Private Equity Financing of High Tech Ventures: An Analysis of Deal Structure*, at 5 (2001) (unpublished manuscript, on file with author) ("for venture capitalists, as well as angels, board representation is an important consideration"). *But see* Fried and Ganor, *supra* note 36, at 1009 ("Unlike VCs, angels generally do not acquire control rights and board positions.").

[84] Wong, *supra* note 53, at 53 tbl.6 Panel D.

[85] Prowse, *supra* note 73, at 790.

[86] Wong, *supra* note 53, at 53 tbl.6 Panel D.

[87] VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 199 ("Freear, Sohl, and Wetzel's finding that in the United States 'private individuals were more inclined to leave the method of liquidation undefined at the time of investment than were venture capital funds' still rings true.") (citation omitted).

[88] Wong, *supra* note 53, at 53 tbl.6 Panel D. Unsurprisingly, I have not come across evidence of a traditional angel bargaining for registration rights.

long syndicated their investments, with an angel investment team comprised of anywhere from six to twelve "active" and "passive" angels.[89] On the other hand, it is difficult to tell to what extent angels adopt the venture capitalist's portfolio theory of investment. Some studies and anecdotal accounts suggest that the typical angel invests in less than one deal per year, which would not permit much diversification,[90] while other commentators have suggested that angels do diversify.[91] More empirical work is needed to answer this question. However, even if angels invest in a number of start-ups, their preference for start-ups in their field of expertise limits diversification of industry.[92]

I reiterate that angels are very difficult to study, and the survey method most commonly used to study them has inherent flaws.[93] As two commentators wrote: "Angel research is a crude field in an early stage of development where convenience sampling is often a necessity and statistically valid generalization is nearly always impossible."[94] Also, it is likely that differences among the wide range of individuals who fall into the "traditional angel" category translate to differences in contract design. For instance, more experienced and sophisticated angels in high-tech corridors may demand more venture capital-like terms.[95] On the other

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[89] Sohl, *Recent Trends and Developments*, *supra* note 46, at 13 (typical angel round involves six to eight investors); Wong, *supra* note 53, at 23 ("On average, twelve angels co-invest in a round."); Sohl, *Early Stage Equity Market*, *supra* note 42, at 111 ("In many cases there is a lead investor that brings the investment opportunity to these co-investors as a means of risk sharing and pooling of capital to round out the financing requirements."). Syndication can be less attractive to active angels who invest to play a hands-on role in the entrepreneurial process if co-investors also wish to play that role. *See* VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 136 (citing one angel as stating: "'Co-investors attract if I'm in it purely for the investment; if it's an investment where I have a hands-on role it doesn't attract – otherwise you have too many egos involved, and it leads to conflict'."). Stephen Prowse observes that passive angels rarely exist in a syndicate without an active angel. Prowse, *supra* note 73, at 788.

[90] *See* VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 109 (discussing studies by Freear and Wetzel, J.D. Aram, and R.J. Gaston); Prowse, *supra* note 73, at 788 ("Many angels do not make more than one investment per year, although there are a few full time angels that will make four or more per year.").

[91] Freear et al., *Angels on Angels*, *supra* note 48, at 277 ("angels will tend to invest in entrepreneurial ventures as part of a total portfolio that contains investments with differing risk characteristics").

[92] *See infra* notes 127-132 and accompanying text (on how angels select their investments).

[93] Wong sought to reduce selection bias by sampling entrepreneurs that received angel funding rather than angels themselves. Wong, *supra* note 53, at 8-9.

[94] Kevin Hindle and Susan Rushworth, *The Demography of Investor Heaven: International Research on the Attitudes, Behaviour and Characteristics of Business Angels*, *in* BRIDGING THE ENTREPRENEURIAL FINANCING GAP, *supra* note 13, at 10.

[95] A 2000 MIT study of 26 experienced angels in the Silicon Valley and Route 128 areas found larger investments and greater use of venture capital-like terms among these

hand, the obscenely wealthy angels may not ask for a contract at all, or only a simple contract, because the investment is not a meaningful sum of money for them (this might have been the case with Andy Bechtolsheim's $100,000 investment in Google, where he simply handed the founders a check after they made a short presentation). It is also reasonable to assume that repeat angels "burned" by a lack of foresight in the past may protect against that contingency by contract in future investments. The impact of these differences among traditional angels has not been adequately considered, and it would be useful to conduct further empirical studies that employed a more refined taxonomy.[96] But, despite the presence of exceptions to the general rules described above, and while acknowledging the need for further research and refinement, the available evidence does point to a unique investment model for traditional angels as a generalized group – a model that seems puzzling in its lack of contractual protections.

C. Explaining Angel Investment Behavior

Why does the angel model differ so dramatically from the venture capital model and from what financial contracting theory would appear to predict given the perilous nature of start-up investments? It could be, as has been suggested, that angels lack bargaining power over entrepreneurs to extract numerous contract protections.[97] But this is unlikely given that start-ups desperately need angel funding and value-added services to advance beyond the initial stages of development. Accordingly, it would appear that angels do enjoy bargaining power over cash-strapped entrepreneurs. It is also unlikely that a competitive market among angels is driving contract design. First, there is excess demand for angels and

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investors. MIT Study, *supra* note 67, at 37. *See also* Peter Kelly and Michael Hay, *The Private Investor-Entrepreneur Contractual Relationship: Understanding the Influence of Context*, *in* FRONTIERS OF ENTREPRENEURSHIP RESEARCH 258, 264 (Paul D. Reynolds et al. eds., 2000) ("we found that more experienced investors incorporated more contractual safeguards up front than their less experienced colleagues"); Prowse, *supra* note 73, at 788 ("The more sophisticated angels tend to insist on investment contracts that resemble the ones written in the organized private equity market, which contain lots of mechanisms to overcome moral hazard problems and protect them in the case of poor performance, whereas unsophisticated angels omit even the most basic protections.").

[96] Broader taxonomies have been attempted, although none have matched the categories of angels with contracting behavior. *See* VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 85-90 (giving some of the taxonomies of angels that have been suggested over the years, including one taxonomy that includes ten types of traditional angels); MIT Study, *supra* note 67, at 17-21. *But see* Freer et al., *Angels on Angels*, *supra* note 48, at 281 ("Perhaps fortunately, the spate of new terms [for angels], once in full flood, is drying up.").

[97] MIT Study, *supra* note 67, at 37 ("even experienced angels do not achieve all the stringent venture capitalist terms. They do not have the negotiating power of venture capitalists…").

therefore plenty of funding opportunities to go around.[98] Second, if angels do compete to fund the most attractive start-ups, it is likely in the ways that venture capitalists compete – over valuation and reputation rather than contract terms.[99]

A second possible explanation for the angel model is that angels do not need aggressive contracts because they adequately diversify risk by syndicating their investments and investing in a portfolio of start-ups. In other words, they make efficient use of two of the three venture capitalist protective measures, which renders the third unnecessary. However, there are two problems with this explanation: 1) venture capitalists still consider comprehensive investment contracts necessary, despite their use of syndication and portfolio theory; and 2) as discussed in the last section, it is far from clear that angels invest in a sufficient number of start-ups or industries to allow for true diversification.[100]

A third possible explanation is that angels are unsophisticated investors who are willing to settle for few protections because they do not know any better. Indeed, this is probably the conventional wisdom as to why angels invest as they do.[101] However, while a lack of sophistication may partially explain angel contract design,[102] it is unlikely to be the primary explanation for two reasons. First, angels are high net-worth individuals, or "accredited investors," who are not the sort of investors we

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[98] Despite a robust angel market, the funding gap still exists. *See* Sohl, *Recent Trends and Developments*, *supra* note 46, at 14 (attributing the funding gap to capital and information inefficiencies); William K. Sjostrom, Jr., *Relaxing the Ban: It's Time to Allow General Solicitation and Advertising in Exempt Offerings*, 32 FLA. ST. L. REV. 1, 3-4 (2004) (suggesting that the funding gap could be filled if the SEC allowed general solicitation in exempt offerings); Colleen DeBaise, *On Angels' Wings*, WALL ST. J., Mar. 19, 2007, at R6 (discussing proposed "Access to Capital for Entrepreneurs Act of 2006," which would have provided a 25% tax credit for angel investing).

[99] It could be that angels as a group maintain their dominance over funding early stage start-ups by eschewing the venture capital model, but there is little evidence that venture capitalists wish to move into this space, and good reasons why this is so. *See supra* notes 47-49 and accompanying text.

[100] *See supra* notes 90-92 and accompanying text.

[101] *See* Sam Yagan, *Angel vs. VC Funding*, AMERICAN VENTURE MAGAZINE, February 2007, http://www.americanventuremagazine.com/articles/658 ("angels may be less sophisticated investors"); Orcutt, *supra* note 48, at 896 ("Why angels employ weaker screening and monitoring mechanisms is not entirely clear. It could be due to lack of sufficient resources or lack of knowledge on how to conduct such activities."); VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 172 (only 38% of angels in the UK seek assistance for lawyers and accountants); Fried and Ganor, *supra* note 36, at 1009 ("Because angels invest less than VCs and are generally less sophisticated, their financing agreements are much more informal.").

[102] *See supra* note 95 and accompanying text.

generally consider unsophisticated.[103] After all, our securities laws use wealth as a proxy for sophistication and allow issuers to forego disclosures to accredited investors.[104] Second, angels are overwhelmingly ex-entrepreneurs,[105] which suggests that they not only understand investing as a general matter, but start-up investments in particular. This is because they made their fortunes after going through the very same funding process on the other side.

The next two sections explore more likely reasons for the traditional angel investment model, all of which support the notion that angels are sophisticated investors who make smart investment choices. Here, I agree with Vic Fleischer that when possible we should look for rational over irrational explanations to explain the behavior of sophisticated parties.[106] The explanations that follow will confirm that. The first set of explanations reveals that the angel investment model is rational from a financial perspective because of the angel's unique circumstances. The second set of explanations reveals that angel investing is more than a purely financial endeavor, with important non-financial goals that could be jeopardized if the venture capital model were to be adopted.

Of course, for some angels, certain rationales from the following set will be more important than others in driving behavior. In that sense, the following rationales can be thought of as a "menu of options," with different angels picking and choosing which rationale or rationale best applies to their own situations. Given the wide variations within the category of traditional angels, there are undoubtedly wide variations in the reasons for a particular contracting preference. The following are five possible rationales that I contend account for why most traditional angels contract on simple, non-protective terms.

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[103] *See* Jill E. Fisch, *Can Internet Offerings Bridge the Small Business Capital Barrier?*, 2 J. SMALL & EMERGING BUS. L. 57, 74 (1998) (The Small Business Association's "ACE-Net" service, a matching service for small business issuers and angel investors, defines angels as accredited investors).

[104] Interpretative Release on Regulation D, Exchange Act Release No. 33-6455, 48 Fed. Reg. 10,045 (March 10, 1983) ("accredited investors are not included in computing the number of purchasers in offerings conducted in reliance on Rules 505 and 506. Also, if accredited investors are the only purchasers in offerings under Rules 505 and 506, Regulation D does not require delivery of specific disclosure"). Of course, it could also be that we do not think wealthy individuals are necessarily more sophisticated for purposes of making investment decisions, but that they are better able to absorb losses from poor decisions.

[105] *See supra* note 59 and accompanying text.

[106] *See* Victor Fleischer, *The Rational Exuberance of Structuring Venture Capital Start-ups*, 57 TAX L. REV. 137, 140 (2003) ("this Article calls attention to the value of seeking out rational explanations before accepting irrational ones – especially when analyzing the behavior of sophisticated experts").

1. *Angel Contract Design as Financially Rational*

a. The Need for Follow-On Venture Capital Funding

The first reason that angel contract design is financially rational is that angels are the first, but not the last, source of outside funding for start-ups.[107] As discussed earlier, angels build the financial bridge from friends and family money to venture capital.[108] Venture capital is needed for a start-up to have any realistic chance at an IPO or even a high-dollar sale to a larger company.[109] Because these are the very exits that make up the angel's most lucrative returns,[110] and therefore compensate for the far greater number of start-ups that fail, angels must entice venture capitalists to follow their investments to have any hope of profit.

This need for venture capital sets de facto limits on the terms of the angel investment contract. To understand why this is so, it is important to recognize that venture capitalists are flooded with funding proposals, and accept maybe 1-3% of them.[111] Funding proposals are rejected for any number of reasons, including a lack of preexisting knowledge about the entrepreneur.[112] While the presence of angels is generally a positive in attracting venture capital,[113] another reason a venture capitalist might reject a funding proposal is the presence of an aggressive or overreaching angel. A start-up marred by a complicated angel round is unattractive to venture capitalists because it requires them to "unwind" the non-standard angel preferences in order to strike the venture capitalist's standard deal. In other words, venture capitalists obtain their usual number of board

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[107] *See* Leavitt, *supra* note 19, at 224 ("Angels generally invest with the expectation that, should the company progress as planned, one or more venture capital ('VC') firms will subsequently invest").

[108] *See supra* Part III.A. On the other hand, some angels may invest in companies that do not wish to go on to attract venture capital. *See* Sieverens, *supra* note 43, at 29 (in the fallout years after the dot.com bust, the Band of Angels investment organization was "more willing to look at companies that are unlikely to go the venture capital route and can make do with less. While those types of opportunities are not likely to be IPO candidates, they can often be attractive acquisitions for larger concerns once their businesses are profitable and established").

[109] *See supra* note 12 and accompanying text.

[110] Wiltbank & Boeker, *supra* note 77 at 1 (study, albeit of AIO angels, finding that 7% of angel exits provided 75% of all investment returns).

[111] *See* VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 146 ("venture capitalists invest in only about 1-3 percent of proposals received"); STROSS, *supra* note 13, at 24 (observing that well-known venture capitalist Benchmark Capital received 1500 funding proposals in 1997 and funded only nine).

[112] *See* STROSS, *supra* note 13, at 25.

[113] *See* Wong, *supra* note 53, at 26 ("more angels leads to a faster time to venture financing. This is evidence that angels can play a networking role; a larger number of angels leads to a larger network of contacts and faster venture capital financing").

seats, control rights, and liquidation preferences in each investment. To the extent that angels have obtained such rights and preferences, they must be undone or else venture capitalists are sharing with the angels and obtaining less than their standard deal. Because this unwinding takes time, effort, and money – not to mention negotiations and a subsequent relationship with an unhappy angel[114] – the venture capitalist faced with numerous investment candidates and limited resources may well pass on the start-up attached to an aggressive angel.

The literature confirms this disadvantage of a preference-filled angel round. One survey found that 94% of venture capitalists consider angels beneficial to the venture capital industry,[115] but that 44% also found angel-backed start-ups to be unattractive candidates for funding when angels took "unnecessarily complex terms."[116] (The most common complaint is that angels overvalue the company.[117]) As a result, early-stage venture capitalist John Callaghan cautions angels against taking "unclean" terms such convertible debt instead of common stock because it may be seen as "extra 'baggage'" by venture capitalists,[118] although other venture capitalists appear to be more comfortable with that particular angel term.[119] Susan Preston, an experienced angel investor, also advises

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[114] MIT Study, *supra* note 67, at 46 ("Active angels are often requested to leave the Board once professional investors participate in subsequent financing rounds….They sometimes resent being removed from the Board").

[115] Stanco and Akah, *supra* note 51, at 3. *See also* KAREN SOUTHWICK, THE KINGMAKERS: VENTURE CAPITAL AND THE MONEY BEHIND THE NET 224-25 (2001) (some venture capitalists look down on angels as being amateurs or not on the venture capitalists' level, although most venture capitalists still acknowledge the need for angels).

[116] Stanco and Akah, *supra* note 51, at 11. Quotes from surveyed venture capitalists emphasized the point. For example, one venture capitalist stated that "there is a tendency to think a cram down and conversion [of an angel's preferred stock] to common is 'necessary' for follow-on venture financing." *Id*. at 12. Another had the following advice for angels: "Deal structuring so that terms don't complicate a VC round that follows. Creating the structure, driving the company to key milestones, etc., to make follow-on VC rounds cleaner and more likely." *Id*. at 15.

[117] *Id*. at 11 (78% of venture capitalists registered this complaint).

[118] Posting of John Callaghan to PEHUB, http://www.pehub.com/wordpress/?p=217.

[119] Convertible debt is presents an interesting dilemma for venture capitalists. It creates a more complicated angel round, but by deferring valuation until the next round, it allows venture capitalists to eliminate their biggest problem with angels – overvaluation. *See* MIT Study, *supra* note 67, at 38 ("Some high tech angels use convertible debt to avoid the battle over valuation with the entrepreneur. These securities allow the venture capitalist or other second round investors to set the value of the company in the next round…and provide the angel seed investors a discount to that round."); *see also* D. GORDON SMITH & CYNTHIA A. WILLIAMS, BUSINESS ORGANIZATIONS: CASES, PROBLEMS, AND CASE STUDIES 160 (2004) (angel investors in Madison, Wisconsin-based NeoClone Biotechnology International LLC took convertible debt that allowed for

angels to keep the terms of their investment simple because "[n]othing can prevent follow-on funding faster than an overly complicated and burdensome first round, which a VC must try to unwind, often demanding a discounted value and other 'cram-down' requirements to offset onerous or overreaching first-round terms."[120] Jeffrey Sohl and Jill Areson-Perkins observe that angels appear to understand their place in entrepreneurial finance and the need for venture capital: "Seed investors [i.e., angels] appear to make a concerted effort to not over burden the seed deal with onerous terms and conditions that may inhibit the firm's ability to attract larger rounds of equity capital in the future."[121]

Therefore, angel contract design is financially rational because angels are involved in a multiplayer game that involves both entrepreneurs and venture capitalists. Early stage venture capitalists also face these de facto limitations on extracting preferences, albeit to a lesser degree, and as a result their contracts appear to be less comprehensive than later-stage venture capital contracts but more comprehensive than angel contracts.[122] We may think of this as a sliding scale where the extent of permissible preferences depends on when and how much is invested.[123] Later-stage venture capitalists, who are at the very end of the sliding scale because they invest the most and the latest, do not face contracting limitations, at least before an exit. In the case of an IPO, investment bankers and public shareholders will "follow" the late-stage venture capitalists, but this is accounted for: an IPO automatically unwinds the venture capitalist's preferences, most notably through the mandatory conversion of preferred stock to common.[124]

While venture capitalists as a group do not face the same de facto limitations on contracting as angels, they do face significant pressure from

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conversion to equity on the upside but offered debt's superior protection on the downside).

[120] SUSAN L. PRESTON, ANGEL INVESTMENT GROUPS, NETWORKS, AND FUNDS: A GUIDEBOOK TO DEVELOPING THE RIGHT ANGEL ORGANIZATION FOR YOUR COMMUNITY 57 (2004).

[121] Sohl and Areson-Perkins, *supra* note 83, at 5.

[122] *See* Brian J. Broughman and Jesse M. Fried, *Deviations from Contractual Priority in the Sale of VC-Backed Firms*, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=956243, at 51 tbl.1 (documenting that venture capitalists take fewer liquidation preferences in the early stages than the later stages).

[123] This may seem odd, that later-stage investors receive greater preferences given that earlier-stage investors take more risks. However, "last-in, first-out" is standard practice in venture capital investing. *See* Bartlett, *supra* note 19, at 76 ("Later investors typically wan to be the first in line to get their original investment (and hopefully their return on investment) out."). Early stage investors are compensated for their extra risk by receiving a larger share of the company for less money.

[124] *See* Gilson and Schizer, *supra* note 31, at 885.

venture fund investors to produce high returns within a relatively short timeframe.[125] This motivates them to go in the opposite direction and demand terms that will allow them to meet investor expectations. Ron Gilson has observed that the venture capital investment contract is thus "braided" with the contract for fund investors for purposes of producing those returns.[126] We now see that the angel investment contract is itself braided with the venture capital investment contract, also to produce high returns, but that this is accomplished in a different manner.

b. Informal Substitutes for Contract

The second reason that angel contract design is financially rational is that the unique nature of the relationship between angel and entrepreneur provides informal substitutes for the venture capitalist's formal contract protections. The pre-investment nature of this relationship reduces uncertainty and information asymmetry through the way in which deals are sourced and selected, and the post-investment nature of the relationship reduces agency costs by imposing informal constraints on entrepreneurial opportunism.

Angel investing is highly localized, relationship-driven, and industry-specific. Pre-investment, angels like to invest in start-ups where they know either the entrepreneur or the substantive area (e.g., biotechnology or e-commerce), and preferably both.[127] This preexisting knowledge reduces uncertainty by allowing the angel to better gauge the start-up's chances for success, and reduces information asymmetry by minimizing the entrepreneur's advantage of private information.[128] The source of the angel's deal flow can also serve to reduce these problems. Investment opportunities come to angels from a network of trusted business associates (e.g., other angels), and to a lesser degree from accountants and lawyers.[129] This "network of trust" serves an important screening and sorting function by funneling high-quality deals to angels

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[125] *See infra* notes 164-166 and accompanying text.

[126] Gilson, *supra* note 17, at 1091.

[127] *See* Prowse, *supra* note 73, at 789 ("The primary criterion that angels use to screen proposals is whether the entrepreneur is previously known and trusted by them or by an associate who they trust."); Wong, *supra* note 53, at 28 ("angels have specialized information and have a high ability to screen for higher quality projects. Many investors have made their fortunes in the same industries that they subsequently invest in"). In some cases passive angels invest outside of their geographic locality or area of expertise, but the active angel in the syndicate will either be local or an industry expert, or both.

[128] *See* Wong, *supra* note 53, at 4 ("Because the [venture capitalists] are not as familiar with the entrepreneur as the local [angel] investors, more formal control mechanisms need to be implemented to protect their investment.").

[129] *See* Orcutt, *supra* note 48, at 895 (referrals from other angels are considered high quality, while referrals from accountants and attorneys are considered of lower quality).

while excluding low-quality deals.[130] The intimate way in which angels learn of and select investments can also benefit start-ups by reducing the amount of due diligence required, thus shortening the time from approach to funding.[131] The importance of familiarity and locality in angel investment is underscored by unsuccessful attempts to create electronic matching services for angels and entrepreneurs.[132]

Of course, venture capital is also localized, relationship-driven, and industry-specific compared to many other forms of investment.[133] However, venture capitalists probably fund a wider range of substantive fields than the typical angel. In addition, venture capitalists must make more investments to generate timely returns for fund investors, which inevitably sacrifice some of the intimacy and familiarity that angels without downstream pressure can afford to wait for. Furthermore, at least some venture capitalists might not have the same entrepreneurial experience as angels; instead they are MBA-finance types.[134] All of these differences, however slight, mean that venture capitalists must rely on detailed contracts to a greater degree than angels do to reduce uncertainty and information asymmetry.

In addition, the post-investment nature of the angel-entrepreneur relationship allows angels to use informal substitutes for the contractual monitoring rights and control mechanisms used by venture capitalists. Angels actively participate in venture development through regular visits to the start-up's facilities, which is made possible by investing locally (within a one to two hour drive[135]) and by establishing trust with

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[130] MIT Study, *supra* note 67, at 28 (on how angels build their "network of trust"); Freear et al., *The Private Investor Market*, *supra* note 55, at 11 (localization produces efficiencies in the angel market); Jeffrey E. Sohl and Bruce Sommer, *Angel Investing: Changing Strategies During Volatile Times*, at 20 (working paper, on file with author) (angels use personal networks to overcome information asymmetry with entrepreneurs).

[131] *See* SMITH AND WILLIAMS, *supra* note 119, at 160 n. 5 (entrepreneurs like angels because they tend to perform less due diligence than venture capitalists).

[132] *See* Sohl, *Early Stage Equity Market*, *supra* note 42, at 115 ("Electronic networks have been largely unsuccessful to date, less than 1% of equity capital raised in 1997 was harvested on-line.") (citation omitted). [add more recent source]

[133] *See generally* ANNALEE SAXENIAN, REGIONAL ADVANTAGE: CULTURE AND COMPETITION IN SILICON VALLEY AND ROUTE 128 (1994) (describing the intimate Silicon Valley culture).

[134] VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 109 ("venture capitalists for the most part have little entrepreneurial experience" and are instead "'financial MBA-types'"). *Cf*. SOUTHWICK, *supra* note 115, at 66-67 (noting that some venture capitalists prefer to hire individuals "who get an MBA and jump almost directly into the financial industry" while others emphasize prior entrepreneurial experience – the latter being currently in vogue due to increasing venture capitalist specialization).

[135] MIT Study, *supra* note 67, at 32 ("Most active angels will not invest in opportunities outside a 1-2 hour driving range."); Sohl, *Early Stage Equity Market*, *supra*

entrepreneurs.[136] As Wong notes, a "localized bond of trust may exist between the entrepreneur and [angel] investor, making formal control mechanisms unnecessary."[137] Margaret Blair and Lynn Stout also observe that trust can reduce agency costs and substitute for complex contracts.[138] Venture capitalists are also active investors in the sense that they sit on boards and participate in major decisions, but the angel's involvement is of a more intimate, routine, and hands-on variety. Daily participation in venture development serves as a better check on entrepreneurial opportunism than attending periodic board meetings.[139]

c. Costly Contracting Theory

The final explanation for the financial rationality of angel contract design comes from costly contracting theory. Costly contracting theory, which has its origins in transaction cost economics,[140] predicts that the level of contract complexity will depend on the costs of determining, negotiating, monitoring, enforcing and even drafting the contract's

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note 42, at 112 (angels live close to their investments to facilitate interactions and provide value-added services).

[136] For more on the trust point, *see infra* Part III.C.2.b.

[137] Wong, *supra* note 53, at 24.

[138] Margaret M. Blair and Lynn A. Stout, *Trust, Trustworthiness, and the Behavioral Foundations of Corporate Law*, 149 U. PA. L. REV. 1735, 1757 (2001):

> Where trust can be harnessed, it can substantially reduce the inefficiencies associated with both agency and team production relationships. Trust permits transactions to go forward on the basis of a handshake rather than a complex formal contract; it reduces the need to expend resources on constant monitoring of employees and business partners; and it avoids the uncertainty and expense associated with trying to enforce formal and informal agreements in court.

[139] Wong suggests that the large residual claim held by entrepreneurs (angels take only about 20% of the company in exchange for their investment) better aligns the interests of angels and entrepreneurs than in venture capital (venture capitalists take 33-40%). Wong, *supra* note 53, at 22. Even if the difference in percentage ownership is not significant (Wong acknowledges the possibility), the fact that the angel's stock is common like the entrepreneur's, while the venture capitalist's stock is preferred, may lend some support to Wong's suggestion that angel-entrepreneur incentives are better aligned.

[140] Transaction cost economics dictates that both *ex ante* and *ex post* costs of contracting be considered. *Ex ante* costs are "the costs of drafting, negotiating, and safeguarding an agreement;" *ex post* costs are the costs of enforcement and enforcement mechanisms. OLIVER WILLIAMSON, THE ECONOMIC INSTITUTIONS OF CAPITALISM 20-21 (1985). The recognition that *ex post* processes are not costless was a significant advancement of transaction cost economics over neoclassical economics. On the relationship between costly contracting theory and transaction cost economics, *see* Alan Schwartz and Joel Watson, *The Law and Economics of Costly Contracting*, 20 J. L. ECON. & ORG. 1, 3 n.1 (2004); GOMPERS AND LERNER, *supra* note 11, at 31 (equating costly contracting theory with Williamson's arguments on contractual completeness).

provisions,[141] and of course the amount at risk. Benjamin Klein observes that "complete contractual specification entails wasteful search and negotiation costs associated with discovering and negotiating prespecified contractual responses to all potential contingencies" and that "most future events can be accommodated at lower cost after the relevant information is revealed."[142] For this reason, Gompers and Lerner tell us that "covenants are included only when the benefits of restricting activity are greater than its costs."[143] They advise venture capitalists to "balance the benefits of restricting activities with the cost of negotiating the provisions, writing the contractual clauses, and monitoring compliance."[144]

Because its five protective devices add significant complexity to the relationship, the venture capital investment contract is costlier to design, write, monitor, and enforce than the angel investment contract.[145] This is rationally so; venture capitalists make larger investments, are in control of those investments for a longer period of time (until exit), and have significant downstream pressure from fund investors that shape the relationship with entrepreneurs. Angels, on the other hand, might rationally choose to forego preference-laden contracts because the costs entailed would be disproportionately high relative to the amount of investment,[146] the duration of the preferences would be short due to venture capital unwinding,[147] and because angels do not have the same need for some provisions (e.g., regarding exit because they do not face the same downstream pressures).[148] This is similar to the reason why in debt financing only creditors extending large amounts of credit find it

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[141] *See* Luca Anderlini and Leonardo Felli, *Incomplete Contracts and Complexity Costs*, 46 THEORY & DECISION 23, 38 (1999) ("Complexity is not necessarily associated with devising the contract but rather with the writing and enforcement of such a contract.").

[142] Benjamin Klein, *Why Hold-Ups Occur: The Self-Enforcing Range of Contractual Relationships*, 34 ECON. INQ. 444, 447 (1996).

[143] GOMPERS AND LERNER, *supra* note 11, at 31.

[144] *Id*. at 33.

[145] *See* Schwartz and Watson, *supra* note 140, at 16 ("Complex contracts – those having a greater number of clauses or requiring a court to evaluate information from many different sources – are assumed to be more expensive to write than are simpler contracts.").

[146] *See* VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 174 (quoting an angel as saying that the "legals were disproportionate to the size of the investment"). There has been at least one attempt to create a model to predict the optimal level of contractual completeness in a given situation. *See* Ronald A. Dye, *Costly Contracting Contingencies*, 26 INTL. ECON. REV. 233 (1985).

[147] *See supra* Part III.C.1.a.

[148] *See also* Goldfarb et al., *supra* note 55, at 2 ("Our results suggest that legal control in seed rounds is not cost-effective because these investments are generally small.").

worthwhile to negotiate loan covenants.[149] For all of these reasons, then, costly contracting theory predicts detailed contracts for venture capitalists and simpler contracts for traditional angels, which is indeed what we see.

d. Reputational and Court Sanctions?

Finally, it is interesting to consider to what extent reputational and court sanctions can reduce an angel's agency costs in the absence of an aggressive investment contracts. To invoke costly contracting theory once more, contracts will be simpler when self-enforcement, in addition to court-enforcement, is available to an aggrieved party.[150] However, it is unclear to what extent this is relevant to the design of angel contracts, or venture capital contracts for that matter. The conventional wisdom is that the tight-knit nature of communities such as Silicon Valley creates a market for reputation between venture capitalists and entrepreneurs, which explains the lack of litigation between them.[151] Some scholars contend that this market for reputation serves as an extra-legal constraint on the venture capitalist's ability to exploit entrepreneurs for fear of gaining a bad reputation,[152] while others are more skeptical of this explanation.[153]

If a market for reputation does exist between venture capitalists and entrepreneurs, then it must also exist between angels and entrepreneurs given that relationship's even greater localization, familiarity, and intimacy. Here, however the extra-legal constraint is on entrepreneurs, as the party with the contractual ability to exploit angels. The angel's self-enforcement mechanism – the reputational sanction – might prevent entrepreneurial opportunism even when the investment contract does not, much like the entrepreneur's self-enforcement mechanism is thought to prevent opportunism by venture capitalists. In other words, an angel's ability to complain about an entrepreneur could serve as a powerful deterrent, for it would make venture capitalists leery of investing in the start-up. However, this is a double-edged sword: if

[149] I thank Jesse Fried for this observation.

[150] *See* Klein, *supra* note 142, at 455 (on the complimentary relationship of self-enforcement and court-enforcement).

[151] *See* D. Gordon Smith, *Venture Capital Contracting in the Information Age*, 2. J. SMALL & EMERGING BUS. L. 133, 153-54 (1998) (describing the conventional wisdom).

[152] *See* Bernard S. Black and Ronald J. Gilson, *Venture Capital and the Structure of Capital Markets: Banks Versus Stock Markets*, 47 J. FIN. ECON. 243, 252-53 (1998) (reputational constraints imposed by geographic proximity between venture capitalists and entrepreneurs are an adequate check on venture capitalist opportunism); Sahlman, *supra* note 32, at 513.

[153] *See* Smith, *supra* note 151, at 160-62 (observing that neither entrepreneurs nor venture capitalists have a vehicle for amalgamating or transmitting information about venture capitalist reputation, such as a stock exchange or required disclosures, and that entrepreneurs may have self-serving reasons not to pass along negative information about venture capitalists).

venture capitalists do not invest, the start-up will not be a "home run" and angels will be denied a large return.[154] This means that angels would have self-interested reasons *not* to expose the entrepreneur's opportunism, at least until after venture capitalists invest.[155] Therefore, it is unclear to what extent self-enforcement capital, even if present, will be leveraged by angels.

Another interesting question is whether it is possible that potential legal sanctions could be *bolstered* through a simple contract. Angels, as minority shareholders in what are then close corporations, could look to the judicial remedies that have been fashioned to address minority shareholder oppression.[156] However, it is unlikely that angels will prevail under a minority oppression claim against entrepreneurs.[157] The classic "freeze-out" involves a minority shareholder who is removed from his posts as director, officer, and employee. Having no employment, dividend stream, or exit rights, he is convinced by the majority shareholder to sell his shares for a low price.[158] Courts that protect such minority shareholders though the oppression doctrine might be hesitant to extend the doctrine to angels, who are often shareholders only and do not lose out on expected employment income. Also, courts might be less sympathetic to angels given their sophistication and bargaining power over entrepreneurs.[159] Up to 70% of IPO firms choose to incorporate in Delaware and be governed by Delaware corporate law,[160] which would prevent yet another hurdle, as the Delaware courts do not help minority shareholders who fail to help themselves through contract.[161] On the other hand, an angel's threat to bring a fiduciary duty suit against a cash-poor entrepreneur might have some deterrent effect on the entrepreneur's opportunistic behavior.

In sum, it is unclear to what extent the possibility of reputational and court sanctions are rational reasons for angels to forego protective

[154] *See supra* note 109 and accompanying text.

[155] Of course, allegations of unscrupulous behavior could haunt the entrepreneur in the future, although there is some question as to whether the typical entrepreneur is a "serial" entrepreneur who would be harmed by such allegations. Venture capitalists are obviously repeat players and therefore must be concerned about their reputations.

[156] *See generally* F. HODGE O'NEAL AND ROBERT B. THOMPSON, O'NEAL'S CLOSE CORPORATIONS (3d ed. 1998).

[157] For a discussion of an angel's potential minority oppression claims against venture capitalists, *see generally* Leavitt, *supra* note 19.

[158] *See, e.g.*, Wilkes v. Springside Nursing Home, Inc., 353 NE 2d 657 (Mass. 1976).

[159] *See supra* notes 96 and 100-104 and accompanying text.

[160] *See* Robert Daines, *The Incorporation Choices of IPO Firms*, 77 NYU L. REV. 1559 (2002)

[161] *Nixon v. Blackwell*, 626 A.2d 1366 (Del. 1993).

investment contracts. It is, however, clear that better reasons include the need for follow-on venture capital funding, informal substitutes for contract, and costly contracting theory.

2. *Non-Financial Motivations*

a. Non-Financial Reasons for Investing

The previous section revealed that angel investment contracts are indeed rational from a financial perspective. In venture capital, the story ends here. Venture capitalists invest for purely financial ends. As I have alluded to, a major reason for this is that venture capitalists are financial intermediaries, meaning that their capital comes almost entirely from other investors who demand timely (and high) returns.[162] "Venture capitalists" are the general partners in venture funds. The limited partners of these funds – including pension funds, endowments, and foundations– supply the fund with capital and take about 80% of the returns. For their efforts, the venture capitalists typically receive a management fee of 2% of the invested funds and 20% of the profits (the "carry").[163]

Venture funds have a maximum life of ten to twelve years before they must liquidate and make final distributions to fund investors.[164] Perhaps halfway through a particular fund's life the venture capitalist will begin soliciting investments for its next fund, often from the same investors. Gompers and Lerner have described this process of recycling investments in venture funds, and then redeploying those funds to new start-ups, as the "venture capital cycle."[165] Therefore, while a good return on start-up investments increases the venture capitalist's carry, it also has another function – to entice the limited partners to continue to invest in the venture capitalist's future funds. This downstream pressure results in highly motivated venture capitalists willing to use their bargaining power

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[162] *See* Gilson, *supra* note 17, at 1071 (venture capitalist puts up only one percent of the capital); STROSS, *supra* note 13, at 87 (observing that in the mid-1990s venture capitalist Benchmark Partners pledged to contribute 3% of a fund's capital, compared to the industry standard of 1%).

[163] Paul Gompers and Josh Lerner, *An Analysis of Compensation in the US Venture Capital Partnership*, 51 J. FIN. ECON. 3, __ (1999) (empirical study found management fees of 2-3% and a large concentration of carry at 20%); *but see* Litvak, *supra* note 19, at 3-4 (critiquing the Gompers and Lerner study on staleness and methodological grounds and concluding from an independent study that "the compensation of VCs varies significantly across venture firms"). *See also* Victor Fleischer, *Two and Twenty: Taxing Partnership Profits in Private Equity Funds*, __ NYU L. REV. __ (2008) (criticizing the tax treatment of the carry as capital gain instead of ordinary income).

[164] GOMPERS AND LERNER, *supra* note 11, at 19 ("Almost all venture and buyout funds are designed to be 'self-liquidating,' that is, to dissolve after ten or twelve years.").

[165] *Id*. at 4.

over entrepreneurs to secure the most protective investment contracts possible.[166]

The financial story, however, is not the full story of angel investment. Unlike venture capital, angel investing is not *required* to be a purely financial exercise. Angels are not financial intermediaries who face downstream pressure to satisfy fund investors.[167] Instead, one of the defining characteristics of angel investment is the use of personal funds.[168] The use of personal funds has its disadvantages, of course. It is always preferable to spend someone else's money rather than your own where there is a risk of losing it, and too many losses will threaten the angel's ability to make future investments. On the other hand, investing one's own funds provides a measure of freedom not available to venture capitalists.[169] If an angel chooses to invest for personal as well as financial reasons, she has that luxury.

Although many, and perhaps most, angels invest primarily for financial reasons,[170] a consistent theme in the literature is that angels also have non-financial reasons for investing. A distinguishing characteristic of angel investment is that angels "usually develop an emotional attachment to the business venture. In contrast, VCs have financial reward as their only incentive and therefore minimize emotional attachment."[171] First and foremost, angels relish the chance to participate in a new venture's development. Most angels are cashed-out entrepreneurs who miss the excitement of being part of a start-up, but not necessarily the headaches and grueling schedule that come with full responsibility for

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[166] The need to control the start-up's exit, in particular, is a product of the venture capital cycle. *See* Smith, *supra* note 33, at 316 (exit "allows fund investors to evaluate the quality of their venture capitalists and, if necessary, to reallocate their funds away from venture capital to other investment vehicles or from less successful venture capitalists to more successful venture capitalists").

[167] *See* VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 99 (observing that the "agency relationship for the venture capitalist firm (with its fund providers) forces the venture capitalist to choose different investment practices from those of the less-restricted (and less-accountable) business angel").

[168] *See supra* note 1.

[169] Sohl, *Early Stage Equity Market*, *supra* note 42, at 111 ("angels typically have longer exit horizons than their venture fund counterparts and thus the capital they provide is termed patient capital").

[170] *See* VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 116-117 (contending that financial gain is the primary motivation for angel investment, and citing one angel as disfavoring the term "angel" investor because it implies the precedence of altruism over financial reward).

[171] MICHAEL STATHIS, THE STARTUP COMPANY BIBLE FOR ENTREPRENEURS 134 (2004) (emphasis removed).

one.[172] The chance to become active in another entrepreneur's venture can stave off the boredom of retirement. According to one angel, "it's cheaper and more fun than buying a yacht."[173] Indeed, the angel's desire for participation is so strong that her selection between competing investment opportunities may be dictated by the opportunity for participation more than by any other factor.[174]

Geographic proximity facilitates participation, and is therefore one of the two most important factors to angels when considering potential investments.[175] Angels typically invest in start-ups within an hour or two drive so that they can visit and consult with entrepreneurs on a regular basis.[176] Through these visits, angels offer value-added services to entrepreneurs in the form of seasoned advice on early stage venture development. Angel participation usually happens informally, although sometimes the angel will enter into a formal employment or consulting relationship with the start-up.[177]

In addition to the private benefits that angels obtain from participating in new venture development, some angels have altruistic reasons for investing. Angels often express the desire to "give back" to the entrepreneurial community that made them wealthy doing what they loved. This altruism can take the form of helping emergent entrepreneurs become successful; investing in start-ups seeking to commercialize socially useful technology (e.g., green/clean technology); and investing in start-ups that will create jobs in the angel's community.[178] These non-

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[172] VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 117-118; MIT Study, *supra* note 67, at 14 ("Angels enjoy the adrenaline rush of emerging company volatility, but without the 80-hour workweeks and the burden of ultimate responsibility for the company.").

[173] VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 117.

[174] *Id*. at 139 ("angels most often chose one investment over another primarily according to the opportunity to get actively involved in the investee firm"). Of course, syndication means that each start-up will have an active angel and several passive ones; those passive angels may be the active angels in other ventures.

[175] MIT Study, *supra* note 67, at 31 (survey of experienced angels found that geographic proximity to the angel was one of the two most important criteria when considering potential investments).

[176] *See supra* note 135.

[177] *See* John Freear et al., *Angels: Personal Investors in the Venture Capital Market*, 7 ENTREPRENEURSHIP & REGIONAL DEV. 85, 92 (1995) (nearly ¼ of angels work in a full or part-time capacity in their investment start-ups).

[178] Wetzel, *supra* note 67, at 31; Freear et al., *Private Investor Market*, *supra* note 56, at 11 ("The most influential non-financial factor was the satisfaction derived from assisting an entrepreneur build a successful business."); MIT Study, *supra* note 67, at 14 (on the "empathy" angels feel for entrepreneurs and the desire to help them avoid mistakes that angels themselves may have made as entrepreneurs).

financial benefits are said to produce "psychic income,"[179] and have led part-time angel investor Brad Feld to describe the angel's process not so much as investing as "for-profit philanthropy."[180]

b. Contract, Trust, and Achieving Non-Financial Goals

What do these non-financial goals of participation and altruism have to do with the use of simple investment contracts? The literature on the relationship between contract and trust reveals that requiring entrepreneurs to enter into venture capital-like contracts, which could be seen by entrepreneurs as more aggressive and self-preserving, would jeopardize the angel's non-financial goals by signaling a lack of trust in the entrepreneur. Most of the literature views contract and trust as substitutes – in other words, contract is necessary when trust is absent and unnecessary when trust is present.[181] A particularly interesting strain of the literature addresses the use of contract as a signaling device. It examines what the use, or nonuse, of a particular contract or contract provision implies about trust and the trustworthiness of the party being asked to agree to it.

As Stewart Macaulay observed in his famous article on the importance of non-contractual relations in business, overly detailed contracts indicate a "lack of trust" of the other party and can turn "a cooperative venture into an antagonistic horse-trade."[182] In another important article on the role of trust in the law, Blair and Stout make the same point through use of a hypothetical: "Suppose a potential business

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[179] Wetzel, *supra* note 67, at 31.

[180] Is it Angel Investing or For-Profit Philanthropy?, http://www.feld.com/blog/archives/002013.html (October 23, 2006).

[181] *See, e.g.*, Frank B. Cross, *Law and Trust*, 93 GEO. L.J. 1457, 1487 (2005) ("Contracts may thus be viewed as the 'antithesis of simple trust'."); Lawrence E. Mitchell, *Trust. Contract. Process.*, *in* PROGRESSIVE CORPORATE LAW 185, 186 (Lawrence E. Mitchell ed., 1995) ("contract begins from a situation of distrust"); Larry E. Ribstein, *Law v. Trust*, 81 B.U. L. REV. 553 (2001) (law can undermine trust). *But see* T.K. Das and Bing-Sheng Teng, *Between Trust and Control: Developing Confidence in Partner Cooperation in Alliances*, 23 ACAD. MANAGEMENT REV. 491, 496 (1998) (trust and control can function as parallel phenomena); Carol Rose, *Trust in the Mirror of Betrayal*, 75 B.U. L. REV. 531, 554 (1995) (law can induce trust by allowing contracting in situations where it otherwise would not occur). *Cf.* Deepak Malhotra and J. Keith Murnigham, *The Effect of Contracts on Interpersonal Trust*, 47 ADMIN. SCI. Q. 534, 556 (2002) (relationship between trust and contract "appears to be far from clean and simple").

[182] Steward Macaulay, *Non-Contractual Relations in Business: A Preliminary Study*, 28 AM. SOC. REV. 55, 64 (1963). Macaulay was focused on ongoing business relationships. It could be said that angel finance does not present the same situation because angels usually fund one round in a particular start-up and then make room for the venture capitalists. However, angel finance is a multi-period game in the sense that it is localized within small geographic communities where entrepreneurs may know one another, meaning that an angel's reputation transcends any one relationship.

partner shows up armed with a lawyer and a ten-page contract loaded with fine print. What does that behavior suggest? Most obviously, a reluctance to trust."[183] Likewise, Kathryn Spier observes that "an individual may refrain from including a particular clause in a contract in order to signal his type."[184] For example, an athlete might forego asking for an injury clause, which would signal accident-proneness, and a spouse might forego a prenuptial agreement, which would signal the possibility of divorce.[185]

Consider the signaling effect of a detailed, preference-laden contract in the context of angel investing. If an angel presents an entrepreneur with such a contract that must be signed before receiving funds, the entrepreneur may interpret it as a lack of trust, or that the relationship will be more combative than cooperative.[186] And if entrepreneurs think this, the angels' non-financial goals are jeopardized.

How? First, angel participation in venture development must be welcomed by entrepreneurs if it is to continue to occur informally. The sort of trust angels hope to develop to invite participation, from which they derive private benefits, is what Oliver Williamson called "calculative" trust, or strategic behavior driven by external reward.[187] Angels attempt to secure this trust by being the opposite of venture capitalists – investors who do not demand onerous contracts. Angels are branding themselves, through the type of contract they choose, as the good guys.[188] Of course, angels could forego trust and attempt to secure participation rights formally, through contract, but this might be difficult for several reasons: participation rights may be tricky to define, costly to contextualize, and angels may not wish to create concomitant duties on themselves through a formal employment or consulting relationship.

Second, requiring a detailed, protective contract risks obscuring any altruistic signal the angel wishes to send. If angels are investing to help young entrepreneurs along, being seen as overly concerned with downside protection does not suggest that the angel has high hopes for the start-up. Instead, it signals doubt and a concern with limiting financial

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[183] Blair and Stout, *supra* note 138, at 1806.

[184] Kathryn E. Spier, *Incomplete Contracts and Signaling*, 23 RAND J. ECON. 432, 432 (1992).

[185] *Id*. at 433.

[186] This is especially true if *not* requiring such contracts is embedded in angel financing practice, as it appears to be. The classic paper on embeddedness is Mark Granovetter, *Economic Action and Social Structure: The Problem of Embeddedness*, 91 AM. J. SOC. 481 (1985).

[187] Oliver E. Williamson, *Calculativeness, Trust, and Economic Organization*, 36 J. L. & ECON. 453 (1993).

[188] *See generally* Victor Fleischer, *Brand New Deal: the Branding Effect of Corporate Deal Strucutures*, 104 MICH. L. REV. 1581 (2006) (on the use of contracts and deal structure for branding purposes).

losses (or, perhaps even worse, a desire to extract a disproportionate share of financial gains). On the other hand, use of a simple, entrepreneur-friendly contract sends precisely the opposite signal – it exhibits trust and therefore reinforces the angel's altruistic message. This type of trust – "true" trust that exhibits an "other-regarding preference" (as opposed to trust secured for personal gain) – has been referred to as "internalized" trust.[189]

All of these reasons, then – the need for follow-on venture capital funding, informal substitutes for contract, costly contracting theory, and achieving non-financial goals of participation and altruism – might explain why angels rationally forego the venture capital model and instead invest in start-ups on simple, non-protective terms. The next Part looks at why this model might now be changing.

IV
THE PROFESSIONALIZATION OF ANGEL INVESTING

A. The Rise of Angel Investment Organizations

Traditional angel investments still constitute the bulk of the angels market. They account for at least 70% of all angel investments, and possibly up to 98% of all angel investments.[190] Traditional angel investments also present the most interesting (and misunderstood) story in investment contract design, as has been discussed. However, a marked shift in angel investing is underway that must also be explored.

The mid- to late-1990s saw angels begin to depart from their longstanding mode of informal, secretive operation and move into the open through the creation of regional angel investment organizations (AIOs).[191] In 1994, Hans Severiens (now deceased) founded the first and best-known AIO – Silicon Valley's "Band of Angels."[192] The Band of Angels began with twelve members, but by 1998 it had grown to 110 members.[193] Not only did the Band of Angels membership grow – the idea of formally organizing regional angels caught on throughout the

[189] Blair and Stout, *supra* note 138, at 1750-1751. Williamson, on the other hand, thought such non-calculative notions of trust were best reserved for "very special relations between family, friends, and lovers" and had no place in commercial exchange. Williamson, *supra* note 187, at 484.

[190] *See supra* notes 7-8 and accompanying text..

[191] AIOs are alternatively referred to as angel alliances, syndicates, or groups.

[192] Band of Angels, www.bandangels.com (last visited April 7, 2007).

[193] MIT Study, *supra* note 67, at 13. According to the Band of Angels website, membership remains at 110. Band of Angels, www.bandangels.com (last visited April 7, 2007).

country. By 1997 there were fifty AIOs, and by 2002 there were 170.[194] The Angel Capital Association, which is the leading peer organization of AIOs in the U.S., reported 114 "full ACA-member" AIOs in 2006.[195] Although the reasons for the trend toward AIOs are worthy of more exploration than I will offer here, some likely explanations include a steadier stream of deal flow, increased opportunities for interaction with other angels and venture capitalists, the chance to fund larger deals through the pooling of resources, and the ability to invest in amounts large enough to justify the transaction costs of preferred stock.[196]

AIOs differ in their precise modes of operation, but they have common traits.[197] Unlike traditional angels, AIOs are not difficult to find; quite the opposite, most have websites providing information about the organization for potential members and entrepreneurs. On the other hand, the members' identities may be more carefully guarded.[198] In terms of membership, some AIOs require only that members be accredited investors. Others, including the Band of Angels, require technical knowledge and expertise and therefore exclude the likes of lawyers and accountants.[199] Industry-specific AIOs will, unsurprisingly, require substantial knowledge of the industry.[200]

In addition, while AIOs still rely on references to find investments, they also employ more formal mechanisms for bringing investment

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[194] *See* James Geshwiler, *Common Angels: An Evolving Tradition*, *in* STATE OF THE ART, *supra* note 43, at 141 (citing research by Jeffrey Sohl).

[195] *See supra* note 8.

[196] I thank Jesse Fried for suggesting this as a possible explanation for the development of AIOs. As he has argued elsewhere, the investment in preferred stock can protect angels against venture capitalist opportunism. *See generally* Fried & Ganor, *supra* note 36; *see also* Leavitt, *supra* note 19.

[197] Jeffrey Sohl distinguishes AIOs from traditional angels by their "size, visibility, and entrance mechanism." Sohl, *Early Stage Equity Market*, *supra* note 42, at 113.

[198] *See* VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 44 ("To retain members' anonymity, many of these syndicates…establish a storefront (or façade) for the general public.").

[199] *Compare* Carol Sands, *The Angels' Forum and The Halo Fund: The Rise of the Professional Angel*, *in* STATE OF THE ART, *supra* note 43, at 32 ("It was clear to [Silicon Valley's The Angels' Forum organization] that diversity was the key to successful development, so we set out to assemble a group of dedicated angel investors with different skill sets (operations, engineering, finance, sales, marketing, business development, legal, and human resources)") *with* Severiens, *supra* note 43, at 22 (the Band of Angels "organizing committee made it clear right from the start that membership in our group would be limited to those with high-tech credentials, and thus lawyers, bankers, real estate developers, and so on were not the kind of members we were seeking").

[200] For example, all members of Silicon Valley's Tenex Medical Investors have "substantial life science expertise." Norm Sokoloff, *Tenex Medical Investors: Niche Investing*, *in* STATE OF THE ART, *supra* note 43, at 44.

opportunities to members. First, there is a pre-screening process to determine whether an entrepreneur will be evaluated by the AIO's full membership, which can include review of an online application, a favorable recommendation from an AIO member, and even the satisfactory completion of initial due diligence. Next, the pre-screened entrepreneurs are invited to present to the full AIO membership.[201] The presentations usually run 20-30 minutes followed by a short question and answer session. All of this often occurs over periodic lunch or dinner meetings. If any AIO angels have an interest in moving forward on a particular start-up, things progress further with more meetings, more diligence, and so forth.

Most AIOs leave individual investment decisions to each member's discretion.[202] Interested members invest in their own names or together through a new investment vehicle (such as a limited liability company).[203] Therefore, most AIOs do not invest as an entity – instead, their members invest individually or through a separate company. However, a small number of AIOs pool all members' funds and finance selected start-ups from this pool.[204]

AIO investments are now an important part of angel investing.[205] Like traditional angels, AIO angels primarily fund start-ups in their earliest stages. AIO investments often fall within the same $100,000 to $1-$2 million dollar range as traditional angel investments, more probably on the low end of that scale.[206] However, the increased opportunities for pooling may also facilitate larger investments,[207] and those larger investments may come at a slightly later stage of start-up development

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[201] *See, e.g.*, MIT Study, *supra* note 67, at 61.

[202] *See, e.g.*, VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 45 (typical practice is that "[e]ach member can decide individually whether to participate in a particular deal that the syndicate decides to undertake and how much he or she wants to be involved in each investment they make"); Severiens, *supra* note 43, at 23 ("Right from the start, it was decided that [Band of Angels] would not pool our funds. Not everyone is interested in the deals some of us invest in, so we leave it to the individual members to invest according to their tastes, interests, and risk profiles.").

[203] Severiens, *supra* note 43, at 23 ("when [Band of Angels] invest[s] in a single deal, a pool is formed, but we still act as individuals and the stock certificates are made out in our individual names").

[204] *See* Sands, *supra* note 199, at 35-39.

[205] *See supra* notes 7-8 and accompanying text for estimates on the size of the AIO market.

[206] *See* Goff, *supra* note 77, at 75 ("The Sierra Angels' funding 'sweet spot' is $200,000 to $1,000,000"); *see also supra* note 8 (average amount of total funding provided by each U.S. AIO in 2006 was $1.78M).

[207] VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 43-44 (AIOs allow angels to "make larger and more frequent investments (though these remain smaller than those funded by even small venture capital firms)").

than traditional angel investments (either just before or in place of early stage venture capital investments). With most venture capitalists now attracting more money from fund investors and moving to even later-stage investments, where larger sums can be put to more efficient use, a new capital gap from $2 million to $5 million is emerging.[208] Some AIOs able to invest larger sums may prove to be the "white knight" that is capable of filling this gap,[209] although this is still on the high side for most AIOs. But the Band of Angels, at least, was formed with filling this gap in mind.[210]

B. The AIO's Move Toward Venture Capital-Like Contracts

This "professionalization" of angel investing through the formation of AIOs has brought with it a change in the angel investment model. Given that AIOs are a product of the last decade, they still account for only a very small portion of the angels' literature. In particular, empirical studies on the terms of AIO investment contracts are currently lacking.[211] However, a few case studies, along with anecdotal accounts, suggest that AIO investment contracts bear a closer resemblance to venture capital contracts than to traditional angel contracts, albeit minus some of the bells and whistles.

A 2000 study from MIT's Entrepreneurship Center found that most AIOs "have modeled their terms and conditions after venture capital deals which include demand rights, voting rights/Board representation, registration rights, piggyback rights, anti-dilution provisions and information rights."[212] The MIT study cited two Harvard Business School case studies in support of this conclusion, one of which was the Band of Angels.[213] I have examined the term sheets used by the Tech Coast Angels, the country's largest AIO (based in Southern California), and these too reveal the inclusion of most common venture capital terms.[214]

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[208] Sohl, *Recent Trends and Developments*, *supra* note 46, at 15.

[209] *See* Susan Preston, *Seraph Capital Forum: National Trends in a Local Context*, *in* STATE OF THE ART, *supra* note 43, at 68 ("with venture capitalists moving farther up the funding chain, a second funding gap has opened up between $2 million and $5 million – a gap that few individual angels can fill. The potential white knight is the angel organization").

[210] *See* Severiens, *supra* note 43, at 20-21.

[211] It should be much easier to conduct empirical studies of AIOs than traditional angels because they are far more visible. This paper should also provide a framework for designing these studies, at least to the extent they are concerned with contract design.

[212] MIT Study, *supra* note 67, at 63.

[213] *Id.*

[214] Series A Preferred Stock Financing Term Sheet; XZY Venture Inc. Summary of Deal Terms (both on file with the author). I thank Luis Villalobos for providing these.

Anecdotal accounts also reveal that the AIO angel favors preferred over common stock. For instance, the Band of Angels "invest[s] almost solely in preferred stock, and often it will be the first round of outside capital, the preferred A."[215] Boston's Angel Healthcare Investors contract for "preferred security, dividends where applicable, preemptive rights, antidilution protection, and board observation rights."[216] Board seats may also be a more common feature in AIO contracts than in traditional angel contracts.[217] Where board seats are not secured, board observation rights (i.e., the right to attend and participate in board meetings but not the right to vote) probably will be.[218]

But again it must be emphasized that without more information about AIOs, including empirical studies of their investment contracts, it is difficult to tell what extent the typical AIO contract replicates the venture capital contract. However, based on the limited information available, the trend is for at least preferred stock over common, and some sort of board rights, with the more sophisticated AIOs adopting even more of the venture capitalist's standard terms.[219]

This leads to another question that cannot yet be answered: What counts as a "typical" AIO? The Band of Angels and Tech Coast Angels,

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[215] Severiens, *supra* note 43, at 23. *But see* Geshwiler, *supra* note 194, at 142-43 (Common Angels "recommend a fairly standard, clean term sheet without multiple liquidation preference, too low a valuation, or other 'bells and whistles'").

[216] Robyn C. Davis et al., *Angel Healthcare Investors: Capitalizing on Innovation*, *in* STATE OF THE ART, *supra* note 43, at 157; *see also* STATHIS, *supra* note 171, at 133 ("the increasing trend is for angels to receive preferred stock, although it lacks many of the stipulations found in the preferred stock issued to venture capitalists").

[217] *See, e.g.*, Severiens, *supra* note 43, at 22 (Band of Angels member who serves as sponsor of start-up in front of the entire group will take a seat on the board if an investment is made).

[218] Goff, *supra* note 77, at 76:

> The Sierra Angels encourages its portfolio companies to choose the most effective candidates for heir boards of directors rather than insist that the network be given a seat. In instances when the group does not have a board seat, our member sponsor frequently acts as an informal advisor, and, as a rule, we expect visiting privileges at board meeting[s].

[219] The AIO will be even harder to distinguish from the early stage venture capitalist if the hallmark of angel investing – the investment of personal funds – is relaxed and AIOs also begin to invest other people's money. Indeed, some AIOs are now doing just that by tacking on "sidecar" investments for an angel's friends and family to at least some deals. *See* Sands, *supra* note 199, at 39 (the Angels' Forum's "creation of The Halo Fund in 2000 allowed our friends and family members as well as institutional investors to co-invest in the group's best deals"). So in a sense, angels are now also investing other people's money, although the ratio is extremely small compared to the venture capitalists' use of predominately investment funds. Still, the trend is toward a further blurring of the angel/venture capitalist line.

which we know the most about, are sophisticated operations in investment-rich California, and it could be that AIOs in other regions (especially outside of major metropolises) look and function very differently. On the other hand, it could be that other AIOs have more or less adopted the more sophisticated AIOs' model, much as Mark Suchman's work reveals that law firms outside of Silicon Valley adopted the Silicon Valley lawyer's form contracts for venture capital financings.[220] Even based on our limited information, it appears safe to say that the formalization and professionalization of angel investing through AIOs has brought with it a move toward venture capital-like contracts that has not been explained.

C. Explaining AIO Investment Contracts

If there is indeed a shift toward venture capital-like contracts in AIO investments, what are we to make of this? On the one hand, AIO investment contracts might be seen as an overdue corrective for traditional angel naivety. For those who accept the conventional wisdom about traditional angels, this stands as the ready explanation. On the other hand, in light of this Article's rational explanations for traditional angel contracts, AIO contracts are themselves a puzzle. Can it be rational for traditional angels to invest on simple, non-protective terms similar to those taken by minority shareholders in close corporations, while at the same time rational for AIO angels to invest on detailed, protective terms resembling those taken by venture capitalists? The answer is yes for several reasons, all of which stem from the fact that AIO angels more closely resemble venture capitalists than traditional angels in a number of important ways. Some of these resemblances have been mentioned, but their relevance to contract design will now be explored in more detail.

First, the AIO angel's higher investment amounts and slightly later investments allow her to move down the sliding scale of permissible preferences than the traditional angel without fear of venture capital unwinding.[221] Her relationships with venture capitalists also allow her to move down the scale. While the traditional angel is closer to entrepreneurs, AIO angels are more plugged into local venture capital communities.[222] If they do not have preexisting relationships with venture

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[220] Mark C. Suchman, On Advice of Counsel: Law Firms and Venture Capital Funds as Information Intermediaries in the Structuration of Silicon Valley (1994) (unpublished Ph.D. dissertation, Stanford University) (on file with Stanford Sociology Department).

[221] *See supra* notes 122-124 and accompanying text.

[222] *See* Band of Angels, About the Band FAQs, http://www.bandangels.com/faqs/index.php (last visited April 7, 2007) (Band of Angels founder Hans Severiens was a former venture capitalist "who formed friendships with many of the first generation of Silicon Valley entrepreneurs and high technology

capitalists, a steadier deal flow makes them repeat players and these relationships can quickly develop. Because of these relationships, AIO members may have a better understanding of the venture capital process and refrain from overvaluing start-ups, thereby eliminating the venture capitalist's most common complaint about angels.[223] In short, venture capitalists tend to view AIO angels as the equivalent of early stage venture capitalists.[224]

Second, a more arms-length relationship with entrepreneurs reduces the AIO angel's ability to rely on informal substitutes for contract. Recall that referrals from a traditional angel's "network of trust," layered on top of her prior knowledge of the entrepreneur and/or the start-up's substantive field, reduce uncertainty and information asymmetry.[225] Conversely, the AIO angel's desire for a more consistent deal flow means fewer entrepreneurs and business plans known to the angel beforehand, and therefore sacrifices some of the familiarity and intimacy such preexisting knowledge brings.[226] Higher levels of uncertainty and information asymmetry are not reduced by the pre-investment nature of the relationship, and therefore must be mitigated by contract. Moreover, some AIO angels may be less active participants in venture development post-investment than traditional angels. Indeed, while it may be rare, some AIOs actually hire an outside party to serve the function of liason between AIO and entrepreneur,[227] which would not occur in traditional angel investing given its premium on participation.[228] Fewer opportunities for informal monitoring create the need for formal control rights to serve as a check on entrepreneurial opportunism. It should be

executives—the founders of Fairchild, National Semiconductor, Genentech, Intel, Compaq, Kleiner Perkins, and Sequoia").

[223] *See supra* note 117 and accompanying text.

[224] On the other hand, some venture capitalists lament the non-financial "dinner club" aspect of AIOs. *See* MIT Study, *supra* note 67, at 63 ("Some venture capitalists do not feel that angel groups support their companies well. They characterized angel clubs as dinner clubs in which members participated in due diligence, but did not sufficiently leverage their expertise and networks in building the company after the investment had been made.").

[225] *See supra* notes 127-134 and accompanying text.

[226] *See* Wilbank & Boeker, *supra* note 77, at 6 (study finding that half of AIO angel investments are unrelated to the angel's industry experience, which correlated to returns on investments that were only half as high compared to investments in the angel's field of expertise).

[227] VAN OSNABRUGGE AND ROBINSON, *supra* note 4, at 45 ("In most cases, one member of the syndicate acts as the lead angel, assuming a liason role between the entrepreneur and the syndicate. In other cases, an outsider with no financial commitment to the group…is hired to perform this function.") (citation omitted).

[228] *See supra* notes 172-177 and accompanying text.

noted that AIO angels may forego participation at their own peril, as participation has been correlated to greater returns on investment.[229]

Third, AIO investments tend to be larger than traditional angel investments, and there is potential for this trend to increase given greater opportunities for the pooling of capital. Recall that costly contracting theory made it irrational for traditional angels to use detailed contracts given smaller amounts of funding and a short duration for preferences.[230] Because AIOs make larger investments, and because venture capitalists are more willing to allow AIO preferences to stand, costly contracting theory becomes less of a reason to invest on simple terms.[231] Spending more to design, monitor, enforce, and write detailed contracts becomes worthwhile for the benefits it provides.

Finally, the non-financial perspective is also different for AIO angels. AIO angels may still be distinguished from venture capitalists by their non-financial goals – AIO angels are still investing their own money – but these goals may be different than the traditional angel's. First, although some AIO angels may wish to participate in venture development, as mentioned there may be less of a premium on participation for AIO angels than for traditional angels. Instead, for many AIO angels the primary non-financial motivation for the endeavor is the opportunity to interact with *other angels*.

This is evident from both the candid admission of AIO angels and the lack of investment activity by a large percentage of them. Some AIO angels have admitted that the "networking effect" is an important motivator for AIO membership. For instance, longtime traditional angel and now AIO member Susan Preston notes that one "reason for the rise of angel groups, a reason that is difficult to quantify…[is] the simple desire for group interaction and socialization."[232] In the view of Bob Goff, founder of the Sierra Angels in the Lake Tahoe, Nevada, "The central element of the Sierra Angels' mantra is having fun," and spouses are an integral part of that group's activities.[233] A telling statistic underscores the point. That is, some 30-40% of angels who join AIOs do not make a

[229] Wiltbank & Boeker, *supra* note 77, at 7.

[230] *See supra* notes 146-149 and accompanying text.

[231] John May, co-founder of a Washington, DC-area AIO, suggests that costly contracting theory plays a role in determining his angels bargain for a board seat. John May, *The Dinner Club: Embracing the New Economy*, *in* STATE OF THE ART, *supra* note 43, at 127 ("When a board seat is inappropriate for the size of our investment, we often take on an advisor role.").

[232] Preston, *supra* note 209, at 68-69.

[233] Goff, *supra* note 77, at 72.

single investment.[234] This has led some groups to require angels to invest a minimum amount to remain in the group.[235] In short, AIO angels may be there for each other as much as they are there for entrepreneurs.

Second, AIO angels may also have altruistic objectives, but they can also take a different form than for traditional angels. Although giving back to the entrepreneurial community is still important to AIO angels, philanthropy also takes the form of donations to nonprofit organizations and foundations through the pooling of AIO-member resources. One AIO has even endowed a professorship.[236] AIOs can also be used to further other social goals, such as enticing more women to become angel investors. This goal is important to Seraph Capital Forum, an AIO in the Pacific Northwest comprised entirely of women members.[237]

These possible differences in non-financial goals are relevant to differences in the reasons behind using simple or detailed contracts. Achieving the AIOs non-financial goals is not as dependent on securing the trust of entrepreneurs. Recall that traditional angels will not demand protective contracts because of the ramifications on entrepreneurial

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[234] Jeffrey E. Sohl, *Angel Investing: A Market Perspective*, *in* STATE OF THE ART, *supra* note 43, at 12 ("In 2000 and 2001, indications were that 36 and 41 percent, respectively, of angel organization members did not make an investment. This compares with 32 percent of investors in 1998.") (citation omitted).

[235] *See* William H. Payne, *Tech Coast Angels: An Alliance of Angel Networks*, *in* STATE OF THE ART, *supra* note 43, at 58 (Tech Coast Angels' members are required to invest at least $50,000 each year); Sokoloff, *supra* note 200, at 46 (members of Tenex Medical Investors "were expected to invest at least $75,000 yearly (this has been relaxed in the current economy). In addition, social networking can pay off financially in other ways for some AIO angels, who have been known to start businesses together outside of the AIO. *See* Davis et al., *supra* note 216, at 161:

> Not only have many of the members developed friendships but also several have created new businesses together outside of [Angel Healthcare Investors]. Two of the original members joined with two later members to launch a specialty pharmaceuticals company that has the potential to reshape the value chain of drugs coming off patent. One founding member joined with a newer member to create a fund of hedge funds investing in non-health-care companies and offered the fund to members and other high-net-worth individuals.

[236] See Barry Moltz, *Prairie Angels: Redefining Midwest Investing*, *in* STATE OF THE ART, *supra* note 43, at 115 (Prairie Angels AIO in Chicago has "donated money to a nonprofit organization in town that trains inner-city youth to become familiar with Web sites and expand their technical expertise."); Davis et al., *supra* note 216, at 161 (of Boston's Angel Healthcare Investors, "Several shared philanthropic interests have emerged since the group was founded….A recent example is the endowment of a charity at a well-known local university to acknowledge the contributions to the school and to health care nationwide by a member of AHI.").

[237] Seraph Capital Forum, http://www.seraphcapital.com/ (last visited April 7, 2007).

trust.[238] But for AIO angels who are not driven, or driven primarily, by the desire for participation or altruism toward entrepreneurs, but instead by other factors, there is less of a need to engender trust in entrepreneurs through use of simple contracts. Because AIO angels secure their non-financial benefits *outside* of their relationships with entrepreneurs, they are less constrained to act a certain way within those relationships.

V
CONCLUSION

Start-up companies have brought us some of the greatest technological and scientific advances of recent years, as well as significant job creation and economic prosperity. At the outset, however, these companies are little more than idea. The entrepreneur's greatest challenge is obtain the funding and advice needed to turn her company into the next Google or eBay. As this Article has explained, it is here that angel investors play a critical and underappreciated role. Angels enable new ventures by providing early financing and seasoned advice to entrepreneurs. Angels invest at a critical time, after friends and family money has run out but before venture capitalists will invest. In doing so, they fill a funding gap that, left unremedied, would endanger both start-up survival and the venture capital industry as a whole.

This Article has also examined angel investment contract design, which appears very puzzling on its face. Traditional angels, who still make the bulk of angel investments, use simple, entrepreneur-friendly contracts despite the extreme risks that this practice entails. The conventional wisdom is that they do so because they are unsophisticated investors who don't know any better. But this Article has explained that traditional angels are misunderstood – that upon closer examination, their investment contracts are rationally designed to achieve financial and non-financial objectives.

Finally, this Article examined the recent trend toward the professionalization of angel investing. Although more information is needed to understand this phenomenon, one of its consequences is that professional angels are increasingly adopting venture capital contact design. In doing so, they are instituting a major change in angel investing, albeit one that is rational given their closer resemblance to early stage venture capitalists than to traditional angels.

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[238] *See supra* Part III.C.2.b.