

Contractual Innovation in Venture Capital

JOHN F. COYLE* AND JOSEPH M. GREEN**

Scholars agree that contractual innovation, though sometimes slow to occur, can and will take place if certain conditions are met. This Article argues that the evolution of certain venture finance contracts over the past decade constitutes a prime example of such innovation.

Drawing upon interviews with some of the leading venture capital attorneys in the United States, this Article chronicles how two types of venture finance securities—the convertible note and convertible preferred stock—and related contracts evolved in response to technological advances that greatly reduced the cost of launching a start-up technology company. Prior to 2005, individuals who invested in early-stage technology companies would typically invest alongside the founder of the new venture by purchasing shares of common stock. Venture capital funds, which invested more substantial amounts of capital at later stages in a company's development, would typically receive convertible preferred stock. And in situations in which a company needed a loan from its current investors to keep it afloat until a new infusion of capital could be raised—a so-called bridge loan—investors would typically receive promissory notes that were convertible into equity at a future date. Each of these types of investment contracts reliably matched up with a particular mode of financing transaction.

Around 2005, however, this stable contractual infrastructure began to change. A number of technological developments—including, most significantly, the rise of cloud computing—led to a dramatic decline in the costs of launching a technology company. In the wake of these changes, the contracts used by investors to structure their investments in these ventures evolved in two important ways. First, convertible notes,

* Assistant Professor of Law, University of North Carolina at Chapel Hill.

** Senior Associate, Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP.

We are grateful to Dan Goldberg, Tom Hazen, Darian Ibrahim, Gregg Polsky, Adam Reuben, Rob Smith, Kathleen Thomas, and Mark Weidemaier for their helpful comments on an earlier draft of this Article. Thanks to Kyle Cunnion, Doug DeBaugh, and David Russell for their invaluable research assistance. Finally, we would like to thank Steve Baglio, Hank Barry, Andy Bradley, Ward Breeze, Ivan Gaviria, Carolyn Levy, Anthony McCusker, Ken McVay, Noah Pittard, Scott Ring, Mark Stevens, and Yokum Taku for taking the time to discuss venture capital contracts with us. All mistakes are, of course, our own.

previously used primarily in the context of bridge financing, were increasingly used to provide financing to early-stage technology companies. Second, investors in early-stage technology companies increasingly turned to much simplified versions of traditional convertible preferred stock documents to structure their investments. While these changes have fundamentally reshaped the contractual infrastructure of early-stage venture finance in the United States, they have attracted scant attention in the legal literature to date. This Article aspires to fill that gap.

This Article also draws upon this account of evolution and change in the venture capital space to develop insights into the process of contractual innovation more generally. It argues that current theories of contractual innovation only partially explain the changes to these venture finance contracts over the past decade. It argues that while attorneys can and do serve to drive the process of contractual innovation, the success of these efforts is highly dependent upon partnerships that they develop with the end users of these contracts. Finally, this Article suggests that the substitution of one type of contract for another—using equity instead of debt, for example—is itself an innovation that has gone largely unappreciated in the contractual innovation literature.

TABLE OF CONTENTS

INTRODUCTION.....	135
I. THEORIES OF CONTRACTUAL INNOVATION	138
A. OBSTACLES TO INNOVATION.....	138
B. CONDITIONS CONDUCTIVE TO INNOVATION	141
C. METHODOLOGY.....	144
II. VENTURE FINANCE CONTRACTS PRE-CLOUD.....	146
A. FRIENDS, FAMILY, AND ANGELS: COMMON STOCK	146
B. VENTURE CAPITALISTS: CONVERTIBLE PREFERRED STOCK.....	149
C. THE STOPGAP INVESTOR: CONVERTIBLE NOTES AND BRIDGE LOANS.....	151
D. SUMMARY	154
III. CLOUD COMPUTING AND THE CHANGING FACE OF TECHNOLOGY START-UPS	155
A. THE FALLING COSTS OF LAUNCHING A START-UP.....	155
B. THE IMPACT ON VENTURE FINANCE	157
IV. SEED NOTES.....	160
A. THE RISE OF THE SEED NOTE	161
B. THE CONVERSION PRICE CAP.....	163
C. THE END OF THE SEED NOTE?	165
1. <i>Convertible Security</i>	166
2. <i>Simple Agreement for Future Equity</i>	168
V. SEED STOCK.....	171
A. ADAPTING CONVERTIBLE PREFERRED STOCK TO A SEED ROUND	172
B. DRAFTING SIMPLIFIED SERIES A DOCUMENTS	173
1. <i>Series AA</i>	174
2. <i>Series Seed</i>	175
VI. THEORIES OF CONTRACTUAL INNOVATION IN PRACTICE	177
A. THEORIES OF INNOVATION AND CHANGE	177
B. THE ROLE OF ATTORNEYS IN CONTRACTUAL INNOVATION.....	179
C. SUBSTITUTION AS CONTRACTUAL INNOVATION.....	181
CONCLUSION	182

INTRODUCTION

The study of the process by which contracts evolve and change—known as the process of contractual innovation—has historically attracted little attention from legal scholars. In recent years, however, this has begun to change. Some scholars have sought to develop a

general theory of contractual innovation.¹ Others have analogized the process of contractual change to the process of technological change.² Still others have sought to determine which groups are most likely to pioneer contractual innovations.³ As a result, today there is a burgeoning literature devoted to the project of explaining how and why contracts evolve over time.

This Article contributes to this literature by exploring how a specific subset of contracts—those used by investors providing capital to early-stage technology companies—has evolved over the past decade.⁴ Prior to 2005, individuals who invested in early-stage companies would typically invest alongside the founder of the new venture by purchasing shares of common stock.⁵ Venture capital funds, which invested more substantial amounts of capital at later stages in a company's development, would typically receive convertible preferred stock.⁶ And in situations in which a company needed a loan from its current investors to keep it afloat until a new infusion of capital could be raised—a so-called bridge loan—investors would typically receive promissory notes that were convertible into equity at a future date.⁷ Each of these types of investment contracts reliably matched up with a particular mode of financing transaction.

Around 2005, however, this stable contractual infrastructure began to change. A number of technological developments—including, most significantly, the rise of cloud computing—led to a dramatic decline in the costs of launching a start-up company.⁸ In the wake of these changes, the contracts used by investors to structure their investments in these new businesses evolved in two important ways. First, convertible notes, previously used primarily in the context of bridge financing, were increasingly used to provide financing to early-stage technology companies.⁹ Second, investors in early-stage technology companies increasingly turned to much simplified versions of convertible preferred stock documents to structure their investments.¹⁰ While these changes have fundamentally reshaped the contractual infrastructure of early-

1. See generally Stephen J. Choi et al., *The Dynamics of Contract Evolution*, 88 N.Y.U. L. REV. 1 (2013) (discussing theories of contractual innovation).

2. Kevin E. Davis, *Contracts as Technology*, 88 N.Y.U. L. REV. 83, 83 (2013).

3. Florencia Marotta-Wurgler & Robert Taylor, *Set in Stone? Change and Innovation in Consumer Standard-Form Contracts*, 88 N.Y.U. L. REV. 240, 247–48 (2013).

4. We use the term “technology companies” as shorthand for Internet companies, digital media companies, and companies whose primary product is software. The term does not encompass healthcare companies or companies that design and build computer hardware.

5. See *infra* Part II.A.

6. See *infra* Part II.B.

7. See *infra* Part II.C.

8. See *infra* Part III.

9. See *infra* Part IV.

10. See *infra* Part V.

stage venture finance in the United States, they have attracted scant attention in the legal literature to date. This Article aspires to fill that gap.

This Article then draws upon this account to contribute to the growing body of literature that explores the contractual innovation process more generally. To date, most scholarly work in this area has relied upon contracts that are available to the public, sovereign debt contracts in particular.¹¹ This Article aims to bring a new collection of private agreements—early-stage venture capital contracts—into the contractual innovation literature.¹² It also seeks to provide partial answers to two questions that have dominated the scholarly work on contractual innovation. First, is it possible to develop a general theory of contractual innovation capable of predicting when such innovations are most likely to occur? Second, what role do attorneys play in the process of contractual innovation? With respect to the first question, we argue that existing theories of contractual change that developed primarily in the context of sovereign debt contracts fail to fully predict how the recent process of contractual innovation has played out in the context of venture finance. With respect to the second question, we argue that while attorneys can and do play an outsized role in driving the process of contractual innovation, the success of these efforts in the context of venture finance is highly dependent upon partnerships that attorneys develop with the end users of these contracts. We also argue that the substitution of one type of contract for another—using equity instead of debt, for example—is itself a form of contractual innovation that has heretofore gone largely unappreciated in the contractual innovation literature.

This Article proceeds as follows. Part I surveys the existing literature on contractual innovation and sets forth our methodological approach. Part II details the status quo that prevailed in the world of venture finance contracts in the years prior to 2005. Part III identifies the various technological and economic shocks that disrupted this status quo beginning roughly in 2005. Part IV chronicles the rising popularity of the convertible note as a tool for providing seed financing and discusses a number of contractual innovations that occurred specifically with respect to these notes. Part V chronicles a set of parallel innovations that sought to “simplify” the documents used in the classic Series A financing done by venture capitalists and describes attempts by some market actors to promulgate model versions of these new documents. Part VI then draws upon the description and analysis set forth in the previous Parts to

11. See *infra* notes 53–57 (discussing widespread use of sovereign debt contracts in contractual innovation literature).

12. See *infra* Part I.C (discussing interview methodology).

develop deeper insights into the process of contractual innovation more generally.

I. THEORIES OF CONTRACTUAL INNOVATION

This Part surveys the existing academic literature regarding how and why contractual innovation occurs. It first examines several reasons why contractual innovation is often slow to take place. It then explores the reasons why innovation sometimes occurs notwithstanding these obstacles. This Part concludes by discussing the methodology that we used to explore the process of contractual innovation in the context of early-stage venture finance contracts.

A. OBSTACLES TO INNOVATION

Scholars have identified a number of reasons why contractual innovation is often slow to occur.¹³ These reasons include: (1) sticky default rules, (2) learning benefits, (3) network benefits, (4) weak intellectual property protection, and (5) inertia.

First, some scholars have argued that state-supplied default rules (such as the Uniform Commercial Code) may have the perverse effect of creating barriers to contractual innovation by making it more costly for parties to vary these terms by express agreement.¹⁴ Particularly when the parties' contracting relationship is informed by considerations that are external to the conduct of the business—or where there is a chance that a proposed modification to a default term could prompt the other party to draw an adverse inference—one party may be reluctant to suggest any changes to default rules, even if they would be value enhancing.¹⁵ Whatever benefits contractual default rules may offer, therefore, the stickiness of such terms may serve to discourage contractual innovation in some cases.¹⁶

13. According to classical economics, contracting parties will bargain with one another to produce the most efficient distribution of resources, assuming there are no transaction costs. *See generally* R. H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960). Where transaction costs exist, however, contracting parties will often look to past contracts and use these as starting points for negotiations. Transaction costs also make these parties less likely to dicker over terms. Consequently, the process of contractual innovation proceeds more slowly in the real world than in a world in which transaction costs do not exist.

14. Charles J. Goetz & Robert E. Scott, *The Limits of Expanded Choice: An Analysis of the Interactions Between Express and Implied Contract Terms*, 73 CALIF. L. REV. 261, 263–64 (1985) (“We argue that the very benefits of the state’s efforts to imply and standardize widely useful terms create hitherto overlooked barriers to innovative forms of contractual agreement.”).

15. Lisa Bernstein, *Social Norms and Default Rules Analysis*, 3 S. CAL. INTERDISC. L.J. 59, 70 (1993) (discussing relational factors and whether norms affect parties’ behavior); Kathryn E. Spier, *Incomplete Contracts and Signalling*, 23 RAND J. ECON 432, 432 (1992) (discussing the possibility of adverse inferences).

16. Omri Ben-Shahar & John A. E. Pottow, *On the Stickiness of Default Rules*, 33 FLA. ST. U. L. REV. 651, 655–60 (2006) (surveying recent literature).

Another potential barrier to innovation is the learning benefits that accrue to particular contract terms over time.¹⁷ Widely used contract provisions have, by definition, been analyzed and dissected by many different users across many different contexts.¹⁸ In these cases, it may be that users become reluctant to make any changes to the provisions because they do not want to undercut the clear meaning that the term has attained over the course of many years.¹⁹ These incentives may be felt especially keenly by associates in law firms who are wary of making changes for which they might subsequently be blamed.²⁰ In cases where the learning benefits that have accrued to a particular contractual provision are significant, therefore, the actual and perceived costs of switching to a new provision may deter contractual innovation.²¹

Network effects—or the benefits that attach as more and more individuals are exposed to a particular contract term—provide still another potential obstacle to contractual innovation.²² Just as the utility of owning a telephone increases as more people buy telephones, so too does the utility of a particular contract provision increase as more people use that contract provision. In contrast to the learning benefits described in the previous paragraph, which run exclusively from early to later users, network benefits apply to everyone who adopts a particular

17. Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting (or “The Economics of Boilerplate”)*, 83 VA. L. REV. 713, 718, 720–21 (1997) (observing that learning benefits “arise[] when a firm adopts a contract term that has been commonly used in the past, regardless of whether other firms will continue using it in the future”).

18. *Id.*

19. Michael Klausner, *The Contractarian Theory of Corporate Law: A Generation Later*, 31 J. CORP. L. 779, 795 (2006) (“[E]ven before a term is widely litigated lawyers develop shared understandings of how the courts will apply the term, and they advise clients on the basis of these understandings. These shared understandings, which are common among Delaware lawyers for example, further enhance the value of commonly used terms.”); Mark C. Suchman & Mia L. Cahill, *The Hired Gun as Facilitator: Lawyers and the Suppression of Business Disputes in Silicon Valley*, 21 LAW & SOC. INQUIRY 679, 704 (1996) (“[When] contracts come to routinely incorporate clauses that have been ‘decided’ years before, lawyers may hesitate to rock the boat by overzealously promoting client interests on specific issues.”).

20. Claire A. Hill, *Why Contracts Are Written in “Legalese”*, 77 CHI.-KENT L. REV. 59, 71 (2001) (“[F]ollowing the standard makes avoiding a bad outcome—that is, a bad outcome for which the lawyer is blamed—easier and less costly.”); see George G. Triantis, *Improving Contract Quality: Modularity, Technology, and Innovation in Contract Design*, 18 STAN. J.L. BUS. & FIN. 177, 199 (2013) (“[H]ierarchy and collegiality within firms discourages individual lawyers from making significant changes to precedent forms, at least partly to avoid offending the partner who authored the provision in question.”).

21. Kahan & Klausner, *supra* note 17, at 728 (“Switching costs may create pressure for a firm to avoid adopting terms in a new contract that deviate from those in its existing contracts. This may be true even if the previous terms are inferior to ones that have since been developed and even if the more recently developed terms have become common.”).

22. See *id.* at 725–26; see also Steven Walt, *Novelty and the Risks of Uniform Sales Law*, 39 VA. J. INT’L L. 671, 689 (1999) (“Network effects . . . produce a suboptimal adoption of sorts of contract terms . . . only if the market for contract terms exhibits network externalities.”).

contract provision regardless of the time of adoption.²³ The possibility that a new contract provision may not ultimately be widely adopted—thereby failing to reap much in the way of network benefits—thus serves to disincentivize the production of novel or idiosyncratic contract terms.²⁴

Weak intellectual property protections for contract language also serve to deter innovation.²⁵ Contracts are easy to copy. Potential innovators know this. Consequently, potential innovators also know that they are unlikely to capture all of the benefits from the resources that they invest in developing any contractual innovation.²⁶ If that innovation turns out to be useful, then other users will appropriate it for their own contracts without compensating the inventor.²⁷ Again, the overall effect is to discourage innovation.

Finally, simple inertia can play an important role in impeding contractual innovation. Once a contract provision becomes part of a standard form, it can be surprisingly difficult to remove. Mitu Gulati and Robert Scott have recounted the story of one particular contract provision (the *pari passu* clause) that became a standard term in sovereign debt contracts almost a century ago.²⁸ This provision, they write, “was promptly absorbed into the lumpish boilerplate of such contracts and then came to be replicated, thousands upon thousands of times, even while the knowledge of its origin and purpose insensibly faded from the minds of its remote drafters.”²⁹ Inertia and inattention, in other words, may also help to explain why contractual innovation is sometimes slow to occur.

23. Kahan & Klausner, *supra* note 17, at 726.

24. *Id.* at 734 (identifying potential problems stemming from network externalities); see Michael Klausner, *Corporations, Corporate Law, and Networks of Contracts*, 81 VA. L. REV. 757, 764 (1995) (“[N]etwork externalities introduce the possibility that corporate contracts that maximize individual firm values will not be socially optimal.”). This point is especially important in the world of venture capital finance, where standardized form contracts are the norm. Pressure to minimize friction and save on legal fees yields widespread agreement to use these forms without much negotiation, leading to less innovation from lawyers and parties alike.

25. Davis, *supra* note 2, at 106 (“Contracts are protected by copyright . . . but only the most blatant and literal forms of copying violate that copyright.”).

26. Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CALIF. L. REV. 479, 571 n.399 (1998) (“[I]n practice, lawyers freely copy contractual innovations from other lawyers without paying for them.”); Walt, *supra* note 22, at 689 (“Over a range of use, a contract term exhibits nonexclusivity: a contracting party cannot feasibly exclude others from benefiting from her own use of a contract term. The infeasibility of exclusion means that the party cannot realize the entire benefit resulting from her use.”).

27. See Lemley & McGowan, *supra* note 26; see also Davis, *supra* note 2, at 105.

28. See generally MITU GULATI & ROBERT E. SCOTT, *THE THREE AND A HALF MINUTE TRANSACTION: BOILERPLATE AND THE LIMITS OF CONTRACT DESIGN* (2013).

29. *Id.* at 2; see Hill, *supra* note 20, at 70 (suggesting attorneys meet expectations by “using time-tested forms, and changing them as little as possible”).

B. CONDITIONS CONDUCIVE TO INNOVATION

Notwithstanding the various obstacles discussed above, contractual innovation can and does take place. In recent years, a number of scholars have sought to identify the conditions and precise circumstances under which such innovation is most likely to occur.³⁰

Choi, Gulati, and Posner, for example, recently hypothesized that the process of contractual innovation occurs in three stages.³¹ In the first stage, a particular standard form dominates the market.³² Stage two begins when some external “shock” disrupts the market and prompts marginal market players to propose changes to the prevailing standard.³³ This shock may be caused by advances in technology, legal or regulatory changes, or changes in market conditions.³⁴ In stage three, high-volume or high-status intermediaries such as law firms recognize that some change is inevitable and each begins to promote its own vision of what the new standard should be.³⁵ During stage three, there will be multiple competing standards jockeying for market share.³⁶ After a period of time, however, one standard emerges as the market leader and becomes the new standard form until another external shock occurs.³⁷

Other scholars have sought to determine precisely who is most likely to develop a lasting contractual innovation. The recent scholarship has focused primarily on three groups: (1) contract users, (2) high-volume intermediaries such as law firms, and (3) trade associations.

30. These efforts constitute an explicit acknowledgment that the various obstacles to innovation discussed in Part I.A collectively provide a powerful deterrent to innovation. Rather than assuming that the parties will negotiate new terms that reflect their collective interests in most cases—as per classical economic theory—these scholars acknowledge that the obstacles to innovation are sufficiently serious that truly novel contract terms will only arise when certain conditions are met.

31. Choi et al., *supra* note 1, at 10.

32. *Id.*

33. *See id.*; *see also id.* at 36 (“Prior to any shock, existing standards are sticky and innovation is sparse . . .”).

34. Triantis, *supra* note 20, at 192–93. *But see* W. Mark C. Weidemaier, *Sovereign Immunity and Sovereign Debt*, 2014 U. ILL. L. REV. 67 (questioning whether major shifts in boilerplate financial contracts require an exogenous shock to occur).

35. Choi et al., *supra* note 1, at 10; *id.* at 37. (“Once enough market participants expect a shift in the standard . . . top market participants switch from being defenders of the status quo to promoters of their own individual visions of the anticipated new standard.”).

36. *Id.* at 37 (“Competing visions can then lead to multiple new standards at stage three . . .”).

37. The broad contours of this analytical framework have been echoed by a number of other scholars who have studied the process of contractual innovation. *See* Ronald J. Gilson et al., *Contract and Innovation: The Limited Role of Generalist Courts in the Evolution of Novel Contract Forms*, 88 N.Y.U. L. REV. 170, 172 (2013) (“Highly stylized, the trajectory of innovation in contract we find is this: Private actors respond to exogenous shocks in their economic environments by changing existing structures or procedures to make them efficient under the new circumstances.”); Barak Richman, *Contracts Meet Henry Ford*, 40 HOFSTRA L. REV. 77, 83 (2011) (“During an era of incremental technological change, firms are often well-served by rigid structures, but . . . ‘technological discontinuities’ or market shocks dramatically alter the market environment . . . Often, only new or entrant firms can organize their routines around the new technology or market environment . . .”).

First, the parties themselves could develop contractual innovations on their own initiative; economic theory predicts, after all, that the parties will introduce new terms to their agreements whenever the perceived benefits from the innovation exceed the perceived costs.³⁸ One recent study of standard form licensing agreements found that sellers introduced a significant number of (mostly pro-seller) changes to these agreements over time.³⁹ That same study found, however, that not all contract users are equally likely to innovate and that innovation is most likely to occur among “younger, growing, and large [companies], as well as [companies] with legal departments.”⁴⁰ So while some contract users are likely to innovate provided the conditions are right, many others are decidedly less likely to do so.

Second, intermediaries such as law firms are also well-positioned to generate contractual innovations.⁴¹ In contrast to contract users, who may negotiate particular types of agreements only infrequently, many law firms draft and negotiate these agreements in significant volume.⁴² Consequently, attorneys at large law firms will typically have access to a significant number of existing contracts that may be mined for innovative provisions.⁴³ Lawyers also have the ability, at least in principle, to spread the costs of innovation across multiple clients, which may enable some law firms to develop contractual innovations in situations in which the costs of innovation would be prohibitive if borne by a single client.⁴⁴ Attorneys may also be incentivized to develop innovations in order to signal to potential clients that they are on the cutting edge of the legal profession.⁴⁵

Finally, trade associations may play a key role in developing a number of novel contract provisions in certain industries.⁴⁶ These groups

38. See Marotta-Wurgler & Taylor, *supra* note 3, at 247–48 (discussing innovations to consumer contracts drafted by in-house legal department).

39. *Id.* at 257 (noting that “twenty-five of the thirty-two terms [studied] became relatively more pro-seller” relative to the otherwise applicable default rules and that “nineteen changes are common enough to be statistically significant.”).

40. *Id.* at 244.

41. Choi et al., *supra* note 1, at 7–8, 10, 16 (discussing innovations in sovereign bond documents drafted by law firms).

42. See Davis, *supra* note 2, at 116.

43. *Id.*

44. Marotta-Wurgler & Taylor, *supra* note 3, at 245.

45. See Triantis, *supra* note 20, at 200–01 (discussing Wachtell’s developing the poison pill and subsequent effort to market it to potential clients).

46. See Davis, *supra* note 2, at 119–21 (discussing why trade associations are innovative and the innovations they promulgate); Kevin E. Davis, *The Role of Nonprofits in the Production of Boilerplate*, 104 MICH. L. REV. 1075, 1078–81 (2006) [hereinafter Davis, *Role of Nonprofits*] (observing that trade associations seem to play a substantial role in producing boilerplate in many industries); Goetz & Scott, *supra* note 14, at 293 (“Certain private organizations—such as trade organizations and law firms—can partially overcome the property rights problem that discourages attempts at contractual innovation.”).

are funded through dues paid by their members and are therefore able to spread the costs of developing these innovations across many contract users.⁴⁷ In addition, trade associations are able to credibly assure prospective users—their members—that the innovations they develop will also be adopted by other users.⁴⁸ Some scholars have also argued that trade associations may also be better able to attract high-quality volunteer labor, thereby enabling them to produce innovations at a relatively low cost.⁴⁹

In the context of this broader discussion about which groups are most likely to innovate, there exists a related discussion about which individuals *within* these groups are most likely to innovate successfully. One hypothesis posits that high-status actors with significant market share will drive the process of innovation.⁵⁰ A counter-hypothesis posits that innovation is most likely to originate from marginal players that stand to gain market share as a result of any disruption to the status quo.⁵¹ To date, the empirical studies that have sought to answer this question have produced mixed results.⁵²

In summary, the contractual innovation literature to date has concerned itself with two primary questions. First, what are the general conditions under which contractual innovations are most likely to occur? Second, who is most likely to pioneer a successful contractual innovation? With these questions in mind, let us now turn to the issue of methodology and the ways by which researchers might go about seeking answers to each of these questions.

47. In the start-up context, the National Venture Capital Association developed its own open-sourced form of contracts for venture capital investments that have become widely used and referenced since their introduction. See Daniel M. Hauserman, *The Case Against Statutory Menus in Corporate Law*, 9 HASTINGS BUS. L.J. 45, 52 (2010).

48. Davis, *Role of Nonprofits*, *supra* note 46, at 1077.

49. *Id.* A number of pioneering contractual innovations were developed and subsequently promulgated by trade associations. See, e.g., INT'L CHAMBER OF COMMERCE, INCOTERMS (2010) (outlining International Chamber of Commerce rules regarding domestic and international trade terms); MODEL LEGAL DOCUMENTS, NAT'L VENTURE CAPITAL ASS'N, AVAILABLE AT www.nvca.org/index.php?option=com_content&view=article&id=108&Itemid=136 (offering Model Series A Preferred Stock Purchase Agreement).

50. Stephen J. Choi & G. Mitu Gulati, *Innovation in Boilerplate Contracts: An Empirical Examination of Sovereign Bonds*, 53 EMORY L.J. 929, 935 (2004).

51. *Id.* at 936.

52. Compare Choi & Gulati, *supra* note 50, at 936 (suggesting that high-volume attorneys are more likely to propose innovations), and Kahan & Klausner, *supra* note 17, at 721 (same), with Choi et al., *supra* note 1, at 36 (suggesting marginal players are key innovators). See Zev J. Eigen, *Empirical Studies of Contract*, 8 ANN. REV. L. & SOC. SCI. 291, 298–301 (2012) (discussing how contracting parties think of contracts); W. Scott Frame & Lawrence J. White, *Empirical Studies of Financial Innovation: Lots of Talk, Little Action?*, 42 J. ECON. LITERATURE 116, 116 (2004) (noting lack of empirical studies examining the process of contractual evolution).

C. METHODOLOGY

Past studies that explored the process of contractual change relied largely on publicly available datasets of contracts.⁵³ In order to identify innovations as they arose, these studies carefully tracked precisely when certain clauses were added (or deleted) to these agreements over a period of many years.⁵⁴ To a significant extent, these studies utilized sovereign debt contracts to analyze the process of innovation because these agreements were publicly available and the boilerplate used in these agreements was largely standardized.⁵⁵ Consequently, it was possible to identify the exact moment when certain clauses were added to (or deleted from) these agreements, and thereafter to draw inferences about which actor was most likely responsible for a particular change.

However well suited these methods may be to the study of sovereign debt contracts, they have little to offer to scholars seeking to better understand the process of contractual innovation in the context of early-stage venture capital investments.⁵⁶ This is particularly true with respect to investments made by wealthy individual investors—commonly known as angels—who invest in early-stage companies.⁵⁷ Since angels are so widely dispersed and invest relatively small sums of capital in individual companies, no comprehensive public dataset of angel investment contracts exists.⁵⁸ Accordingly, a different methodological approach is necessary to gain insights into how this particular group of contracts has evolved over time.

Since we lacked access to a reliable dataset of early-stage venture finance contracts, we chose to interview a number of individuals who are intimately familiar with these contracts: attorneys with a specialty in

53. The Thomson One Banker database, for example, contains 700 bonds issued by 75 different sovereigns between January 1, 1990 and July 1, 2011. Choi et al., *supra* note 1, at 10–11. Archival research has unearthed still more sovereign debt agreements. W. Mark C. Weidemaier, *Contracting for State Intervention: The Origins of Sovereign Debt Arbitration*, 73 *LAW & CONTEMP. PROBS.* 335, 342 n.37 (2010) (listing various archives). By comparison, there are no comparably comprehensive public datasets for venture capital contracts.

54. Choi et al., *supra* note 1, at 10–11.

55. *See id.*

56. There is at least one important difference between sovereign debt contracts and venture finance contracts. While there is an active secondary market for sovereign debt, the secondary market for investments made in early-stage technology companies is virtually nonexistent. The need to maintain standard terms in venture contracts, therefore, may be less pressing in these contracts that are not actively traded on a secondary market. This difference suggests that innovation may be marginally more likely to occur with respect to venture finance contracts than with respect to sovereign debt contracts; although such innovation will still be constrained by the various factors discussed in Part I.A.

57. *See generally* Andrew Wong, *Angel Finance: The Other Venture Capital*, in *VENTURE CAPITAL: INVESTMENT STRATEGIES, STRUCTURES, AND POLICIES* 71 (Douglas J. Cumming ed., 2010) (discussing the methodological challenges in researching angel investors).

58. *See id.* at 76.

venture capital. Over the course of several months in late 2013 and early 2014, we interviewed thirteen lawyers from six different law firms who specialize in representing investors and entrepreneurs in connection with the financing of early-stage technology companies.⁵⁹ We then drew upon these interviews—along with newspaper accounts, blog postings, and the occasional law review article—to construct a narrative of contractual innovation specifically as it relates to early-stage venture finance agreements. While this narrative is necessarily incomplete, we are confident that it is the richest and most comprehensive account that currently exists in the academic literature.

In addition to conducting interviews with attorneys who are familiar with venture finance contracts, we also interviewed a number of individuals who had themselves proposed innovations to these agreements.⁶⁰ These interviews proved useful in a number of ways. First, speaking directly with the innovators enabled us to better understand *why* they proposed certain changes rather than merely documenting the fact that change occurred. Second, it allowed us to pull back the curtain to better understand *how* the drafting process—the nitty-gritty work of innovation—actually took place. Third, it enabled us to avoid having to rely on inferences derived from contract datasets over time and, instead, to hear the story of contractual innovation directly from those responsible for the innovation.⁶¹

59. We interviewed thirteen attorneys based in Silicon Valley, Denver, and New York City in late 2013 and early 2014. Three interviews were conducted in person in New York City in October, November, and December 2013. Six interviews were conducted over the phone. The remaining four interviews took place over e-mail, as the interviewees responded in writing to written questions and follow-up questions. We arranged the interviews by asking friends and colleagues to make introductions on our behalf. Accordingly, the responses that we received may reflect a bias stemming from this non-random sample. The answers that we received were, however, consistent with observations and sentiments voiced by bloggers on websites that regularly discuss venture finance issues. A “snowball sample” approach was used to identify potential interviewees. See Patrick Biernacki & Dan Waldorf, *Snowball Sampling: Problems and Techniques of Chain Referral Sampling*, 10 SOC. METHODS & RES. 141, 141 (1981) (“Snowball . . . sampling is a method that . . . yields a study sample through referrals made among people who share or know of others who possess some characteristics that are of research interest. The method is well suited for a number of research purposes and is particularly applicable when the focus of study is on a sensitive issue, possibly concerning a relatively private matter, and thus requires the knowledge of insiders to locate people for study.”); see also Charles Kadushin, *Power, Influence and Social Circles: A New Methodology for Studying Opinion Makers*, 33 AM. SOC. REV. 685, 694–97 (1968) (discussing the strengths and weaknesses of snowball sampling). Previous studies of contractual innovation have also relied upon the snowball sampling method. See, e.g., Mark Weidemaier, Robert Scott & Mitu Gulati, *Origin Myths, Contracts, and the Hunt for Pari Passu*, 38 LAW & SOC. INQUIRY 72, 76 n.1 (2013).

60. Each of these innovators is included in the list of thirteen attorneys discussed above. See *supra* note 59 and accompanying text.

61. This approach is thus distinguishable from one that first identifies the contractual change and then seeks to determine the individuals responsible for the change inferentially by looking to which firm or underwriter represented the contract user.

There are, to be sure, drawbacks with any methodological approach that relies primarily on interviews. Human memory is fallible. There is the possibility of self-serving accounts that overstate the role of the interviewee—or the interviewee’s employer—in pioneering particular innovations. Further, our non-random choice of interview subjects may have led us to overemphasize certain aspects of the story. Nevertheless, we believe that the methods utilized in researching this Article are appropriate given the unique access challenges posed by this particular body of contracts. We also derive confidence from the fact that the narrative set forth in this Article is generally consistent with other partial accounts of the changes that have swept the market for venture funding over the past several years.

II. VENTURE FINANCE CONTRACTS PRE-CLOUD

In 1981, the Practising Law Institute published a book entitled *The Legal Aspects of Venture Capital Investing*.⁶² This book listed a number of different types of securities that were widely used in venture finance, including (1) common stock, (2) convertible preferred stock, and (3) convertible notes or debentures.⁶³ This Part provides an overview of the ways in which each of these instruments was most commonly utilized in venture finance between 1981 and 2005. This inquiry both sets the stage for the discussion to follow and serves to establish a baseline against which to evaluate subsequent contractual innovations.

A. FRIENDS, FAMILY, AND ANGELS: COMMON STOCK

Historically, in order to finance a new venture, entrepreneurs would use their own funds (often called “bootstrapping”) to test, as cheaply as possible, whether a market existed for their concept.⁶⁴ Those who were fortunate enough to have friends and family who could help finance the fledgling company could obtain capital from them.⁶⁵ Entrepreneurs who

62. See generally PRACTISING LAW INSTITUTE, *THE LEGAL ASPECTS OF VENTURE CAPITAL INVESTING* 1981, at 291 (1981).

63. Nahum L. Gordon, *The Different Types of Securities Issued in a Venture Capital Investment—Convertibles, Warrants, Also the Problem of Equitable Subordination (and Usury)*, in *THE LEGAL ASPECTS OF VENTURE CAPITAL INVESTING*, *supra* note 62, at 294.

64. See ANDREW METRICK & AYAKO YASUDA, *VENTURE CAPITAL AND THE FINANCE OF INNOVATION* 15 (2d ed. 2011) (discussing stages of investment finance in venture capital); Richard A. Mann et al., *Starting from Scratch: A Lawyer’s Guide to Representing a Start-Up Company*, 56 *ARK. L. REV.* 773, 821–22 (2004) (discussing bootstrapping methods); Jeffrey E. Sohl, *The U.S. Angel and Venture Capital Market: Recent Trends and Developments*, 6 *J. PRIVATE EQUITY* 7, 13 (2003) (“At the inception, or pre-seed stage, the venture is owner/investor-financed through a variety of bootstrapping methods.”).

65. See DAVID NOUR, *THE ENTREPRENEUR’S GUIDE TO RAISING CAPITAL* 44 (2009) (discussing friends and family as sources of capital); STEPHEN F. REED & ESTHER S. BARRON, *ENTREPRENEURSHIP LAW: CASES AND MATERIALS* 153 (2013) (discussing caveats when using friends and family as sources of capital).

were able to gain access to “angel” investors—wealthy individuals who invest in start-up companies—could raise still more capital.⁶⁶

Although there was considerable variation in sophistication between and among friends, family, and angel investors, these early-stage investors would usually receive common stock when they invested in a new company.⁶⁷ Among other rights, common stockholders have the right to vote in director elections, the right to receive dividends when declared, and the right to approve certain fundamental changes to the corporate structure.⁶⁸ Common stockholders are also owed fiduciary duties by corporate officers and directors.⁶⁹

The primary virtue of common stock is its simplicity. As a tool for providing significant seed capital to early-stage technology companies, however, it exhibits several drawbacks. Successful companies are rare in the start-up world. For every “home run,” a great many more companies are eventually disposed of in a fire sale, or worse, shuttered and liquidated.⁷⁰ If and when liquidation occurs, the common stockholder will be subordinated to all other classes of securities and other creditors in liquidation, and share ratably with the founders of the company (who likely received their common stock without making a financial investment in the company).⁷¹ Given this reality, the fact that individuals who invest in these companies would accept common stock, rather than a different security that offers more legal and economic protections on the downside, is curious.

66. Mann, *supra* note 64, at 823.

67. William W. Bratton & Michael L. Wachter, *A Theory of Preferred Stock*, 161 U. PA. L. REV. 1815, 1882 (2013) (“Significantly, angels tend to take common stock stakes, foregoing board seats, negative covenants, vetoes, and exit rights.”); Jesse M. Fried & Mira Ganor, *Agency Costs of Venture Capitalist Control in Startups*, 81 N.Y.U. L. REV. 967, 1009 (2006) (“[A]ngels frequently invest through common equity.”); Stephen G. Morrissette, *A Profile of Angel Investors*, 10 J. PRIVATE EQUITY 52, 59 (2007) (“Unlike the more sophisticated deal terms and complex securities used by venture capitalists, angels mostly make simple common stock investments . . .”); 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, 895 (2005) (“Many angels are content to receive common stock, rather than convertible preferred stock and its added protections against agency problems.”). *Cf.* Abraham J.B. Cable, *Fending for Themselves: Why Securities Regulations Should Encourage Angel Groups*, 13 U. PA. J. BUS. L. 107, 127 (2010) (“It is often stated that angel investors are more likely to invest in common than preferred stock. Recent studies, however, suggest that this perception is no longer accurate (if it ever was).”).

68. Gordon, *supra* note 63, at 294–97.

69. JAMES D. COX & THOMAS LEE HAZEN, TREATISE ON THE LAW OF CORPORATIONS § 10:9 (3d ed. 2010).

70. Ronald J. Gilson & David M. Schizer, *Understanding Venture Capital Structure: A Tax Explanation for Convertible Preferred Stock*, 116 HARV. L. REV. 874, 884 (2003) (“[T]he stereotypical risky venture-backed firm is either a ‘home run’ or a total failure.”).

71. *Id.* at 883–84.

One possible explanation for these investors' historical willingness to accept common stock is their relative lack of sophistication.⁷² Another is the possibility that the size of the investment was relatively small and amounted to an insignificant portion of the investor's overall portfolio.⁷³ Still another possible explanation, proffered by Darian Ibrahim, is that these investors are able to utilize informal, non-contractual sanctioning regimes to discipline wayward entrepreneurs, thereby making it unnecessary for them to negotiate for formal contractual protections in connection with their investment.⁷⁴ Ibrahim also argues that many of these investors derive psychic, non-financial benefits from investing and do not wish to interject a complex set of contractual protections into the investment relationship.⁷⁵ Finally, Ibrahim observes that the relatively low legal fees associated with investing in common stock make it an attractive option when the amount of money at stake is relatively small.⁷⁶

Whatever the precise explanation for the widespread use of common stock to finance early-stage companies, sophisticated investors long ago began to seek alternative investment structures that offered more in the way of contractual protections.⁷⁷ While some chose to structure their investment in the form of convertible notes, our interviews suggested that this practice was relatively infrequent prior to approximately 2005.⁷⁸ It was far more common, we were told, for

72. Fried & Ganor, *supra* note 67, at 1009 ("Because angels invest less than VCs and are generally less sophisticated, their financing agreements are much more informal. Unlike VCs, angels generally do not acquire control rights and board positions. Most importantly, angels frequently invest through common equity.").

73. *See id.* ("The amounts invested in a firm by an *individual* angel investor (as opposed to the total amount of angel financing) is likely to be much smaller than the amounts invested by individual VC firms.").

74. *See* Darian M. Ibrahim, *The (Not So) Puzzling Behavior of Angel Investors*, 61 VAND. L. REV. 1405, 1441-42 (2008).

75. *See id.*

76. *Id.* at 1443-45.

77. JOSH LERNER ET AL., VENTURE CAPITAL AND PRIVATE EQUITY 288 (3d ed. 2005) ("Typically, venture capitalists do not buy common stock.").

78. Although the primary purpose of the convertible note in venture finance prior to 2005 was as a "bridge" between one round of venture financing and the next, as discussed in Part II.C, non-institutional investors would occasionally utilize versions of these same notes to fund a company at its earliest stages. In other words, a convertible note was sometimes used as a substitute for common stock when friends, family, and angels invested in early-stage companies. We identified at least two instances in which convertible notes were used to finance early-stage technology companies in the 1970s and 1980s. *See, e.g.*, Daniel C. Cox, Comment, *Lawsuit Syndication: An Investment Opportunity in Legal Grievances*, 35 ST. LOUIS U. L.J. 153, 157 (1990) (discussing use of a convertible note to fund a company in the 1970s); Jill Andresky Fraser, *Anatomy of a Financing: The Benefits of Convertible Debt*, INC. MAGAZINE (Feb. 1, 1995), <http://www.inc.com/magazine/19950201/2159.html> (discussing use of a convertible note to fund a company in the 1980s). We also identified several sources suggesting that this practice continued into the 1990s and 2000s. *See* Jeffrey M. Leavitt, *Burned Angels: The Coming Wave of Minority Shareholder Oppression Claims in Venture Capital Start-up Companies*, 6 N.C. J. L. & TECH. 223, 257 (2005) ("Some very seasoned angels . . . will invest in a convertible note

sophisticated investors—particularly those with substantial amounts of capital to invest—to utilize convertible preferred stock.

B. VENTURE CAPITALISTS: CONVERTIBLE PREFERRED STOCK

Once a new technology venture's initial stores of capital were exhausted, the founders would need to raise a more substantial round of capital in order to expand the scale of the business. The amount of money required for this next phase of growth was (and remains) more than could usually be raised by friends, family, and angel investors, but the companies typically did not have sufficient assets or cash flow to secure a bank loan on commercially attractive terms (if at all).⁷⁹ Additionally, it was often the case that founders needed other non-financial resources to successfully scale the business. For example, founders who were undertaking their first venture needed ongoing advice and counsel related to growing a business and access to industry contacts, neither of which would typically be provided by commercial lenders.⁸⁰ Enter the institutional venture capitalist ("VC").⁸¹ The partners of a VC firm would have extensive experience advising founders of growing companies on how to build their businesses and ultimately achieve a profitable exit for the founder and the VC funds, either

with principal and interest convertible into the company's subsequent preferred equity round."); MIT ENTREPRENEURSHIP CTR., VENTURE SUPPORT SYSTEMS PROJECT: ANGEL INVESTORS 38 (2000) ("Some high tech angels use convertible debt to avoid the battle over valuation with the entrepreneur."). A number of our interviewees confirmed that convertible notes were sometimes used to provide seed funding prior to the advent of the cloud computing era. *See, e.g.*, E-mail from Attorney, Silicon Valley Law Firm I, to John Coyle (Jan. 15, 2014, 6:05 PM) (on file with John Coyle) ("[W]e were doing convertible notes for seed round financings in 1997. The difference was that in those days there wasn't an especially robust angel market."); E-mail from In-House Counsel, Silicon Valley Venture Capital Fund, to John Coyle (Jan. 20, 2014, 6:26 PM) (on file with John Coyle) (stating that convertible notes were used for seed funding in 1999 but acknowledging that this was not the "standard" practice at the time). All of our interviewees agreed that the practice of using convertible notes to fund seed rounds was uncommon in the years prior to the technological advances discussed in Part III. This view is generally consistent with the prevailing academic wisdom that angel investors generally structured their investments in the form of common stock. *See* Bratton & Wachter, *supra* note 67, at 1882. Accordingly, we defer an extended analysis of the use of convertible notes for this purpose to Part IV.

79. There were a small number of market actors willing to extend "venture debt" to start-up companies even if they had not participated in the initial round of financing. *See* LERNER, *supra* note 77, at 112–20 (3d ed. 2005) (discussing venture debt). In these instances, a lender would extend loans to start-up companies in exchange for warrant coverage and a promise to repay the loan with interest upon maturity. *See* Darian M. Ibrahim, *Debt as Venture Capital*, 2010 ILL. L. REV. 1169, 1176–80 (discussing venture debt business model).

80. *See* Ola Bengtsson & Frederick Wang, *What Matters in Venture Capital? Evidence from Entrepreneurs' Stated Preferences*, 39 FIN. MGMT 1367, 1397 (2010) ("[E]ntrepreneurs have a more favorable view of VCs that have valuable contacts, provide operational help, assist with recruiting new employees, facilitate in raising additional capital, and, to a lesser extent, assist the company at exit.").

81. *See* Ibrahim, *supra* note 74, at 1422 ("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.").

through a sale of the company to a larger acquirer or through an initial public offering of the company's stock.⁸² They would also have had sufficiently "deep pockets" to support the company financially as it grew and required additional investment.

VC investors typically staged the financing of a new company over several "rounds" of investment, thereby giving the investors leverage even after the initial investment was made.⁸³ The first round in which an institutional VC invested in a company was commonly known as the "Series A" round—so named on account of the convention that VC funds would purchase Series A Convertible Preferred Stock of the company.⁸⁴ This series of convertible preferred stock and other investment contracts associated with the Series A round of financing contained a standard panoply of rights designed to protect the VC investors' interests, as they would only be purchasing a minority, non-controlling stake in the company at this stage (typically twenty to thirty-five percent). The holders of Series A Preferred Stock would, for example, typically be entitled to a preferred dividend and a liquidation preference, which would give them priority over the common stockholders in respect of any distributions of cash until the company had returned the investors' initial investment plus any accrued but unpaid dividends.⁸⁵ The preferred stock would be convertible to common stock on a 1:1 basis.⁸⁶ The lead VC fund and other larger investors would also typically receive contractual preemptive rights to subscribe for additional shares in any future financing round, if they wished to maintain their ownership percentages of the company.⁸⁷ The consent of Series A stockholders would be required for the company to undertake certain actions, such as authorizing or issuing additional stock, incurring indebtedness, agreeing to undergo a change in control or other

82. Elizabeth Pollman, *Information Issues on Wall Street 2.0*, 161 U. PA. L. REV. 179, 184 (2012) ("The goal is for the start-up companies to achieve successful 'exits' that make a significant return on investment for the venture capital fund The primary exit mechanisms for start-ups are going public and being acquired in a merger transaction").

83. John F. Coyle & Gregg D. Polsky, *Acqui-hiring*, 63 DUKE L.J. 281, 288 (2013).

84. *Id.*

85. Some scholars have argued that venture capitalists structure their investment in the form of preferred stock not for the priority that preferred stock enjoys in liquidation, but for the tax benefits conferred by the use of such stock. See Gilson & Schizer, *supra* note 70, at 902–04. Having a priority in liquidation, so the argument goes, is not particularly valuable when the company is worthless.

86. This ratio would typically be adjusted in the investors' favor if the company subsequently sold preferred stock for less than the Series A per share purchase price, giving the Series A investors anti-dilution protection in the event that they paid more for their shares than a future investor. The ratio would also be adjusted in the event of stock splits or combinations. Gregg D. Polsky & Brant J. Hellwig, *Examining the Tax Advantage of Founders' Stock*, 97 IOWA L. REV. 1085, 1095–96 (2012); Michael A. Woronoff & Jonathan A. Rosen, *Effective vs. Nominal Valuations in Venture Capital Investing*, 2 N.Y.U. J.L. & BUS. 199, 204 n.27 (2005).

87. See Ibrahim, *supra* note 74, at 1413–15.

liquidation of the company, paying dividends, or redeeming outstanding shares of stock.⁸⁸ Finally, to ensure proper governance and protect the interests of the investors, a partner from the lead VC firm would usually demand a seat on the board of directors.⁸⁹

The VC funds would invest an amount that was intended to give their new portfolio company sufficient capital to operate (“runway,” in the industry’s parlance) for one year to eighteen months before it would need additional investment.⁹⁰ The goal was for the company to achieve certain milestones during that period (based on metrics such as revenue, users, eyeballs, mouse clicks, etc.) that would attract investment from new VC funds at a substantially higher valuation.⁹¹ For successful companies, this process would continue over a number of years, with the company raising additional capital at increasingly higher valuations by selling shares of new series of preferred stock (Series B, Series C, Series D, and so on) to new investors, usually with their existing investors participating in such subsequent rounds to maintain their pro rata ownership.

C. THE STOPGAP INVESTOR: CONVERTIBLE NOTES AND BRIDGE LOANS

Historically, the primary purpose of the convertible note in venture finance was to serve as a “bridge” between one round of venture financing and the next. A convertible note, as the name suggests, is a debt instrument that may be converted into equity.⁹² The convertible note pays interest, has a formal maturity date, gives the holder priority over equity holders, and puts the holder on an equal footing with other unsecured debt holders and trade creditors in liquidation.⁹³ In contrast to straight debt, however, convertible notes may be converted into common stock or preferred stock, thereby giving the holder a chance to

88. *Id.*

89. *Id.* at 1414–15.

90. Interview with Attorney, New York Law Firm II (Nov. 20, 2013).

91. *Id.*

92. These instruments have a long history outside of venture capital. See A. A. Berle, Jr., *Convertible Bonds and Stock Purchase Warrants*, 36 *YALE L.J.* 649, 649 (1927) (“Convertible bonds and notes have been familiar documents on the stock exchanges for a number of years.”); William A. Klein, *The Convertible Bond: A Peculiar Package*, 123 *U. PA. L. REV.* 547, 547 (1975) (“[C]onvertible bonds have been widely used for many years”); see also Arthur Stone Dewing, *THE FINANCIAL POLICY OF CORPORATIONS* 269–71 (5th ed. 1953) (discussing use of convertible bonds by various companies in historical context). Much of the literature on convertible debt is focused on its issuance by public companies. See generally William W. Bratton, Jr., *The Economics and Jurisprudence of Convertible Bonds*, 1984 *WIS. L. REV.* 667; Alexander J. Triantis & George G. Triantis, *Conversion Rights and the Design of Financial Contracts*, 72 *WASH. U. L. Q.* 1231 (1994).

93. See *JESSE H. CHOPER ET AL., CASES AND MATERIALS ON CORPORATIONS* 201 (7th ed. 2008).

participate in the upside if a company ultimately achieves a successful exit.⁹⁴

In the start-up context, convertible debt was historically used by the existing investors of a company in two bridge-like situations: (1) if the investors were confident that the company would be able to achieve an important milestone if only it had enough capital to provide a few additional months of runway, and that achieving that milestone, in turn, would then enable the company to raise capital from new outside investors; or (2) the investors and the founders were trying to sell a struggling company and it needed additional funds to continue operating while they found a buyer and negotiated the sale of the business.⁹⁵ We refer to the convertible debt instruments used in these two situations as “bridge notes.” When we later explore the use of convertible debt as the first round of financing for a new venture, we will refer to those instruments as “seed notes.”

Although the terms of a bridge note could vary greatly depending on a number of circumstances, they generally contained a number of standard terms.⁹⁶ For instance, since the bridge notes were debt instruments, they would bear interest, and the principal and interest would become due and payable upon demand at maturity if the notes were not converted to equity prior to that time.⁹⁷ These notes would sometimes be secured if the company had assets that made a security interest worth the time and expense of perfection.⁹⁸

94. See George G. Triantis, *Financial Contract Design in the World of Venture Capital*, 68 U. CHI. L. REV. 305, 317 (2001) (“Conventional convertible debt gives the security holder the option to trade its debt for common stock in the issuer. The instrument defines the time during which the option may be exercised and also often grants to the issuer the right to call the debt in order to induce the convertible debtholder to convert.”); Bratton, *supra* note 92, at 673 (“The issuer incorporating a conversion privilege into its bonds grants a future claim on its equity. For investors, this future claim gives convertible bonds the advantage of combining desirable features of straight bonds, such as fixed income payments and principal repayment, with the upside potential of common stock.”).

95. See Yoichiro Taku, *What Is Convertible Equity (or a Convertible Security)?*, STARTUP COMPANY LAW. (Aug. 31, 2012), <http://www.startupcompanylawyer.com/category/convertible-note-bridge-financing> (“Originally, the concept of convertible debt was part of the VC playbook in order to ‘bridge’ companies that needed financing in between round of equity financing—such as between Series A and Series B—in order to get to the next milestone to raise financing or sell the company.”).

96. The terms may vary depending upon (1) whether the investment was a bridge to another equity financing or a sale, (2) the company’s chances of reaching either of those events, (3) whether all of the company’s existing investors were willing to continue supporting the company and (4) the company’s existing capital structure. Interview with Attorney, New York Law Firm I (Dec. 3, 2013).

97. See Coyle & Polsky, *supra* note 83, at 290 (“In the event the startup is liquidated before a note is converted, the noteholder traditionally was entitled to a return of his investment plus accrued interest.”); George W. Dent, Jr., *The Role of Convertible Securities in Corporate Finance*, 21 J. CORP. L. 241, 243–44 (1996) (“Convertibles are often callable—the issuer may redeem them during a state period at a stated price, which is usually the issue price, plus any accrued, unpaid interest or dividends, plus a call premium.”).

98. See David J. Kendall, *Venture Capital Lending: Usury and Fiduciary Duty Concerns*, 33 COLO. LAW. 49, 52 (2004) (“A company may agree to grant a security interest in all or a portion of

The conversion feature of the bridge notes envisaged several possible outcomes. If the company raised a new round of equity financing from outside investors, the noteholders would be able to convert their notes into shares of the new series of preferred stock to be sold in that subsequent financing.⁹⁹ Since an interest rate high enough to truly provide adequate compensation to the noteholders for the risk of default in these circumstances would likely have been viewed as usurious, noteholders instead received warrant coverage (which might range from twenty percent to over fifty percent of the principal amount of the notes for companies in dire straits).¹⁰⁰ Warrant coverage was a standard feature of straight bank debt for VC-backed companies and was typically used in the bridge note context, as well to provide additional upside for the noteholders should the bridge loan enable the company to reach another equity financing or sale.¹⁰¹ Since many of these bridge notes were intended to help the company reach an exit event, there were special provisions regarding the treatment of the bridge notes upon a change in control or IPO.¹⁰² In such situations, the agreements would often provide for the noteholders to receive two or three times the principal amount of their notes, plus interest, upon consummation of an exit.¹⁰³

Despite its debt-like features, such as interest rates, maturity dates, and security interests,¹⁰⁴ bridge notes could also be thought of as a deferred equity investment because the bridge investors' expectations were not to have the principal repaid with interest, but to receive equity at some future date.¹⁰⁵ Unlike more traditional debt instruments, bridge notes did not contain negative or affirmative covenants, had very light

its assets to secure a bridge loan.”). *But see* Antone Johnson, *Knowledge Is Power: Convertible Note Financing Terms, Part I*, GUST (Sept. 29, 2011), <http://gust.com/blog/2011/09/29/convertible-note-financing-terms-1> (“[T]he note is usually not secured by any kind of collateral [because] [i]nvestor and entrepreneur alike are betting on success, in which case the note will convert to equity.”).

99. *See* Christopher K. Aidun & Ernest Ceberio, *Current Trends in Venture Capital Financing: 2002*, 7 CYBERSPACE LAW. 2, 4 (2002) (“Sometimes, when bridge investors believe the next capital event may be a sale of the Company, the bridge notes are also made convertible, at the option of the holders, in to an existing series of preferred stock.”).

100. *Id.* (“Warrants are always issued with bridge notes.”).

101. *See* Ibrahim, *supra* note 79, at 1176–80 (discussing phenomenon of venture debt).

102. Interview with Attorney, New York Law Firm II, *supra* note 90.

103. *Id.*

104. *See, e.g.*, Kendall, *supra* note 98, 50–52 (outlining the common terms and conditions of VC bridge loans, including term of the loan, interest rate, liquidation preference, convertibility, anti-dilution protections, warrant coverage, and security).

105. *See, e.g.*, Charles R.P. Pouncy, *Contemporary Financial Innovation: Orthodoxy and Alternatives*, 51 SMU L. REV. 505, 522 n.101 (1998) (“If preferred shares can be viewed as debt-like equity, then convertible bonds can be seen as equity-like debt. Generally, the holder [of] a convertible bond may, at her option, exchange it for a predetermined amount of common stock.”); Aidun & Ceberio, *supra* note 99, at 4 (“Bridge notes generally carry . . . an opportunity to convert to equity.”).

events of default, and had minimal representations and warranties.¹⁰⁶ The notes also did not require any periodic payments, since these businesses were not profitable and were fully expected to use all of the cash raised from the bridge notes on ongoing operations rather than on servicing interest payments.¹⁰⁷

If bridge notes were really more appropriately considered deferred equity, why didn't these firms just issue more equity instead? After all, the liquidation preference and dividends of preferred stock could easily be made the economic equivalent of the principal and interest of a bridge note. Since most of the companies that raised capital through bridge notes were struggling, however, structuring the investment as debt provided some additional downside protection for the investors in the event that the company failed and had to be sold at a loss or liquidated. As debt, the bridge notes would have priority over all of the preferred and common stock in liquidation, which would ensure that the last money in would be the first money out.¹⁰⁸ This could become particularly important if only some of the investors were continuing to support the company through the bridge investment, as the participating investors may have been unwilling to purchase preferred stock that would have shared priority with all of the previous preferred shareholders (even investors who refused to participate in the bridge). The priority of debt in a liquidation, along with the relative simplicity of bridge notes (and the resulting ease and speed of execution), thus led investors to structure these investments as debt instead of equity.

D. SUMMARY

Venture finance, as it was practiced in Silicon Valley and elsewhere at the turn of the last century, operated within a fairly stable legal framework. In a company's early days, friends, family, and angel investors would contribute relatively small amounts of capital to the venture in exchange for common stock. As the company grew, its founders would raise additional capital from VCs by issuing convertible preferred stock. In the event that future rounds of financing were required, the company would sometimes issue convertible notes to its

106. See Dent, *supra* note 97, at 247 ("If convertibles were employed when an issuer is considered likely to undertake undue risk, covenants would be especially stringent in convertible financings. In practice, however, the opposite is true—covenants tend to be tighter for straight debt.").

107. See Triantis, *supra* note 94, at 312 ("Start-up firms often have negative earnings or cash flows in their early stages, and therefore the security typically does not provide for mandatory periodic payments of either interest or dividends.").

108. See Kendall, *supra* note 98, at 50 (explaining that bridge financing provides the economic and legal benefit of giving creditors priority over all equity holders, including preferred equity holders and that in the event of liquidation, a bridge loan allows a VC investor to be higher in the capital structure).

existing investors in order to obtain enough capital to sustain it until the next preferred stock round of financing or a sale. Beginning in approximately 2005, however, this orderly world was disrupted by a number of economic and technological changes. These changes are detailed in the next Part.

III. CLOUD COMPUTING AND THE CHANGING FACE OF TECHNOLOGY START-UPS

Over the past decade, the costs of launching a new technology start-up have fallen precipitously.¹⁰⁹ At the same time, new technologies have given these start-ups the ability to rapidly scale their operations.¹¹⁰ These changes, in turn, have had a dramatic impact on the way that technology companies are launched and financed. This Part chronicles these changes and explains how they set the stage for a number of contractual innovations in the world of venture finance.

A. THE FALLING COSTS OF LAUNCHING A START-UP

In order to found and build a serious software company *circa* 1999, serious money was required. A new company had to pay for office space, computers, servers, and software, and none of these items came cheap. The conventional wisdom held that a start-up had to raise at least three to five million dollars just to determine whether an idea was viable.¹¹¹ Since this much money was typically more than could be raised from friends, family, and even most angel investors, the support of a VC was essential if a company was to survive past its infancy.

Beginning in roughly 2005, however, the costs of launching a new software company began to fall.¹¹² One key reason for this decline was the rise of cloud computing.¹¹³ With the advent of the cloud, it was no

109. George Deeb, *The Top 4 Reasons VCs Bias Technology Startups*, FORBES (Oct. 23, 2013, 9:20 AM), <http://www.forbes.com/sites/georgedeeb/2013/10/23/the-top-4-reasons-vc-bias-technology-startups> (“The cost of building a technology startup has dramatically reduced over the last decade. No longer do you need to pay for hardware, or code commonly-used tools, or pay for big support teams. Websites today are hosted in the cloud and use open source software, taking the cost of the build-out down from the millions a decade ago to the hundreds of thousands today.”).

110. *Id.*

111. See, e.g., Robert P. Merges, *Software and Patent Scope: A Report from the Middle Innings*, 85 TEX. L. REV. 1627, 1639 (2007) (showing that VCs invested \$2.697 million on average in first-time start-up financings in 1999).

112. See Darian M. Ibrahim, *Should Angel-Backed Start-Ups Reject Venture Capital?*, 2 MICH. J. PRIVATE EQUITY & VENTURE CAPITAL L. 251, 256–57 (2013).

113. See Coyle & Polsky, *supra* note 83, at 292; see also William Jeremy Robinson, Note, *Free at What Cost?: Cloud Computing Privacy Under the Stored Communications Act*, 98 GEO. L.J. 1195, 1199 (2010) (“[Cloud computing is] the ability to run applications and store data on a service provider’s computers over the Internet, rather than on a person’s desktop computer.”). Cloud computing overcomes many of the inefficiencies of a dispersed computing model by eliminating the cost of purchasing processing power and storage capacity, the cost of data protection, and the cost of equipment failure. *Id.*

longer necessary for young Internet companies to purchase and maintain expensive servers to provide their own web hosting.¹¹⁴ Cloud computing also made it possible for start-ups to rely on cloud-based software to manage various functions in a more cost-efficient way. Such software was frequently used, for example, by start-ups to handle their accounting, to manage their customer relationships, and to store their data.¹¹⁵ In addition, new companies were able to make use of more widely available open-source software. New companies could, for example, obtain the use of high-quality open-source software that enabled them to handle tasks, such as graphics editing, online payment, and e-mail marketing, at literally no cost to the company.¹¹⁶ The upshot of these and other changes was that many technology start-ups could operate on a relative shoestring for much longer than was previously the case.¹¹⁷

Even as the costs of launching a start-up declined, the ability of such companies to rapidly achieve significant scale at comparatively little cost was enhanced. The increasing penetration of high-speed Internet access via computers, smart phones, tablets, and other mobile devices meant that new software products could find a market with only minimal marketing and distribution costs.¹¹⁸ This ability to scale up more easily was also attributable in significant part to the growing popularity of

at 1200–01. The advent of cloud computing has also shifted development from the “Software as a Service” model to the “Platform as a Service” model where providers open their systems to third-party developers who create applications on the provider’s platform. *Id.* at 1203. For further information on cloud computing, see JAMES MANYIKA ET AL., MCKINSEY GLOBAL INST., *DISRUPTIVE TECHNOLOGIES: ADVANCES THAT WILL TRANSFORM LIFE, BUSINESS, AND THE GLOBAL ECONOMY* 6 (2013), available at http://www.mckinsey.com/insights/business_technology/disruptive_technologies.

114. See Tim Beyers, *Investors Look to Fund Capital-Light Businesses*, ENTREPRENEUR (Aug. 12, 2010), <http://www.entrepreneur.com/article/217209>; Gene Marks, *Do You Replace Your Server or Go to the Cloud? The Answer May Surprise You*, FORBES (Apr. 29, 2013, 11:17 AM), <http://www.forbes.com/sites/quickerbetteartech/2013/04/29/do-you-replace-your-server-or-go-to-the-cloud-the-answer-may-surprise-you> (“There’s no question that if you’re a startup or a very small company or a company that is virtual or whose employees are distributed around the world, a cloud based environment is the way to go.”); Hafizah Osman, *SMBs That Embrace Cloud Enjoy More Revenue: MYOB*, ARN (Apr. 24, 2013, 3:27 PM), http://www.arnnet.com.au/article/459981/smb_s_embrace_cloud_enjoy_more_revenue_myob.

115. Joe McKendrick, *How Cloud Computing is Fueling the Next Startup Boom*, FORBES (Nov. 1, 2011, 6:00 AM), <http://www.forbes.com/sites/joemckendrick/2011/11/01/cloud-computing-is-fuel-for-the-next-entrepreneurial-boom>.

116. Jonathan Stoddard, *Open Source Software Helps the Lean Startup*, KTG INC., <https://web.archive.org/web/20130529140517/http://www.ktgdenver.com/content/open-source-software-helps-lean-startup> (last visited Dec. 14, 2014).

117. See McKendrick, *supra* note 115 (“As Chris Sacca, a 280 North investor and former Google Inc. executive, put it: ‘The biggest line item in these companies now is rent and food . . . A decade ago, I don’t think you could write a line of code for less than \$1 million.’”).

118. See *OECD Broadband Portal*, OECD, <http://www.oecd.org/sti/broadband/oecdbroadbandportal.htm> (last updated July 22, 2014) (providing tables that show country-by-country percentage increases of broadband penetration per 100 inhabitants and historical penetration rates of G7 countries); Tom Cheshire, *In Depth: How Rovio Made Angry Birds a Winner (and What’s Next)*, WIRED (Mar. 7, 2011), <http://www.wired.co.uk/magazine/archive/2011/04/features/how-rovio-made-angry-birds-a-winner> (discussing the low costs of marketing and distributing the Angry Birds app).

social media networks.¹¹⁹ These networks enabled Internet trends and brands to grow virally, which in turn made it possible for new technology products to spread rapidly across the United States and around the world.¹²⁰ While consumer Internet and social media companies benefitted the most from the changes, business-to-business and software-as-a-service models have also taken advantage of opportunities that these changes have wrought.¹²¹

In summary, a confluence of developments in technology—including cloud-based servers, cloud-based software, and open-source code—substantially reduced the costs of launching a technology-based start-up, beginning in approximately 2005. At the same time, a number of other factors—including the improved accessibility of high-speed Internet and the increased popularity of social media—enabled these same companies to rapidly achieve significant scale.

B. THE IMPACT ON VENTURE FINANCE

Given the breadth and scope of the changes discussed above, it should come as little surprise that they had a marked impact on the ways that start-up technology companies are financed. To illustrate this point, assume that the founder of a new software company in 2002 would have bootstrapped the business with \$50,000 to \$100,000 of his own money, or perhaps up to \$250,000 with money from friends, family, and angel

119. As of January 2014, seventy-four percent of adults use social networking sites. *See Social Networking Fact Sheet*, PEW RESEARCH INTERNET PROJECT, <http://pewinternet.org/fact-sheets/social-networking-fact-sheet> (last visited Dec. 14, 2014); *see also* Jeremy Gelms, *High-Tech Harassment: Employer Liability Under Title VII for Employee Social Media Misconduct*, 87 WASH. L. REV. 249, 266 (2012) (“The most popular social networking site, Facebook, has over 800 million users worldwide. These users include roughly sixty percent of the American Internet population.”); Sarah Tran, *Cyber-Republicanism*, 55 WM. & MARY L. REV. 383, 413 (2013) (“Whereas a 2011 survey indicated 43 percent of American adults had a Facebook page, a 2012 survey reports that a whopping 56 percent of the adult population now have a page and that over one-third of its users access Facebook at least once a day.”).

120. *See* Deeb, *supra* note 109.

121. *See* PHILIPPE BOTTERI ET AL., BESSEMER VENTURE PARTNERS, BESSEMER’S TOP 10 LAWS OF CLOUD COMPUTING AND SAAS 3 (2010), *available at* http://www.bvp.com/sites/default/files/bvps_10_laws_of_cloud_saas_winter_2010_release.pdf (“One of the clear benefits of the Cloud Computing hype is that many very large companies are collectively investing billions of dollars in Cloud infrastructure and are now tripping over themselves to offer your business Cloud infrastructure at ridiculously low prices.”). In addition to decreasing infrastructure cost, cloud computing also enables Software-as-a-Service (“SAAS”) businesses to aggregate detailed usage statistics of its customers at low cost. *Id.* at 10. Others have outlined the benefits of business-to-business (“B2B”) cloud integration. Cindy Frei, *How Cloud Computing Expands B2B Opportunities*, MARKETRESEARCH (Mar. 14, 2013, 5:45 PM), <http://blog.marketresearch.com/blog-home-page/bid/217824/How-Cloud-Computing-Expands-B2B-Opportunities-MarketResearch-com> (“For B2B companies especially, the benefits of transitioning older systems to *the cloud* are obvious, starting with cost reduction in operations and IT.”); Josh Hardy, *For Leading Global Business, the Future of B2B Integration Is in the Cloud*, SMARTER COMMERCE (Oct. 28, 2013), <http://www.smartercommerceblog.com/articles/2013/10/28/for-leading-global-businesses-the-future-of-b2b-integration-is-in-the-cloud>.

investors in exchange for shares of common stock. After burning through that money over several months to prove the concept of the business on a small scale, the founder would likely have sold Series A stock to a VC fund to raise an additional \$3 million to \$5 million, giving up perhaps a third of the company (implying a valuation of the company of \$6 million to \$10 million prior to the investment, the “pre-money” valuation).¹²² Those additional funds from the Series A round were necessary for the company to be in a position to start achieving any kind of meaningful scale.¹²³

With a company founded in 2014, however, the founder can instead raise \$500,000 to \$750,000 of capital in a “seed round” and perhaps buy herself a year to eighteen months of runway.¹²⁴ With that longer period of time, she can build and sometimes significantly scale the business, achieving more impressive milestones before having to approach VC firms for a Series A round.¹²⁵ Raising funds from that more advantageous position allows the founder to command a significantly higher valuation for the company, thereby keeping more of the ownership for herself. To provide a quantitative example of this point, since the company is able to be much more capital efficient and is further along in its growth, perhaps the founder would sell \$3 million worth of Series A Preferred Stock to the VC fund, but at a pre-money valuation of between \$9 million to \$12 million (giving up only twenty percent to twenty-five percent of the company instead of one-third). Thus, it now makes great economic sense, from a founder’s perspective, to raise a more substantial seed round than was previously the case because of how much more the founder can

122. See Coyle & Polsky, *supra* note 83, at 288–89 (discussing the early stages of startup financing); Ibrahim, *supra* note 74, at 1413 (describing the typical venture capital investment contract as employing staged financing) (citing 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)).

123. See Coyle & Polsky, *supra* note 83, at 288 (“At the very early stages of a company’s development, there will be a seed round in which the company raises capital to launch the enterprise.”); see also Brian Broughman & Jesse M. Fried, *Carrots and Sticks: How VCs Induce Entrepreneurial Teams to Sell Startups*, 98 *CORNELL L. REV.* 1319, 1327 (2013) (“Most venture-backed startups issue a new series of preferred stock for each round of financing.”).

124. While it may seem counterintuitive that the amount of capital raised in these seed financings was increasing at the same time that the costs of starting a business were falling, the explanation lies in the amount of time, or runway, that a given amount of capital was afforded a start-up founder. In the pre-cloud world, \$500,000 to \$750,000 would likely not have allowed a start-up founder to accomplish much more than they could have if they raised \$250,000 or less. To get a technology business off the ground simply required a much larger amount of funds (typically in the millions). Post-cloud, however, \$750,000 became sufficient to allow an entrepreneur to build a potentially substantial business over a year to eighteen months before having to raise a more significant round of financing.

125. Startups receive venture capital funding only after an initial period when the company has survived the earliest stages and is expanding. Ibrahim, *supra* note 74, at 1416–19. The time gap between the beginning of a startup’s life and the first round of financing is typically one year. *Id.* at 1416. A more developed company would more easily attract venture capital funding. See *id.* at 1417.

achieve with those amounts and how it better positions the company for a subsequent round of financing.¹²⁶

Raising a larger seed round, however, presents issues of its own. When the company was raising \$250,000 or less, most investors would have been allocated less than \$50,000 apiece (with many investing only \$25,000, or even as little as \$10,000). For such a small investment, even the more sophisticated angels were largely willing to invest in common stock alongside the founder, with nothing in the way of traditional VC-style rights or protections. After all, the logic went, it was an insignificant investment in the portfolios of these high-net-worth individuals and typically viewed as not much more than a lottery ticket.¹²⁷ However, for a new company raising a seed round of \$500,000 to \$750,000, perhaps the angels would be investing several hundred thousand dollars each. Since this was a more substantial sum, these angels decided that they wanted more for their money than mere common stock with no further assurances.¹²⁸

At the same time, the most obvious alternative to common stock—a full VC-style preferred stock financing—seemed to many as being too involved for the amount of money being invested.¹²⁹ In particular, there was sensitivity surrounding legal fees, as the fees associated with preferred stock financings did not decrease just because the company was raising only \$500,000 instead of \$3 million or \$5 million.¹³⁰ This meant that the transaction costs consumed a much larger percentage of the new capital in the seed-financing context than they would have in a larger Series A round. Moreover, many angel investors did this type of investing more as a hobby than a profession.¹³¹ Consequently, the angels were often not particularly sophisticated when it came to venture financing terms and were not well equipped to negotiate the full array of rights associated with VC-style preferred stock.¹³² Many also lacked the

126. One survey has found that although the number of seed financings increased from 472 in 2009 to 1749 in 2012, the number of Series A rounds only increased from 418 to 692 during this same time period. FENWICK & WEST LLP, 2012 SEED FINANCING SURVEY: INTERNET/DIGITAL MEDIA AND SOFTWARE INDUSTRIES 3 (2013), available at <http://www.fenwick.com/publications/Pages/Seed-Finance-Survey-2012.aspx>.

127. Interview with Attorney, New York Law Firm I, *supra* note 96.

128. *Id.*

129. *Id.*; Susan C. Morse, *Startup Ltd.: Tax Planning and Initial Incorporation Location*, 14 FLA. TAX. REV. 319, 342–44 (2013) (discussing resource constraints in early-stage companies).

130. Interview with Attorney, New York Law Firm III (Nov. 13, 2013).

131. Ibrahim, *supra* note 74, at 1439 (“Many if not most angels are ex-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 one.”).

132. 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, 879 (2005) (“Some angels are extremely sophisticated in financial and investment matters and invest in a manner similar to professional investors. The majority of angels, however, do not appear to be as highly sophisticated.”).

appetite to do so, either because they were busy with their primary occupations or because they invested in so many seed-stage companies that they did not have the capacity to spend time and resources heavily negotiating preferred stock terms for each investment.¹³³ Founders, meanwhile, were eager to stretch these seed dollars as far as they possibly could, because every dollar spent on fees would mean less runway, and ultimately, could mean a lower valuation at the next financing round.¹³⁴

This left both founders and angel investors looking for financing instruments that would provide more protection than common stock but would have less complexity and lower transaction costs than a full-scale Series A Convertible Preferred Stock financing. With these needs in mind, the contracts that had long been used to structure venture capital investments in the United States began to evolve and change. The process of evolution—and the changes that this process ultimately produced—are described in the next two Parts. Part IV first discusses the ways in which attorneys and investors adapted the convertible notes, historically used principally in the bridge loan context, to provide seed funding to early-stage technology companies. Part V then analyzes the ways in which many of these same individuals sought to adapt the traditional Series A financing documents to the same end by developing “stripped-down” versions of these same documents.

IV. SEED NOTES

As the costs of launching a new start-up fell, investors in Silicon Valley and elsewhere began to look for contracts that could be used to commit capital to these ventures. Over time, more and more of these investors, entrepreneurs, and their attorneys found themselves gravitating to the convertible note as a contractual form well-suited to their needs. While the turn to this instrument was not entirely new—the convertible note had been used occasionally to provide initial funding for companies in the pre-cloud era—its increased use in the post-cloud era marked a massive shift in its perceived utility in the seed finance community.¹³⁵

This Part first chronicles the convertible note’s rise to prominence in the cloud computing era and explains precisely why investors and entrepreneurs found these contracts so useful. It then discusses one particular contractual innovation—the conversion price cap—and explains how and why it gradually came to be incorporated into most

133. Telephone Interview with Attorney, AmLaw 100 Law Firm I (Dec. 9, 2013).

134. Interview with Attorney, New York Law Firm III, *supra* note 130.

135. See Ibrahim, *supra* note 74, at 1430 n.119 (discussing use of convertible notes to provide seed financing prior to 2005); see also *supra* note 78.

convertible notes. The Part concludes by discussing two proposals to strip away the debt-like features of the convertible note in order to recognize, formally, what is already often true in fact—that the convertible note is not really a debt instrument so much as it is a means of making deferred equity investments in early-stage technology companies.

A. THE RISE OF THE SEED NOTE

The earliest financings using seed notes essentially duplicated existing form contracts for bridge notes with little to no customization for the earlier stage of the investment.¹³⁶ Since the bridge notes already envisioned a conversion into stock at the next equity financing, the off-the-shelf bridge documentation worked fairly well in the seed context. Over time, however, certain features that were typical of bridge notes were modified in the forms used for seed notes. For instance, to simplify documentation, the concept of warrant coverage was replaced with a more straightforward discount to the actual price in the next equity financing.¹³⁷ In addition to the reduction of paperwork by eliminating the standalone warrant, this change had the further benefit of avoiding some adverse tax consequences associated with warrants.¹³⁸ Security interests also largely fell by the wayside, as they provided little to no protection for investors in a seed-stage company, few of which would have had any meaningful assets to serve as collateral.¹³⁹

Once the bridge notes had been modified along the preceding lines, the resulting seed notes offered a number of advantages to the investor. Should the company not survive long enough to raise additional financing, the fact that the investor held debt instead of equity would entitle her to any remaining cash or other assets of the company in a dissolution—up to the principal and interest of her notes—before equity holders received anything.¹⁴⁰ And if the company should ultimately be able to attract additional investment, the investor could convert the note into the same security that the first institutional VC investors would receive (usually Series A Convertible Preferred Stock) with the same

136. Telephone Interview with Attorney, AmLaw 100 Law Firm III (Jan. 27, 2014).

137. *Id.*

138. See JACK S. LEVIN, STRUCTURING VENTURE CAPITAL, PRIVATE EQUITY, AND ENTREPRENEURIAL TRANSACTIONS 5–51 (2009) (discussing tax allocations when warrants are issued along with other securities).

139. Telephone Interview with Attorney, AmLaw 100 Law Firm III, *supra* note 136.

140. Coyle & Polsky, *supra* note 83, at 290 (“In the event the startup is liquidated before a note is converted, the noteholder traditionally was entitled to a return of his investment plus accrued interest.”); William W. Bratton, *Venture Capital on the Downside: Preferred Stock and Corporate Control*, 100 MICH. L. REV. 891, 915 (2002) (stating that the issuance convertible debt and preferred stock with liquidation preferences increase the cost of poor performance to an entrepreneur who would face longer odds at a positive return in the event of liquidation).

rights, preferences, and privileges accorded to holders of that stock.¹⁴¹ Instead of having to spend time negotiating these various rights and a price with the founder, moreover, the use of convertible notes would allow the later investor to do so at that investor's time and expense; the early investor would simply convert her notes at a discount to that Series A price. These features thus struck a balance between giving early-stage investors more protection than common stock investments provided and keeping the terms simple enough to save time and transaction costs.¹⁴²

The use of convertible notes also offered a number of advantages from the founders' perspective. First, the legal fees associated with the issuance of a convertible note were a mere fraction of those associated with the issuance of preferred stock. In instances in which the amount of capital being invested in a particular business was reasonably small—say \$100,000—the difference between incurring \$5,000 to \$15,000 in legal fees for a convertible note financing and \$20,000 to \$35,000 for a “venture-style” Series A financing loomed large. Second, the use of convertible notes enabled the founder to defer negotiations over the valuation of the company until the next financing, when she hoped to have more leverage.¹⁴³ Not having to negotiate a price and extensive terms at the seed stage was also particularly appealing when the investors consisted mostly of friends and family, with whom a founder may be reluctant to play hardball.¹⁴⁴ Instead, the founder could tell his investors that they would receive the same security that a future venture capitalist would receive in the next financing round, but at a discounted price.¹⁴⁵

To be sure, there are also disadvantages associated with the use of convertible notes. If the note matures before a conversion event, the company is obligated to repay the principal and accrued interest in full unless the noteholder agrees to grant an extension.¹⁴⁶ Since the company will rarely (if ever) have sufficient funds to do so, the lenders may have leverage to renegotiate the economics of their investment in their

141. They would also sometimes receive the benefit of many of the other rights typically associated with Series A Preferred Stock, such as anti-dilution protection, preemptive rights, registration rights, rights of first refusal, and co-sale rights. ANDREW METRICK & AYAKO YASUDA, *VENTURE FINANCE & THE FINANCE OF INNOVATION* 151–61 (2011).

142. Bratton, *supra* note 140, at 895 (“The most likely venture capital transaction structure entails neither full protection nor classic preferred stock vulnerability. In the majority of transactions, the venture capitalist emerges at a midpoint on the protection range . . .”).

143. Leavitt, *supra* note 78, at 257 (stating that one of the benefits of utilizing a convertible note is that the instrument defers the valuation negotiation). One additional advantage of deferring the valuation negotiation is that it allows the start-up to issue equity-based incentive compensation to new employees at a low basis for tax purposes. See Gregg D. Polsky & Brant J. Hellwig, *Examining the Tax Advantage of Founders' Stock*, 97 IOWA L. REV. 1085, 1098 (2012).

144. Interview with Attorney, New York Law Firm III, *supra* note 130.

145. Interview with Attorney, New York Law Firm II, *supra* note 90.

146. See Triantis, *supra* note 94, at 317 (stating that a characteristic of convertible debt is definite maturity).

favor.¹⁴⁷ Also, there are disadvantages from a noteholder's perspective. In contrast to common stockholders, the holder of a convertible note is not owed any fiduciary duties by the principals of the company, which means that the investors' ability to control the founder is constrained by the (limited) contractual rights set forth in the note.¹⁴⁸ Assuming the next round of financing is obtained before the note matures, however, and assuming that the founders are true to their word, then the convertible note offers protections that are more robust than those offered by common stock at a cost that is far lower than that available through a full Series A financing.

B. THE CONVERSION PRICE CAP

As the seed note grew in popularity, some individuals who invested in companies that subsequently achieved sky-high valuations came to regret their initial decision to structure the investment in the form of a seed note rather than equity. In response to this problem, there evolved a contractual innovation known as the conversion price cap. Although the precise origins of this provision are unclear, our interviews suggested that it was a standard feature of most convertible notes by 2007 or 2008.¹⁴⁹ Today, few seed note rounds are done without including conversion caps.¹⁵⁰ It has become the market convention and is far and away the most noteworthy and widely-adopted innovation in convertible debt terms to date.

147. Interview with Attorney, New York Law Firm II, *supra* note 90.

148. *Simons v. Cogan*, 542 A.2d 785, 789 (Del. Ch. 1987) ("The implication of *Harff* was, of course, that, as creditors, holders of such debt were not the beneficiaries of fiduciary duties.") (referring to *Harff v. Kerkorian*, 324 A.2d 215 (Del. Ch. 1974)).

149. In the course of our research, we identified at least one convertible note containing a conversion price cap that was issued in 1999. See UNSECURED CONVERTIBLE PROMISSORY NOTE ISSUED BY AMERICASLAWYER.COM, INC. (Nov. 2, 1999) (on file with John Coyle). Our interviews suggested, however, that such provisions did not come into widespread use until almost a decade later.

150. A survey conducted in 2012 found that conversion price caps could be found in ninety percent of convertible seed note financings done in that year. FENWICK & WEST LLP, *supra* note 126, at 7. One possible explanation for the prevalence of conversion caps was the growing power of angels and so-called "superangels" in the early-stage venture finance ecosystem. Around the time that seed notes started including conversion caps, an increasing number of companies were competing for seed funds. With more founders looking to raise a larger seed round, the profile and importance of the role of angel investors as a source of initial capital increased, as very few founders could raise \$1 million from friends and family alone. With the greater need for start-up capital, competition for providing that capital also increased, drawing more sophisticated angels to pool their resources into investing clubs or networks. Some of the most prominent angel investors even began managing other angels' money, effectively becoming early-stage venture capital funds. At the same time, established, later-stage VC funds created seed-arms that were focused on this earliest stage of financing to try to capture some of the outsized returns that many angel investors were capturing by investing early in some extremely successful Internet and social media companies. The entry of these more sophisticated players, coupled with the increased reliance of founders on these investors for seed capital, contributed to the rise and eventual primacy of the conversion cap in seed note financings.

The origins of the conversion price cap lie in a now-standard note provision known as the discount, which states that the principal of the notes would convert into Series A convertible preferred stock at the next equity round of financing at a discount (typically twenty percent) to the Series A price.¹⁵¹ If the new investors were paying \$1.00 per share for Series A stock, in other words, the seed noteholders would convert their notes at a price of \$0.80 per share. While this ability to acquire Series A shares at a discount was advantageous to noteholders, it also had the potential to create headaches for the investors, as illustrated by the following scenario.

Imagine that seed investors in a company have the choice between investing in (1) a seed note or (2) stock. They choose to structure the investment as a seed note with a twenty percent conversion discount because it is simple, inexpensive, and does not require the parties to negotiate a valuation for the company. Had they gone the equity route, however, assume that they could have bought stock at a valuation for the company of approximately \$5 million. The company subsequently raises a Series A round at a pre-money valuation of \$25 million. On the one hand, the seed investors are thrilled that their investment has turned out so well. On the other hand, they may also be experiencing buyer's remorse for not having spent the time and cost negotiating that \$5 million valuation for equity. Had they purchased equity, their investment would have increased several times over in value and they would have ended up owning a significant percentage of the company. Having used a convertible note, however, these investors will see that note convert at a twenty percent discount to the price implied by the \$25 million valuation, which will result in a substantially lower return on their investment and ownership of a significantly smaller percentage of the company.

As more seed note investors experienced the type of "valuation whiplash" just described, the convertible note instrument evolved to address this concern. Specifically, the attorneys drafting these notes began to write a "conversion price cap" into the contract.¹⁵² The conversion price cap imposed a ceiling on the price at which a seed note would convert into the equity security sold at the next equity financing. Continuing with the example above, let us assume that the seed notes had included a conversion cap of \$10 million. This would mean that if the company raised its next round of financing at a pre-money valuation below \$10 million, the seed noteholders would still convert at a price twenty percent below the price paid by the new investors. However, in the event that the company raised that next round at a \$25 million valuation, the noteholders would be able to convert their notes at a price

151. Telephone Interview with Attorney, AmLaw 100 Law Firm III, *supra* note 136.

152. Telephone Interview with Attorney, AmLaw 100 Law Firm I, *supra* note 133.

implied by a \$10 million valuation instead (an effective discount much greater than the typical twenty percent off the actual Series A price). By including a conversion price cap in the note, the seed investors were thus able to realize a significantly greater return than would have been possible in the absence of such a cap. While the conversion price cap is not entirely costless from the founder's perspective, it solved a problem that had bedeviled investors and paved the way for the continued widespread use of seed notes in venture finance.¹⁵³

C. THE END OF THE SEED NOTE?

Over the course of the past decade, the outcomes for investors in seed notes came to be viewed as largely binary: (1) the company is either successful enough to raise an equity round, in which case the seed notes convert into stock, or (2) the company is unable to raise additional capital, in which case the investors likely experience a total loss.¹⁵⁴ Given this reality, many investors adopted the view that seed notes were better thought of as a deferred equity investment rather than debt.

As the view that convertible notes were a deferred equity investment gained traction, the debt-like features of these notes came to be viewed as annoyances in some quarters. In Silicon Valley, the overwhelming majority of the notes had a maturity date of one year

¹⁵³. These caps present two significant issues from a founder's perspective. The first problem stems from the conversion of the seed notes into preferred stock with a liquidation preference. When the new investors purchase Series A stock, they typically have a dollar-for-dollar liquidation preference, the idea being that their original investment should be returned before the common stockholders receive a return if the valuation in an exit is not high enough for the preferred stock to convert to common stock. However, in a situation where seed noteholders are converting at a valuation cap that ends up being a fraction of the actual Series A valuation, the noteholders effectively receive a "free" liquidation preference that can be several multiples of their original investment. This not only raises the bar for the valuation at which a founder can share in a successful exit, but Series A investors often take umbrage with seed noteholders who receive, at a potentially astronomical discount, the very same security and liquidation preference the Series A investors are purchasing at full price. This first problem has been exacerbated by a second related problem—there has been significant downward pressure on the cap threshold, to the point that founders and seed investors appear to be setting that threshold low enough to approximate the current price the seed investors would be willing to pay for equity. This trend is increasing the frequency with which practitioners are encountering the scenario described above where the Series A valuation far exceeds the valuation cap for the seed note round. As conversion caps were set lower and consequently were creating more painful issues for founders at the time the notes converted, practitioners developed additional contractual innovations to try to mitigate these concerns. One method for alleviating the issues related to the "free" liquidation preference created by conversion caps was to issue preferred stock to noteholders based on the principal amounts of their notes so that their liquidation preferences would match the actual amounts they invested. Then, to give them the correct percentage of the company based on the economic deal implied by the conversion cap, they would receive additional common stock (which would not have a liquidation preference).

¹⁵⁴. Interview with Attorney, New York Law Firm II, *supra* note 90.

owing to restrictions imposed by the California Finance Lender's Law.¹⁵⁵ In cases in which the issuing company had not yet raised additional capital on the maturity date, therefore, the companies were obliged to either repay the note in full or to go back to their investors to negotiate an extension.¹⁵⁶ While extensions were typically granted, the need to obtain them—and the possibility that an investor could bankrupt a pre-revenue company by insisting upon repayment—distracted the founders from the task of growing the business and incurred additional legal costs.¹⁵⁷ Furthermore, although the interest on the notes typically accrued over time, it was still necessary to determine periodically how much interest was, in fact, owed on the note.¹⁵⁸ Since few, if any, investors were investing for the purpose of earning interest, and since the entrepreneurs were inclined to view the investment as deferred equity rather than debt in any event, the need to keep tabs on the accrued interest likewise came to be viewed as an unnecessary distraction.¹⁵⁹ The complications posed by each of these issues were multiplied, moreover, when a single company had issued multiple series of notes to different investors with varying interest rates and conversion terms.

This frustration with the debt-like features of convertible notes prompted several individuals to propose alternatives. In 2012, a Silicon Valley attorney and a Silicon Valley investor jointly proposed the creation of what they dubbed a “convertible security” as a replacement for the convertible note. In late 2013, an attorney at the start-up accelerator Y Combinator proposed a “simple agreement for future equity” (“SAFE”) as an alternative to the convertible note. Each of these proposals, which are discussed further below, sought to retain many of the existing features of convertible notes—including the discount and conversion cap provisions—while eliminating the terms that marked them as debt instruments.

I. Convertible Security

The convertible security was the brainchild of Yoichiro Taku, a partner at the law firm Wilson Sonsini Goodrich & Rosati, and Adeo Ressi, the founder of the Founder's Institute, a program for training

155. See CAL. FIN. CODE § 22062(a)–(b) (2004) (requiring that any person engaged in the business of a finance lender to obtain a license from the state of California but making an exception for a venture capital company making a commercial bridge loan with a maturity date not to exceed one year). In 2014, the California State legislature approved amendments to this law that (1) exclude from its ambit certain types of investments made by venture capital companies, and (2) extend the permitted maturity date on commercial bridge loans to three years. S.B. 1181, 2013–14 Reg. Sess. (Cal. 2014) (enacted).

156. Telephone Interview with Attorney, AmLaw 100 Law Firm III, *supra* note 136.

157. *Id.*

158. Telephone Interview withCarolynn Levy, Partner, Y Combinator (Jan. 21, 2014).

159. *Id.*

entrepreneurs.¹⁶⁰ In essence, the convertible security is a convertible note that lacks a maturity date and an interest rate provision.¹⁶¹ Given the absence of these provisions, the security is not formally debt. On the other hand, it is also not a traditional equity instrument; the holder is not entitled to dividends and has no right to vote on matters affecting the corporation. The instrument is best conceptualized as a novel type of warrant for which the investor pays full value today for an unspecified future security at some later date.

According to Taku, the drafting process that generated the proposal for the convertible security was straightforward.¹⁶² He drafted the documents primarily in consultation with Ressi, but occasionally discussed them with other attorneys at his law firm.¹⁶³ Once the draft documents were complete, he asked an accounting firm to comment on them.¹⁶⁴ As a final step, Taku and Ressi posted the draft documents to the Internet for comment in August 2012 and circulated them to several other attorneys. Their stated goal was to persuade investors and others to substitute the convertible security for the convertible note.¹⁶⁵

To date, anecdotal evidence suggests that the convertible security has not attracted a wide following.¹⁶⁶ One possible reason is that the attributes of this particular contract are perceived to be friendlier to founders than to investors. Given the fact that the investors typically (though not always) have greater leverage in seed financing deals, investors may prefer to retain the debt-like protections of the convertible note because these provisions sometimes work to their advantage.¹⁶⁷

160. See *About*, FOUNDER INST., <http://fi.co/about#> (last visited Dec. 14, 2014).

161. Telephone Interview with Yoichiro Taku, Partner, Wilson Sonsini Goodrich & Rosati (Jan. 27, 2014).

162. *Id.*

163. *Id.*

164. *Id.*

165. *Id.*

166. See Brian Axelrad, *Investor Beware: Dirty Secrets of Angel Financing*, LINKEDIN (July 13, 2014), <https://www.linkedin.com/pulse/article/20140713161531-73993546-investor-beware-dirty-secrets-of-angel-financing> (“I would probably venture to say, at this point, all of these additional options [such as the convertible security] are only adding further confusion to the marketplace as entrepreneurs are increasingly unclear about which form of instrument to turn to. It is no surprise that, faced with this increasing buffet of financing instruments, entrepreneurs are more and more falling back on the original, basic form of convertible note.”).

167. See Manuel A. Utset, *High-Powered (Mis)Incentives and Venture-Capital Contracts*, 7 OHIO ST. ENTREPRENEURIAL BUS. L. J. 45, 75 (2012) (“[T]he weaker party’s suggestions are an important source of potential contractual innovation which is lost when the weaker party has no incentive to suggest modifications to the standard contracts.”). In addition to having more leverage, the investors are also likely to be more knowledgeable when it comes to the terms of the proposed contract. Cf. Ola Bengtsson, *Intermediaries in Negotiations of Complex Contracts: The Role of Attorneys in Venture Capital Transactions* 5 (Mar. 17, 2009) (unpublished working paper), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1362236 (“[E]ntrepreneurs typically do not understand either the precise implications of every contractual term or how a proposed set of terms compares with those of other contracts used in similar VC financing situations.”).

Unless a particular founder enjoys substantial leverage in negotiations with an investor, in other words, it may prove difficult to persuade that investor to adopt a novel contractual structure that benefits the founder at the investor's expense.

2. *Simple Agreement for Future Equity*

The SAFE was developed by attorney and Y Combinator partner Carolynn Levy. Y Combinator is a business accelerator that provides wide-ranging advice and support to early-stage companies.¹⁶⁸ Y Combinator provides a small amount of seed funding—typically no more than \$20,000—to approximately 104 start-ups each year in exchange for small stakes in these companies.¹⁶⁹ Owing to Y Combinator's sterling reputation for identifying promising entrepreneurs, a number of other investors have pledged to commit \$80,000 to any company that Y Combinator accepts into its program.¹⁷⁰

Levy joined Y Combinator in 2012 after more than a decade of representing Silicon Valley start-ups at the law firm of Wilson Sonsini.¹⁷¹ Upon her arrival, the other partners asked her to come up with an entirely new form of investment contract that would remedy the perceived problems with the convertible note.¹⁷² Levy spent several months trying to develop a contract that was “creative” and “disruptive.”¹⁷³ After several months of trying to think of something totally new and different, however, she ultimately came to the conclusion that “simplifying was a better approach than radical change. The community was more likely to accept something recognizable.”¹⁷⁴

At this point, she went back to (1) the convertible security that Y Combinator had been using for years in connection with its investments in startups, and (2) the convertible notes that had been used in many previous financings of Y Combinator startups, and decided to try to improve them rather than replace them.¹⁷⁵ Levy ultimately took

168. Coyle & Polsky, *supra* note 83, at 288 n.15.

169. *Y Combinator Business Accelerator*, FIND THE BEST, <http://business-incubators.findthebest.com/15/Y-Combinator> (last visited Dec. 14, 2014). The size of Y Combinator's equity stakes range from two percent to ten percent. *Id.*

170. Leena Rao, *Y Combinator's YC VC Will Replace the Start Fund; Includes Yuir Milner, Andreessen Horowitz but Offers Less Money*, TECHCRUNCH (Nov. 26, 2012), <http://techcrunch.com/2012/11/26/y-combinator-debuts-yc-vc-to-replace-the-start-fund-includes-yuri-milner-andreessen-horowitz>.

171. Telephone Interview with Carolynn Levy, *supra* note 158. Y Combinator was one of Levy's clients while she was at Wilson Sonsini.

172. *Id.*

173. *Id.*

174. *Id.*

175. *Id.*

the basic convertible note and stripped the debt attributes out of it.¹⁷⁶ The result was a contract for deferred equity investment that she labeled the SAFE.¹⁷⁷ In many respects, the SAFE closely resembles the convertible security proposed by Taku and Ressi in 2012.¹⁷⁸ Each instrument drew heavily from the convertible note but saw its debt-like features stripped away. Each instrument stipulated that it would convert to equity upon the occurrence of a particular future event. And each instrument was intended to address basically the same perceived problems with convertible notes. There are, nevertheless, some noteworthy differences between the two instruments from the perspective of contractual innovation scholars. First, it appears that the process by which the SAFE was drafted was more extensive and collaborative than the process that generated the convertible security. Second, the SAFE was sponsored by an institution—Y Combinator—that carries significant clout in Silicon Valley and is comfortable wielding that clout on behalf of entrepreneurs.

In drafting the SAFE, Levy worked closely with two non-lawyer partners at Y Combinator. These partners provided feedback on the documents as they evolved.¹⁷⁹ At periodic intervals, drafts of the documents were circulated to a wide set of partners at Y Combinator.¹⁸⁰ The Y Combinator partners also occasionally solicited informal feedback on the documents from friends and other investors in Silicon Valley.¹⁸¹ As time passed, the circle widened.¹⁸² Individuals at venture capital firms with longstanding relationships with Y Combinator—such as SV Angel and Andreessen Horowitz—were also asked to provide feedback on the documents.¹⁸³

176. *Id.* The new instrument was formally structured as a contract for a deferred equity investment that gave the holder the right to buy into the company if and when certain events occurred but did not require that a valuation be placed on the company immediately. See *Financing Documents*, Y COMBINATOR (June 2014), www.ycombinator.com/documents. The triggering events in question—liquidation, a new round of financing, change in control—were taken directly from the existing forms for convertible notes. *Id.* In addition, the new instrument explicitly envisioned that the parties would continue to negotiate a discount and/or a valuation cap in connection with their investment. See *id.* (including a valuation cap provision).

177. Telephone Interview withCarolynn Levy, *supra* note 158.

178. Adeo Ressi, Comment to *Y Combinator: What Is the Difference Between Y Combinator's New SAFE Financing Method and Ressi's Convertible Equity Financing Route?*, QUORA (Jan. 2, 2014), <http://www.quora.com/Y-Combinator/What-is-the-difference-between-Y-Combinators-new-SAFE-financing-method-and-Ressis-Convertible-Equity-financing-route> (“[T]he reality is that [the convertible security] and SAFE are the same thing: a convertible investment vehicle without debt.”).

179. Telephone Interview withCarolynn Levy, *supra* note 158.

180. *Id.*

181. *Id.*

182. *Id.*

183. *Id.*

Later in the process, Levy solicited input from other attorneys at law firms across Silicon Valley.¹⁸⁴ In many cases, the feedback from outside attorneys was extensive.¹⁸⁵ While some of these suggestions were ultimately incorporated into the documents, Levy consciously decided not to add certain additional terms to the document even when these terms may have served to clarify its meaning because her goal was to produce a document that was layperson-friendly.¹⁸⁶ Since it is impossible to draft a contract to cover every contingency, and since the whole point of the SAFE was to provide a simple and inexpensive means of investing in an early-stage technology company, Levy thus chose to prioritize accessibility over comprehensiveness.¹⁸⁷ The resulting document, in its simplest form, is only six pages long.¹⁸⁸

Notwithstanding its relative brevity, Levy noted that the most challenging part of the drafting process was to ensure that the SAFE struck a balance between the needs of entrepreneurs and the needs of investors.¹⁸⁹ Levy remarked that she viewed herself as “drafting for a community rather than a client.”¹⁹⁰ In this, she observed that her task was quite different from that of the prototypical corporate lawyer who drafts a document that advances the interests of one party (the lawyer’s client) at the expense of the other party.¹⁹¹ Since the efficiencies to be generated by the SAFE could only be achieved if both sides were of the view that it furthered their interests, Levy sought to ensure that the document was balanced.¹⁹²

Once the SAFE drafting process was complete, Y Combinator approached those institutions that invest in Y Combinator companies as a matter of course and suggested that they use the SAFE when investing in these companies. They all expressed willingness to adopt this instrument, provided feedback on it, and ultimately used it when

184. *Id.*

185. *Id.*

186. *Id.* She also noted that these documents are rarely litigated in court.

187. *Id.*

188. *Id.* Convertible note forms, by way of comparison, are typically upwards of fifteen pages, many of which include a Note Purchase Agreement and stand-alone promissory notes for each noteholder.

189. *Id.*

190. *Id.*

191. *Id.*

192. *Id.* Although the ultimate goal of the SAFE was to supplant the convertible note, Levy reported that she did not view the SAFE as a particularly radical innovation. *Id.* This was not, it should be emphasized, because Levy was committed to avoiding disruptive change. *Id.* As discussed above, she initially went into the drafting with the express aim of developing a new and different type of investment contract. *Id.* Rather, it was because she viewed the SAFE as an incremental departure from the status quo—the next logical step in the evolution of the convertible note. *Id.* Any contract that bore such a strong resemblance to another, she believed, could hardly be viewed as radical. *Id.*

investing in the companies accepted into Y Combinator's 2014 winter program.¹⁹³

V. SEED STOCK

Even as the convertible note became increasingly popular as a tool for funding early-stage companies, law firms that specialize in venture capital finance also began creating simplified versions of their standard-form Series A convertible preferred stock financing documents.¹⁹⁴ To signal their origins, these simplified equity financing documents were given labels such as "Series Seed," "Simple Series A," "Series A-1" or "Series AA." These documents sought to keep transaction costs down by minimizing due diligence and negotiation on documentation and, in so doing, to provide an equity alternative to seed notes that was comparable in terms of cost.¹⁹⁵

Significantly, these changes to the Series A financing documents were spurred by precisely the same developments chronicled above—cloud computing, open-source software, and ease of scalability—that led to substantial innovation in the convertible note context. The effect of these developments on Series A financing documents, however, was precisely the opposite as it was in the case of the convertible note. As seed notes evolved into more complex contractual instruments, preferred stock financings evolved into simpler ones. The impact of a single set of economic and technological changes, in other words, led to very different innovations in different types of venture finance contracts.

This Part first describes the basic characteristics of these newly simplified Series A financing documents and considers why some investors prefer them to the seed note in certain cases. It then discusses the process by which two particular sets of "model" simplified Series A documents—the so-called "Series AA" and "Series Seed"—were drafted and subsequently promulgated to the venture finance community.

193. *Id.*

194. One interviewee noted that stripped-down Series A documents were occasionally used in the pre-cloud era. See E-mail from In-House Counsel, *supra* note 78 (stating that "simple series a preferred" was sometimes used for seed funding in 1999). As was the case with respect to both the convertible note and the conversion price cap, however, the increased use of simplified Series A preferred stock in the post-cloud era marked a massive shift in its perceived utility in the seed finance community and its use increased dramatically in the years after 2005.

195. Wilson Sonsini LLP and Y Combinator published sample Series AA financing documents in 2008. *Financing Documents*, *supra* note 176. Cooley LLP and TechStars published model Series AA seed financing documents in 2008. *Open Sourced Model Seed Financing Documents*, TECHSTARS, <http://www.techstars.com/docs> (last visited Dec. 14, 2014). Fenwick & West LLP published its Series Seed documents in 2010. See SERIES SEED, <http://www.seriesseed.com> (last visited Dec. 14, 2014).

A. ADAPTING CONVERTIBLE PREFERRED STOCK TO A SEED ROUND

The primary difference between the classic Series A financing documents and the various stripped-down versions of these same documents is that a number of terms customarily included in the former are conspicuously absent from the latter. The stripped-down documents, for example, typically lack any language relating to dividend preferences, registration rights, or co-sale rights.¹⁹⁶ They also frequently omit any provisions relating to price-based anti-dilution protection and have a less exhaustive list of representations and warranties and protective provisions.¹⁹⁷ While each of these terms may be of some utility to venture capital funds making a sizable investment in a company as part of a traditional Series A financing, each is simply unnecessary in the context of a seed equity investment.

These stripped-down financing documents do, however, provide some protections to the investor. Investors are typically granted a board seat and receive a right of first offer on future financings.¹⁹⁸ They are typically entitled to a non-participating preferred liquidation preference.¹⁹⁹ They frequently obtain certain blocking rights, such as the ability to prevent the company from being sold without their consent.²⁰⁰ They may also require a “most favored nation” provision with respect to the terms discussed above that are omitted from stripped-down forms, allowing early investors to capture the benefits of terms they agree to give up at the seed stage later down the road.²⁰¹ To be sure, the rights granted by these seed equity documents are less extensive than those that one would see in a traditional Series A or later-stage financing round. They are, however, considerably more robust than those typically included in a seed note.

Given the existence of two options for raising a company’s first round of capital—seed stock and seed notes—that have become increasingly comparable from a cost perspective, there are a number of factors that tend to drive a founder toward using one or the other. The first and most important factor is what type of instrument the start-up’s investors prefer. There are many angels and early-stage VCs that are comfortable investing via seed notes containing conversion price caps.²⁰² Others, however, demand more pricing certainty and will only invest in

196. Telephone Interview with Yoichiro Taku, *supra* note 161.

197. *Id.*

198. *Id.*

199. *Id.*

200. *Id.*

201. *Id.*

202. Interview with Attorney, New York Law Firm I, *supra* note 96.

seed equity.²⁰³ Depending on which type of investor the founder is able to access through her network, the company could just as easily end up selling stock instead of convertible notes. The amount of capital being raised in the seed round also plays a part in this decision. For companies that are raising less than \$500,000, the convention would be to use seed notes as the fundraising instrument.²⁰⁴ Conversely, for seed rounds in excess of a million dollars, the slightly higher transaction costs of a seed equity financing may seem a reasonable trade-off for certainty around price.²⁰⁵

The trend over the last few years has undoubtedly been toward using convertible debt as the instrument of choice for a company's first round of financing.²⁰⁶ However, with the falling cost of seed equity, some market players now seem to be moving toward simplified equity financings at the seed stage.²⁰⁷ This is not altogether surprising given, as we have seen, that seed notes began as a makeshift alternative to a costly preferred stock financing. As contractual innovations in preferred stock financings have decreased the cost and complexity of those transactions precipitously, the comparative advantage of seed notes (which now have some new drawbacks, largely due to conversion caps) has diminished. Nevertheless, there is a well-established market for convertible debt instruments among angels, superangels, and even some VC funds, which portends their continued role as a principal instrument of seed-stage finance well into the future.

B. DRAFTING SIMPLIFIED SERIES A DOCUMENTS

Over the past several years, several individuals have published model versions of stripped-down Series A financing documents. Although these documents represent important examples of contractual innovation, the innovation at issue is of a somewhat different type than in the context of the convertible security and the SAFE. The convertible security and the SAFE were innovative in the sense that they were contracts containing terms that had never before been used in combination. The model stripped-down Series A documents, by contrast, are innovative in the sense that they assembled a number of innovations previously developed by a variety of actors into a single comprehensive package. These differences notwithstanding, the essence of each project was the same—an attempt to draft language that would advance the

203. See, e.g., Fred Wilson, *Some Thoughts on Convertible Debt*, AVC (Aug. 31, 2010), <http://www.avc.com/2010/08/some-thoughts-on-convertible-debt>.

204. Interview with Attorney, New York Law Firm I, *supra* note 96.

205. *Id.*

206. Interview with Attorney, New York Law Firm III, *supra* note 130.

207. *Id.*

general project of giving parties more and better options when negotiating contract terms.

In order to gain insight into the drafting process that ultimately resulted in several of these model stripped-down Series A documents, we interviewed the drafters of two different sets of such documents. First, we interviewed a Colorado attorney who helped to prepare a set of model documents (the “Series AA”) on behalf of TechStars, a Colorado-based start-up accelerator, in 2008. Second, we interviewed a Silicon Valley attorney who drafted and published a different set of model documents (the “Series Seed”) in 2010. Each of these proposals sought to eliminate certain provisions in Series A financing documents that were unnecessary in seed financing rounds while retaining those terms that investors deemed valuable.

I. Series AA

The set of Series AA documents published by TechStars were developed by two attorneys who practice law at Cooley LLP in Broomfield, Colorado (next to the technology cluster in Boulder): Michael Platt and Noah Pittard. In an interview, Pittard explained that the promulgation of the Series AA documents was an attempt to standardize documents that were frequently idiosyncratic.²⁰⁸ In the post-cloud era, he explained, every law firm had developed its proprietary set of stripped-down Series A financing documents.²⁰⁹ While the documents prepared by different firms were broadly similar, each firm’s own set of documents was unique.²¹⁰ Within each of these firms, moreover, each individual partner tended to work exclusively with her own personalized version of the firm’s proprietary documents.²¹¹ As a consequence of all this variation, Pittard explained, the legal costs in venture finance transactions were excessive at times.²¹²

Pittard could not remember precisely whether the idea to develop the Series AA documents originated with the attorneys at Cooley or with TechStars.²¹³ Most likely, he said, the idea grew out of conversations between the two parties.²¹⁴ Once the decision to publish these documents was made, however, the drafting process was fairly straightforward because the Cooley attorneys drew extensively upon their own firm’s existing forms.²¹⁵ Pittard explained that what ultimately became the

208. Telephone Interview with Noah Pittard, Special Counsel, Cooley LLP (Feb. 13, 2014).

209. *Id.*

210. *Id.*

211. *Id.*

212. *Id.*

213. *Id.* TechStars had been a client of the firm since the company’s inception.

214. *Id.*

215. *Id.*

Series AA documents began as a project for a Cooley client in search of a cost-effective means of investing in very small founder-friendly equity rounds.²¹⁶ Although these documents underwent some changes prior to their release as TechStars model documents—most notably, the closing mechanics were modified so as to permit rolling closings rather than having all investors sign and close on the same day at the same time—the bulk of the drafting work had occurred long before.²¹⁷ As Pittard put it: “It was really just a question of us adding some blanks and deleting some client names and sending them over.”²¹⁸ Once the revisions were complete, TechStars posted the Series AA documents to the Internet with a statement urging potential users to “think of them as a good starting point that can save you some time and money.”²¹⁹

Although he was largely satisfied with the Series AA documents that he developed with his colleagues at Cooley, Pittard acknowledged that the National Venture Capital Association (“NVCA”)—an industry trade association—was in many ways better positioned to develop a standardized set of stripped-down Series A financing documents.²²⁰ He cited the influence that NVCA’s set of model Series A documents had had on standardizing the terms of traditional Series A financings.²²¹ Using documents with which lawyers on both sides are familiar is value-enhancing for the client, he explained, because it enables corporate attorneys to focus on value-additive strategic advice rather than, say, on how a particular firm drafts complicated anti-dilution provisions.²²² He added that, notwithstanding his own work in the area, he would welcome any attempt by the NVCA to promulgate model stripped-down Series A financing documents.

2. *Series Seed*

The Series Seed documents published in 2010 were the brainchild of Ted Wang, a partner at the law firm of Fenwick & West LLP in Silicon Valley. In an interview, Wang explained that the impetus for drafting the documents stemmed from his frustration with the high costs of a traditional Series A round.²²³ These high costs, he felt, were attributable in large part to contract provisions in standard Series A form documents

216. E-mail from Noah Pittard, Special Counsel, Cooley LLP, to John Coyle (Apr. 1, 2014, 5:23 PM) (on file with John Coyle). Pittard stated that the size of these “very small” equity rounds was in the range of \$100k to \$200k. *Id.*

217. *Id.*

218. Telephone Interview with Noah Pittard, *supra* note 208.

219. *See Open Sourced Model Seed Financing Documents*, *supra* note 195.

220. Telephone Interview with Noah Pittard, *supra* note 208.

221. *Id.* He also analogized the NVCA documents to Delaware corporate law in that both contain rules and provisions with which attorneys who represent venture capital clients are familiar. *Id.*

222. *Id.*

223. Telephone Interview with Ted Wang, Partner, Fenwick & West LLP (Jan. 27, 2014).

that were largely irrelevant to seed equity investors today.²²⁴ Accordingly, Wang set about stripping vestigial and otherwise superfluous provisions from the classic financing documents.²²⁵ While his primary objective in undertaking this project was to address a specific problem—the high costs of doing seed equity rounds—he also saw the preparation of the Series Seed documents as a form of “pro bono” work that would benefit the entire seed investing community as a whole.²²⁶

Wang prepared most of the contracts that ultimately became the Series Seed documents while working largely alone, but with the help of his colleagues at Fenwick.²²⁷ While he circulated the documents to a number of other attorneys to ask for comments, he specifically did *not* try to convene a committee of lawyers to “bless” the documents.²²⁸ He explained that he had learned from past experience that it was difficult, if not impossible, to get a group of experienced transactional attorneys to agree on model terms in a given set of documents.²²⁹ By contrast, Wang actively sought out the leading seed funders at the time—including Marc Andreessen, a well-known venture capitalist—for the purpose of asking them to bless these same documents.²³⁰ When the Series Seed documents were finally posted to the web, Wang specifically disclaimed that the documents were his own firm’s model documents, stating instead that he “considered them to be jointly owned by the entire seed investing community.”²³¹

While the decision to focus on the needs of seed investors rather than attorneys may at first glance seem curious—lawyers, after all, like to think their views carry great weight—it was entirely sensible given that the ultimate users of these documents would be seed investors. As Wang explained: “From a distribution strategy perspective, it was more helpful to get the money guys behind it.”²³² If the Series Seed documents were to come into widespread use—and the evidence to date suggests that these documents are being used—it was arguably more important for the investors to like it than for other lawyers to accept it as an ideal model form.²³³

224. *Id.*

225. *Id.*

226. *Id.*

227. *Id.*

228. *Id.*

229. *Id.*

230. One of the people whose support Wang solicited—and who subsequently became an enthusiastic advocate for the Series Seed—was Marc Andreessen, a well-known venture capitalist. *Id.*

231. Ted Wang, *For the Faithful*, SERIES SEED, <http://www.seriesseed.com/posts/for-the-faithful.html> (last visited Dec. 14, 2014).

232. Telephone Interview with Ted Wang, *supra* note 223.

233. See Yoichiro Taku, *How Do the Sample Series Seed Financing Documents Differ from Typical Series A Financing Documents?*, STARTUP COMPANY LAW. (Mar. 14, 2010),

VI. THEORIES OF CONTRACTUAL INNOVATION IN PRACTICE

While the foregoing story of contractual evolution and change in venture finance is interesting in its own right, it is also significant for the insights that it can offer to scholars who study the process of contractual innovation. This Part draws upon the changes that have occurred in venture finance contracts over the past decade to contribute to the literature in this area.

This Part first considers whether the above-described changes to venture finance contracts are consistent with certain theories of contractual innovation. It argues that while some of these changes are consistent with what these theories predict, others are not. This Part then explores the specific role played by attorneys—in contrast to contract users or trade associations—in the process of contractual innovation. It argues that although attorneys enjoy a number of advantages in developing these innovations, their ultimate success will be determined less by the attorney's technical skill at drafting and more by the relationships that the attorney develops with the end users of the contract. Finally, this Part suggests that the substitution of one type of contract for another—using equity instead of debt, for example—is itself an innovation that has gone largely unappreciated in the contractual innovation literature.

A. THEORIES OF INNOVATION AND CHANGE

In light of the narrative set forth in the previous Parts, one question that naturally arises is how well the story of contractual innovation in venture finance tracks more general theories as to how and why contractual innovation occurs. As described earlier, one such theory—advanced by Choi, Gulati, and Posner—posits that the process of contractual innovation occurs in three stages.²³⁴ In stage one, a particular standard form dominates the market.²³⁵ Stage two begins when some external shock disrupts the market and prompts marginal market players to propose changes to the prevailing standard.²³⁶ In stage three, high-volume or high-status intermediaries recognize that some change is inevitable and each begins to promote its own version of the new standard.²³⁷ During stage three, the theory predicts that there will be multiple competing standards jockeying for market share.²³⁸ After a

<http://www.startupcompanylawyer.com/2010/03/14/how-do-the-sample-series-seed-financing-documents-differ-from-typical-series-a-financing-documents> (“The only way that the Series Seed documents will be widely used is if investors demand use of the documents.”).

234. Choi et al., *supra* note 1, at 10.

235. *Id.*

236. *Id.*

237. *Id.*

238. *See id.*

period of time, one standard emerges as the market leader and becomes the new standard form until another external shock occurs.²³⁹

The evolution of certain venture finance contracts over the past decade offers some evidence that is consistent with this theory of contractual change and some evidence that is inconsistent with it. Proceeding chronologically, it seems clear that the world of early-stage venture finance contracts prior to 2005—stage one—was dominated by not one, but two forms: common stock and convertible preferred stock. The former was typically used by friends, family, and angel investors investing relatively small sums of money early in a company's lifecycle, whereas the latter was typically used by institutional venture capital funds investing larger sums at later stages. In one sense, therefore, it is inaccurate to suggest that a single standard form dominated the market. If, however, one defines the relevant market more narrowly—such that there was one market for individual investors and another market for institutional investors—then one standard form could be said to have dominated each market in the pre-cloud era.

Turning then to stage two, it seems clear that the various developments discussed in Part III—the rise of cloud-computing, the increased availability of open-source software, and the ability to scale a business quickly—constituted a market shock that brought about significant changes to the status quo. The increased use of convertible notes and the development of simplified convertible preferred stock can be explained in substantial part by this shock.²⁴⁰ The prevailing theory also predicts, however, that market shocks will prompt *marginal* market players to propose changes to the prevailing standard.²⁴¹ This prediction is inconsistent with our findings. While we were unable to identify the precise origins of a number of innovations, we were able to identify two specific proposals to modify the terms of the seed note. These proposals originated from individuals who cannot be fairly described as marginal market players. Taku is a partner at Wilson Sonsini—one of the premier law firms in Silicon Valley—and Ressi operates a well-known institute that seeks to train entrepreneurs. Levy is a former partner at the law firm of Wilson Sonsini and is currently a partner at the best-known start-up accelerator in Silicon Valley—Y Combinator. While it remains to be seen whether the convertible security or the SAFE will ultimately be

239. *Id.*

240. The timing of other proposed innovations, however, was not closely related to the timing of the shock. The convertible security and the SAFE, for example, were proposed in 2012 and 2013, respectively, well after cloud computing had come into widespread use in technology start-ups. Thus, while market shocks ushered in some contractual innovations, other innovations were proposed even in their absence. *See* Weidemaier, *supra* note 34, at 73 (discussing contractual change in the absence of a market shock).

241. *Id.* at 108.

widely adopted, there can be little doubt that each of these proposals originated from a high-status market player rather than a marginal one.

At stage three, the theory predicts that high-volume intermediaries, such as law firms, will recognize that change is inevitable and will begin to promote their own versions of the new standard. This hypothesis is generally consistent with our findings. After an initial phase in which various law firms developed their own stripped-down Series A financing documents, several different “model” versions of documents were promulgated by individuals at several different high-status law firms working in conjunction with several different high-status groups representing investors or entrepreneurs.²⁴² Each of these sets of model documents, which in some cases were simply a particular law firm’s proprietary forms with a light edit, can be said to be jockeying for market position with the others. It is not clear, however, that any one of them will ultimately emerge as a definitive market leader. Given the fragmented nature of the market for early-stage venture capital investments, the variety of different types of contractual forms, and the idiosyncratic preferences of angel investors and venture capital funds, it may well be that no one set of documents will ever come to dominate the market.²⁴³ Time alone will tell.

In summary, the theory of contractual innovation proposed by Choi, Gulati, and Posner—which was developed against a backdrop of changes in sovereign debt contracts—can only partially explain the recent changes made to venture finance contracts. While the theory accurately predicts the significance of an exogenous shock and a rush by high-status market players to promote their own versions of a new standard once change is perceived as inevitable, it (inaccurately) suggests that innovations will bubble up from marginal market players when, in fact, a number of noteworthy proposals for innovation have originated from high-status players. The theory also fails to account for the fact that several significant innovations were proposed well after the occurrence of an exogenous shock.

B. THE ROLE OF ATTORNEYS IN CONTRACTUAL INNOVATION

The prevailing view in the literature is that attorneys play an outsized role in driving the process of contractual innovation due to their role as intermediaries who deal with certain types of contracts in

242. The law firms are Wilson Sonsini, Fenwick & West LLP, and Cooley LLP. The investor groups are Y Combinator, Andreessen Horowitz, and TechStars, respectively.

243. Venture finance contracts are unique in that they are interchangeable to a significant extent. An investor may, for example, choose to structure his investment as *either* common stock *or* convertible notes *or* stripped-down Series A *or* even a classic Series A financing. Innovations with respect to one type of contract can thus drive innovations in other types.

significant volume.²⁴⁴ While our findings suggest that each of these propositions is true to a point, they also suggest that these advantages are less important than they may appear at first glance.

Our findings tend to confirm that attorneys are well-positioned to serve as contract innovators. Each of the attorneys interviewed had been in practice for over a decade—and had reviewed literally hundreds of venture finance contracts, each with its own distinct variations—at the time when she sat down to propose a particular innovation. In addition, each interviewee was able to tap an extensive professional network of other attorneys to obtain feedback on drafts and proposals. If contractual innovation is viewed purely as an exercise in technical drafting, therefore, there can be little doubt that attorneys with extensive experience at large law firms possess a number of advantages vis-à-vis other potential innovators when it comes to developing successful contractual innovations.

However, several of our interviewees stated that they ignored technical comments from other attorneys—or consciously declined to seek such comments from other attorneys—in order to keep the contract language simple. This desire for simplicity is attributable, at least in part, to the unique needs of this particular contracting community. These are deals for relatively small amounts of money and there is a strong desire to keep legal fees and friction low so as to execute the transaction quickly. In addition, these contracts are highly unlikely to wind up in litigation, which means that the simplicity of the contracts is unlikely to create problems in the event of a legal dispute.²⁴⁵ Nevertheless, the fact that these innovators prized simplicity over technical mastery indicates that, to a significant extent, they were focused on the perceived needs of end users of the contracts, rather than those of other attorneys.²⁴⁶

Indeed, our interviews suggest that the perceived needs of contract users dominated the drafting process carried out by attorneys. Each of the contract innovators that we interviewed worked closely with an

244. Choi et al., *supra* note 1, at 8. While some scholars have argued that law firms also have the ability to spread the costs of innovation across multiple clients, it is not clear that this cost-spreading ability played a significant role in facilitating the innovations discussed herein. The time that an attorney spent innovating, we were told, was typically billed to a single client. Telephone Interview with Yoichiro Taku, *supra* note 161. Telephone Interview withCarolynn Levy, *supra* note 158. Telephone Interview with Noah Pittard, *supra* note 208. While this does not mean that cost-spreading does not help to facilitate innovation in other contexts, it suggests that it is not a particularly important factor in the venture finance context. Accordingly, we do not discuss it at any length.

245. See Coyle & Polsky, *supra* note 83, at 302 (discussing reputational concerns that reduce the amount of litigation between venture capital investors and founders).

246. Several of our interviewees sought to downplay the extent to which an innovative contractual provision represented a break with the past. Instead, they emphasized the connection between the old and the new. If attorneys whose stock and trade is to provide legal advice to cutting-edge companies find it challenging to develop truly novel contract forms, then one is pessimistic that attorneys in other industries will do so.

investor or an entrepreneur who provided feedback on the draft. Taku partnered with Ressi, a serial entrepreneur, to develop the convertible security. Levy worked closely with Y Combinator partners and co-investors when drafting the SAFE. Pittard coordinated the release of the Series AA documents with TechStars. Wang sought and obtained the blessing of many of the lead seed funders before he publicized the Series Seed. Absent buy-in from prospective users, these innovations will wither on the vine. Non-lawyers are therefore in a position to exercise tremendous influence—both directly and indirectly—over attorneys seeking to develop useful contractual innovations.

When asked about their motivations, the individuals we interviewed all noted that the innovations they proposed were designed to solve a specific problem. In the case of the SAFE and the convertible security, the problem was the fact that convertible notes were required to include an interest rate and a maturity date. In the case of the Series AA and the Series Seed, the problem was the higher cost and complexity of using a classic set of Series A documents to provide financing to very early-stage ventures and the dizzying array of stripped down alternatives that had arisen in response to this problem. Problem solving was not, however, the only factor driving them. Wang stated that he viewed the production of the Series Seed as a project in which he was able to leverage a very specialized skill set—a deep knowledge of early-stage venture finance—into a set of documents that would benefit the entire venture finance community.²⁴⁷ Levy reported that she viewed herself as drafting “for a community rather than a client.”²⁴⁸ And although none of our interviewees specifically mentioned this as a factor, several comments made in passing suggested to us that yet another factor encouraging them to innovate was a desire to obtain greater professional prestige. There is considerable caché, after all, in pioneering an innovation that subsequently becomes the industry standard.

C. SUBSTITUTION AS CONTRACTUAL INNOVATION

To date, most studies of contractual innovation have focused on the process of incremental change, that is, on determining precisely when a particular contract term was added to or removed from a particular type of contract. Contractual innovation can, however, also occur when the contracting parties choose to substitute one type of contract for another, as when a property owner’s decides to enter into a ninety-nine-year lease with a potential buyer instead of selling the land outright. While such a decision would certainly qualify as a contractual innovation, it would be a qualitatively different type of innovation than adding a clause to an

247. Telephone Interview with Ted Wang, *supra* note 223.

248. Telephone Interview with Carolynn Levy, *supra* note 158.

existing sales contract.²⁴⁹ While this process of innovation by substitution—as contracted to innovation by incremental change—has attracted virtually no academic attention to date, the discussion of venture finance contracts in the previous Parts suggests that innovation by substitution can and does occur.

Historically, investors in early-stage technology companies tended to invest in common stock. Over the past decade, however, these investors have increasingly chosen to structure their investment in convertible notes, convertible preferred stock, or novel contract types such as the SAFE. This substitution of one type of contract for another that accomplishes the same basic end, we argue, constitutes a form of contractual innovation. Once this insight is recognized, the process of innovation is revealed to be far richer and more complex than previously appreciated. As incremental changes to the text of a particular type of contract make that type more attractive to investors, the investors will begin using that type of contract to the exclusion of others. This shift may, in turn, lead to further incremental changes in the text of still another type of contract, which ultimately leads to yet another substitution. It is not enough, in other words, to explore the process of contractual innovation exclusively by looking to textual changes within a given subset of contracts.²⁵⁰ In certain areas—and venture finance is undeniably one of these areas—the process of evolution and change may be fully grasped only if one also takes into account the possibility that incremental changes may ultimately lead contract users to substitute one type of contract for another. The decision to structure one’s investment in the form of convertible debt rather than convertible equity, in summary, is as significant an innovation as the addition or deletion of a *pari passu* clause from a sovereign debt contract.

CONCLUSION

Over the past decade, a number of technological advances have fundamentally altered the ways in which early-stage technology companies are operated and funded. On the one hand, the convertible note—an instrument previously used primarily in the context of bridge funding—has become more complex and is now commonly used to provide seed funding to these companies. On the other hand, classic Series A form financing documents—instruments previously used principally by venture capitalists to fund companies at a later stage in their development—have been simplified and are now commonly used

249. See Davis, *supra* note 2, at 89 (“Innovation means any change that is both novel and likely to be adopted by a group of prospective users.”).

250. See Choi et al., *supra* note 1, at 24–36 (comparing innovations in sovereign debt contracts governed by New York law to innovations in sovereign debt contracts governed by English law).

by seed investors who would prefer to invest in equity. While these shifts have fundamentally reshaped the contractual infrastructure of early-stage venture finance in the United States, existing theories of contractual innovation can only partially explain the changes to these venture finance contracts. They also fail to fully capture the role played by attorneys in bringing these changes to fruition. While further research is needed in order to fully understand the complex (and occasionally bewildering) process by which venture finance contracts change over time, this Article represents an important first step in bringing new types of contracts into the fold of the fast-growing body of scholarship that explores the process of contractual innovation.