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Darian M. Ibrahim

William & Mary Law School, dmibrahim@wm.edu

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Darian M. Ibrahim*

Abstract

This Article on “intrapreneurship” has several goals. First, it points out that while much of the legal literature on innovation is concerned with startups (entrepreneurship), the innovation that takes place inside our largest corporations (intrapreneurship) is substantial, important, and understudied. Second, the Article observes that while large technology corporations that used to be startups may remain intrapreneurial in culture, intrapreneurship is less common in the aggregate than we might expect. Reasons include organizational bureaucracy, laws favoring entrepreneurship, and what Clayton Christensen (Harvard Business School) calls “the innovator’s dilemma.” The innovator’s dilemma is, put simply, that good management causes large corporations to please existing customers with new and improved products at the expense of cultivating disruptive innovations that could replace those products altogether. Third, the Article detours to corporate law, which might, as a descriptive matter, play at the margins of the innovator’s dilemma and the entrepreneurial/intrapreneurial balance. Finally, the Article explores a hybrid approach—corporate venture capital—that combines entrepreneurial and intrapreneurial advantages. In corporate venture capital, a large corporation’s venture arm can invest in promising startups, and thus share in disruptive gains, without having to overcome obstacles to developing those projects internally.

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I. Introduction

Entrepreneurship is sexy. Our business lore includes Steve Jobs creating Apple Computer in his garage¹ and Mark Zuckerberg creating Facebook in his Harvard dorm room.²

1. See WALTER ISAACON, STEVE JOBS 67 (2011) (pointing out that the Jobs's house became the assembly point for Apple I boards).

2. See BEN MEZRICH, THE ACCIDENTAL BILLIONAIRES: THE FOUNDING OF FACEBOOK: A TALE OF SEX, MONEY, GENIUS AND BETRAYAL 153 (2010) ("In the incorporation documents, they'd laid out the ownership of [Facebook] as they'd

Innovation takes flight when these entrepreneurs bravely forego the safety of a traditional job and create a new firm (a “startup”) to pursue an exciting new idea.³ Everyone, including politicians⁴ and law professors (especially this one⁵), likes entrepreneurship.

What receives less attention is innovation that takes place inside our largest corporations, referred to as *intrapreneurship*. This Article explores the world of intrapreneurship. It is also the first systematic academic effort to study how the law, and in particular corporate law, might affect the intrapreneurial/entrepreneurial balance.⁶ I note at the outset that many of these effects, to the extent they are having an influence, are likely at the margins. They are also probably unintended effects, as Delaware judges are not deciding fiduciary duty cases brought against corporate management with innovation ramifications in mind.⁷ Still, much like a prior

agreed upon in Mark’s dorm room.”).

3. See Joseph Bankman & Ronald J. Gilson, *Why Start-Ups?*, 51 STAN. L. REV. 289, 289–90 (1999) (commenting that “the prototypical start-up involves an employee leaving her job with an idea”).

4. On legal preferences granted to startups and other small businesses, see Mirit Eyal-Cohen, *Legal Mirrors of Entrepreneurship*, 55 B.C. L. REV. 719, 719 (2014) [hereinafter Eyal-Cohen, *Legal Mirrors*] (analyzing why “Congress and private institutions have been acting to incentivize, support, and reward entrepreneurship through the law to stimulate the economy”); Mirit Eyal-Cohen, *Down-Sizing the Little Guy Myth in Legal Definitions*, 98 IOWA L. REV. 1041, 1046 (2013) [hereinafter Eyal-Cohen, *Down-Sizing*] (explaining some of the policy considerations behind the legal preferences granted to small businesses).

5. See, e.g., Darian M. Ibrahim, *The New Exit in Venture Capital*, 65 VAND. L. REV. 1, 2 (2012) (citing favorably statistics that show “[i]n 2008 public companies that were once venture-backed accounted for more than 12 million U.S. jobs and \$2.9 trillion in revenues, which equates to 21 percent of U.S. GDP” (quoting Press Release, NAT’L VENTURE CAPITAL ASS’N, *National Venture Capital Association Releases Recommendations to Restore Liquidity in the U.S. Venture Capital Industry* (Apr. 29, 2009) (on file with the Washington and Lee Law Review))).

6. This Article, however, is by no means the first law review article to discuss the concept of intrapreneurship in general. See Bankman & Gilson, *supra* note 3, at 299–308 (examining why large corporations lose innovative employees to startups); see also Eyal-Cohen, *Down-Sizing*, *supra* note 4, at 1087 (“Intrapreneurship denotes business units with large and established corporations that create breakthrough inventions that increase their entrepreneurial value.”).

7. See Brent J. Horton, *Modifying Fiduciary Duties in Delaware: Observing Ten Years of Decisional Law*, 40 DEL. J. CORP. L. 921, app. I (2016)

interesting essay explores how tort law's deference to custom might unintentionally hinder innovation,⁸ this Article explores how corporate law might be playing an unanticipated role in the optimal intrapreneurial/entrepreneurial balance we observe.⁹ This Article also explores a hybrid approach—corporate venture capital—that may be the best of both worlds.¹⁰ Corporate venture capital programs allow large corporations to keep abreast of, and participate in, exciting new technologies without having to spend internal R&D dollars or overcome bureaucratic obstacles ever present in large organizations.¹¹

Before discussing these original contributions, this Article explores intrapreneurship as a descriptive phenomenon.¹² Intrapreneurial corporations have long existed, from 3M (whose employees developed the Post-It Note) to Lockheed Martin (whose “skunkworks” group developed the U-2 Spy Plane).¹³ Now much intrapreneurship occurs in the technology stalwarts that began as startups (e.g., Google and Amazon).¹⁴ However, given that large corporations have advantages over startups in terms of

(showcasing thirty-six cases supporting the proposition that “the purpose of the duty of loyalty is in large measure to prevent the exploitation by a fiduciary of his self-interest to the disadvantage of the minority”).

8. See Gideon Parchomovsky & Alex Stein, *Torts and Innovation*, 107 MICH. L. REV. 285, 286 (2008) (“Academic discussions are typically confined to the domains of patent and trade secret law.”). The authors note that their “[a]rticle highlights a previously underappreciated connection between innovation and tort law.” *Id.* at 286.

9. See *infra* Part IV.A (arguing that “the business judgment rule and the duty to monitor” encourage intrapreneurship).

10. See *infra* Part IV (describing corporate venture capital, detailing “competitive advantages of corporate venture capital,” and showing evidence of the varied success of corporate venture capital).

11. See Rami Rahal, *Will Corporate Venture Capital Disrupt the Traditional Investment Ecosystem?*, ENTREPRENEUR (Dec. 16, 2014), www.entrepreneur.com/article/240904 (last visited Dec. 15, 2016) (discussing the advantages a corporate venture fund has for large corporations) (on file with the Washington and Lee Law Review).

12. See *infra* Part II (breaking down the difference between “intrapreneurship” and entrepreneurship, laying out the practical importance of “intrapreneurship,” and expounding the innovator’s dilemma).

13. See *infra* notes 74–83 and accompanying text (presenting examples of numerous corporations founded throughout the twentieth century that have successfully implemented “intrapreneurship”).

14. See *infra* notes 74–78 and accompanying text (revealing that various Silicon Valley tech giants have programs that encourage intrapreneurship).

resources, employee talent, and production economies of scale, it is surprising to not find even more intrapreneurship relative to entrepreneurship.¹⁵

Entrepreneurship is always going to be more attractive to some individuals.¹⁶ There are psychic rewards for being one's own boss¹⁷ and financial payoffs upon success that a large corporation has difficulty matching.¹⁸ Corporate law's limited liability, meaning the founder's personal wealth is not at stake should the venture fail, also drives entrepreneurial risk-taking.¹⁹ But on balance, why don't the large corporation's competitive advantages in terms of attracting and retaining innovators result in less startups and more intrapreneurship?

The existing legal literature identifies one possible reason—ownership rights to intellectual property developed while working for a large corporation.²⁰ I will discuss that briefly, recognizing that it is not my domain and leaving it to the IP scholars.²¹ I also briefly discuss other possible explanations.²² The Article then

15. See Michael Livingston, *Risky Business: Economics, Culture and the Taxation of High-Risk Activities*, 48 TAX L. REV. 163, 214 (1993) (“[L]arge companies had significant advantages in R&D, including superior diversification and marketing . . . , effectively unlimited lives . . . , superior laboratories and research teams, and greater financial resources.”).

16. See Amir N. Licht, *The Entrepreneurial Spirit and What the Law Can Do About It*, 20 COMP. LAB. L. & POL’Y J. 817, 817 (2007) (writing on the unique characteristics that distinguish entrepreneurs from other civilians).

17. See *id.* at 825 (“[E]vidence supports the notion that self-employment offers substantial nonpecuniary benefits, such as being your own boss.” (internal citations omitted)).

18. See Barton H. Hamilton, *Does Entrepreneurship Pay? An Empirical Analysis of the Returns of Self-Employment*, 108 J. POL. ECON. 604, 629 (2000) (affirming that there is “some support for the superstar model [of entrepreneurship] since a handful of entrepreneurs earn substantial returns in self-employment”).

19. See D. Gordon Smith & Darian M. Ibrahim, *Law and Entrepreneurial Opportunities*, 98 CORNELL L. REV. 1533, 1566–67 (2013) (describing how limited liability encourages entrepreneurship).

20. See Ronald J. Gilson, *Locating Innovation: The Endogeneity of Technology, Organizational Structure, and Financial Contracting*, 110 COLUM. L. REV. 885, 896 (2010) (“A number of scholars have focused on the risk to the employee of merely disclosing the innovation; by doing so, the employee will compromise her intellectual property.”).

21. See *infra* Part II.C (observing that when a corporate employee invents a disruptive innovation at work ownership rights are unclear).

22. See *infra* Part II.C (mentioning that compensation leads to technology

turns to a business school theory of much buzz—Clayton Christensen’s *The Innovator’s Dilemma*.²³ Christensen argues that well-managed large corporations cater to existing customers and improve upon existing products (i.e., sustaining innovations) rather than pursue disruptive innovations that create new products and new demand.²⁴ Eventually, however, experience shows that entrepreneurial disruptive innovations invade or occupy the large corporation’s space.²⁵ This is the innovator’s dilemma: stick with a successful strategy and eventually be disrupted by a startup.²⁶

Christensen claims that solving the innovator’s dilemma—and having a large corporation pursue a concurrent

companies losing employees to startups and “an employee gets a psychic reward from ‘going it alone’ and becoming a successful entrepreneur”).

23. See generally CLAYTON M. CHRISTENSEN, *THE INNOVATOR’S DILEMMA: THE REVOLUTIONARY BOOK THAT WILL CHANGE THE WAY YOU DO BUSINESS* (1997) [hereinafter *THE INNOVATOR’S DILEMMA*] (considering the difficulties that established companies have when dealing with disruptive technology). Christensen’s novel has garnered top business industry accolades since its publication in 1997. See Dan Ackman, *The 20 Most Influential Business Books*, *FORBES* (Sept. 30, 2002), <http://www.forbes.com/2002/09/30/0930booksintro.html> (last visited Dec. 15, 2016) (praising distinguished business books that have come out within the past 20 years) (on file with the Washington and Lee Law Review); see also *Aiming High: We Launch a Quarterly Review of Business Books by Naming Six of the Best*, *ECONOMIST* (June 30, 2011), <http://www.economist.com/node/18894875> (last visited Dec. 15, 2016) (examining six books from the past fifty years which “shape[d] the business world”) (on file with the Washington and Lee Law Review); *Global Business Book Awards*, J. M. McELLIGOTT, http://www.bookawards.bizland.com/financial_times.htm (last visited Dec. 15, 2016) (naming Christensen’s book the “Best Business Book” of 1998, as determined by the *Financial Times* and Booz-Allen & Hamilton) (on file with the Washington and Lee Law Review).

24. See *THE INNOVATOR’S DILEMMA*, *supra* note 23, at xxii (“If good management practice drives the failure of successful firms faced with disruptive technology change, then the usual answers to companies, problems—planning better, working harder, becoming more customer-driven, and taking a longer-term perspective—all *exacerbate* the problem.”).

25. See *id.* at 48 (“Because the experience was so archetypical, the struggle of Seagate Technology, the industry’s dominant maker of 5.25-inch drives, to successfully commercialize the disruptive 3.5-inch drive is recounted in detail . . .”).

26. See *id.* at xxvi (“In many instances, leadership in sustaining innovations—above which information is known and for which plans can be made—is not competitively important. It is in disruptive innovations, where we know least about the market, that there are such strong first-mover advantages. This is the innovator’s dilemma.”).

sustaining/disruptive innovation approach—requires reducing two important *asymmetries* that exist within large corporations.²⁷ These are *asymmetric motivation* (only caring about upstream movements to higher-end products and customers)²⁸ and *asymmetric information* (organizational hurdles that prevent disruptive threats and potential responses to them from filtering up from employees to senior management).²⁹

Much like corporate law could tip the scales toward forming a startup by offering the founders limited liability,³⁰ corporate law can also speak to the innovator’s dilemma.³¹ First, the business judgment rule—as central a principle to corporate law as limited liability³²—prompts senior management (the CEO and board of directors) to pursue a disruptive innovation even if it might fail.³³ Locating intrapreneurial ventures in new organizational units or corporate subsidiaries is a way to pursue disruptive innovation while still catering to the corporation’s core business.³⁴ Market

27. See *id.* at 33–68, 89–110 (advancing that the resolution to the innovator’s dilemma lies within solving *asymmetric motivation* and *asymmetric information*).

28. See *id.* at 89–110 (observing that “the prospects for growth and improved profitability in upmarket value networks” is attractive and “that it is not unusual to see well-managed companies leaving . . . their original customers as they search for customers at higher price points”).

29. See *id.* at 33–68 (explaining that “[m]ost proposals to innovate are generated from deep within the organization not the top” and as a result “middle managers play a critical . . . role in screening these projects” however “[t]hese managers can’t package and throw their weight behind every idea”).

30. See Smith & Ibrahim, *supra* note 19 (positing that limited liability encourages entrepreneurs to “engage in transactions because they no longer have to take an ‘all or nothing’ approach to starting a business”).

31. See *infra* Part IV (arguing that the business judgement rule and the duty to monitor reduce the information asymmetry problems in large corporations).

32. See Stephen M. Bainbridge, *The Business Judgment Rule as Abstention Doctrine*, 57 VAND. L. REV. 81, 81 (2004) (describing the business judgment rule as “corporate law’s central doctrine, pervasively affecting the roles of directors, officers, and controlling shareholders”).

33. See *infra* note 166 and accompanying text (asserting that the business judgment rule drives risk taking within corporations).

34. See, e.g., Nathan Furr & Daniel Snow, *The Prius Approach*, HARV. BUS. REV. (Nov. 2015), <https://hbr.org/2015/11/the-prius-approach> (last visited Dec. 15, 2016) (tackling how large corporations should react to the threat of disruption based on whether such disruption is already underway, has just begun, or is in the distant future) (on file with the Washington and Lee Law

pressures will ultimately drive business decisions, but corporate law can also reduce the asymmetric motivation problem and encourage corporations to pursue disruptive innovation.³⁵

Second—and less intuitively—corporate law might also reduce the asymmetric information problem.³⁶ Christensen contends that skilled employees do sometimes see disruption coming, and develop a response to it, but those ideas do not reach the senior management level.³⁷ Delaware law recognizes a duty to monitor, part of the duty of loyalty, which mandates that the board of directors install a compliance system to monitor for employee illegal activity.³⁸ The duty to monitor does not reach business risks,³⁹ whether from overexposure to subprime mortgages⁴⁰ or threats from disruptive innovation.⁴¹ However, it can work in that way indirectly, when coupled with market pressures, in ways this Article will explore.⁴² Consequently, the duty to monitor, albeit indirectly and unintentionally, may help innovation-related information reach senior management who can then act on it.⁴³

Review).

35. See *infra* notes 163–179 and accompanying text (analyzing the relationship between the business judgment rule, intrapreneurship, and risk taking).

36. See *infra* Part IV.B (asserting that the duty to monitor can help solve part of the innovator’s dilemma).

37. See THE INNOVATOR’S DILEMMA, *supra* note 23, at 33–34, 94–97 (specifying the organizational hurdles that get in the way of creating disruptive technologies within a large corporation).

38. See Eric J. Pan, *A Board’s Duty to Monitor*, 54 N.Y.L. SCH. L. REV. 717, 738 (2010) (considering the duty to monitor and what requirements it imposes on the board of directors).

39. See Christine Hurt, *The Duty to Manage Risk*, 39 IOWA J. CORP. L. 253, 259 (2014) (clarifying that the duty to monitor business risk does not exist within the corporate law framework of duties).

40. See *infra* notes 200–212 and accompanying text (exploring the case of *In re Citigroup Inc. S’holder Derivative Litig.*, 964 A.2d 106 (Del. Ch. 2009)).

41. See *infra* Part IV.B.2 (doubting that Delaware judges would hold board of directors legally liable for failing to identify a business risk).

42. See *infra* notes 220–224 and accompanying text (explicating Ed Rock’s and Melvin Eisenberg’s argument that courts in Delaware provide standards of conduct).

43. See *infra* Part IV.B (contending that although Delaware courts will not impose legal liability for failing to appreciate business risks from disruptive innovation, Delaware courts can affect director behavior).

Finally, the Article pivots to perhaps the best of both worlds: corporate venture capital.⁴⁴ Large corporations can and do form venture arms to fund startups, which allow the corporations to pursue sustaining innovations in-house while also sharing in disruptive activity through startup ownership.⁴⁵ I will argue that corporate venture capital is theoretically equipped to outperform private venture capital in funding startups, although corporate venture capital's actual success is varied.⁴⁶

Before proceeding further, let me be clear that this is largely a descriptive rather than normative Article. For example, I do not argue for a change in corporate law to make large corporations even more intrapreneurial. Indeed, I do not even know if that is desirable from an aggregate social welfare perspective. On the whole, it should not matter who is innovating—startups or large corporations. Nor should it matter who funds innovation, private or corporate venture capitalists. This Article is simply an inquiry into the distributive, or the relative balance between where innovation happens, who funds it, and why.

II. Intrapreneurship and the Innovator's Dilemma

This Part asks a series of preliminary questions. First, what is “intrapreneurship” and how does it differ from entrepreneurship? Second, what do we know about intrapreneurial companies? And third, what reasons can we find for why even more innovation doesn't take place inside large corporations given the many advantages they appear to enjoy over startups?

44. See *infra* Section V (proposing that corporate venture capital might be the best way for large corporations to develop intrapreneurship).

45. See Josh Lerner, *Corporate Venturing*, HARV. BUS. REV. (Oct. 2013), <https://hbr.org/2013/10/corporate-venturing> (last visited Dec. 15, 2016) (noting that “companies as diverse as Google, BMW and General Mills are complementing traditional R&D by joining with other investors to put money in promising start-ups”) (on file with the Washington and Lee Law Review).

46. *Infra* Section V.B.

A. Intrapreneurship and Entrepreneurship Differentiated

The basic difference between intrapreneurship and entrepreneurship is that intrapreneurship is innovative activity that happens within a large, established firm,⁴⁷ whereas entrepreneurship is innovative activity that is pursued through a new firm (a startup) established primarily for that purpose.⁴⁸ An “entrepreneur assumes the risk of the venture, generally by investing his or her own capital and reputation and by forsaking a guaranteed income,”⁴⁹ whereas an intrapreneur is commonly thought of as an employee inside a large corporation who stays in-house to pursue her idea rather than leaving to form a startup⁵⁰ (although I will conceive of the employee and management team together as the true intrapreneur).

Entrepreneurship is glorified in our collective mindset.⁵¹ Joseph Bankman and Ronald Gilson write that “in Silicon Valley, the defining myth takes as its stage David Packard’s or Steve Jobs’ garage In this community, the myth is taken seriously. Over and over again, people set out on the path of heroes: They leave their comfortable, secure jobs, and start from scratch.”⁵²

47. Gifford Pinchot is credited with coining the term “intrapreneur” to “describe a person who creates innovation of any kind *within* an organization.” Timothy D. Schellhardt, *DAVID in GOLIATH: Some Giant Companies Are Particularly Good at Fostering an Entrepreneurial Spirit. Here’s How They do It*, WALL ST. J., May 23, 1996, at R14; see also Art Fry, *The Post-It Note: An Intrapreneurial Success*, 52 SAM ADVANCED MGMT. J. 3, 4 (1987) (“‘Intrapreneuring’ is a word coined by Gifford Pinchot in his book, *Intrapreneuring*. We had intrapreneurs for years at 3M, but didn’t know what to call them.”).

48. See D. Gordon Smith & Masako Ueda, *Law & Entrepreneurship: Do Courts Matter?*, 1 ENTREPRENEURIAL BUS. L.J. 353, 356 (2006) (defining entrepreneurship as “getting novel things done’ by new for-profit enterprises,” yet not discussing “entrepreneurial activities by established firms”).

49. David E. Polzen, *We Are All Entrepreneurs Now*, 43 WAKE FOREST L. REV. 283, 285 (2008).

50. See Patrina Ozurumba, *Girl Power: How Female Entrepreneurs Can Overcome Barriers to Successful Businesses*, 34 WOMEN’S RTS. L. REP. 24, 37 (2012) (“[A]n intrapreneur is an employee within an organization who undertakes innovative internal business development initiatives.”).

51. See Polzen, *supra* note 49, at 286 (“Entrepreneurs, in the American imagination, are leaders, innovators, pioneers, problem solvers, and takers; they are diligent, persistent, charismatic, dynamic, imaginative, and resourceful . . .”).

52. Bankman & Gilson, *supra* note 6, at 289–90.

Similarly, John Coyle and Gregg Polsky observe that Silicon Valley engineers are “willing to accept lower salaries and fewer perks in exchange for . . . the intangible benefits of participating in a startup in Silicon Valley, where entrepreneurship is cherished.”⁵³

Not only does entrepreneurship dominate in cultural and popular significance, these social norms are also embedded in our legal system.⁵⁴ Mirit Eyal-Cohen has detailed the benefits that the legal system grants small businesses (which include startups) simply due to their size.⁵⁵ As a descriptive matter, she notes that these benefits—which include the ease of complying with securities laws⁵⁶ and lower patent application fees⁵⁷—are available to startups but not to large corporations.⁵⁸ As a normative matter, she argues that this “legal favoritism of small entities results in the waste of revenues and the misallocation of government resources” and that “[t]his occurs because the rules governing the allocation of benefits focus on firm size,”⁵⁹ even if size is not the best proxy for innovation.⁶⁰

53. John F. Coyle & Gregg D. Polsky, *Acqui-hiring*, 63 DUKE L.J. 281, 291 (2013).

54. See Eyal-Cohen, *Legal Mirrors*, *supra* note 4, at 719 (“Our legal system is full of benefits granted to small entities.”).

55. See *id.* at 742–46 (arguing that in response to small businesses failing over time Congress started to favor small businesses); Eyal-Cohen, *Down-Sizing*, *supra* note 4, at 1068–69 (detailing the rationale behind small business favoritism in the eyes of the law).

56. See Eyal-Cohen, *Down-Sizing*, *supra* note 4, at 1065–86 (“Securities laws govern business entities’ abilities to access public capital markets. These laws treat small entities favorably by granting them more relaxed registration and reporting requirements.”).

57. *Id.* at 1076–78 (“[A] key part of the statutory patent fee structure is a two-tier free system, which provides small entities with discounted rates for fees required for application, issuance, search, and maintenance of patents.”).

58. *Id.* at 1051 (“Entrepreneurship has been commonly equated with small-business ownership, and it has been used to justify regulatory concessions.”).

59. Eyal-Cohen, *Legal Mirrors*, *supra* note 4, at 721. Notably for purposes of my argument, Eyal-Cohen thinks preferential legal treatment should be granted to businesses that are truly innovative, whether startups or large corporations. See *id.* at 763–65 (proposing a conceptual model that aims to determine a firm’s entrepreneurial character by weighting the firm’s age, knowledge procurement ability, innovation yield, labor expansion, and entrepreneurial success).

60. See Thomas J. Chemmanur, Elena Loutskina & Xuan Tin, *Corporate Venture Capital, Value Creation, and Innovation*, 27 REV. FIN. STUD. 2434, 2434

Perhaps it is not surprising, then, that legal academics focus on startups, including their legal organization,⁶¹ financing,⁶² governance,⁶³ and exit mechanisms.⁶⁴ Conversely, Gordon Smith and Masako Ueda observe that “[s]cholarly interests in intrapreneurship are clustered around the issue of how to circumvent inertia in established firms and to get novel things done”⁶⁵ Thus, intrapreneurship is viewed as the study of overcoming organizational bureaucracy rather than a topic for legal scholars.⁶⁶ But it is richer than that.

(2013) (analyzing “how corporate venture capital (CVC) differs from independent venture capital (IVC) in nurturing innovation [through patents] in entrepreneurial firms”).

61. See LARRY E. RIBSTEIN, *THE RISE OF THE UNINCORPORATION* 227–28 (2010) (asserting that but for venture capital investments, startups would rationally organize as “unincorporations” such as LLCs); Joseph Bankman, *The Structure of Silicon Valley Start-Ups*, 41 *UCLA L. REV.* 1737, 1738–41, 1764–65 (1994) (contending that startups are organized as C corporations due to a “gambler’s mentality” on the part of the founders); Victor Fleischer, *The Rational Exuberance of Structuring Venture Capital Start-ups*, 57 *TAX L. REV.* 137, 143–80 (2003) (explaining that there are rational reasons why start-ups are organized as C corporations).

62. See generally Ronald J. Gilson, *Engineering a Venture Capital Market: Lessons from the American Experience*, 55 *STAN. L. REV.* 1067 (2003) (breaking down venture capital financing); Darian M. Ibrahim, *The (Not So) Puzzling Behavior of Angel Investors*, 61 *VAND. L. REV.* 1405 (2008) (outlining angel investor financing); Darian M. Ibrahim, *Debt as Venture Capital*, 2010 *U. ILL. L. REV.* 1169 (elucidating venture debt financing).

63. See generally Jesse M. Fried & Mira Ganor, *Agency Costs of Venture Capitalist Control in Startups*, 81 *N.Y.U. L. REV.* 967 (2006) (observing the unusual governance scheme in startups, with venture capitalists as preferred stockholders versus common shareholders who control other corporations).

64. See generally D. Gordon Smith, *The Exit Structure of Venture Capital*, 53 *UCLA L. REV.* 315 (2005) (describing venture capitalist strategies for exiting their portfolio startups).

65. Smith & Ueda, *supra* note 48, at 356. See Schellhardt, *supra* note 47 (“Intrapreneurs often face giant stumbling blocks within hierarchical organizations, whose corporate cultures can serve to repel—not embrace—the entrepreneurial spirit.”). Clayton Christensen rightfully observes that many analyses of “organizational impediments” to intrapreneurship “stop with such simple rationales as bureaucracy, complacency, or ‘risk-averse’ culture,” although there are exceptions that go deeper. *THE INNOVATOR’S DILEMMA*, *supra* note 23, at 33–34.

66. See Darian M. Ibrahim & D. Gordon Smith, *Entrepreneurs on Horseback: Reflections on the Organization of Law*, 50 *ARIZ. L. REV.* 71, 82 nn.62–65 (2008) (citing that the emerging “law and entrepreneurship” literature primarily focused on startups). There are exceptions of legal scholarship that discuss intrapreneurship. See generally Ronald J. Gilson, *Locating Innovation:*

B. Intrapreneurship's Practical Importance

The entrepreneurial startup backed by venture capital deserves its due attention. Fledgling startups become household names that employ thousands of people and bring us many of the technological innovations we hold dear.⁶⁷ But the research labs inside large corporations (that have been large for some time) bring us many notable successes too, also employing thousands of people.⁶⁸ While it may be difficult to quantify the amount of innovation that comes from R&D laboratories inside large corporations as opposed to startups, proxies can illuminate the comparison.⁶⁹

Patents are sometimes used as a measure of innovative activity.⁷⁰ Gideon Parchomovsky and R. Polk Wagner note that the “major drivers of the recent increases in patenting activity are medium-to-large corporations” and that large corporations including “IBM, Intel, and Hewlett-Packard . . . have consistently ranked among the top patent recipients in recent years.”⁷¹ As one striking example, the authors note that “[s]ince 1994, IBM has

The Endogeneity of Technology, Organizational Structure, and Financial Contracting, 110 COLUM. L. REV. 885 (2010) (considering the “dilemma faced by an established company in deciding whether to keep an employee’s innovation or allow the employee to pursue innovation through a startup”).

67. See Amanda Davis, *How These Three Startups Became Household Names*, INSTITUTE (Sept. 4, 2015), theinstitute.ieee.org/tech-history/technology-history/how-these-three-startups-became-household-names (last visited Dec. 15, 2016) (highlighting how “Microsoft, Sony, and Tata Consultancy Services found success through intrapreneurship, risk taking, and a bit of luck”) (on file with the Washington and Lee Law Review).

68. See WILLIAM J. BAUMOL, *THE FREE-MARKET INNOVATION MACHINE: ANALYZING THE GROWTH MIRACLE OF CAPITALISM* 56 (2002) (“Routinized innovation is . . . of great and probably growing significance, as [evidenced] by the fact that the bulk of U.S. R&D is now channeled through [established] firms.”).

69. See, e.g., Chemmanur, Loutskina, & Tin, *supra* note 60, tbl.1 (reporting statistics that measure patents as a proxy for a firm’s innovation output).

70. See, e.g., Zvi Griliches, Ariel Pakes & Bronyn H. Hall, *The Value of Patents as Indicators of Inventive Activity*, in *ECONOMIC POLICY & TECHNOLOGICAL PERFORMANCE* 97, 121 (Partha Dasgupta & Paul Stoneman eds., 1987) (“[P]atent data represents a valuable resource for the process of technological change.”); Chemmanur, Loutskina & Tin, *supra* note 60 (using patents as a proxy for a firm’s innovativeness).

71. Gideon Parchomovsky & R. Polk Wagner, *Patent Portfolios*, 154 U. PA. L. REV. 1, 7 n.12 (2005).

amassed over 25,000 U.S. patents, far more than any other company.”⁷² In a study examining the relationship between patents and firm size, John Allison and Mark Lemley empirically found that large corporations filed about 70% of issued patents in their sample, while small businesses filed only 11%.⁷³

Silicon Valley tech giants are leaders in intrapreneurship.⁷⁴ Amazon’s Amazon Web Services (AWS), an intrapreneurial project, has itself become a highly lucrative business.⁷⁵ Google has an “innovation time off” program which allows employees to spend part of their workday on their own intrapreneurial ideas.⁷⁶

72. *Id.* at 46.

73. John R. Allison & Mark A. Lemley, *Who’s Patenting What? An Empirical Exploration of Patent Prosecution*, 53 VAND. L. REV. 2099, 2128 (2000). The remaining balance was almost 18% filed by individuals and 1% filed by nonprofits. *Id.*

74. See George Deeb, *Big Companies That Embrace Intrapreneurship Will Thrive*, ENTREPRENEUR (Mar. 19, 2015), <https://www.entrepreneur.com/article/243884> (last visited Dec. 15, 2016) (listing several examples of intrapreneurial successes within Silicon Valley tech companies) (on file with the Washington and Lee Law Review).

75. See Randy Bias, *What is Amazon’s Secret for Success and Why Is EC2 a Runaway Train?*, CLOUDSCALING (Oct. 13, 2011), <http://www.cloudscaling.com/blog/cloud-computing/what-is-amazons-secret-for-success-and-why-is-ec2-a-runaway-train/> (last visited Dec. 15, 2016) (“AWS is staying on-track for 100% year-over-year growth, revenues in the 1B range for 2011, and no end in sight to the high flying act.”) (on file with the Washington and Lee Law Review); see also Eugene Kim, *This One Chart Gives You an Idea of How Crazy Amazon’s Cloud Growth Really Is*, BUS. INSIDER (Dec. 15, 2015, 3:56 PM), www.businessinsider.com/amazon-aws-growth-rate-is-far-outpacing-other-enterprise-vendors-2015-12 (last visited Dec. 15, 2016) (“AWS is seeing 78% year-on-year revenue growth, an astonishing growth rate compared to other large cap enterprise vendors on this list that had an average growth rate of a mere 6%.”) (on file with the Washington and Lee Law Review).

76. See generally RYAN TATE, *THE 20% DOCTRINE: HOW TINKERING, GOOFING OFF, AND BREAKING THE RULES AT WORK DRIVE SUCCESS IN BUSINESS* (2012) (pointing out the difficulties that established companies have when dealing with disruptive technology). While reports suggest Google is no longer officially offering “20 Percent Time,” the company culture is such that employees continue to work on what they call “20 Percent Projects” even though they receive little to no institutional support. See Ryan Tate, *Google Couldn’t Kill 20 Percent Time Even If It Wanted To*, WIRED: BUS. (Aug. 21, 2013, 6:20 AM), <http://www.wired.com/2013/08/20-percent-time-will-never-die/> (last visited Dec. 15, 2016) [hereinafter Tate, *Google’s 20 Percent*] (noting that even though Google has formally cancelled its “20 Percent Project” program, it still encourages its employees to pursue “20 Percent Projects”) (on file with the Washington and Lee Law Review).

Notably, half of the programs Google launched in the latter half of 2005 were developed through this program, including Gmail and Google News.⁷⁷ Facebook and LinkedIn have their own permutations of the innovation-time-off rule.⁷⁸

Intrapreneurship is not only the province of the Silicon Valley tech companies, however. Internal employee collaboration created the Post-It Note at 3M⁷⁹ and Lockheed Martin's "Skunk Works" innovation team developed the U-2 spy plane.⁸⁰ A junior employee at Sony developed the Playstation gaming console by tinkering with his daughter's Nintendo.⁸¹ Though his immediate supervisors were not particularly amused, senior leaders saw the promise of the new creation and were open to innovation at a time before "intrapreneurship" was a developed principle.⁸²

77. See Tate, *Google's 20 Percent*, *supra* note 76 ("The policy [20% time] led to products like Google News; Google's autocompletable system, originally called Google Suggest; Gmail, and AdSense . . .").

78. See *id.* ("[C]orporate hackathons [a cheaper version of 20% time] are now common place, including at Twitter, Facebook, Google, Yahoo, LinkedIn, and eBay . . ."); see also Anis Bedda, *Don't Think Intrapreneurs Are Just Like Entrepreneurs—It's Not True*, INNOVATION, INTRAPRENEURSHIP CONFERENCE: BLOG, <http://www.intrapreneurshipconference.com/dont-think-intrapreneurs-are-just-like-entrepreneurs-its-not-true/> (last visited Dec. 15, 2016) (sharing "four fundamental intra/entrepreneur disconnects for you to consider if you are serious about implementing intrapreneurship in your organization") (on file with the Washington and Lee Law Review).

79. See Dan Schawbel, *Why Companies Want You to Become an Intrapreneur*, FORBES (Sept. 9, 2013, 12:29 PM), <http://www.forbes.com/sites/danschawbel/2013/09/09/why-companies-want-you-to-become-an-intrapreneur/> (last visited Dec. 15, 2016) ("[A]t 3M, they came up with Post-It Notes . . .") (on file with the Washington and Lee Law Review); Fry, *supra* note 47, at 5 (describing 3M's founders as innovative and noting that "3M is like a bunch of small companies pasted together").

80. See *The U-2 Dragon Lady*, LOCKHEED MARTIN, <http://www.lockheedmartin.com/us/100years/stories/u2.html> (last visited Dec. 15, 2016) (recounting how and why the U-2 Dragon Lady was created) (on file with the Washington and Lee Law Review); see also ERIC RIES, *THE LEAN STARTUP: HOW TODAY'S ENTREPRENEURS USE CONTINUOUS INNOVATION TO CREATE RADICALLY SUCCESSFUL BUSINESSES* 30–31 (2011) (noting that Intuit's five-member intrapreneurial team created SnapTax).

81. See *10 Inspiring Examples of Successful Intrapreneurship*, VOCOLI: BLOG (May 27, 2014), <https://www.vocoli.com/blog/may-2014/10-inspiring-examples-of-successful-intrapreneurship/> (last visited Dec. 15, 2016) (presenting a synopsis of how PlayStation was created) (on file with the Washington and Lee Law Review).

82. See *id.* (discussing how "[m]any Sony Bosses were outraged at his work," but a Sony employee in a senior position saw the promise of the Sony

Whirlpool—not exactly the first company one thinks of when it comes to innovation—enrolled every salaried employee in a business innovation course and trained specific employees to facilitate intrapreneurial projects.⁸³

C. *Why Intrapreneurship Isn't Even More Successful*

This Article is agnostic on the normative question of whether it is more desirable to see innovation pursued inside large corporations or through startups.⁸⁴ But it is puzzling that intrapreneurship doesn't completely dominate here.⁸⁵ Bankman and Gilson argue that theoretically we should *never*

PlayStation).

83. See Jay Rao & Joseph Weintraub, *How Innovative Is Your Company's Culture*, MIT SLOAN MGMT. REV.: RES. (Mar. 19, 2013), <http://sloanreview.mit.edu/article/how-innovative-is-your-companys-culture/> (last visited Dec. 15, 2016) (detailing how Whirlpool switched from an engineering and manufacturing oriented company to an innovation oriented company) (on file with the Washington and Lee Law Review). By 2008, 1,100 of Whirlpool's approximately 61,000 worldwide employees were "I-mentors," who received specialized training to facilitate innovation projects among the employee base. *Id.*

84. From an aggregate social welfare perspective, we may not care if large corporations or startups are innovating—but the directors and shareholders of the large corporations do. See Minda Zetlin, *Why Big Companies Suddenly Care About Small Companies and What You Should Do About It*, INC (May 31, 2013), <http://www.inc.com/minda-zetlin/why-big-corporations-suddenly-care-about-small-companies-and-what-you-should-do.html> (last visited Dec. 15, 2016) ("Across the nation, executives in boardrooms are thinking, worrying and talking about the new factor that's changing everything in their world—the growth, innovation, and market power of small and start-up companies.") (on file with the Washington and Lee Law Review). Also, given that retail investors are more likely to find themselves as shareholders of large corporations through retirement funds and the like (as opposed to the exclusive club of wealthy angel investors and venture capitalists that fund startups), there may be egalitarian issues here as well. See InvestorGuide Staff, *What is the Difference Between Retail Investors and Institutional Investors?*, INVESTORGUIDE, www.investorguide.com/article/11202/what-is-the-difference-between-retail-investors-and-institutional-investors/ (last visited Dec. 15, 2016) (discussing the different investments that a retail investor and an institutional investor will make) (on file with the Washington and Lee Law Review).

85. See Bankman & Gilson, *supra* note 3, at 293 (arguing large employers have advantages in innovation compared to individual employees).

see startups.⁸⁶ Instead, large corporations should be able to dominate innovation given their tax, information, and scope advantages.⁸⁷ Further, the market should incentivize large corporations to innovate to stay relevant.⁸⁸

Still, intrapreneurship does not, on the whole, seem to be all roses. A recent article in the *Harvard Business Review* claims that intrapreneurial projects “fail between 70% and 90% of the time.”⁸⁹ Christensen likewise notes that “most attempts to create successful new projects [inside a large corporation] fail.”⁹⁰

86. See *id.* at 299 (“[W]e should not observe auctions [between large corporations and startups for an employee’s innovative idea], and we should not observe start-ups.”).

87. See *id.* at 293 (explaining that “[w]hen all else is equal, the employer has advantages—tax, information, and scope—that should result in it consistently winning the auction” to keep employees and their ideas in-house); see also Eyal-Cohen, *Legal Mirrors*, *supra* note 4, at 730 (observing despite popular opinion, large established firms may be “more entrepreneurial and innovative than small firms” because they “have more resources to invest in innovation and to attract and incentivize entrepreneur-employees” (footnotes omitted)).

88. See GIFFORD PINCHOT III, *INTRAPRENEURING: WHY YOU DON’T HAVE TO LEAVE THE CORPORATION TO BECOME AN ENTREPRENEUR* 7 (1985) (“The more rapidly American business learns to use the entrepreneurial talent inside large organizations, the better. The alternative in a time of rapid change is stagnation and decline.”); see also Henry Chesbrough, *Graceful Exits and Missed Opportunities: Xerox’s Management of Its Technology Spin-off Organizations*, 76 *BUS. HIST. REV.* 803, 807 (2002) (noting that as early as 1969, Xerox’s head of research warned his company of falling the way of RCA, which “continued to invest in perfecting the vacuum tube and failed to invest in the transistor, which quickly rendered the vacuum tube obsolete”).

89. Beth Altringer, *A New Model for Innovation in Big Companies*, *HARV. BUS. REV.* (Nov. 19, 2013), <https://hbr.org/2013/11/a-new-model-for-innovation-in-big-companies/> (last visited Dec. 15, 2016) (on file with the Washington and Lee Law Review); see also Susan Foley, *5 Reasons Why Intrapreneurship Is Important*, *CORP. ENTREPRENEURS* (Nov. 8, 2013), <http://corporate-entrepreneurs.com/blog1/2013/11/08/5-reasons-why-intrapreneurship-is-important/> (last visited Dec. 15, 2016) (“Most studies report a 60%–70% failure rate when it comes to change initiatives. Risk adverse cultures and resistance to change impede an organizations [sic] ability to grow.”) (on file with the Washington and Lee Law Review). This is not to say that the percentages are better for startups. See, e.g., Ibrahim, *supra* note 62, at 1176 (noting “the well-known fact that most start-ups fail” (footnotes omitted)).

90. See CLAYTON M. CHRISTENSEN & MICHAEL E. RAYNOR, *THE INNOVATOR’S SOLUTION: CREATING AND SUSTAINING SUCCESSFUL GROWTH* 73 (2003) [hereinafter CHRISTENSEN & RAYNOR, *THE INNOVATOR’S SOLUTION*] (“Over 60 percent of all new-product development efforts are scuttled before they ever reach the market. Of the 40 percent that do see the light of day, 40 percent fail to become

There are several explanations for why the entrepreneurship/intrapreneurship balance is often struck for the former. First, should a corporate employee come up with a disruptive innovation at work, it may be unclear whether she owns it or whether her employment agreement assigns property rights to the corporation. The employee is then faced with a dilemma of her own. On the one hand, she could pursue intrapreneurship, which means disclosing the innovation to her superiors and putting the ownership question front and center.⁹¹ As an alternative, the employee can leave the corporation, form a startup, and probably have an easier claim to the innovation.⁹² Therefore, it takes an innovative employer—one with an intrapreneurial mindset—to assure an employee that she will reap the rewards of disclosing her idea and staying in-house.⁹³

Second, an employer must commit to intrapreneurship in another way: compensation. Bankman and Gilson note that in large corporations, you risk “the perception of unfairness resulting from wide pay disparities.”⁹⁴ Gilson nuances the issue further in another essay, arguing that intrapreneurial companies who financially reward innovative ideas get more employees to stay, but among *themselves*, employees will “hoard research to protect their property rights”⁹⁵ This conundrum leads to the

profitable and are withdrawn from the market.”); *see also* Altringer, *supra* note 89 (“Studies show that efforts to stimulate intrapreneurship—entrepreneurship within an established company—more often than not fall flat.”).

91. *See* Gilson, *supra* note 20, at 896 (“A number of scholars have focused on the risk to the employee of merely disclosing the innovation; by doing so, the employee will compromise her intellectual property.”).

92. *See* Robert P. Merges, *Property Rights Theory and Employee Inventions* (Berkeley Ctr. for L. & Tech., Working Paper No. 97-03, 1997) (arguing that, when the employee leaves the employer, employees have a better ownership claim on their innovations—free of an employer’s ownership claim—the earlier the innovation is in its development).

93. *See infra* notes 140–141 and accompanying text (discussing Thermo Electron, a large corporation that created a new subsidiary for each intrapreneurial idea and gave the employee with the idea an entrepreneur-like ownership stake in the subsidiary).

94. Merges, *supra* note 92.

95. Gilson, *supra* note 20, at 899; *see also* Bankman & Gilson, *supra* note 3, at 302 (citing Edward P. Lazear, *Pay Equality and Industrial Politics*, 97 J. POL. ECON. 561, 562 (1989) (noting employees may sabotage each other’s efforts if the “prize” from having an intrapreneurial idea pursued is large enough)).

outcome that “[e]stablished technology companies both perform substantial amounts of innovation and lose employees to startups.”⁹⁶

Third, an employee gets a psychic reward from “going it alone” and becoming a successful entrepreneur that a large corporation may be unable to match.⁹⁷ Recall the earlier discussion of the entrepreneur as the modern American hero.⁹⁸ It is unclear whether an employee who innovates in-house would feel the same sense of personal accomplishment.⁹⁹ On the other hand, for risk-averse employees who know that most startups fail, the compromise of being able to pursue an innovative idea while keeping a steady paycheck favors intrapreneurship.¹⁰⁰

Finally, I turn to the best-known and most influential theory on why intrapreneurship often fails: Clayton Christensen’s *The Innovator’s Dilemma*.¹⁰¹ Christensen counterintuitively argues that it is not stodgy old corporations resistant to change that get disrupted.¹⁰² Instead, he observes that “[c]orporate executives often bet the future of billion-dollar enterprises on an innovation,” citing IBM, DuPont, and Corning as examples.¹⁰³ Indeed, even though New Coke was a spectacular failure, the corporate employees who developed it were given raises and promotions.¹⁰⁴ Christensen contends that it is actually *well-run*

96. Gilson, *supra* note 20, at 899.

97. See Bankman & Gilson, *supra* note 3, at 305–06 (“Employees do not regard venture capital entrepreneurship as an identical substitute for continued employment. Employees have different utility functions . . .”).

98. See *supra* notes 51–60 and accompanying text (discussing the glorification of entrepreneurs).

99. See *id.* at 306 (“[A]n employee may positively value the opportunity to be her own boss, as well as the favorable cultural image of an entrepreneur.”).

100. See *id.* (discussing an employee’s risk calculus and considerations).

101. While Christensen made the problems with large corporations innovating famous, other commentators had made similar observations. See, e.g., Rebecca Henderson, *Underinvestment and Incompetence as Responses to Radical Innovation: Evidence from the Photolithographic Alignment Equipment Industry*, 24 RAND J. ECON. 248, 251, 267–68 (1993) (contending that large corporations focus on incremental improvements while startups are more likely to engage in radical innovation).

102. See CHRISTENSEN & RAYNOR, THE INNOVATOR’S SOLUTION, *supra* note 90, at 2–3 (discussing corporations insistent on focusing on their core business).

103. *Id.* at 7.

104. See Bedda, *supra* note 78 (“Even though the product was a complete

organizations that fail at intrapreneurship.¹⁰⁵ For starters, Christensen distinguishes between two types of possible innovations: *sustaining* and *disruptive*. Sustaining innovations are improvements on a corporation's existing products that are already popular with its customers,¹⁰⁶ while disruptive innovations are truly revolutionary ideas that create new markets and new customers.¹⁰⁷ For example, a "new and improved" Crest toothpaste is a sustaining innovation, whereas Crest white strips are a disruptive innovation.¹⁰⁸

Unlike Procter & Gamble's success with Crest, Christensen argues that most large corporations only offer the "new and improved" sustaining innovation.¹⁰⁹ Why? As Christensen explains: "*good management itself* was the root cause [of failing to consider disruptive innovations]. Managers played the game the way it was supposed to be played . . . listening carefully to customers . . . and investing resources to design and build higher-

flop, the guys who invented New Coke, were given raises and promotions instead of being canned.").

105. See THE INNOVATOR'S DILEMMA, *supra* note 23, at xv (showing that "in the cases of well-managed firms such as those cited above, *good* management was the most powerful reason they failed to stay atop their industries").

106. See *id.* at xviii ("What all sustaining technologies have in common is that they improve the performance of established products . . ."); *id.* ("Most technological advances in a given industry are sustaining in character.").

107. See *id.* (noting disruptive innovations "result in *worse* product performance, at least in the near-term").

108. See Robert D. Hof, *Innovate or Die*, BLOOMBERG (Oct. 6, 2003), <http://www.bloomberg.com/bw/stories/2003-10-05/innovate-or-die> (last visited Dec. 15, 2016) ("Procter & Gamble Co . . . does more than simply offer 'new and improved' toothpaste. In 2001, it launched Crest Whitestrips, a home tooth-whitening product that created a new market . . .") (on file with the Washington and Lee Law Review). Similarly, Wal-Mart and Kmart were disruptive innovations to high-end department stores in the 1960s. See CHRISTENSEN & RAYNOR, THE INNOVATOR'S SOLUTION, *supra* note 90, at 46 ("In the 1960s, discount retailers such as Wal-Mart and Kmart attacked the low end of department stores' market—nationally branded hard goods such as paint, hardware, kitchen utensils, toys, and sporting goods—that were so familiar in use that they could sell themselves."). There are also "hybrid" disruptors such as Charles Schwab, which "stole some customers from full-service brokers with its discounted trading fees, but it also created new markets by enabling people who historically were not equity investors—such as students—to begin owning and trading stocks." *Id.* at 47.

109. See CHRISTENSEN & RAYNOR, THE INNOVATOR'S SOLUTION, *supra* note 90, at 40–41 (discussing the use of sustaining inventions by companies).

performance [and] higher-quality products”¹¹⁰ Conversely, disruptive innovations often start downstream, chasing new customers in less-desirable, less-profitable markets.¹¹¹

Asymmetries that exist within large corporations cause the innovator’s dilemma. First, well-run corporations suffer from *asymmetric motivation*, meaning they have “value networks” that prioritize the needs of their largest customers.¹¹² Therefore, large corporations do not have the motivation to invest in technologies that will move them downstream into less desirable markets.¹¹³ Per Christensen: “Disruptive innovations are complex because their value and application are uncertain, according to the criteria used by incumbent firms.”¹¹⁴ Therefore, managers—especially the important middle managers (discussed below)—will play it safe and pursue non-risky projects with more certain payment streams.¹¹⁵

Second, large corporations also suffer from the problem of *asymmetric information*—i.e., disparities in who knows what inside the corporation. Skilled employees such as engineers may well see disruption coming, and have their own ideas for responding to it, but those ideas do not make their way up the food chain.¹¹⁶ Christensen argues that “while senior managers

110. THE INNOVATOR’S DILEMMA, *supra* note 23, at 112; *see also* Gilson, *supra* note 20, at 905 (“[T]he problem arises precisely because the industry leaders are so good at what they do.”); Philip J. Weiser, *The Internet, Innovation, and Intellectual Property Policy*, 103 COLUM. L. REV. 534, 588 (2003) (“[C]ompanies get locked in to a particular value network, so that they are not able to innovate radically after establishing a platform standard.”).

111. *See* THE INNOVATOR’S DILEMMA, *supra* note 23, at xx (“By and large, a disruptive technology is initially embraced by the least profitable customers in a market. Hence most [large corporations]. . . are rarely able to build a case for investing in disruptive technologies until it is too late.”).

112. *Id.* at 36 (“The concept of the *value network*—the context within which a firm identifies and responds to customers’ needs, solves problems, procures input, reacts to competitors, and strives for profit—is central to this synthesis.”).

113. *See id.* at 89 (discussing how “leading companies migrate so readily toward high-end markets” but “moving downmarket” does not easily occur); *id.* at 61 (“[I]ncumbent firms are likely to lag in the development of technologies—even those in which the technology involved is intrinsically simple—that only address customers’ needs in emerging value networks.”).

114. *Id.* at 61.

115. *See id.* at 112 (discussing managers’ resource allocation logic).

116. This may not always be true, as R&D departments may not anticipate competitive threats. *See, e.g.*, Lerner, *supra* note 45 (“Traditional R&D doesn’t

may *think* they're making the resource allocation decisions, many of the really critical resource allocation decisions have actually been made long before senior management gets involved"¹¹⁷ Middle managers are actually the key players, and their incentives favor sustaining, not disruptive, innovations.¹¹⁸

As Christensen notes: "Middle managers aren't penalized for *all* failures . . . [b]ut projects that fail because the *market* wasn't there have far more serious implications for managers' careers."¹¹⁹ Therefore, middle managers are likely to reject an employee's disruptive innovations, which by definition have uncertain markets, and instead promote sustaining innovations whose known markets are the corporations' current customers.¹²⁰ Thus, while Bankman and Gilson argue that large corporations know more about a current employee's disruptive idea than a venture capitalist will (the "informational" advantage), the senior management at the corporation might not.¹²¹

Christensen's work, and the buzz around "disruption," was immediately bought into without much challenge—that is until Harvard history professor Jill Lepore penned *The Disruption Machine* in a 2014 issue of the *New Yorker*.¹²² Lepore observed:

do a good job of sniffing out competitive threats. More and more, corporate R&D units tend to focus on a narrow range of projects, thus potentially neglecting disruptive advances that occur outside the company."). An aside: although I generally link them throughout this Article, *risks* from disruptive threats outside the corporation and employee *opportunities* for responding to those risks are distinguishable and may require more nuanced thought on how the difference affects my analysis.

117. THE INNOVATOR'S DILEMMA, *supra* note 23, at 95.

118. *See id.* ("Middle managers have made their decisions about which projects they'll back and carry to senior management—and which they will allow to languish.").

119. *Id.*

120. *See id.* at 119 (observing that managers who choose to pitch disruptive innovations "essentially are picking a fight with a powerful tendency of organizational nature—that customers, not managers, essentially control the investment patterns of a company"); CHRISTENSEN & RAYNOR, THE INNOVATOR'S SOLUTION, *supra* note 90, at 10 ("Middle managers typically hesitate to throw their weight behind new product concepts whose market is not assured. If a market fails to materialize, the company will have wasted millions of dollars.").

121. *See* Bankman & Gilson, *supra* note 3, at 295–97 (discussing how large companies have better information than VCs both as to the employee generally and to her innovation).

122. Jill Lepore, *The Disruption Machine: What the Gospel of Innovation*

“Most big ideas have loud critics. Not disruption.”¹²³ Lepore changed that, and others have followed.¹²⁴

The critiques generally fall into two categories. First, Lepore claimed that Christensen’s case studies in *The Innovator’s Dilemma* do not actually support his theories.¹²⁵ Others have made similar claims, perhaps most significantly, Dartmouth business school professor Andrew King and graduate student Baljir Baatartogtokh.¹²⁶ Christensen has hit back at his critics, noting that matters of disruption happen differently in different industries, and that his theories continue to evolve (as addressed

Gets Wrong, NEW YORKER (June 23, 2014), <http://www.newyorker.com/magazine/2014/06/23/the-disruption-machine> (last visited Dec. 15, 2016) (on file with the Washington and Lee Law Review).

123. *Id.*

124. *See infra* notes 125–131 (discussing the range of criticism).

125. For example, on the disk-drive industry case studies, Lepore argues: “Most of the entrant firms celebrated by Christensen as triumphant disrupters . . . no longer exist, their success having been in some cases brief and in others illusory.” *See* Lepore, *supra* note 122. She then goes further by stating that, in the long term

victory in the disk-drive industry appears to have gone to the manufacturers that were good at incremental improvements, whether or not they were the first to market the disruptive new format. Companies that were quick to release a new product but not skilled at tinkering have tended to flame out.

Id. On the mechanical excavation case studies, Lepore states that Christensen counted thirty established companies in the 1950s but stated that only four survived the entrance of thirteen so-called “disruptive newcomers” by the 1970s. *Id.* However, Lepore points out that many of these newcomers had been in the industry for years. *Id.* In particular, O&K was founded in 1876 and made cable-operated shovels since 1908; Demag had been building excavators since 1925; and Hitachi, founded in 1910, sold cable-operated shovels before World War II. *Id.* Lepore reports that Christensen also focused heavily on Bucyrus and stated that its profits began to decline due to the disruptive hydraulics technology in the industry. *Id.* However, Lepore points out that Bucyrus’s profits grew twenty-five-fold between 1962 and 1979 and was purchased by Caterpillar in 2011 for \$9 billion. *Id.*

126. *See* Andrew A. King & Baljir Baatartogtokh, *How Useful Is the Theory of Disruptive Innovation?*, 57 MIT SLOAN MGMT. REV. 77, 78 (2015) (summarizing their view of Christensen’s theories, attempting to determine whether seventy-seven of Christensen’s own examples conformed to his theories (as they understood them), and finding that only seven of the examples (or 9%) fit the four criteria they attribute to Christensen).

in subsequent work) but are still fundamentally correct as originally set forth.¹²⁷

A second critique is how broadly Christensen's theory has been applied.¹²⁸ Some examples of areas ripe for disruption are museums, hospitals, schools, universities, journalism, and politics. But these areas involve different constituencies and considerations than business.¹²⁹ Christensen himself is to blame for some of the disruption overuse, as he has penned books applying disruption to other areas¹³⁰ while simultaneously hesitating at how broadly his theory is being applied.¹³¹

127. Drake Bennett, *Clayton Christensen Responds to New Yorker Takedown of 'Disruptive Innovation,'* BLOOMBERG BUSINESS (June 21, 2014), <http://www.bloomberg.com/bw/articles/2014-06-20/clayton-christensen-responds-to-new-yorker-takedown-of-disruptive-innovation> (last visited Dec. 15, 2016) (on file with the Washington and Lee Law Review). In response to King and Baartartogtokh, Christensen argues that “the rigor of their research was greatly lacking,” and “doesn’t demonstrate a thorough understanding of how disruption plays out in different industries.” Jay Fitzgerald, *'Disruptive Innovation' Theory Comes Under Scrutiny,* BOS. GLOBE (Oct. 24, 2015), <https://www.bostonglobe.com/business/2015/10/23/disruption-economic-theory-faces-detractors/ZruX6qvCjNb7Eh5XdujPLI/story.html> (last visited Dec. 15, 2016) (on file with the Washington and Lee Law Review).

128. See Haydn Shaughnessy, *What Did the Innovator's Dilemma Get Wrong?*, FORBES (June 27, 2014), <http://www.forbes.com/sites/haydnshaughnessy/2014/06/27/what-did-innovators-dilemma-get-wrong/> (last visited Dec. 15, 2016) (supporting Lepore's article because it challenges the business elite as having too much power in shaping intellectual discussions) (on file with the Washington and Lee Law Review).

129. See Dave Beal, *Disrupting 'Disruption': Skepticism Grows about One of Business's Biggest Ideas,* MINNPOST (Nov. 19, 2015) <https://www.minnpost.com/business/2015/11/disrupting-disruption-skepticism-grows-about-one-business-biggest-ideas> (last visited Dec. 15, 2016) (explaining that employing disruption beyond business is “typically more complicated because they have direct stakeholders beyond primary shareholders. For example, public schools have to deal with administrators, teachers, students and parents”) (on file with the Washington and Lee Law Review).

130. See, e.g., CLAYTON M. CHRISTENSEN, *THE INNOVATOR'S PRESCRIPTION: A DISRUPTIVE SOLUTION FOR HEALTH CARE* xix–xx (2009) (relating to the health care industry); CLAYTON M. CHRISTENSEN & HENRY J. EYRING, *THE INNOVATIVE UNIVERSITY: CHANGING THE DNA OF HIGHER EDUCATION FROM THE INSIDE OUT* XXIV–XXV (2011) (relating to higher education).

131. See King & Baartartogtokh, *supra* note 126, at 78 (discussing Christensen's “theory, or variations thereof, has been used in so many settings that Christensen himself has expressed unease with some of the ways the theory is being applied”); Globe Staff, *Clay Christensen Explains, Defends 'Disruptive Innovation,'* BOS. GLOBE (Oct 25, 2015),

First, I cannot say whether Christensen or his critics are correct on the empirics of disruption. However, I am more concerned with certain parts of his work, namely the asymmetries he identifies within large corporations. In short, I am more interested in Christensen's identification of structures/institutional roadblocks to large corporations pursuing disruptive innovations than his case studies. As to the overuse critique, intrapreneurship (my focus) sits squarely in the business world, Christensen's original battle sphere, so whether it applies elsewhere is irrelevant to my project. Thus, for my purposes, the triumphs of the innovator's dilemma still trump the critiques.

III. Solving the Innovator's Dilemma

So that, in a nutshell, is the innovator's dilemma. Well-managed corporations do not pursue significant, disruptive innovations—instead leaving them to startups—because their value networks are built around serving existing customers through safer sustaining innovations. Yet ultimately in the examples Christensen identifies in his book, “it was disruptive technology that precipitated the leading firms' failure.”¹³² Thus, if large corporations are to survive, they must engage in disruptive innovation in some form or another. The remainder of the Article is devoted to two possible approaches: 1) large corporations getting better at pursuing disruptive innovations in-house; or 2), large corporations continuing to mostly pursue sustaining innovations in-house, but establishing venture arms to fund startups (so-called “corporate venture capital”).¹³³

This Part and Part IV focus on improving efforts at intrapreneurship, both from an organizational and business perspective and by detouring into corporate law.¹³⁴ Part V

<https://www.bostonglobe.com/business/2015/10/24/clay-christensen-explains-defends-disruptive-innovation/fmYOKIJJXOSPPMquj8HQM10/story.html> (last visited Dec. 15, 2016) (“The word disruption has many connotations in the English language. I just didn't realize how that would create such a wide misapplication of the word ‘disruption’ into things that I never meant it to be applied to.”) (on file with the Washington and Lee Law Review).

132. THE INNOVATOR'S DILEMMA, *supra* note 23, at xviii.

133. *Infra* Parts IV–V.

134. *Infra* Parts III–IV.

examines corporate venture capital as a possible win-win hybrid approach between entrepreneurship and intrapreneurship.¹³⁵

A. Christensen's Answer

How do corporations overcome the innovator's dilemma and improve at intrapreneurship? In his follow-up book *The Innovator's Solution*, Christensen revisits the two asymmetry problems identified in *The Innovator's Dilemma* and offers some solutions.¹³⁶

First, to overcome the myopic focus on high-end customers (the asymmetric motivation problem), Christensen proposes that corporations "set up an autonomous organization charged with building a new and independent business around the disruptive technology."¹³⁷ He notes that successful intrapreneurial corporations have "placed projects to develop disruptive technologies in organizations small enough to get excited about small opportunities and small wins."¹³⁸ Numerous examples in his book reveal how a new organizational unit is not hamstrung by the existing value networks of the corporation.¹³⁹ Bankman

135. *Infra* Part V.

136. See CHRISTENSEN & RAYNOR, *THE INNOVATOR'S SOLUTION*, *supra* note 90, at 268–71 (discussing the role of managers in promoting intrapreneurship).

137. *THE INNOVATOR'S DILEMMA*, *supra* note 23, at xxiv; see also Roland Bel, *Innovation: Misconceptions, Trends, and Directions*, 32 *GLOBAL BUS. & ORGANIZATIONAL EXCELLENCE* 71, 79 (2013) (describing 3M's intrapreneurial incentives and noting that "if the new product achieves a certain level of success, a business unit is created and the product champion is given the opportunity to head it, a very prestigious position").

138. *THE INNOVATOR'S DILEMMA*, *supra* note 23, at 114; see also Gilson, *supra* note 20, at 906–07 ("Christensen recommends that the established company hedge the potential that a technology is disruptive by creating a separate unit . . . If the technology ultimately proves disruptive, the established company has the resources to grow the small separate unit quickly.").

139. See Gilson, *supra* note 20, at 121 (noting Quantum financed and held 80% ownership in a spin-off to develop a new disk drive that was housed in a separate location and "was a completely self-sufficient organization"); *id.* at 127 (observing IBM succeeded at the beginning of the personal computing industry because it "created an autonomous organization in Florida, far away from its New York state headquarters" that had complete freedom of operation); *id.* at 134 ("HP created a completely autonomous organizational unit, located in Vancouver, Washington, with responsibility for making the ink-jet printer a success.").

and Gilson likewise point to the intrapreneurial corporation Thermo Electron, which “appears to exemplify the employer who never loses an auction of an employee’s innovation to a venture capitalist.”¹⁴⁰ Thermo Electron creates new subsidiaries each time an employee comes up with a viable idea for a business, and the employee gets “an entrepreneur’s equity stake in the venture.”¹⁴¹

Second, regarding ideas from below not reaching top management (the asymmetric information problem), Christensen argues that disruptive ideas must be allowed to percolate up the food chain instead of being killed at the middle-manager level.¹⁴² His thoughts on how to accomplish this mostly consist of vague statements such as: “senior executives need to stand astride the interface between sustaining innovations and disruption,” and “managers of the mainstream business units need to be fully informed of the technological and business model innovations that are developed” elsewhere in the corporation.¹⁴³ In Part IV, I offer some thoughts on how corporate law can help disruptive ideas better flow up the organizational ladder.

Christensen’s work is richer than I have summarized, but this one-two goal of senior management *learning* about disruptive innovations, then *pursuing* them in independent units is at the core of the innovator’s solution.¹⁴⁴ Note that this is not a full-on shift to pursuing disruptive over-sustaining innovations, but a nimble balance between the two, such as Crest struck with improved toothpaste and white strips.¹⁴⁵ On the one hand, the corporation focuses on its core business and sustaining innovations, while small units within the corporation

140. Bankman & Gilson, *supra* note 3, at 299.

141. *Id.*

142. See CHRISTENSEN & RAYNOR, THE INNOVATOR’S SOLUTION, *supra* note 90, at 270 (observing that middle managers often only send information to senior management that will win senior management’s approval).

143. *Id.* at 271.

144. See *id.* at 268 (indicating that the development of a disruptive growth engine will place a company on a path to profitability).

145. See *id.* at 271 (determining that to develop a successful disruptive growth engine, managers must learn about both the sustaining and disruptive sides of the interface).

pursue riskier, disruptive innovations.¹⁴⁶ This nimbleness is what Ronald Gilson has termed “organizational ambidexterity.”¹⁴⁷

B. Borrowing from Entrepreneurship: What Makes a Good Entrepreneur?

Interestingly, an examination of the *entrepreneurship* literature reveals themes similar to those discussed above.¹⁴⁸ In short, successful entrepreneurs are both superior risk takers and superior risk identifiers.

First, harkening back to the days of Frank Knight, scholars have long thought of entrepreneurs as risk takers.¹⁴⁹ This personality trait of entrepreneurs is academically-termed ‘risk tolerance’ and aligns with the general human intuition of why entrepreneurs are successful—colloquially, they are more likely to “stick their neck out.”¹⁵⁰ On the other hand, Robert Brockhaus compared

146. See *id.* at 280 (directing that implementing a disruptive growth engine requires appointing senior managers who monitor resource allocation and creating an expert team of innovators).

147. See Gilson, *supra* note 20, at 891 (“Can the same organization and financing arrangements successfully support development of the dominant technology while simultaneously supporting development of the technology that will supplant [it] . . . ?”).

148. See generally CHRISTENSEN & RAYNOR, *THE INNOVATOR’S SOLUTION*, *supra* note 90; *infra* note 149 and accompanying text (discussing entrepreneurs’ trait of “risk tolerance”).

149. See FRANK KNIGHT, *RISK, UNCERTAINTY, AND PROFIT* 41 (1921) (describing risk-taking as the essential function of an entrepreneur); see also Yakov Amihud & Baruch Lev, *Risk Reduction as a Managerial Motive for Conglomerate Mergers*, 12 *BELL J. ECON.* 605, 606 (1981) (positing that managers in large corporations are risk averse); Lowell W. Busenitz & Jay B. Barney, *Differences Between Entrepreneurs and Managers in Large Organizations: Biases and Heuristics in Strategic Decision-Making*, 12 *J. BUS. VENTURING* 9, 10 (1997) (citing prior academic work describing academics as “risk-takers and rugged individualists” and “as being a ‘breed apart’” (citations omitted)); William I. Norton, Jr. & William T. Moore, *The Influence of Entrepreneurial Risk Assessment on Venture Launch or Growth Decisions*, 26 *SMALL BUS. ECON.* 215, 215 (2006) [hereinafter *Entrepreneurial Risk Assessment*] (“There is a broadly held perception that entrepreneurs engage in risky behavior . . . [and that this] suggests differential predispositions and actions across entrepreneurs and nonentrepreneurs.”).

150. See William I. Norton, Jr. & William T. Moore, *Entrepreneurial Risk: Have We Been Asking the Wrong Question?*, 18 *SMALL BUS. ECON.* 281, 281 (2002) (discussing long-held notions about an entrepreneur’s superior risk

entrepreneurs and corporate managers and found no significant differences in terms of their risk tolerance.¹⁵¹ Brockhaus's study found that "the level of risk taking propensity does not distinguish new entrepreneurs either from managers or from the general population[.]" as all were deemed 'moderate' risk takers.¹⁵² Follow-up work has echoed this claim.¹⁵³

Certainly the conventional wisdom holds—risk taking is at the heart of the entrepreneurial enterprise. But scholars have also now identified entrepreneurs as superior risk *identifiers*.¹⁵⁴ This shift in thought moves away from how much risk an entrepreneur took and towards entrepreneurs' versus others' assessment of new projects.¹⁵⁵ William Norton and William Moore have published a number of articles that hypothesize, and to a certain degree aim to empirically test, that while "[e]ntrepreneurs will not differ significantly in risk taking propensity from nonentrepreneurs [e]ntrepreneurs will

tolerance); Ruth Simon, *Endangered Species: Young U.S. Entrepreneurs: New Data Underscore Financial Challenges and Low Tolerance for Risk Among Young Americans*, WALL ST. J. (Jan. 2, 2015), <http://www.wsj.com/articles/endangered-species-young-u-s-entrepreneurs-1420246116> (last visited on Dec. 15, 2016) ("The share of people under age 30 who own private businesses has reached a 24-year-low, according to new data, underscoring financial challenges and a *low tolerance for risk* among young Americans." (emphasis added)) (on file with the Washington and Lee Law Review); see also Steve Strauss, *Can Entrepreneurs Avoid Risk? A: No Way*, USA TODAY (Oct. 27, 2015), <http://www.usatoday.com/story/money/columnist/strauss/2015/10/27/strauss-small-business-risk/74683398/> (last visited Dec. 15, 2016) ("Risk is part of the game and if you want to start a business, you simply have to be risk-tolerant.") (on file with the Washington and Lee Law Review); Neil Patel, *The Entrepreneur's 8-Step Checklist For Taking A Business Risk*, FORBES (Aug. 14, 2015), <http://www.forbes.com/sites/neilpatel/2015/08/14/the-entrepreneurs-8-step-checklist-for-taking-a-business-risk/> (last visited Dec. 15, 2016) (explaining that entrepreneurial success is the result of "pure chance, hard work, and taking risks") (on file with the Washington and Lee Law Review).

151. See Robert H. Brockhaus, Sr., *Risk Taking Propensity of Entrepreneurs*, 23 ACAD. MGMT. J. 509, 519 (1980) (deducing that there was no significant difference in risk propensity between entrepreneurs and managers).

152. *Id.* at 518–19.

153. See Busenitz & Barney, *supra* note 148, at 11 ("[I]t is now often concluded that most of the psychological differences between entrepreneurs and managers in large organizations are small or nonexistent.").

154. See Norton & Moore, *supra* note 149, at 222 (concluding that entrepreneurs assess risk more favorably).

155. See PATRICK R. LILES, *NEW BUSINESS VENTURES AND THE ENTREPRENEUR* 13 (1974) (discussing the "potential entrepreneur's *perception* of the risk involved" (emphasis added)).

assess venture opportunities more favorably than nonentrepreneurs.”¹⁵⁶ More specifically, they argue that “entrepreneurs do not necessarily possess character traits which predispose them to engage in behavior with widely variable outcomes, but rather that entrepreneurs *assess* opportunities differently than non-entrepreneurs.”¹⁵⁷

This is primarily because of an entrepreneur’s prior experiences.¹⁵⁸ Lowell Busenitz and Jay Barney give more context to this argument, finding that entrepreneurs are more willing to generalize from past experiences than corporate managers.¹⁵⁹ These traits lead to different ways in which entrepreneurs and corporate managers “perceive and think about risk.”¹⁶⁰ Even Malcolm Gladwell has picked up on these ideas, writing: “The risk-taking model suggests that the entrepreneur’s chief advantage is one of temperament—he’s braver than the rest of us are. In the [new] model, the entrepreneur’s advantage is analytical—he’s better at figuring out a sure thing than the rest of us.”¹⁶¹

IV. Intrapreneurship and Corporate Law

Having laid out the asymmetry problems inside large corporations that hinder intrapreneurship, and having observed that successful *entrepreneurs* overcome these problems, my attention turns to what limited role corporate law might play here.¹⁶² Limited

156. Norton & Moore, *supra* note 149, at 218.

157. Norton & Moore, *supra* note 150, at 281.

158. *See id.* at 281, 285 (labeling an entrepreneur’s past experiences as “personal prior information”).

159. *See* Busenitz & Barney, *supra* note 149, at 25 (concluding that entrepreneurs are more likely to use biases and heuristics in their decision-making).

160. *Id.*

161. Malcolm Gladwell, *The Sure Thing*, NEW YORKER (Jan. 18, 2010) <http://gladwell.com/the-sure-thing> (last visited Dec. 15, 2016) (on file with the Washington and Lee Law Review); *see also* Viktor Mayer-Schonberger, *The Law as Stimulus: The Role of Law in Fostering Innovative Entrepreneurship*, 6 J. L. & POL’Y FOR INFO. SOC’Y 153, 172–74 (2010) (determining that entrepreneurs succeed either because they have better information than others or assess the same information in a superior manner).

162. Smith & Ibrahim, *supra* note 19, at 1539 (“[A] legal system can facilitate the creation of entrepreneurial opportunities by emboldening

liability and bankruptcy laws play a well-known role in encouraging entrepreneurship. What about law and intrapreneurship? I reveal below that the business judgment rule and the duty to monitor—two important corporate law doctrines—reduce asymmetry problems in large corporations and thus encourage intrapreneurship.

A. Risk Taking and the Business Judgment Rule

The corporate law doctrine that encourages management to take risks in the face of uncertainty, such as pursuing disruptive innovations, is the business judgment rule. The business judgment rule, corporate law's defining doctrine,¹⁶³ insulates management (most notably boards of directors) from personal liability for honest business decisions that turn out poorly.¹⁶⁴ There are many proffered rationales for the business judgment rule¹⁶⁵—the one I focus on is encouraging risk-taking.¹⁶⁶

entrepreneurs to act.”); *see also* Amir N. Licht, *The Entrepreneurial Spirit and What the Law Can Do About It*, 28 COMP. LAB. L. & POL'Y J. 817, 850 (2007) (discussing how the law is a powerful tool for impacting entrepreneurial activity).

163. *See* Bainbridge, *supra* note 32, at 83 (“The business judgment rule pervades every aspect of state corporate law, from the review of allegedly negligent decisions by directors, to self-dealing transactions, to board decisions to seek dismissal of shareholder litigation, and so on.”).

164. *See* Aronson v. Lewis, 473 A.2d 805, 812 (Del. 1984) (noting that the business judgment rule is a presumption that the directors “acted on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the company”); *see also* Kaye v. Lone Star Fund V, 453 B.R. 645, 678 (N.D. Tex. 2011) (“Under Delaware law, the business decisions of a company’s directors or officers are insulated from court review by the business judgment rule . . .” (emphasis added)).

165. The other main rationales beyond encouraging directors to take risks are that judges are not business experts and that we should encourage outside directors to serve on boards. *See* Dodge v. Ford Motor Co., 170 N.W. 668, 684 (Mich. 1919) (“The judges are not business experts.”); Kamin v. Am. Express Co., 383 N.Y.S.2d 807, 810–11 (Sup. Ct. 1976) (App. Div. 1976) (“The directors’ room rather than the courtroom is the appropriate forum for thrashing out purely business question . . .”); William T. Allen, Jack B. Jacobs & Leo E. Strine, Jr., *Realigning the Standard of Review of Director Due Care with Delaware Public Policy: A Critique of Van Gorkom and Its Progeny as a Standard of Review Problem*, 96 NW. U. L. REV. 449, 449 (2002) (“Highly qualified directors may also avoid service if they face liability risks that are disproportionate to the benefits of service.”).

166. *See* Sandra K. Miller, *What Standards of Conduct Should Apply to*

The basic economic calculus for shareholders and directors differs when it comes to taking significant risks. As Stephen Bainbridge outlined, the shareholders of large corporations “will have a high tolerance for risky corporate projects” for two reasons.¹⁶⁷ First, under corporate law, shareholders enjoy limited liability, meaning that if a risky project fails, the shareholders only suffer that loss to the extent of their capital investment—their personal fortune is not at risk.¹⁶⁸ Second, shareholders in large corporations tend to also be shareholders in other large corporations; i.e., they hold a diversified portfolio of investments.¹⁶⁹ Thus, risky projects that fail for one corporation can be offset by risky projects that succeed in another.¹⁷⁰

The directors’ economics are much different. Directors cannot diversify their human capital to the extent that shareholders can diversify their financial capital.¹⁷¹ There are only so many boards on which a director can sit and adequately do her job; thus, directors make firm-specific human capital investments.¹⁷² Also, while directors earn compensation from the corporations they serve, both through salary and stock options, theirs is a relatively small ownership percentage in the corporation. Thus, without the business judgment rule, if directors take on a risky project, they

Members and Managers of Limited Liability Companies?, 68 ST. JOHN’S L. REV. 21, 41 (1994) (“The policy underlying the [business judgment] rule encourages risk taking, innovation, and creative entrepreneurial activities.”); Michael C. Pollack, *Judicial Deference and Institutional Character: Homeowners Associations and the Puzzle of Private Governance*, 81 U. CIN. L. REV. 839, 875 (2013) (“The business judgment rule is a means of incentivizing innovation and risk-taking in the development of new products and business methods.”).

167. Bainbridge, *supra* note 32, at 111.

168. *See id.* (“Because shareholders thus do not put their personal assets at jeopardy, other than the amount initially invested, they effectively externalize some portion of the business’ total risk exposure to creditors.”).

169. *See id.* at 112 (“[S]hareholders can largely eliminate firm-specific risk by holding a diversified portfolio . . .”).

170. *See id.* (citing that shareholders of large corporations tend to diversify to account for risk).

171. *See id.* at 113 (“[M]anagers obviously cannot diversify their human capital among a number of other firms.”).

172. *See id.* (“Corporate managers typically have substantial firm-specific capital.”).

enjoy only a limited upside if it succeeds, but face a significant downside if it fails.¹⁷³

By encouraging directors to take risks that shareholders would want, the business judgment rule aligns director-shareholder interests.¹⁷⁴ As Chancellor Allen colorfully put it, to allow directors to be liable for risky projects gone bad where “the investment was too risky (foolishly risky! stupidly risky! egregiously risky!)—you supply the adverb[,]” would “be very destructive of shareholder welfare in the long-term.”¹⁷⁵

Thus, perhaps an important reason why previous entrepreneurial studies have found little difference in risk-taking appetites among managers in large corporations and entrepreneurs in startups is because *corporate law evens the playing field*.¹⁷⁶ It permits management who might otherwise be disinclined to pursue risky projects to do so without the fear of personal liability.¹⁷⁷ In sum, the risk-taking encouraged by the

173. See *Gagliardi v. TriFoods Int'l, Inc.*, 683 A.2d 1049, 1052 (Del. Ch. 1996) (determining that without the business judgment rule, there would be “this stupefying disjunction between risk and reward for corporate directors”).

174.

The [business judgment] rule could rationally be no different . . . Shareholders don't want (or shouldn't rationally want) directors to be risk averse. Shareholders' investment interests, across the full range of their diversifiable equity investments, will be maximized if corporate directors and managers honestly assess risk and reward and accept for the corporation the highest risk adjusted returns available that are above the firm's cost of capital.

Id.

175. *Id.* at 1052–53. This position is not without its critics. Writing after the Financial Crisis of 2008, David Rosenberg argues that the “widely accepted notion that the business judgment rule should protect virtually all risk-taking by corporate directors goes too far.” David Rosenberg, *Supplying the Adverb: The Future of Corporate Risk-Taking and the Business Judgment Rule*, 6 BERKELEY BUS. L.J. 216, 220 (2009); see also Karl S. Okamoto & Douglas O. Edwards, *Risk Taking*, 32 CARDOZO L. REV. 159, 160 (2010) (proposing a nuanced approach on the idea of financial risk-taking).

176. See *supra* note 173 and accompanying text (citing the business judgment rule as a corporate law structure in which risk taking among managers is evaluated similarly to risk taking of entrepreneurs).

177. According to Charles O'Kelley, Frank Knight's seminal work, *Risk, Uncertainty, and Profit*, anticipated this connection to some extent. See Charles R. T. O'Kelley, *Berle and the Entrepreneur*, 33 SEATTLE U. L. REV. 1141, 1148 (2010) (discussing FRANK H. KNIGHT, *RISK, UNCERTAINTY, AND PROFIT* (2009)). The article explains: “Knight believed that a proper understanding of the nature of business judgment would lead to a discovery that the modern corporation was

business judgment rule can help reduce the asymmetric motivation problem inside large corporations.¹⁷⁸ To pursue both sustaining and disruptive innovations simultaneously, management can establish a new organizational unit within the corporation or form a new corporate subsidiary to house the intrapreneurial project.¹⁷⁹ Both decisions would be protected by the business judgment rule.

B. Risk Identification and the Duty to Monitor

Next I turn to the other asymmetry that lies at the heart of the innovator's dilemma: the asymmetric information problem. That is, senior management (including the board of directors) not learning of disruptive employee innovations hatched below them.¹⁸⁰

1. The Modern Duty to Monitor

The corporate law doctrine that most aptly speaks to risk identification is the duty to monitor.¹⁸¹ The modern formulation of the duty to monitor was first set forth in 1996 by the Delaware

actually managed and controlled by an approximation of the classic entrepreneur." *Id.* See also *id.* at 1149 (noting the "apparent separation of the functions of making decisions and taking the 'risk' of error in decisions" inside the corporation).

178. See *supra* note 174 and accompanying text (arguing that the business judgment rule gives managers within a corporation more leeway to utilize disruptive ideas).

179. See Victor Fleischer, *Options Backdating, Tax Shelters, and Corporate Culture*, 26 VA. TAX REV. 1031, 1048 (2007) ("[L]arge, bureaucratic organizations sometimes develop 'skunkworks': small, subversive units within a larger organization charged with developing technological innovation.").

180. See CHRISTENSEN & RAYNOR, *supra* note 90 (citing that middle management often censors information that it sends to upper management).

181. A preliminary note: the entrepreneurship literature often conflates or uses interchangeably risk *identification* and risk *assessment*, which are actually two different notions. The duty to monitor might help directors identify risks, but legal doctrine does not speak to how directors bring to bear their experiences and judgments in assessing those risks. See *In re Caremark Int'l Inc.*, 698 A.2d 959, 967 (Del. Ch. 1996) (setting forth the modern formulation of the duty to monitor).

Chancery Court in *In Re Caremark*.¹⁸² *Caremark* rejected prior notions that directors were only required to monitor employees if “red flags” existed, and instead made instituting a monitoring system a mandatory requirement.¹⁸³ Through this pronouncement, Chancellor Allen recognized that most activity within a large corporation happens below the board level and sought to increase the board’s awareness of subordinate action.¹⁸⁴

The *Caremark* decision led commentators to speculate that the new duty to monitor would be a significant change in directors’ duties under Delaware law.¹⁸⁵ Yet, *Caremark* itself had limited reach for several reasons. First, it was a settlement opinion, and thus largely dicta.¹⁸⁶ Second, although the Delaware Supreme Court later disputed this, at the time it was fairly obvious that the duty to monitor was treated as a subset of the duty of care, and thus subject to exculpation under DGCL Section 102(b)(7).¹⁸⁷ Further, even without exculpation, the duty did not seem difficult to satisfy, as a good faith attempt at a monitoring system was sufficient and the details of the system were left to the directors’ business judgment.¹⁸⁸

182. See *id.* (setting forth the modern formulation of the duty to monitor).

183. See *Graham v. Allis-Chalmers Mfg. Co.*, 188 A.2d 125, 130 (Del. 1963) (observing that middle managers often only send information to senior management that will win senior management’s approval and that “absent cause for suspicion there is no duty upon the directors to install and operate a corporate system of espionage to ferret out wrongdoing”).

184. See Bernard S. Sharfman, *Enhancing the Efficiency of Board Decision Making: Lessons Learned from the Financial Crisis of 2008*, 34 DEL. J. CORP. L. 813, 847 (2009) (“In *Caremark*, Chancellor Allen explained that he wanted a board to be more actively involved in company oversight and monitoring.”).

185. See, e.g., Hillary A. Sale, *Monitoring Caremark’s Good Faith*, 32 DEL. J. CORP. L. 719, 719–20 (2007) (“[F]ormer Chancellor Allen’s opinion *In Re Caremark International Derivative Litigation* is destined to be one of the most prominent Delaware opinions of all time.”).

186. See generally *In re Caremark Int’l Inc.*, 698 A.2d at 960 (assessing the strengths and weaknesses of the respective claims to evaluate the fairness of the settlement agreement at issue).

187. See Del. Code Ann. tit. 8, § 102(b)(7) (West 2015) (allowing corporations to preemptively absolve directors of personal liability for violating the duty of care).

188. See *In re Caremark Int’l Inc.*, 698 A.2d 959, 970 (Del. Ch. 1996) (“[A] director’s obligation includes a duty to attempt in good faith to assure that a corporate information and reporting system . . . exists, and that failure to do so under some circumstances may . . . render a director liable for losses caused by non-compliance with applicable legal standards.”).

Caremark's progeny have had more reach. Most notably, *Stone v. Ritter*¹⁸⁹ presented the Delaware Supreme Court with the opportunity to examine "a classic *Caremark* case."¹⁹⁰ In *Stone*, as in *Caremark*, illegal conduct by corporate employees led to the U.S. government imposing a fine on the corporation.¹⁹¹ The shareholders sued to have the directors repay the fine to the corporate treasury.¹⁹² The *Stone* Court affirmed the *Caremark* monitoring standard but with two changes.¹⁹³ First, the Court proclaimed that the fiduciary duty being breached by not monitoring was good faith, a subset of loyalty, to which neither 102(b)(7) or the business judgment rule apply.¹⁹⁴ Second, the Court clarified that the directors must not only install a monitoring system, they must use it.¹⁹⁵ For instance, a board cannot employ a compliance officer and never hear from her claiming that never receiving a report is a matter of business judgment.¹⁹⁶

Still, only an "utter failure" to monitor results in liability, and the duty to monitor only requires monitoring for certain actions—namely, illegal activity specific to the corporation's

189. 911 A.2d 362 (Del. 2006).

190. *Id.* at 364.

191. *See id.* at 365 (determining that defendant had paid close to forty-million dollars in fines); *see also In re Caremark Int'l Inc.*, 698 A.2d at 960 ("Caremark pleaded guilty to a single felony of mail fraud and agreed to pay civil and criminal fines.").

192. *See Stone*, 911 A.2d at 368–69 (citing cases in which shareholders sued directors to personally repay, to the corporate treasury, the fine imposed on the business due to the directors' own legal conduct).

193. *See id.* at 365 (citing *In re Caremark Int'l Inc.*, 698 A.2d 959, 970 (Del. Ch. 1996) (determining a director's duty to monitor)) (concluding that *Caremark* articulated the correct conditions for assessing director oversight liability).

194. *See id.* at 370 ("Where directors fail to act in the face of a known duty to act, thereby demonstrating a conscious disregard for their responsibilities, they breach their duty of loyalty by failing to discharge that fiduciary obligation in good faith."); Stephen M. Bainbridge, Star Lopez & Benjamin Oklan, *The Convergence of Good Faith and Oversight*, 55 UCLA L. REV. 559, 582 (2008) ("[T]he [*Stone*] court subsumed good faith into the duty of loyalty, a marriage we believe will prove most unwise.").

195. *See Stone v. Ritter*, 911 A.2d 362, 370 (Del. 2006) (noting that directors must oversee operations and use monitoring systems).

196. *See id.* at 368 (determining that a board must exercise good faith judgment when receiving compliance reports).

business.¹⁹⁷ In *Caremark* the allegation was failing to monitor employees who violated the federal Anti-Referral Payments Law by providing kickbacks to doctors;¹⁹⁸ in *Stone* the allegation was failing to monitor employees who violated the federal Bank Secrecy Act's anti-money laundering regulations.¹⁹⁹

Failing to appreciate business risks, such as those from disruptive innovation, are outside the specter of illegal conduct. Indeed, in the important 2009 case of *In re Citigroup Inc. Shareholder Derivative Litigation*,²⁰⁰ plaintiff-shareholders suing in the wake of the Great Recession tried to expand the monitoring duty to reach employee activity related to business risks.²⁰¹ The claim in *Citigroup* was “based on defendants’ [directors’] alleged failure to properly monitor Citigroup’s *business risk*, specifically its exposure to the subprime mortgage market.”²⁰² Then-Chancellor Chandler rejected characterizing these as monitoring claims, instead describing them as classic duty-of-care claims “attempting to hold the director defendants personally liable for making (or allowing to be made) business decisions that, in hindsight, turned out poorly for the Company.”²⁰³ The former Chancellor wrote that “[w]hile it may be tempting to say that directors have the same duties to monitor and oversee business risk, imposing *Caremark*-type duties on directors to monitor

197. *Id.* at 364.

198. *In re Caremark Int'l Inc.*, 698 A.2d 959, 961, 964, 967 (Del. Ch. 1996) (alleging that Caremark's board of directors breached their duty of care by “allow[ing] a situation to develop and continue which exposed the corporation to enormous legal liability,” which was in part due alleged “inappropriate referral payments” that violated the Anti-Referral Payments Law).

199. *See Stone*, 911 A.2d at 364–65 (alleging that the directors had breached their duty of oversight by “utterly fail[ing] to implement any sort of statutorily required monitoring, reporting or information controls that would have enabled them to learn” that company employees had not filed Suspicious Activity Reports, “as required by the federal Bank Secrecy Act”).

200. 964 A.2d 106 (Del. Ch. 2009).

201. *See generally id.*

202. *Id.* at 123; *see also id.* at 130 (contrasting another recent monitoring case, *AIG*, and noting that “[u]nlike the allegations in this case, the defendants in *AIG* allegedly failed to exercise reasonable oversight over pervasive *fraudulent* and *criminal* conduct”).

203. *Id.* at 124.

business risk is fundamentally different.”²⁰⁴ This decision has been both criticized²⁰⁵ and supported.²⁰⁶

2. *The Duty to Monitor and Risks from Disruptive Innovation*

The duty of monitoring in its current formulation does not mandate that directors monitor for business risks, including the risk their business will be disrupted by a startup.²⁰⁷ Limiting the duty to monitor to illegal employee activity makes sense due to slippery slope possibilities.²⁰⁸ Further, this is not a normative Article where I reflexively urge expansion of the monitoring duty to encourage more intrapreneurship. Still, I believe the duty to monitor will encourage intrapreneurship for three reasons.

First, as a matter of legal liability, it is possible to distinguish *Citigroup's* facts from disruptive innovation concerns.

204. *Id.* at 131.

205. See Eric J. Pan, *Rethinking the Board's Duty to Monitor: A Critical Assessment of the Delaware Doctrine*, 38 FLA. ST. U. L. REV. 209, 245 (2011) (“What is the point of making the duty to monitor more robust if directors never face out-of-pocket liability?”). Hillary Sale, writing about the duty to monitor before *Citigroup*, cites the case of a General Motors board member who resigned because management was not adequately informing the board, including by not timely sending out materials before board meetings. Sale, *supra* note 185, at 743–44. Sale notes that while the GM situation “does not arise in the context of criminal liability for individuals or the corporation, the lack of ongoing information and preparation by the GM board is, if true, arguably a breach of its good-faith *Caremark/Stone* obligations.” *Id.* at 744. More recent decisions do not seem to have borne this out.

206. See Hurt *supra* note 39, at 259 (2014) (arguing that “not only does a duty to manage financial risk not exist within the prevailing corporate law framework of duties, but also that recognizing a separate duty to manage financial risk would be imprudent” (citation omitted)); Robert T. Miller, *Oversight Liability for Risk-Management Failures at Financial Firms*, 84 S. CAL. L. REV. 47, 103–05 (2010) (arguing that expanding the duty to monitor to risk-management failures would eviscerate business judgment rule); see also Martin Petrin, *Assessing Delaware's Oversight Jurisprudence: A Policy and Theory Perspective*, 5 VA. L. & BUS. REV. 433, 479 (2011) (concluding that the duty to monitor as currently applied “works, and, contrary to what many critics say, strikes the correct balances between directors’ accountability and authority”).

207. See *In re Citigroup Inc.*, 964 A.2d 106, 122 (determining that directors are only liable for a failure to monitor due to a sustained or systematic failure to exercise oversight).

208. See *supra* note 206 and accompanying text (citing sources discussing the imprudence of expanding directors’ duty to monitor).

In *Citigroup*, Chancellor Chandler discusses how entertaining a monitoring claim on these facts would essentially be punishing directors for *taking* a risk.²⁰⁹ Recall that Citigroup lost money by betting on subprime mortgages.²¹⁰ *Taking* risks is exactly the sort of thing the business judgment rule is supposed to protect, and thus Chancellor Chandler properly analyzed *Citigroup* under the duty of care.²¹¹ But *identifying* risks posed by disruptive innovation is different. A board being unaware—that the relevant information is not filtering to the top—is properly in the realm of monitoring since no business judgment is being made.²¹² Still, given the realities of corporate law decisions, I doubt legal liability will lie anytime soon for failing to identify a business risk.

The more likely result is that the duty to monitor in its limited scope will function concurrently with market pressures to influence management to better monitor for business risks.²¹³

Market pressures are already causing boards to monitor for business risks just as they do for law compliance.²¹⁴ For example,

209. *In re Citigroup Inc.*, 964 A.2d at 126.

210. *See id.* at 112 (outlining Citigroup's exposure to subprime mortgages).

211. *See id.* at 124 (analyzing the liability for director defendants by using the business judgment rule). Another *Caremark* case, *Massey Energy*, is also distinguishable, as it focuses not only on monitoring but also on management causing the corporation to violate applicable law. *See In re Massey Energy Co.*, 2011 Del. Ch. LEXIS 83, *74 (2011) ("Massey continued to think it knew better than those charged with enforcing the law, and in fact often argued with the law itself.").

212. *See, e.g., Francis v. United Jersey Bank*, 432 A.2d 814, 822 (N.J. 1981) ("Directors are under a continuing obligation to keep informed about the activities of the corporation."). Although the *Citigroup* opinion could be read more broadly to close the door on even this possibility as a matter of law. *See In re Citigroup*, 964 A.2d. at 131 ("Oversight duties under Delaware law are not designed to subject directors, even expert directors, to *personal liability* for failure to predict the future and to properly evaluate business risk.").

213. Also, as it often does, federal securities law is working in tandem with Delaware corporate law on risk identification. The SEC has new rules requiring public corporations to give more disclosure about their risk monitoring practices. *See Proxy Disclosure Enhancements*, 74 Fed. Reg. 68,344 (Dec. 29, 2009) (to be codified at 17 C.F.R. pts. 229, 239, 240, 249, 274).

214. *See* Stephen M. Bainbridge, *Director Primacy: The Means and Ends of Corporate Governance*, 97 NW. U. L. REV. 547, 570 (2003) ("Directors are held accountable to shareholder interests through a variety of market forces, such as the capital and reputational markets."); Henry G. Manne, *Mergers and the Market for Corporate Control*, 73 J. POL. ECON. 110, 112 (1965) (stating that a

Hewlett-Packard has a technology committee, which is responsible for recommendations to the board on technology strategies, execution of technology strategies, and guidance on technology.²¹⁵ Other companies have committees very specific to their industry and relevant technologies. Boeing, for example, has a Special Programs Committee, which reviews classified programs the company has undertaken on behalf of the U.S. Government.²¹⁶ While not explicitly stated, these programs are likely dealing with R&D and product innovation issues.²¹⁷ J.P.Morgan, in the face of huge losses, adopted new technologies to monitor for rogue traders.²¹⁸ The technology, which was originally developed for counter-terrorism efforts, uses an algorithm to electronically analyze patterns in human communications—identifying potential collusions and allowing J.P.Morgan to proactively intervene regarding both legal and business matters.²¹⁹

company that does not generate a good return for its shareholders will likely see a drop in the market price of its shares against the shares of other companies in the same industry).

215. *Hewlett-Packard Company Board of Directors: Technology Committee Charter*, HEWLETT-PACKARD 1, 2–3 (Nov. 19, 2014), <http://h30261.www3.hp.com/~media/Files/H/HP-IR/documents/others/technology-committee-charter.pdf>. In particular, “Guidance on Technology” includes providing guidance on such things as investments, R&D investments, and market entry and exit, among other responsibilities. *Id.* at 3.

216. *Special Programs Committee Charter*, BOEING 1 (Feb. 21, 2011), http://www.boeing.com/resources/boeingdotcom/company/general_info/pdf/charte_r_special_programs.pdf.

217. See John E. Pepper, “Best Practice” Boards and CEOs, CORPORATE BOARD, July 2008, at 1 (quoting a former Chairman and CEO at Procter & Gamble, who pointed to other examples of directors focused on such topics as innovation, thinking of the customers in developing nations, and diversifying management).

218. See Hugh Son, *JPMorgan Algorithm Knows You’re a Rogue Employee Before You Do*, BLOOMBERG (Apr. 8, 2015, 12:00 AM), <http://www.bloomberg.com/news/articles/2015-04-08/jpmorgan-algorithm-knows-you-re-a-rogue-employee-before-you-do> (last visited Dec. 15, 2016) (explaining that with large Wall Street investment banks losing billions of dollars in fines for illegal employee actions, the \$6.2 billion London Whale trading loss, and riggings of currency and energy markets, JPMorgan has created an internal surveillance system) (on file with the Washington and Lee Law Review).

219. See *id.* (describing how the software reads language used in emails to decipher a potentially rogue employee’s intentions).

Layering on even further, pronouncements of the Delaware courts—even absent corresponding liability—can work with these market pressures to affect director behavior. In a well-known article, Ed Rock argues that Delaware courts pen “corporate law sermons,” or “parables—instructive tales—of good managers and bad managers . . .”²²⁰ that are more standards than rules.²²¹ Because corporate managers of large Delaware corporations “form a surprisingly small and close-knit community,” these standards are consumed by corporate lawyers and communicated to managers, thus influencing managers’ behavior.²²²

Similarly, per Melvin Eisenberg, one can think of Delaware courts as providing both standards of conduct and standards of review.²²³ Standards of conduct are aspirational and directed to primary actors (directors), whereas standards of review are where liability actually lies for nonperformance and are directed at reviewing bodies (courts).²²⁴ Thus, for the monitoring duty, Delaware judges could pronounce a broad duty to monitor as a standard of conduct, yet keep monitoring for law compliance as the narrower standard of review.²²⁵

The trick is to get directors to “hear” the conduct rules and act *better* than legally required, while judges hear the review rules—thus noting the aspirations but permitting greater leeway

220. Edward Rock, *Saints and Sinners: How Does Delaware Corporation Law Work?*, 44 UCLA L. REV. 1009, 1016 (1997).

221. *See id.* at 1015–16 (explaining that a narrative process generates standards that are difficult to reduce into a rule).

222. *Id.* at 1017; *cf.* David A. Skeel, Jr., *Shaming in Corporate Law*, 149 U. PA. L. REV. 1811, 1811–12 (2001) (pointing out that while American society in general is less close-knit than in the past, corporations and corporate directors form a relatively enmeshed community).

223. *See* Melvin Aron Eisenberg, *The Divergence of Standards of Conduct and Standards of Review in Corporate Law*, 62 FORDHAM L. REV. 437, 462 (1993) (differentiating between a standard of conduct and a standard of review); *see generally* Meir Dan-Cohen, *Decision Rules and Conduct Rules: On Acoustic Separation in Criminal Law*, 97 HARV. L. REV. 625 (1984).

224. *See* Dan-Cohen, *supra* note 223, at 630 (explaining that a conduct rule prohibits a criminal from acting illegally, while a decision rule explains how a judge should decide cases involving the criminal’s illegal act).

225. *See* Eisenberg, *supra* note 223, at 463 (arguing that a discrepancy between a standard of conduct for the general public and a standard of review for courts allows a legislature to regulate conduct while allowing for leniency toward violations of that conduct in court).

before imposing liability. In the real world, such acoustic separation between conduct rules and review rules may be mere aspirational thinking. For example, in the case of the business judgment rule, well-counseled directors no doubt “hear” the permissive liability rule as well as the aspirational directive to follow best practices.²²⁶ However, directors may have bounded rationality and are less familiar with newer laws such as the duty to monitor, which may help the acoustic separation work better.²²⁷ Thus, Delaware judges should inspire directors to monitor for all important risks to their businesses, but only hold them liable for failing for law compliance. In these ways, then, the duty to monitor can speak—albeit softly—to the asymmetric information problem.

V. Corporate Venture Capital

Finally, this Article turns to what may be the best way for large corporations to develop an innovation strategy: corporate venture capital. This Part first describes corporate venture capital. Second, it details what appear to be competitive advantages of corporate venture capital over private venture capital in funding startups. Finally, this Part shows that the real evidence on corporate venture capital success is a mixed bag, and explores possible reasons for that outcome.

A. Basics of Corporate Venture Capital

What if large corporations can continue focusing on sustaining innovations but also avoid disruption? That balance would be the best of both worlds. This is what corporate venture capitalists (CVCs) allow large corporations to do.²²⁸ CVCs are

226. See *id.* (“In the real world, complete acoustic separation is not possible. As a result, each audience, general public and officials, may hear the rules addressed to the other.”).

227. See *id.* at 466–67 (“Although it is common to assume that individuals act rationally on the basis of full information, in fact most actors make decisions on the basis of bounded rationality involving limited information.”).

228. See Christian Guirnalda, *Corporate Venture Capital is Back . . . But We’re in it for the Partnership*, VERIZON VENTURES (Apr. 2, 2015),

venture arms established by a corporation. CVCs invest in promising startups, usually related to their parent corporation's business,²²⁹ although some CVCs have a purely financial focus and invest in any startup that seems promising.²³⁰ As Josh Lerner writes: "A corporate VC fund . . . can move faster, more flexibly, and more cheaply than traditional R&D to help a firm respond to changes in technologies and business models."²³¹ Importantly, Lerner also notes that a CVC "can serve as an intelligence-gathering initiative, helping a company to protect itself from emerging competitive threats."²³²

<http://www.verizonventures.com/blog/2015/04/corporate-venture-capital-is-back%E2%80%A6-but-we%E2%80%99re-in-it-for-the-partnership> (last visited Dec. 15, 2016) (describing how corporate venture capital projects allow large corporations to gain an edge in innovative ideas, while also avoiding high research and development expenses, as well as the bureaucracy of large corporate structures) (on file with the Washington and Lee Law Review).

229. These are referred to as "strategic" investments because they complement the corporation's core business. *Id.* For example, Verizon states that "the financial return can sometimes matter less than the innovation return for both the parent company and co-investors." *Id.*; see also Paul A. Gompers & Josh Lerner, *The Determinants of Corporate Venture Capital Success: Organizational Structure, Incentives, and Complementarities*, in RANDALL K. MORCK, CONCENTRATED CORPORATE OWNERSHIP 19 (2000) ("Corporations are likely to benefit from indirect gains (e.g., strategic alliances and greater understanding of industry trends) as well as direct financial returns.").

230. Corporate venture capital funds sometimes invest in unrelated sectors purely for financial gains. See Gompers & Lerner, *supra* note 229, at 25 (explaining that Xerox began its corporate venture capital program to maximize return on investment). This is less common, but is the strategy of Google Ventures, the largest corporate venture capital fund. See Rachel King, *Corporate VC Investments Hold Steady Amid Broader Downturn in Market*, WALL ST. J. (January 22, 2016), <http://blogs.wsj.com/cio/2016/01/22/corporate-vc-investments-hold-steady-amid-broader-downturn-in-market/> (last visited Dec. 15, 2016) (noting that Google invests "for financial [not strategic] returns") (on file with the Washington and Lee Law Review).

231. Lerner, *supra* note 45.

232. *Id.*; see also Massimo G. Colombo, Evila Piva & Cristina Rossi-Lamastra, *The Sensitivity of High-Tech Entrepreneurial Ventures' Employment to a Sales Contraction in a Negative Growth Scenario: The Moderating Role of Venture Capital Financing*, 35 MANAGERIAL AND DECISION ECON. 73, 76 (2014) (explaining that corporate venture capital gives parent corporations a view of "technological progress in leading-edge fields, which are surrounded by high uncertainty, without committing resources to internal research and development activities" (internal citations omitted)).

CVCs have been around almost as long as private venture capitalists (PVCs).²³³ The ten most active CVCs are arms of well-known, mostly-tech corporations: Google Ventures, Intel Capital, Salesforce Ventures, Qualcomm Ventures, Comcast Ventures, Novartis Venture Funds, Samsung Ventures, Cisco Investments, Siemens Venture Capital, and SR One.²³⁴ CVCs appear to invest at all stages of startup development, although one study found they invested most often in the middle stages—i.e., not in very early rounds, or later when a startup is close to an IPO.²³⁵

B. Advantages of Corporate Venture Capital over Private Venture Capital

Corporate venture capital appears to enjoy real advantages over private venture capital as a funding option for startups.²³⁶ To understand why, it is important to note that venture capital of any kind succeeds or fails based on a VC's ability to select the right startups to fund *ex ante* investment and help them grow *ex-post* investment.²³⁷

First, in terms of selecting startups to fund, the CVC's managers should be able to bring to bear expertise from within the parent corporation.²³⁸ If the CVC has a strategic focus, as

233. See Gompers & Lerner, *supra* note 229, at 21–22 (giving a brief history of CVC).

234. See *The 104 Most Active Corporate VC Firms*, CB INSIGHTS (Feb. 6, 2015), <https://www.cbinsights.com/blog/corporate-venture-capital-active-2014/> (last visited Dec. 15, 2016) (listing the most active corporate venture capital programs in 2014) (on file with the Washington and Lee Law Review); see also *If You Can't Beat Them, Buy Them*, ECONOMIST (January 14, 2016) (citing statistics that “[o]ver the past five years the number of corporate-venture units worldwide has doubled to 1,100; 25 of the 30 firms that comprise the Dow Jones Industrial Average have one”).

235. See Gompers & Lerner, *supra* note 229, at 32 (“Corporate funds tend to invest slightly less frequently in start-up and mature private firms. Instead, they are disproportionately represented among companies in the middle stages, such as ‘development’ or ‘beta.’”).

236. See *id.* at 46 (noting that corporate venture investments seem to be at least as successful as private venture capital investments).

237. See *id.* (concluding that corporate venture programs must select programs that fall within the corporation's overall strategic vision for the CVC to succeed).

238. Perhaps the CVC is staffed by former corporate executives. Even if it is

most do, its people should have substantial expertise in the startup technologies being funded.²³⁹ The corporation would also possess superior knowledge of the entrepreneur if she came from inside the corporation.²⁴⁰ Both of these advantages reduce pre-investment uncertainty and information asymmetry in ways at least as effective as the PVC's staged financing tool.²⁴¹

Second, in terms of growing startups ex-post investments, CVCs take board seats and closely monitor startups as PVCs do.²⁴² Beyond what PVCs can offer, though, CVCs can also tap into the numerous resources of their parent corporations to add extra value to their portfolio startups.²⁴³ As Lerner writes: "Companies bring a lot of value to the start-ups they fund, in the form of reputation, skills, and of course, resources—from research scientists to sophisticated laboratories to armies of salespeople."²⁴⁴ As an example, Google Ventures appears to be very involved with its portfolio startups—providing support to startups in the areas of security, PR, technology platforms, and

not, the corporation's people should be available for the CVC to consult. See Gina Dokko & Vibha Gaba, *Venturing Into New Territory: Career Experiences of Corporate Venture Capital Managers and Practice Variation*, 55 ACAD. MGMT. J. 563, 571 (2012) (exploring the prior work histories of CVC managers, including those coming from PVCs).

239. See *id.* at 566 (explaining that individuals with prior experience in a certain facet of business or entrepreneurship will better understand the problems involved in a new business or entrepreneurial project).

240. See Bankman & Gilson, *supra* note 3, at 299 (explaining auctions between corporations and PVCs for employee talent).

241. See Ronald J. Gilson, *Engineering a Venture Capital Market: Lessons from the American Experience*, 55 STAN. L. REV. 1067, 1076 (2003) (identifying uncertainty and information asymmetry as pre-investment problems in startup investing); *id.* at 1078–79 (discussing staged financing as a PVC's primary solution to these problems); see also Steven N. Kaplan & Per Stromberg, *Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts*, 70 REV. ECON. STUD. 281, 304 (2003) ("There is no evidence that the VC's liquidation claim is larger when asymmetric information problems are more severe, because volatility, pre-revenue, and repeat entrepreneur are not significant.").

242. See David Benson & Rosemarie H. Ziedonis, *Corporate Venture Capital and the Returns to Acquiring Portfolio Companies*, 98 J. FIN. ECON. 478, 479 (2010) (citing prior studies that CVC managers "assume roles on [startup] boards of directors").

243. See *id.* at 478–79 ("Corporate investors commonly provide technical and commercial advice to portfolio companies.").

244. Lerner, *supra* note 45.

others.²⁴⁵ Google Venture’s “library” provides articles on design, product management, user research, hiring, engineering, marketing, entrepreneurship, and workshops.²⁴⁶ Google Ventures also provides a “Design Sprint” and “Research Sprint” for its portfolio startups.²⁴⁷ The Design Sprint is a five-day process that focuses on product design and prototyping.²⁴⁸ The Research Sprint is a four-day process providing startups with information on user research and how to utilize it.²⁴⁹

These pre- and post-investment advantages over PVCs have led to CVC successes. Studies have found that CVC-backed

245. See Emily Chang, *How Google Ventures Chooses Its Investments*, BLOOMBERG (Oct. 17, 2015), <http://www.bloomberg.com/news/videos/b/808891dfa754-4a62-8e10-49c7ec712565> (last visited Dec. 10, 2016) (discussing how Google Ventures helps its investments) (on file with the Washington and Lee Law Review); see also Brad Coffey, *Will Google Disrupt Venture Capital?*, FORTUNE (June 22, 2011), <http://fortune.com/2011/06/22/will-google-disrupt-venture-capital/> (last visited Dec. 10, 2016) (explaining that Google is trying to continue its history of reinventing industries through its use of venture capital) (on file with the Washington and Lee Law Review).

246. See GV LIBRARY, <http://www.gv.com/library/> (last visited Dec. 10, 2016) (listing articles discussing aspects of Google Ventures) (on file with the Washington and Lee Law Review).

247. *Id.*

248. See THE DESIGN SPRINT, <http://www.gv.com/sprint/> (last visited Dec. 10, 2016) (describing multi-day processes for discussing business, design, prototyping, and testing ideas with customers) (on file with the Washington and Lee Law Review); see also John Koetsier, *How Google Ventures Does Rapid Prototyping ‘Design Sprints’ with Its 170 Startups*, VENTURE BEAT (Aug. 14, 2013), <http://venturebeat.com/2013/08/14/how-google-venture-partners-does-rapid-prototyping-design-sprints-with-its-170-startups/> (last visited Dec. 10, 2016) (explaining how “Google Ventures built its own rapid prototyping process, with a defined five day schedule to understand the challenge, create multiple options, build multiple prototypes, and get real customer feedback”) (on file with the Washington and Lee Law Review); Leena Rao, *Inside a Google Ventures Design Sprint*, TECHCRUNCH (Oct. 23, 2013), <http://techcrunch.com/2013/10/23/inside-a-google-ventures-design-sprint/> (last visited Dec. 10, 2016) (“Google offers its portfolio startups the opportunity to participate in a Design Sprint, which is an intensive, visual bootcamp around a design problem for portfolio companies.”) (on file with the Washington and Lee Law Review).

249. See Michael Margolis, *The GV Research Sprint: A 4-day Process for Answering Important Startup Questions*, GV (Aug. 4, 2014), <https://library.gv.com/the-gv-research-sprint-a-4-day-process-for-answering-important-startup-questions-97279b532b25#.vbm0syds2> (last visited Dec. 10, 2016) (stating that four-day research sprints allow for testing of ideas without an actual launch of the idea) (on file with the Washington and Lee Law Review).

startups that go public “produce more patents and patents that are of higher quality,”²⁵⁰ and that CVC investment has a positive signaling effect on upon a startup’s later IPO.²⁵¹ Gompers and Lerner empirically found that CVC investments “appear to be at least as successful” as PVC investments, especially where the CVCs had a strategic (as opposed to financial) focus.²⁵² The parent corporation benefits both through financial gains and by bringing the knowledge gained through CVC operations in-house.²⁵³

C. Why Corporate Venture Capital Doesn’t Dominate Private Venture Capital

The advantages of corporate venture capital cited above beg the question: why doesn’t corporate venture capital dominate private venture capital instead of representing only about a tenth of it?²⁵⁴ One explanation is that CVCs and PVCs often co-invest and, therefore, it is not a competition or adversarial affair to begin with.²⁵⁵ In short, CVC does not wish to compete with PVC, just supplement it.²⁵⁶ Another explanation is that there are

250. Chemmanur, Loutskina & Tian, *supra* note 60, at 2437.

251. See Toby E. Stuart, Ha Hoang & Ralph C. Hybels, *Interorganizational Endorsements and the Performance of Entrepreneurial Ventures*, 44 ADMIN. SCI. Q. 315, 315 (1999) (finding that startups with a prominent CVC investor launch IPOs more quickly and with higher valuations than startups without a prominent CVC investor).

252. Gompers & Lerner, *supra* note 229, at 19.

253. See *id.* at 3 (stating that corporate venture investments benefit the parent corporations by providing direct financial returns and better understanding of industry trends).

254. See *id.* (explaining the benefits that large corporate structures can provide to their venture capital programs).

255. See Lerner, *supra* note 45 (noting that co-investors have the added value of forcing a CVC to more quickly cut ties with a failing startup).

256. In fact, private venture capital’s limited partnership structure, with funds having a ten-year life span, can put exit pressure on corporate venture capital, as CVCs are corporate subsidiaries and under no such life-span deadline. The PVC will push the CVC to make a quicker decision on exit than it otherwise might. See Gilson, *supra* note 20, at 1076 (“The fact that portfolio company investments are of limited duration rather than long term is critical to the operation of the venture capital market.”). *But see* Chemmanur, Loutskina & Tian, *supra* note 60, at 2435 (arguing that not having a ten-year lifespan is actually a positive that CVC has over PVC).

problems with corporate venture capital including: 1) instability and short-term focus; 2) inability to capitalize on knowledge spillovers that could flow from CVC-funded startups to parent corporations; and 3) inadequately compensating CVC fund managers.²⁵⁷

First, corporate venture capital appears cyclical, and although that mirrors the cyclical nature of private venture capital,²⁵⁸ parent corporations tend to turn and cut bait on CVCs more quickly than PVCs do.²⁵⁹ When times are good—as in the last several years—corporate venture capital accounts for anywhere from 11–13% of all venture capital dollars invested.²⁶⁰ In 2015, a particularly good year, CVCs “invested over \$7.5 billion in 905 deal to high-growth startups.”²⁶¹ But the bad times are a different story. CVC investments dropped off precipitously after the stock market crash of 1987 and again after the dot-com crash of the late 1990s.²⁶² Lerner estimates that a CVC’s life span may be as short as a year.²⁶³ This short-term focus may sometimes be due to corporate venture capital’s mostly strategic nature; once the technological need of the corporation is met, the

257. See Gompers & Lerner, *supra* note 229, at 45 (listing structural problems, lower compensation of investors, and short time frame of corporate investments as CVC’s disadvantages).

258. See *id.* at 22 (writing in 2000 that “corporate involvement in venture capital has mirrored (perhaps even in an exaggerated manner) the cyclical nature of the entire venture capital industry over the past three decades”).

259. See Lerner, *supra* note 45 (explaining that a corporation can often more easily jettison a poorly performing venture investment than they can abandon internally developed innovations).

260. See King, *supra* note 230 (citing statistics that corporate venture capital accounted “for 13 percent of all venture capital dollars invested [in 2015], and 21 percent of all deals”); Lerner, *supra* note 45 (“In the first half of 2011 . . . more than 11% of the VC dollars invested came from corporate venture funds, a level not seen since the dot-com bubble.”).

261. King, *supra* note 230; see also Benson & Ziedonis, *supra* note 242, at 478 (“From 1980 through 2003, established firms invested over \$40 billion in entrepreneurial ventures.”).

262. See Benson & Ziedonis, *supra* note 242, at 480 (explaining that investment in venture capital firms “subsided with the plummet in technology markets”).

263. See Lerner, *supra* note 45 (“[l]arge companies have been wary of corporate venturing The median life span of these funds has been about one year.”).

startup investment is no longer necessary.²⁶⁴ Or perhaps some CVC arms are CEO pet projects, and thus not part of long-term corporate strategy.²⁶⁵ Either way, the instability of corporate venture capital may cause promising entrepreneurs to prefer funding from private venture capital.²⁶⁶

Second, to fully capitalize on corporate venture capital's potential, the knowledge gained from strategic startup investments must find its way back to the parent corporation.²⁶⁷ If not, this is not really a hybrid form of intrapreneurship at all, but merely the same as any other corporate financial investment. There are alternative ways to bring the knowledge from CVC portfolio startups back into the parent corporation. One way is to acquire the startup once it develops.²⁶⁸ However, a recent empirical study found poor returns to corporations acquiring their own CVC-funded startups.²⁶⁹ Indeed, my own research into the top CVCs revealed that they do not often acquire their portfolio startups.²⁷⁰

264. See Gompers & Lerner, *supra* note 229, at 19 (“[I]t may be that corporations need to employ such programs only during periods of severe technological discontinuity. After such periods of rapid change pass, the programs are no longer needed.”).

265. See Benson & Ziedonis, *supra* note 242, at 489 (citing studies for the proposition that a “common criticism against corporate venturing programs is their use to fund CEO ‘pet projects’”).

266. See *id.* (questioning why takeovers of portfolio companies often drastically reduce value for shareholders of CVC investors).

267. See Gary Dushnitsky & J. Myles Shaver, *Limitations to Inter-Organizational Knowledge Acquisition: The Paradox of Corporate Venture Capital*, 30 STRATEGIC MGMT J. 1045, 1045 (2009) (noting that a corporation will often not invest in an entrepreneur's invention unless the entrepreneur discloses details about his invention).

268. See Benson & Ziedonis, *supra* note 242, at 479 (examining whether investors earn positive returns when they acquire startups).

269. See *id.* at 489 (explaining the methodology of their study on returns on investment for corporations acquiring CVC-backed startups).

270. For example, Google Ventures had fifteen of its portfolio startups acquired in 2014, but only three of these were acquired by Google. See *GV Year in Review: 2014*, GV, <http://www.gv.com/2014/> (last visited Dec. 10, 2016) (listing the various achievements and exits of Google Venture companies) (on file with the Washington and Lee Law Review). Salesforce Ventures has had twenty-one portfolio startups with an exit event since 2011; of the acquisitions, only two were undertaken by Salesforce. See *Salesforce Ventures Exits*, CRUNCHBASE, <https://www.crunchbase.com/organization/salesforce-ventures/exits/all/global> (last visited Dec. 10, 2016) (listing Salesforce ventures and the type of exit of

A second way of effecting knowledge spillovers is to obtain information from portfolio startups *while* they are developing absent a parent company acquisition. CVCs sometimes appear to have problems facilitating this type of knowledge spillover.²⁷¹ As Lerner observes: “Knowledge doesn’t automatically flow from start-ups to the large organizations that have invested in them,” and that there is “a cultural gap between the young MBAs who dominate most venture teams and the firm’s senior executives.”²⁷² He suggests, citing the CIA’s example of In-Q-Tel, that “linked units” can be the bridge that transfers relevant information to the parent.²⁷³ Another paper sounded a similar note, stating that “CVC managers needed to be deeply embedded in the social networks of both the start-up venture and the incumbent” and needed to function as “knowledge brokers.”²⁷⁴ But large corporations are not always good at facilitating this knowledge spillover.

A final problem with corporate venture capital is adequately compensating the managers running the funds. Private venture capital fund managers make substantial returns on carried interest, or the profits made on a portfolio startup’s exit.²⁷⁵

each venture) (on file with the Washington and Lee Law Review). Likewise, Intel appears to rarely acquire companies in which Intel Capital has invested. See Eric Blattberg, *Intel Capital Saw More Exits than Sequoia, Greylock, or Google Ventures Last Year*, VENTURE BEAT (May 8, 2014) <http://venturebeat.com/2014/05/08/intel-capital-saw-more-exits-than-sequoia-greylock-or-google-ventures-last-year/> (last visited Dec. 10, 2016) (“Intel Capital has the mandate to get the best exit possible for Intel Corp., not to serve as a feeder for Intel Corp.”) (on file with the Washington and Lee Law Review). These findings do not include strategic alliances or licensing agreements made between parent corporations and CVC portfolio startups, which may be another way the parent corporation becomes more intrapreneurial through corporate venture capital programs.

271. See Lerner, *supra* note 45 (“The barriers to knowledge transfer are many: The corporate venturing and business development groups may be located far from the firm’s central operations. Everyone is busy with day-to-day tasks.”).

272. *Id.*

273. *Id.*

274. Thomas Keil, Erkkö Autio & Gerard George, *Corporate Venture Capital, Disembodied Experimentation and Capability Development*, 45 J. MGMT. STUD. 1475, 1491 (2008).

275. See Victor Fleischer, *Two and Twenty: Taxing Partnership Profits in Private Equity Funds*, 83 N.Y.U. L. REV. 1, 9 (2008) (“Because private equity funds are leanly staffed, a carried interest worth millions of dollars may be split

Corporate venture capital fund managers, on the other hand, are compensated like comparable employees in parent corporations: through salaries and bonuses.²⁷⁶ As a result, corporate venture capital fund managers make far less than their private venture capital counterparts, and often leave for them, resulting in a talent drain at CVCs.²⁷⁷

Remedying the problem is not easy. Just as it is difficult to compensate intrapreneurial employees like entrepreneurs,²⁷⁸ it is challenging to compensate corporate venture capital fund managers like their private venture capital fund counterparts without creating interorganizational issues.²⁷⁹ General Electric's CVC arm lost many people to private venture capital firms in 1998 and 1999 for this reason.²⁸⁰ The practical effect of this talent drain further negates the seeming advantages of corporate venture capital over private venture capital.

One way to overcome these obstacles is for the parent corporation to design a strong corporate venture capital program.²⁸¹ Studies have found that a CVC's likelihood of success increases if the parent corporation establishes dedicated units (e.g., subsidiaries), rather than housing the corporate venture

among just a handful of individuals.”).

276. See Gompers & Lerner, *supra* note 229, at 23 (“Corporations have frequently been reluctant to compensate their venture managers through profit-sharing (‘carried-interest’) provisions.”); Lerner, *supra* note 45 (“[C]orporate leaders are typically troubled by the disparity between what venture managers expect to earn and the compensation of executives with comparable seniority in other parts of the company.”).

277. See Gompers & Lerner, *supra* note 229, at 45 (“[F]ield research suggests that corporate venture groups are often plagued by defections of their most successful investors, who become frustrated at their low level of compensation.”).

278. See *supra* notes 93–96 and accompanying text (examining financial incentives for employees).

279. See Edward P. Lazear, *Pay Equality and Industrial Politics*, 97 J. POL. ECON. 561, 562 (1989) (explaining how a large disparity in salaries for similarly situated employees within a company can result in decreased cooperation and even sabotage among these employees).

280. See Lerner, *supra* note 45 (“Corporations that fail to provide adequate incentives [to the corporation’s private venture capital investors] face a steady stream of defections once junior investors master the venture process.”).

281. See Gompers & Lerner, *supra* note 229, at 18 (emphasizing the importance of having a strong link between a corporate parent’s strategic focus and the venture capital group’s investment focus).

capital operation inside the parent.²⁸² Although the results of CVC-funded startup acquisitions have not been good, one study found that when parent corporations later acquired their CVC's portfolio startups, financial returns were significantly higher "when managers from dedicated CVC units [were] responsible for the initial funding decision."²⁸³ The authors of that study state: "Investors that house CVC programs in autonomous organizational units realize more favorable outcomes than do corporate investors with less systematized programs."²⁸⁴

VI. Conclusion

This Article examined how corporate law plays at the margins to influence the intrapreneurship/entrepreneurship balance we observe. It also explores the hybrid option of large corporations funding startups through corporate venture capital projects, rather than competing with them. To close with a bit more on the entrepreneurial/intrapreneurial balance, a recent *Harvard Business Review* article offers three business reasons why large corporations will become increasingly important to innovation going forward.²⁸⁵

First, large corporations have competitive advantages due to brand recognition and staying power, whereas startups increasingly encounter rivals due to shorter product development cycles and an abundance of financing.²⁸⁶ In other words, due to

282. Benson & Ziedonis, *supra* note 242, at 491 (noting that prior studies demonstrate that firms often more easily find managers with backgrounds in finance or private equity when they organize their CVCs into autonomous subsidiaries).

283. *Id.* at 494.

284. *Id.* at 496.

285. See Scotty D. Anthony, *The New Corporate Garage*, HARV. BUS. REV. 1, 4 (Sept. 2012), <https://hbr.org/2012/09/the-new-corporate-garage> (last visited Dec. 11, 2016) (listing the decreasing cost of innovation, large companies adopting open innovation, and business) (on file with the Washington and Lee Law Review).

286. See *id.* at 5 ("[Startups] are increasingly vulnerable to the same capital-market pressures that plague big companies—but before they've developed lasting corporate assets."). Conversely, it could be argued that the abundance of capital and cheap cost of launching a startup would create more entrepreneurship relative to intrapreneurship, not less. See Coyle & Polsky, *supra* note 53, at 292–93 (noting that the cost of launching certain types of

their newness, startups do not enjoy the same entrenchment as large corporations and can more easily be disrupted themselves.²⁸⁷ Second, large corporations are more openly embracing innovation and nimbleness to stay competitive.²⁸⁸ Finally, much innovation in recent years has involved innovative business models, which play to large corporations' strengths better than innovative product technologies.²⁸⁹

For these reasons, intrapreneurship is important to study. And while the law may be a relatively minor factor in influencing where innovation occurs, it does have a previously unexplored role that is important for legal scholars to understand.

startups, notably software startups, has decreased significantly since the rise of cloud computing and that the amount and variety of funding for new startups is more abundant than ever).

287. See, e.g., Mike Isaac & Katie Benner, *LivingSocial Offers a Cautionary Tale to Today's Unicorns*, N.Y. TIMES (Nov. 20, 2015), http://www.nytimes.com/2015/11/22/technology/livingsocial-once-a-unicorn-is-losing-its-magic.html?_r=0 (last visited Dec. 10, 2016) (explaining how LivingSocial could not generate liquidity by going public, because a peer company, Groupon, attempted to go public, which generated investor skepticism about the sustainability of its and LivingSocial's business model) (on file with the Washington and Lee Law Review).

288. See Anthony, *supra* note 285 (“[L]arge companies, taking a page from start-up strategy, are embracing open innovation and less hierarchal management and are integrating entrepreneurial behaviors with their existing capabilities.”).

289. See *id.* (“[A]lthough innovation has historically been product- and service-oriented, it increasingly involves creating business models that tap big companies' unique strengths.”); *id.* (“One analysis shows that from 1997 to 2007 more than half of the companies that made it onto the *Fortune 500* before their 25th birthdays—including Amazon, Starbucks, and AutoNation—were business model innovators.”).