2017

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Arkansas Law Review

Volume 70 | Number 3 Article 2

December 2017

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Brian Kingsley Krumm*

INTRODUCTION

For the past half century, innovation has driven the economic growth that has made the American economy the envy of the world.[1] For most of this period, venture capitalists provided not only the capital that new innovative companies needed, but also the management expertise.[2] In the last fifteen years, however, the venture-capital business has changed. Many venture capitalists no longer provide money and mentoring to the proverbial inventor working out of her garage. Instead, they primarily focus their

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1. NAT'L RESEARCH COUNCIL (US) COMM. ON COMPARATIVE NAT'L INNOVATION POLICIES: BEST PRACTICE FOR THE 21[ST] CENTURY, RISING TO THE CHALLENGE: U.S. INNOVATION POLICY FOR THE GLOBAL ECONOMY 201 (Charles W. Wessner & Alan Wm. Wolff eds., 2012), http://politiques-innovation.org/wp-content/uploads/2013/07/2012-Wessner-STEP-Rising-to-the-Challenge-U.S.-Innovation-Policy-for-Global-Economy.pdf [https://perma.cc/8B5G-3MCP].

2. Charles R. Korsmo, *Venture Capital and Preferred Stock*, BROOK. L. REV. 1163, 1169 (2013).

investments on companies that are already established and generating revenue.[3] And even this funding is available only to companies located in a few geographic areas.[4]

This pullback could not have happened at a worse time. Interest in entrepreneurship and innovation is at an all-time high. Nearly a quarter of millennials say they want to be some sort of entrepreneur.[5] State governments are focusing their economic development efforts on stimulating entrepreneurism and redirecting resources they formerly spent attempting to recruit industry from other states.[6] While zeal for entrepreneurialism is growing, a recent Gallup poll suggests that the number of net U.S. Firms has steadily decreased since 1977 to the point where there are more net closures than startups.[7]

Given such glaring contradictions, it seems reasonable to question how best to finance innovation, or rather how to better coordinate a series of financing opportunities. Not surprisingly, the federal government has introduced funding programs to fund new businesses, and several new forms of organizations have developed to assist entrepreneurs in their attempt to commercialize their innovations.[8] These new organizations have helped, but much more needs to be done. This article proposes a new kind of

3. FOUNDER EQUITY, THE NEW REALITY OF VENTURE CAPITAL: DISCONNECT BETWEEN VALUE CREATION AND CAPTURE, http://politiques-innovation.org/ wp-content/ uploads/2013/07/2012-Wessner-STEP-Rising-to-the-Challenge-U.S.-Innovation-Policy-for-Global-Economy.pdf [https://perma.cc/Q3GC-63WG].

4. JOSH LERNER, GEOGRAPHY, VENTURE CAPITAL, AND PUBLIC POLICY 1 (2010), https://www.hks.harvard.edu /sites /default /files /centers /taubman /files /PB_final_lerner_vc.pdf [https://perma.cc/7YYC-V6DZ].

5. *24% Of Millennials Plan To Start Their Own Business, But Have The Generation Called Time On Traditional Family Values?*, MINTEL (Nov. 19, 2014), http://www.mintel.com/press-centre/social-and-lifestyle/enter-the-entrepreneurs-a-quarter-of-millennials-plan-to-start-their-own-business-but-have-the-generation-called-time-on-traditional-family-values [https://perma.cc/AWC6-YMDY].

6. ERIN SPARKS, NAT'L GOVERNOR'S ASS'N, TOP TRENDS IN STATE ECON. DEV. 5 (2013), https://www.nga.org /files /live /sites /NGA /files /pdf /2013 /1308 TopTrends in-StateEconDevPaper.pdf [https://perma.cc/T2EZ-WJ9Q].

7. Jim Clifton, *American Entrepreneurship: Dead or Alive?*, GALLUP.COM, (Jan. 13, 2015), http://www.gallup.com/businessjournal /180431/american-entrepreneurship-dead-alive.aspx [https://perma.cc/2TSG-N8A2].

8. *See, e.g.*, Meredith Wood, *7 Small Business Grants for Entrepreneurs*, STARTUPNATION (Aug. 9, 2016), https://startupnation.com/start-your-business/small-business-loans/ [https://perma.cc/YBH9-HHXG]; Thomas Smale, *10 Organizations That Provide Support for Entrepreneurs*, ENTREPRENEUR (Dec. 2, 2015), https://www.entrepreneur.com/article/253283 [https://perma.cc/5CAT-B6D7].

business organization, one that can serve to fill the gap that venture capital currently does not fill.

Part I of this article provides the reader with a perspective on how innovation has been financed over the years and how the roles of the federal government and private equity have evolved in this process. Parts II and III examine the role that private investment plays in the current innovation finance ecosystem, and identifies both the inefficiencies and value enhancing attributes of that source of financing. Part IV describes the major federal policy initiatives implemented in recent years to bolster funding for start-ups and other small businesses. Part V, which is the heart of this article, proposes the creation of a business association specifically designed to help entrepreneurs secure the necessary capital and to assist them in the management of their businesses.

I. HISTORY OF INNOVATION FINANCE

Most economics scholars believe that innovation has been the main driver of long-term economic growth in the United States.[9] Beyond macro-economic growth, innovation increases per capita income and improves standards of living and quality of life.[10] Because innovation has such a dramatic impact on both our economy and our social welfare, it is crucial that we look at how innovation has been financed in the past and how recent changes in financing practices may limit innovation in the future.

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> In the most fundamental sense, there are only two ways of increasing the output of the economy: (1) you can increase the number of inputs that go into the productive process, or (2) if you are clever, you can think of new ways in which you can get more output from the same number of inputs.

NATHAN ROSENBERG, ORG. FOR ECON. CO-OPERATION AND DEV., INNOVATION AND ECONOMIC GROWTH 1 (2004), http://www.oecd.org /cfe /tourism /34267902.pdf [https://perma.cc/4RUP-D6QK].

10. David Ahlstrom, *Innovation and Growth: How Business Contributes to Society*, 24 ACAD. OF MGMT. PERSPECTIVES 11, 11-12 (2010). In this article, Ahlstrom challenges famed economist Milton Freidman's contention that business' sole purpose is to generate profits for shareholders. *Id.* Instead, he argues that the main goal of business is to develop new and innovative products that generate growth and deliver important benefits to an increasingly wide range of the world's population. *Id.*

The Patent Act of 1836[11] played a significant role in providing creative individuals with the freedom to innovate and maintain their independence from the firms that bought or licensed their intellectual property.[12] Inventors at that time were able to obtain financing primarily from friends, families, and retained earnings.[13] By the beginning of the twentieth century, however, the contractual mobility of even the most prolific inventors waned as they increasingly joined companies as principals or employees.[14] This shift was due in large part by the risks associated with and rising costs of Research and Development (R&D).[15] The complexity and capital intensity of new technology made it more difficult for inventors to obtain sources of outside financing.[16] The firms benefitted not only from owning the intellectual property that was created by the inventors, but also from the reduced competition from subsequent innovations that would make the prior practices obsolete.[17]

Most of the firms that invested heavily in R&D during this period were entrepreneurial companies that formed to commercialize the discoveries of their inventors.[18] Forming companies around prominent inventors was quite popular at this time, and

11. Patent Act of 1836, Ch. 357, 5 Stat. 117 (July 4, 1836).

12. FINANCING INNOVATION IN THE UNITED STATES, 1870 TO THE PRESENT 12 (Naomi R. Lamoreaux & Kenneth L. Sokoloff eds., 2007). Thomas Hughes referred to the late nineteenth century as the "golden age for independent inventors." *Id.*

13. *See id.* at 14.

14. *Id.* at 12-13 (citation omitted).

15. *Id.* at 13.

16. Lamoreaux & Sokoloff, *supra* note 12, at 13 (citing JOHN W. KENDRICK, PRODUCTIVITY TRENDS IN THE UNITED STATES (1961)).

17. *Id.* (citing STEVEN W. USSELMAN, REGULATING RAILROAD INNOVATION: BUSINESS, TECHNOLOGY, AND POLITICS IN AMERICA (2002)). Firm defensive strategies were greatly assisted by a shift in the judiciary to favor employers regarding patent and trade secret disputes. *Id.* at 32 n.17. *See also* Catherine L. Fisk, *Removing the 'Fuel of Interest' from the 'Fire of Genius': Law and the Employee-Inventor, 1830-1930*, 65 U. CHI. L. REV. 1127, 1139 (1998) ("Finally, at the end of the nineteenth century, courts began to see that employers might hire a person precisely because of his 'inventive capacities' and that the employer might therefore own the product of the employee's creativity.").

18. *See* Lamoreaux & Sokoloff, *supra* note 12, at 14. "Perhaps the most famous example is General Electric, formed from a merger of two core enterprises that had been organized by investors with the aim of commercializing the inventions of Thomas Edison and Elihu Thompson." *Id.* (citation omitted).

financing was often informally raised by backers who were personally aquatinted with the inventors.[19] Funding from more formal institutions, such as banks and organized securities markets, only arose in the later 1920's.[20] R&D intensive firms like General Electric, Du Pont, Westinghouse Electric, General Motors, and IBM all became prominent on the stock exchanges.[21] They relied on a strategy of developing new technologies in the lab and achieving returns directly from the innovations through the sale of their goods and services.[22] Funding for future research was generated through retained earnings.[23]

With the advent of World War II, the federal government began playing a much greater role in the funding of R&D.[24] Most of the national R&D budget was funded by government, most of which came through the Defense Department where the research was focused predominately on defense technologies.[25] Although research was by its very nature closely controlled for secrecy, it had some extraordinary ancillary benefits.[26] A large scale R&D infrastructure was created in federal laboratories and U.S. universities, which continues to serve as a highly productive source of innovation.[27] Federal R&D programs created an environment for interfirm technology diffusion and encouraged the creation of

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19. *Id.; see also* Diego Comin & Ramana Nanda, *Financial Development and Technology Diffusion* 4 (Harv. Bus. Sch., Working Paper No. 15-036, 2014) ("A[s] interest in these sorts of opportunities grew, technologically creative entrepreneurs increasingly sought out investors (and vice versa) because the greater technical complexity and capital intensity of the new technologies meant that effective programs of inventive activity and commercial exploration required more financial backing than before.").

20. Lamoreaux & Sokoloff, *supra* note 12, at 16.

21. *Id.* at 19; *see also* HAROLD PASSER, THE ELECTRICAL MANUFACTURERS, 1875-1900: A STUDY IN COMPETITION, ENTREPRENEURSHIP, TECHNICAL CHANGE, AND ECONOMIC GROWTH 149-50 (1953); DAVID HOUNSHELL & JOHN KENLY SMITH JR., SCIENCE AND CORPORATE STRATEGY: DU PONT R&D (1988); ALFRED SLOAN, MY YEARS WITH GENERAL MOTORS 216 (John McDonald & Catharine Stevens eds., 1964).

22. *See* Lamoreaux & Sokoloff, *supra* note 12 at 19 (citations omitted).

23. *See id.*

24. *Id.* at 21-22.

25. *See id*. at 21. "Through most of the 1953-2005 period, more than 50 percent of th[e] federal R&D budget was devoted for defense purposes." Kira R. Fabrizio & David C. Mowery, *The Federal Role in Financing Major Innovations: Information Technology During the Postwar Period, in* FINANCING INNOVATION IN THE UNITED STATES, 1870 TO THE PRESENT 283, 283 (Naomi R. Lamoreaux & Kenneth L. Sokoloff eds., 2007).

26. *See* Lamoreaux & Sokoloff, *supra* note 12, at 21-22.

27. Fabrizio & Mowery, *supra* note 25, at 287.

new companies to support this massive effort.[28] In many instances, expenditures on procurement rather than the R&D programs themselves produced widespread innovations.[29] The nascent information technology (IT) sector (semiconductors, internet, computer hardware and software) in particular made significant advancements as a result of procurement in support of the federal R&D programs.[30] These technologies now encompass many markets and applications beyond national defense and have further spawned a multitude of civilian-focused innovations.[31]

In the mid-1960's private companies drastically reduced their spending on R&D.[32] These cutbacks prompted firms to more closely evaluate their internal expenditures on R&D in an effort to control costs.[33] Inventors were being required to justify their research expenditures and financial tests were imposed to reduce the risk of potential failure.[34] Such management controls had a negative effect on the innovativeness of the labs.[35] As a result, many research facilities experienced budget cuts, were spun off as separate companies, or were shut down entirely.[36]

Over the next two decades, a number of small innovative companies began to emerge that were funded through the expanding private equity market.[37] The larger firms, in turn, focused

28. *Id.* at 286. Government programs have historically filled the void of investing in early stage companies that are often too uncertain for the private markets. *Id.* at 285.

29. *Id.* at 285.

30. *Id.* at 287. Federal funding of R&D programs has played a major role in the development of other post-war technologies, such as the pharmaceutical and biomedical sciences, which have benefitted from R&D programs sponsored by the National Institutes of Health. Fabrizio & Mowery, *supra* note 25, at 310.

31. *Id.* "The most obvious examples are the pharmaceuticals and biotechnology industries" which have been spurred on by the National Institutes of Health. *Id.*

32. *See* Margaret B.W. Graham, *Financing Fiber: Corning's Invasion of the Telecommunications Market*, *in* FINANCING INNOVATION IN THE UNITED STATES, 1870 TO THE PRESENT 247, 256-57 (Naomi R. Lamoreaux & Kenneth L. Sokoloff eds., 2007).

33. *See id.* at 257. One of the driving forces for cutting R&D spending was the aforementioned departure between R&D investments and innovation results. *Id.* at 256; *see also* Margaret B.W. Graham, *Industrial Research in the Age of Big Science*, RESEARCH IN TECHNOLOGICAL INNOVATION (1985); David A. Hounshell, *The Evolution of Industrial Research in the United States*, *in* ENGINES OF INNOVATION: U.S. INDUSTRIAL RESEARCH AT THE END OF AN ERA 13, 50-51 (Richard S. Rosenbloom & William J. Spencer eds., 1996).

34. *See* Graham, *supra* note 32, at 257.

35. *See* Lamoreaux & Sokoloff, *supra* note 12, at 20.

36. *Id.* at 21.

37. *Id.* at 24.

their efforts on commercializing and marketing technologies created by such business entities.[38] The early successes by venture capital firms gave rise to significant growth in the venture capital industry.[39] An important change in federal policy in 1979 allowed U.S pension funds to invest in venture capital, resulting in significant growth in the industry.[40] The late 1990's were a "boom period" for venture capital as firms benefited from a surge in interest in the civilian applications for the internet and other computer technologies.[41] Investments in both venture capital funds and portfolio companies reached record highs.[42] However, venture capital financing peaked in early 2000.[43] The stock market crash of 2001 "shook the entire venture capital market as valuations for technology companies collapsed."[44] Many venture capital investors reduced their commitments and by 2003 the venture capital investments withered to less than half of their 2001 levels.[45] Since this time, venture capital investments have fluctuated with the economy reaching a low in 2009 and achieving a post-2000 high level of $59.1 billion in 2015.[46]

38. *Id.* at 26.

39. *See* Paul A. Gompers, *The Rise and Fall of Venture Capital*, 23 BUS. & ECON. HIST. 1, 7-10 (1994).

40. *See* ANDREW METRICK & AYAKO YASUDA, VENTURE CAPITAL AND THE FINANCE OF INNOVATION 11-12, 19-20 (Lacey Vitetta ed., 2d ed. 2011), http://ssrn.com/abstract=929145 [https://perma.cc/6LUW-CWYS]. If you are a fiduciary, you are expected to act like a "prudent man." This means fiduciaries are to act "with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims [.]" 29 USC § 1104(a)(1)(B) (2012). Under the original application, each investment was expected to adhere to risk standards on its own merits, limiting the ability of investment managers to make any investments deemed potentially risky. Under the revised 1978 interpretation, the concept of portfolio diversification of risk, measuring risk at the aggregate portfolio level rather than the investment level to satisfy fiduciary standards would also be accepted.

41. *See* METRICK & YASUDA, *supra* note 40, at 13.

42. *See* NAT'L VENTURE CAPITAL ASS'N, 2016 NATIONAL VENTURE CAPITAL ASSOCIATION YEARBOOK 11 (Thomson Reuters 2016) [hereinafter 2016 YEARBOOK], www.spurcap.com /nvca- yearbook- 2016.pdf. [https://perma.cc/PGZ7-UZ3N].

43. *See id.* at 12.

44. Brian Krumm, *Understanding the New Tennessee Small Business Investment Company Credit Act: Stimulating Economic Growth at the Intersection of Free Market Capitalism and Government Intervention*, 11 TRANSACTIONS: THE TENN. J. OF BUS. L. 93, 99 (2010).

45. *See* 2016 YEARBOOK, *supra* note 42, at 12.

46. *See id.* at 9. Since 2009, the venture capital activity level has increased for 6 consecutive years. *Id.* Despite this fact, the $59 billion in investments made in 2015 pales

In recent years, there has been a renewed interest in entrepreneurism. While some draw a distinction between entrepreneurism and innovation, the combination of entrepreneurial activity and innovation are considered the major factors behind long-term economic growth.[47] This interest is manifesting itself in many ways. States are focusing their economic development efforts on supporting entrepreneurism rather than using tax credits to attract industry from other states and countries.[48] They are investing in state-sponsored venture capital programs[49] and establishing business accelerators and incubators in strategic locations.[50] Colleges and universities across the country are establishing formal programs and offering degrees in entrepreneurship.[51] They are collaborating on local and regional economic development efforts that focus on innovation.[52] University researchers are encouraged to commercialize the inventions that they create through their basic research.[53]

in comparison to the $105.9 billion in investments made in 2000. *See* METRICK & YASUDA, *supra* note 40, at 13.

47. *See* Ahlstrom, *supra* note 10, at 16.

48. *See generally Entrepreneurship's Role in Economic Development*, KAUFFMAN FOUNDATION: ENTREPRENEURSHIP POLICY DIGEST (June 11, 2014), http://www.kauffman.org/~/ media/ kauffman_org/ resources/ 2014/ entrepreneurship%20policy%20digest/june%202014/entrepreneurship_policy_digest_june_2014.pdf [https://perma.cc/DJY3-RVAG].

49. *See* DON GRAVES & CLIFTON G. KELLOGG, *Foreword to* INFORMATION AND OBSERVATIONS ON STATE VENTURE CAPITAL PROGRAMS (2013). While the State Small Business Credit Initiative is one example, the Department of Treasury "manages a large portfolio of programs and fiscal policies intended to strengthen the U.S. Economy . . . ." ERIC CROMWELL & DAN SCHMISSEUR, INFORMATION AND OBSERVATIONS ON STATE VENTURE CAPITAL PROGRAMS 1 (2013).

50. *See* CROMWELL & SCHMISSEUR, *supra* note 49, at 12; *see, e.g.*, INCITE CO-INVESTMENT FUND, LAUNCH TENNESSEE, http://launchtn.org/investors/capital/incite/ [https://perma.cc/WB5V-R7A7]. *But see* STATE VENTURE CAPITAL PROGRAMS, *supra* note 49, at 1-2 n.1 (describing how 30 states participate in SSBCI and that California and Massachusetts do not use SSBCI capital for state venture capital programs).

51. *See* OFFICE OF INNOVATION & ENTREPRENEURSHIP ECON. DEV. ADMIN., U.S. DEP'T OF COMMERCE, THE INNOVATIVE AND ENTREPRENEURIAL UNIVERSITY: HIGHER EDUCATION, INNOVATION & ENTREPRENEURSHIP IN FOCUS 10 (2013), https://www.eda.gov /pdf /The_ Innovative_ and_ Entrepreneurial_University_Report.pdf [https://perma.cc/C7X7-FRWS].

52. *Id.* at 17.

53. The Department of Commerce has established programs to "nurture innovation, commercialization, and entrepreneurship among students, faculty, alumni, and within their communities." *Id.* at 9.

In sharp contrast, a recent Gallup article discusses the fact that since 2008 there have been more net business closures than start-ups.[54] According to the Bureau of Labor Statistics, "the level of entrepreneurship actually has declined in recent years."[55] While there can be a wide array of explanations for such an occurrence, the fact remains that since 1977 there has been a significant decline in the number of start-up businesses created in the U.S.[56] Recent studies suggest that the challenge of obtaining capital is one of the primary contributors inhibiting small business growth.[57]

II. VENTURE CAPITAL

A. History

The modern business entity form of venture capital only dates back to 1946, when Georges Doriot created American Research and Development Corporation (ARDC) to help fund entrepreneurial firms by those who did not have wealthy friends or family and could not obtain traditional bank financing.[58] During its 25-year existence, ARDC generated 15.8% annualized returns

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54. Clifton, *supra* note 7. "[T]he number of self-employed in the U.S. has dropped notably. Incorporated self-employed fell from 5.78 million in 2008 to 5.13 million in 2011. It climbed back to 5.64 million in 2016. So, after eight years, the number of incorporated self-employed remains well short of the 2008 level." *Facts & Data on Small Business and Entrepreneurship*, SMALL BUS. ENTREPRENEURSHIP COUNCIL, http://sbecouncil.org/about-us/facts-and-data/ [https://perma.cc/B8UE-6ZL9].

55. *Facts & Data on Small Business and Entrepreneurship, supra* note 54. Even with declining entrepreneurship in America, small businesses still comprise up to 97.9% of nationwide firms. *Id.*

56. *See* Clifton *supra* note 7 (containing a graph of U.S. Census Bureau Business Dynamics Statistics displaying a gradual and significant decline from 1977 to the present).

57. *See* BABSON, THE STATE OF SMALL BUSINESS IN AMERICA 2016 9 (2016), http://www.babson.edu/ executive-education/ expanding-entrepreneurship/ 10k-small-business /Documents /goldman-10ksb-report-2016.pdf. [https://perma.cc/3XQD-XZVY]. The Babson report summarizes insights collected through a survey administered to over 1,800 small business owners across the country, and examines challenges and opportunities facing established small businesses around four main themes: (1) access to capital; (2) the regulatory environment; (3) workforce; and (4) technology. *See id.* at 6.

58. METRICK & YASUDA, *supra* note 40, at 10. Unlike modern venture capital funds which are typically limited partnerships, ARD was organized as a corporation and was publicly traded. *Id.* at 10-11. Recorded venture capital activity dates back to 640 B.C., when Aristotle wrote about Thales, a Phoenician who purchased olive-oil presses in the winter when they were cheap and gained a considerable return during the more active winter season. *See* THE FIRST VENTURE CAPITALISTS: GEORGES DORIOT ON LEADERSHIP, CAPITAL, & BUSINESS ORGANIZATION, at XIII (Udayan Gupta ed., 2004).

for its investors, a standard for generating this type of returns that still exists today.[59] Such a return was heavily dependent on one primary "home run" investment in Digital Equipment Corporation (DEC).[60] DEC was founded by two MIT engineers who "wanted to make computers smaller, cheaper and easier to use."[61] In return for ARDC's $70,000 investment and Doriot's strategic guidance, ARDC received 70% of the stock in DEC.[62] Fearing that DEC would fall into hostile hands when he retired, he arranged for a buyout in 1972, where DEC shares were passed on to the ARDC investors.[63] ARDC sold its holdings to a much larger corporation with ARDC's interest in DEC shares valued at $450 million.[64]

During his tenure with ARDC, Doriot funded over a hundred different technology based start-ups in a wide range of industries from healthcare to telecommunications. He and his associates would use their academic credentials to scour labs for austronautical and military funded government research which had potential for civilian-commercial applications.[65] Doriot relied heavily on the character of the entrepreneur when deciding on what companies to invest in.[66] He stuck with these companies for the long-term, and believed that "profit was a byproduct of hard work and commitment, but not the endpoint."[67] Indeed, much of his success as a Harvard Business School professor and as a venture capitalist is attributed to his personal involvement with his students' and individuals whose companies he invested in.[68]

59. METRICK & YASUDA, *supra* note 40, at 10.

60. *Id.* "Excluding the $70,000 investment in their biggest 'home run', the Digital Equipment Corporation, ARD[C]'s 25-year annualized performance drops to 7.4 percent." *Id.*

61. Andrew Beattie, *Georges Doriot and The Birth of Venture Capital*, INVESTOPEDIA, http://investopedia.com/articles/financialcareers/10/georges-doriot-venture-capital.asp [perma.cc/SG5E-MKC8].

62. *Id.*

63. *Id.*

64. *Id.* Doriot later regretted the decision to sell to a larger corporation. *Id.* He felt that the larger corporate culture and impersonal management hampered DEC's flexibility. *Id.*

65. Beattie, *supra* note 61.

66. *See id.*

67. *Id.* As a Harvard Business School professor, Doriot prided himself on instilling in his students the value of an "honest day's work." SPENCER E. ANTE, CREATIVE CAPITAL: GEORGES DORIOT AND THE BIRTH OF VENTURE CAPITAL 43, 47 (2008).

68. Gupta, *supra* note 58, at XIV, XIX.

ARDC's success spurred others to create venture funds and "enter the venture capital field using Doriot's model."[69] Many of these new venture capital firms were started by former students and ARDC employees.[70] Doriot supported these efforts and believed that "as long as [start-ups] were subjected to selective rigor and . . . properly supported [,]" the more new ventures the better.[71] Doriot began to see the standards of some venture capital firms drop as they focused on realizing "quick profit from [initial public offerings] rather than building a company."[72] In a 1971 letter to ARDC shareholders, Doriot wrote "[v]enture capital seems to have shifted from a constructive, difficult task to a new method of speculation."[73]

Recognizing the need for additional capital for small start-ups beyond what the private equity market was providing, Congress passed the Small Business Act of 1958.[74] This act created the Small Business Administration (SBA) and subsequently the Small Business Development Companies (SBICs).[75] SBICs are privately owned investment companies that are licensed and regulated by the Small Business Administration to provide venture capital to small independent businesses.[76] SBICs have various investment philosophies, most provide long-term loans to qualified small businesses, but some more aggressive firms make equity-participation loans.[77] There are currently over 290 licensed

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69. Beattie, *supra* note 61.

70. *Id.* Because of the public status of ARDC, Doriot was unable to compensate his employees with options on those start-up companies that they were building. *See* ANTE, *supra* note 67, at 65.

71. Beattie, *supra* note 61.

72. *Id.*

73. Gupta, *supra* note 58, at 51.

74. Small Business Act, Pub. L. No. 85-536 67 Stat. 232 (1958); METRICK & YASUDA, *supra* note 40, at 10-11.

75. METRICK & YASUDA, *supra* note 40, at 11.

76. U.S. SMALL BUSINESS ADMINISTRATION, https://www.sba.gov /offices /headquarters /ooi /resources /4905 [https://perma.cc/L3VM-NXDR]. "Only companies defined by SBA as 'small' are eligible for SBIC financing." *Id.* "Generally, the SBIC Program defines a company as 'small' when its net worth is $18.0 million or less and its average after tax net income for the prior two years does not exceed $6.0 million." *Id.*

77. *Small Business Investment Companies (SBIC)*, INC., https://www.inc.com/encyclopedia/small-business-investment-companies-sbic.html [https://perma.cc/B7GU-KGNU]. "SBICs . . . [can] range from limited partnerships to subsidiaries of multinational corporations." *Id.* "For banks, establishment of an SBIC subsidiary is often an attractive proposition, because it enables them to make small business investments that would otherwise be closed to them because of U.S. banking laws and requirements." *Id.* Regardless of their

SBICs in existence across the country today.[78] While SBICs did not immediately contribute a significant source of venture capital for start-ups, they eventually provided a valuable training ground for venture capitalists.[79]

In the early 1960's venture capital firms began organizing as limited partnerships.[80] Venture capitalists served as general partners and passive investors, while institutions such as pension funds, university endowments, and other entities served as the primary investors and limited partners.[81] The limited partnership business-entity form offered two distinct advantages over the venture capital corporation. It allowed the venture fund to take advantage of the pass through taxation feature of the partnership, while providing the limited partners with the liability protection offered to corporations.[82] Additionally, it allowed the general partners to craft a limited partnership agreement which vests them with substantial discretion to function in multiple roles within the company such as an officer, an advisor, and a source of funding while limiting their own personal liability to the fullest extent possible.[83] The transformation to the limited partnership structure is

business structure, "their ultimate goal is to realize a profit from their various business transactions." *Id.* Once SBA approved, SBICs can leverage funds at advantageous rates from the United States Treasury based upon the amount of private investment in the fund. *Id.* "Some SBICs make most of their revenue from straight debt financing, with their profit coming from the differential between the cost of borrowing from the SBA and the interest rate they charge the small business [borrower]" and some make equity-participation loans. *Id.* Typically, SBICs are eligible to receive up to 300% of private equity raised. 13 C.F.R. § 107.1150(a) (2017).

78. U.S. SMALL BUSINESS ADMINISTRATION, SBIC ANNUAL REPORT FY 1 (2014), https://www.sba.gov/sites/default/files/files/SBICAnnualReport_FY2014_Final_508.pdf. [https://perma.cc/J24S-BDLB]. "In FY 2014, SBA licensed 30 SBICs with over $1.3 billion in private investor capital . . . bringing the SBIC operating portfolio to 294 funds with $11.8 billion in Private Capital and almost $10.7 billion in SBA outstanding leverage and commitments for a total of $22.5 billion of capital under management." *Id.* at 2-3.

79. *See* METRICK & YASUDA, *supra* note 40, at 11, 15. "Since 1958, SBICs have invested almost $60 billion in small U.S. companies . . . ." *The Steps to SBIC Financing*, SMALL BUSINESS INVESTOR ALLIANCE, http://www.sbia.org /?page=sbic_financing [https://perma.cc/ZN42-LVWH].

80. METRICK & YASUDA, *supra* note 40 at 11; *see also* Martin Kenney & Richard Florida, *Venture Capital in Silicon Valley: Fueling New Firm Formation*, *in* UNDERSTANDING SILICON VALLEY: THE ANATOMY OF AN ENTREPRENEURIAL REGION 98, 109 (Martin Kenney ed., 2000).

81. David Rosenberg, *Venture Capital Limited Partnerships: A Study in Freedom of Contract*, 2002 COLUM. BUS. L. REV. 363, 366, 375 (2002).

82. *Id.* at 376.

83. *See id.* at 382.

viewed as one of "the . . . most important organizational innovation[s] of the modern venture capital system."[84]

Perhaps the most significant policy change that impacted venture-capital investment occurred in 1979 when U.S. pension fund rules were relaxed to allow pension funds to invest in this asset class.[85] With vast amounts of money to invest compared to the individual investor, pension funds soon began to dominate the venture capital market;[86] in fact, pension funds presently "supply nearly half of all the money for [venture capital] in the United States."[87] Following a surge in venture capital investment after the relaxation of ERISA laws, growth in the venture capital industry "remained [relatively] stable throughout the 1980s."[88] This growth continued through the first half of the 1990s, increasing from $3 billion in 1983 to just over $4 billion in 1994.[89]

In the late 1990s, the United States market experienced extraordinary growth in internet and computer technology investments, and venture capitalists were there to share in the profit.[90] Venture capital investments in such companies were yielding spectacular returns, and institutional investors rushed in to participate.[91] Venture capital investments grew from a previous high of around $4 billion in the early 90s to an unprecedented level of $104 billion in 2000.[92] This boom in venture capital investments, however, was short lived. "The [stock market] crash and technology slump that started in March 2000 shook virtually the entire venture capital industry as valuations for startup technology companies collapsed."[93] Venture capital investments fell by nearly half from the fourth quarter of 2000 to the first quarter of 2001.[94]

84. *Id.* at 365 (citation omitted).

85. METRICK & YASUDA, *supra* note 40, at 11.

86. *Id.* at 11-12.

87. *Id.* at 11.

88. *Id.* at 12.

89. *Id.*

90. *See* METRICK & YASUDA, *supra* note 40, at 12.

91. *See id.* Investments rose to $11.0 billion in 1996, $14.7 billion in 1997, $20.9 billion in 1998, and $54.4 billion in 1999 before reaching an all-time high of $105.9 billion in 2000. *Id.* at 12-13.

92. *Id.* at 12.

93. M Maritha, et al., *Role of Venture Capital in Indian Economy*, 4 IOSR J. of BUS. & MGMT., Sept.-Oct. 2012, at 46, 51.

94. *See id.* "Although the post-boom years represent just a small fraction of the peak levels of venture investment reached in 2000, they still represent an increase over the levels of investment from 1980 through 1995." *Id.* at 51. "[V]enture investment was 0.058% [of

During the post-boom period venture capital investments fluctuated between $20 and $30 billion dollars a year[95] until 2009 where activity steadily increased before reaching $58.8 billion in 2015.[96]

B. The Limited Availability of Venture Capital

The National Venture Capital Association recognizes 718 venture capital firms in existence in 2015 with a total of over $165 billion of capital under management.[97] There were 3,709 companies funded in 2015, and 1,444 of those raised money for the first time.[98] During this period, companies in 46 states received venture capital funding; however, 41% of the deals and 57% of the total funds invested were in California.[99] Companies in California, New York, and Massachusetts were the beneficiaries of 78% of all such investments.[100]

"An obstacle for supporting high-growth small businesses as a state economic development strategy is the supply of private sector equity investors, both in terms of the number of experienced venture investors and the amount of capital available for venture investments."[101] As the above data indicates, "the supply and accessibility of privately managed venture capital is far more limited for small businesses located outside a small number of

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GDP] in 1994, peaked at 1.087% (nearly 19 times the 1994 level) in 2000 and ranged from 0.164% to 0.182% in 2003 and 2004." *Id.* "The revival of an Internet-driven environment in 2004 through 2007 helped to revive the venture-capital environment." *Id.* "However, as a percentage of the overall private equity market, venture capital has still not reached its mid-1990s level, let alone its peak in 2000." *Id.*

95. METRICK & YASUDA, *supra* note 40, at 13. The years following 2000 are referred to as the post-boom period for venture capital. *Id.*

96. *See* 2016 YEARBOOK, *supra* note 42, at 10-11.

97. *Id.* at 9.

98. *Id.* at 9, 12. Of the 3,709 companies funded, 2,620 were in information technology, 664 were in Medical/Health/Life Sciences and 425 were Non-High Technology industry groups. *Id.* at 12.

99. *Id.* at 9.

100. *See id.* at 14.

101. PROGRAM EVALUATION OF THE US DEPARTMENT OF TREASURY STATE SMALL BUSINESS CREDIT INITIATIVE, U.S. DEPT. OF TREASURY 61 (2016) [hereinafter EVALUATION OF SMALL BUSINESS CREDIT INITIATIVE], https://www.treasury.gov/ resource-center/ sb-programs/ Documents/ SSBCI%20 Program%20 Evaluation%20 2016%20 -%20 Full%20 Report.pdf. [https://perma.cc/2BHA-2K2N].

geographic regions."[102] Given that most venture capitalists become actively engaged with their portfolio companies,[103] it is critical that the company is within reasonable commuting distance from the fund.[104] As a result, the funded companies are often required to move closer to the funding source.[105] Start-ups emanating from universities, government operations, and corporations outside these three states are developing valuable intellectual property, and entrepreneurs are seeking seed capital with which to commercialize such innovations.[106] Economic development officials outside of traditional venture capital centers view such agglomeration of venture capital funding as a constraint on innovation, stifling to such start-ups, as well as state economic development efforts designed to foster the growth in state entrepreneurial activities.[107]

Within this macroeconomic context, an entrepreneur must also understand that "[f]or every 100 business plans that come to a venture capital firm for funding . . . only 10 or so get a serious

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102. *Id.*

103. They usually accomplish this by taking a board seat and acting as strategic advisors. 2016 YEARBOOK, *supra* note 42, at 6.

104. *See* Scott Shane, *Why Venture Capital Deals Stay in Silicon Valley*, ENTREPRENEUR.COM (Nov. 2, 2015), https://www.entrepreneur.com/article/252225 [https://perma.cc/Q44A-A767]. "For example, since 2010, small businesses receiving 80 percent of the $166 billion of venture capital investments were headquartered in fewer than 1 percent of the U.S. counties." EVALUATION OF SMALL BUSINESS CREDIT INITIATIVE, *supra* note 101, at 61 (citation omitted).

105. *See* Shane, *supra* note 104. Observers of equity capital markets have noted that the "virtuous cycle" of venture-backed businesses located close to funding sources has also created a "vicious cycle" for regions with few venture capital firms actively investing in local businesses. LERNER, *supra* note 4, at 6.

106. *See generally* 2016 YEARBOOK, *supra* note 42 (containing numerous graphic data displays). According to the State Science and Technology Institute (SSTI), three of the primary elements of an innovation or technology-based economy include intellectual infrastructure, an entrepreneurial culture, and investment capital. *See* A RESOURCE GUIDE FOR TECHNOLOGY-BASED ECONOMIC DEVELOPMENT: POSITIONING UNIVERSITIES AS DRIVERS FOSTERING ENTREPRENEURSHIP INCREASING ACCESS TO CAPITAL, STATE SCIENCE & TECHNOLOGY INSTITUTE 7 (2006) [hereinafter RESOURCE GUIDE], http://ssti.org/sites/default/files/resourceguidefortbed.pdf. [https://perma.cc/5T3C-8WTH].

107. *See* RESOURCE GUIDE, *supra* note 106, at 7, 13. Research has shown that young, high-growth businesses contribute disproportionately to job growth and positive spillover effects for regional economies. *See* Haltiwanger et al., *Who Creates Jobs? Small vs. Large vs. Young* 9-10 (Nat'l Bureau of Econ. Res., Working Paper No. 16300, 2010), http://www.nber.org/papers/w16300.pdf [https://perma.cc/2ZVD-UFS8].

look, and only one ends up being funded."[108] "The venture capital firm looks at the "management team, the concept, the marketplace, fit to the fund's objectives, the value-added potential for the firm, and the capital needed to build a successful business."[109] The reality is that most start-ups do not qualify for venture capital and likely never will. Most venture capitalists invest only in fast-growing ventures that have a proven record of accomplishment. This reduces the risk of poor fund performance.[110] The ultimate objective of venture capital funds is to invest in start-up companies and obtain a high rate of return in the shortest time frame possible.[111] This is typically accomplished through merger and acquisition or through an initial public offering in the security markets.[112]

Given this focus on speedy monetization, there are a number of reasons why entrepreneurs may not choose to access venture capital. Many first-time entrepreneurs can be confused over who the real customer is in a venture capital transaction.[113] Under the typical venture capital model the investors are limited partners who supply 99% of the fund's capital.[114] The general partners supply 1% of the capital and receive an annual management fee of 2% of the value of the fund.[115] The general partners decide which start-ups to invest in and when such investments should be liquidated. The most common profit-sharing arrangement is an

108. 2016 YEARBOOK, *supra* note 42, at 6.

109. *Id.* at 6-7.

110. Growth stage companies received the highest percentage of investment in 2015. 2016 YEARBOOK, *supra* note 42, at 26.

111. METRICK & YASUDA, *supra* note 40, at 3. The typical fund is set up for a ten-year life. *Id.* at 16. "Historically, after the [tenth] year, only a few companies that typically do not have huge upside potential remain in the portfolios." *Id.* at 20. "But the slow pace of exits in recent years has resulted in a number of good, mature companies remaining in portfolios well past the nominal 10-year mark." *Id.* "Life science funds tend to have lives two years longer than typical technology funds." *Id.* The median initial public offering of a fund in this analysis is 14.17 years. *Id.*

112. 2016 YEARBOOK, *supra* note 42, at 6. I will refer to investors in venture capital funds as investors. While the venture capitalists running those funds are also investors in the start-up firms, I will refer to them simply as venture capitalists. The term entrepreneurs and founders are used interchangeably. The innovation-intensive start-ups being financed will be referred to as start-ups or portfolio companies, or simply, the venture.

113. *See id.* at 7.

114. Diane Mulcahy, *Venture Capitalists Get Paid Well to Lose Money*, HARV. BUS. REV., Aug. 5, 2014, https://hbr.org/2014/08/venture-capitalists-get-paid-well-to-lose-money [https://perma.cc/3PVP-6ZFY].

115. See *id.*

80/20 split, where after returning all the original investment to the limited partners, the general partner keeps 20% of the fund's profit and distributes 80% to the limited partners.[116] This compensation structure, known as Carried Interest, is taxed at the reduced rate applicable to the capital gain rate and is the incentive that makes private equity so enticing for investment professionals.[117]

Once this model is understood, it becomes clear that the venture-capital-funds customers are the general partner(s) and investors, and the entrepreneur and the start-up company is the product that is partially acquired, nurtured, and ultimately sold for a profit. The typical venture investee will be a company that has large growth potential over a short period of time. Only about "three percent of all businesses can be classified as high growth businesses" that venture capitalists typically target.[118] Within the subset of high-growth businesses, venture companies largely target established or rapidly growing companies rather than early-stage or seed companies.[119] In fact, most venture capital funding "is going to large, late-stage companies including 'unicorns,' which are private companies valued at $1 billion or more."[120] Those "unicorns" accounted for most of the available VC funding in early 2016, comprising $40 billion in the first half of 2016 out of the $79 billion total invested.[121]

C. The Conflicts of Interest Inherent in Venture Capital

116. *See id.*

117. *See* Todd Hixon, *An Insider Perspective On Carried Interest*, FORBES (Feb. 2, 2012, 1:50 PM), http://www.forbes.com/sites/toddhixon/2012/02/02/an-insider-perspective-on-carried-interest/#5f4a49b56b0a [https://perma.cc/4D8B-A5HU].

118. Karen Mills, *The 4 Types of Small Businesses, and Why Each One Matters*, HARV. BUS. REV., Aug. 30, 2015, https://hbr.org/2015/04/the-4-types-of-small-businesses-and-why-each-one-matters [https://perma.cc/NDJ5-XKV7].

119. Lizette Chapman, *Unicorns Snag Most Venture Capital in First Half of 2016*, BLOOMBERG (July 8, 2016, 7:16 p.m.), https://www.bloomberg.com /news /articles /2016-07-07 /unicorns- snag- most- venture- capital- in- first- half- of -2016 [https://perma.cc/3XM8-KGWE].

120. *Id.*

121. *Id.*

Once the fund is raised, the venture capitalist begins the process of acquiring an interest in an attractive start-up. Many first-time entrepreneurs dream of the day that they hit it big and get a venture capital firm to back their new start-up. After all, that is how the likes of Apple, Microsoft, Google, and Starbucks got their start.[122] However, most novice entrepreneurs are unaware of the dynamics of entering into a contractual relationship with a venture capital firm and are blind to the potential consequences.[123] There are inherent conflicts of interest between the entrepreneur and the venture capital firm. The most obvious is the one that everyone knows from Shark Tank. The entrepreneur wants to get the most money from the investor while giving up the smallest share of the company; the investor wants the opposite. The venture capitalist has an advantage here, because the venture capitalist has wide experience in valuing companies and a staff of analysts to help with the job.

Often, venture capital contracts can have problems embedded at their inception. During the negotiations stage, the relative imbalance of bargaining power can influence the valuation of the start-up company and the contractual rights of the parties.[124] "Venture capital contracts are [largely] non-negotiable"[125] and the terms are favorably drafted to protect the interests of the fund and provide the venture capitalist with as much control as possible over the portfolio company.[126] In addition, if there are no other sources of financing, the start-up has little leverage in negotiating the amount of equity it must give up to the venture capitalist for the necessary financing.

While it may appear that such contracts are patently unfair to the entrepreneur, one must consider the amount of risk that the

122. *See* 2016 YEARBOOK, *supra* note 42 at 7.

123. Andy Heughebaert & Sophie Manigart, *Firm Valuation in Venture Capital Financing Rounds: The Role of Investor Bargaining Power*, 39 J. BUS. FIN. & ACC. 500, 505-06 (2012) (citations omitted), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1729773 [https://perma.cc/8GAH-H4JW]; *see also* Yrjö Koskinen, et. al., *Private Information and Bargaining Power in Venture Capital Financing*, 3 (2013), https://ssrn.com/abstract=891192 [https://perma.cc/3PY7-LR9J].

124. Heughebaert & Manigart, *supra* note 123; *see also* Yrjö Koskinen, et. al., *supra* note 123.

125. *See* Manuel A. Utset, *Reciprocal Fairness, Strategic Behavior & Venture Survival: A Theory of Venture Capital-Financed Firms*, 2002 WIS. L. REV. 45, 55 n.16 (2002).

126. *Id.* at 61 (stating that venture capitalist are permitted to "keep a 'tight leash' on entrepreneurs").

investors are taking in such speculative investments, and the fiduciary duties the general partners of the venture capital firm owe their limited partners when they make these investments[127] Failure rates for start-ups are between 30 and 95% depending on how failure is defined.[128] The agreements are designed to give the general partners the most flexibility possible to navigate between what is in the best interest of the fund versus what is in the best interest of the portfolio company. However, as a practical matter, the way the venture capital compensation structures are set up, the incentives clearly favor the interests of the fund.[129]

The general partners or their agents will typically take seats on the board of the portfolio companies to ensure oversight over the start-up.[130] Operational conflicts often arise from information-asymmetry problems, where both the entrepreneur and the venture capitalist are in possession of specialized information which was not uncovered during due diligence or contemplated in the agreement.[131] Furthermore, the founders and venture capitalist will often have differing expectations and interests in the transaction and conflicts arise from these divergences.[132]

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

128. *See* Carmen Nobel, *Why Companies Fail—and How Their Founder Can Bounce Back*, HARVARD BUSINESS SCHOOL (Mar. 7, 2011), http://hbswk.hbs.edu/item/why-companies-failand-how-their-founders-can-bounce-back [https://perma.cc/UGX3-65NU]. Shikhar Ghosh, a senior lecturer at Harvard Business School, estimates that if failure means liquidating all assets, with investors losing all or most of their investment, then the failure rate for start-ups is 30 to 40%. If failure is defined as failing to meet projected return on investment, the failure rate is between 70 and 80%. If failure is defined as failing to meet a previously declared projection, then the failure rate is between 90 and 95%. *Id.*

129. *See* Heughebaert & Manigart, *supra* note 123, at 506.

130. *See* Utset, *supra* note 125, at 61.

131. *See* Zsuzsanna Fluck, et. al., *Venture Capital Contracting and Syndication: An Experiment in Computational Corporate Finance*, 20 (Nat'l Bureau of Econ. Research, Working Paper No. 11624, 2005) (citation omitted), http://www.nber.org/papers/w11624 [https://perma.cc/6DWW-GCL3]. Information asymmetry plays a crucial role in the venture industry because the founder will often possess much greater knowledge of the product or products while the venture investor possesses business acumen and market knowledge. *See* Maya Steinitz, *The Litigation Finance Contract*, 54 WM. & MARY L. REV. 455, 488 (2012).

132. *See* JUAN LI & JAN TONY ABRAHAMSSON, NEW MONEY, NEW PROBLEMS: A QUALITATIVE STUDY OF THE CONFLICTS BETWEEN VENTURE CAPITALISTS AND

Because of the potential conflicts that arise during the maturation process, the parties in the venture transaction sometimes resort to obstructionist measures to further their individual goals at the expense of the company or the venture itself.[133] For example, the general partners will structure the investment in the portfolio company by taking preferred shares "with significant liquidation preferences and redemption rights, [which] 'puts them in a superior position to common stockholders'—i.e. the founder in liquidation or acquisition."[134] One of the ways that venture capitalist can usurp company control from the founders is through wash-out financing.[135] When venture capitalist undergo a round of wash-out financing, the new issuance drastically dilutes the ownership of the founders and the venture capitalists are able to take control of the company.[136]

Once the venture capitalist has obtained majority control, the venture capitalist may continue nurturing the company until it can be brought to market, but they may also "dissolve the company and salvage what it can,"—meaning selling the portfolio-company's assets in an effort to break even.[137] If the venture capitalist

ENTREPRENEURS IN SWEDEN 23 (2011) (noting a Swedish market study where conflicts most often arise out of differing expectations and objectives), http://www.diva-portal.org /smash /get/diva2:426612/FULLTEXT01 [https://perma.cc/VAZ3-NKES].

133. *See* Utset, *supra* note 125, at 117 n.236. Utset believes that the relative dependence on the entrepreneur's remaining in the venture can cause the entrepreneur to take company-harming actions due to the often VC-favorable contract provisions. *Id.*

134. Vladimir Atanasov, et. al., *The Impact of Litigation on Venture Capitalist Reputation*, 6 (Nat'l Bureau of Econ. Research, Paper No. 13641, 2007) http://www.nber.org/papers/w13641 [https://perma.cc/3JXJ-QSAX]; *see* José M. Padilla, *What's Wrong with a Washout?: Fiduciary Duties of the Venture Capitalist Investor in a Washout Financing*, 1 HOUS. BUS. & TAX L. J. 269, 274 (2001); *see also* Utset, *supra* note 125, at 51 ("[V]enture capitalists structure transactions so as to retain control. Among other things, control gives venture capitalists the ability to freely maneuver during the venture, including the ability to dismiss entrepreneurs when their services are no longer deemed valuable . . . .").

135. Padilla, *supra* note 134, at 276. Practically speaking, however, washouts are "excruciating" and "ugly." Paul Jones, *Startup Finance: A VC's Thoughts on Wash Out Rounds*, TECHNORI (Apr. 12, 2013), http://www.technori.com /2013/04/4114-startup-finance-a-vcs-thoughts-on-wash-out-rounds/ [https://perma.cc/8ZMW-BEKJ].

136. *See* John R. LeClaire, et. al., *WatchMark Ruling Clarifies Pay-To-Play*, VENTURE CAPITAL JOURNAL 64 (Mar. 2005).

137. Utset, *supra* note 125, at 57, 65 ("Intangible assets like intellectual property are harder to value and sell to third parties."); *see also* Ralph Bachmann & Ibolya Schindele, *Theft and Syndication in Venture Capital Finance* 1, 3 (2006), https://ssrn.com/abstract=896025 [https://perma.cc/3TPE-TGPW] (stating that "[v]enture capitalists hold portfolios of projects, which provides them with the opportunities and the incentives to apply ideas or technologies developed by one entrepreneur in other projects.").

takes the latter course, they salvage some or all of their initial investment, but in doing so they take away any chance for the portfolio company to succeed, thereby assuring that the founders will get nothing for all the time, money, and hard work they put into the business.

In many ventures, the primary asset of the portfolio company is its intellectual property, which the venture investor can either sell to third parties or incorporate into its other portfolio companies which are being financed through the fund.[138] Because founders typically only contribute human capital and intellectual property to the venture,[139] much of their continued managerial involvement depends on future product developments. The tacit knowledge of the intellectual property possessed by the founders can play an important role in how successful the products are or how services perform in the marketplace.[140] Withholding such information is the only real obstructionist behavior that the entrepreneur can undertake to retaliate against the opportunistic behavior of the venture capitalist. Due to the contractual protections contained in the venture capital agreement, the founder is limited in its self-serving actions.[141]

The only real alternative that an aggrieved entrepreneur has is to take legal action. However, an entrepreneur that is seeking outside funding to promote their start-up, will likely not have the financial ability to support litigation. Again, because the venture capital agreements are largely drafted to protect the interests of the venture capitalist, pursuing such an option is rarely beneficial. An example of how such investor-favorable provisions play out in an action of this nature is reflected in the Delaware case *In re Trados Inc. Shareholder Litigation*; here, a founder unsuccessfully attempted to sue based on an investor's supposed breach of fiduciary duty by utilizing their liquidation preference.[142] Courts

138. *See* Utset, *supra* note 125, at 57.

139. *See id.*

140. Brian K. Krumm, *University Technology Transfer - Profit Centers or Black Holes: Moving Toward a More Productive University Innovation Ecosystem Policy*, 14 NW. J. TECH. & INTELL. PROP. 171, 191 (2016).

141. Utset, *supra* note 125, at 57. Utset describes how entrepreneurs facing dismissal or liquidation may engage in "hold-up" behavior to cease development of the product. *Id.* A study of VC-involved litigation showed that founder claims usually center around fraud and 94% of trials end in victory for the VC. *See* Atanasov et al., *supra* note 134, at 21.

142. 73 A.3d 17, 20, 33-34 (Del. Ch. 2013). While *Trados* is one example of VC litigation, there are several others. *See generally Encite LLC v. Soni*, No. 2476-VCG, 2011

will generally give effect to the terms of the venture agreement because the contracts reflect the exchange of the venture capitalist's added value for such control provisions.[143] In reality, the best protection an entrepreneur has in this process is evaluating the venture capitalist's reputation prior to entering into such agreements.[144] The industry tends to monitor itself and those venture capital firms that have a history of opportunistic or predatory actions toward their portfolio companies can be uncovered during the due diligence process.[145]

While such disputes may prove the exception rather than the rule, the relationship proves to be most successful when all of the parties' interests are aligned.[146] When working effectively, the venture capital model has produced unprecedented results in bringing innovative products and services to market.[147] Such market successes are only partially attributable to the capital contributions made to the venture, and perhaps to an even greater extent it is the value added services that the venture firms provide that make the difference.[148] "Although [such activities are] an important part of the bargain between the venture capitalists and the entrepreneur, they are rarely specified" in venture capital contracts.[149]

WL 5920896 (Del. Ch. Nov. 28, 2011) (describing governance disputes arising in the course of a venture); *see, e.g.*, *In re Nine Sys. Corp. S'holders Litig.*, No. 3940-VCN, 2014 WL 4383127, at *34 (Del. Ch. Sept. 4, 2014) (describing the litigation challenges with "fair dealing and fair price" issues); *Orban v. Field*, No. 12820, 1997 WL 153831, at *1 (Del. Ch. Apr. 1, 1997) (the court found no breach of good faith when common stock holders received no consideration in a merger); *Casanaro v. Bloodhound Techsm Inc*., 65 A.3d 618, 637 (Del. Ch. 2013) (describing the application of the business judgment rule in obtaining control of the company).

143. *See* David Rosenberg, *Venture Capital Limited Partnerships: A Study in Freedom of Contract*, 2002 COLUM. BUS. L. REV. 363, 367-68 (2002).

144. *See* Atanasov, et. al., *supra* note 134, at 2, 4.

145. *Id.* at 4.

146. *See* 2016 YEARBOOK, *supra* note 42, at 7-8.

147. *Id.* at 6.

148. *See* TERTTU LUUKKONEN, ET. AL, IMPORTANCE OF THE NON-FINANCIAL VALUE ADDED OF GOVERNMENT AND INDEPENDENT VENTURE CAPITALISTS 3 (KESKUSTELUAIHEITA DISCUSSION PAPERS, 2011), https://www.etla.fi/wp-content/uploads/2012/09/dp1257.pdf [https://perma.cc/R7P8-2C2H].

149. D. Gordon Smith, *Venture Capital Contracting in the Information Age*, 2 J. SMALL & EMERGING BUS. L. 133, 134 (1998).

D. Venture Capital's Value Enhancing Activities

When entrepreneurs enter into business with active investors they receive a boost in capital from the firm to evolve into the next step in its life cycle. More importantly, however, they receive non-monetary assistance from the active investor. Venture capitalists provide much more than money to the venture, they nurture the enterprise in hopes of increasing the value of its holdings.[150] The venture capitalist can serve as a networking tool, introduce the founders to new areas of the venture industry, proffer financial alternatives, legitimize the firm, and coach the firm to success.

While the organizational structure of venture capital firms take on many different forms, in many respects they resemble a consulting firm. The senior personnel in the hierarchy are the general partners or managing directors. They make the final investment decisions and sit on the board of directors of the portfolio companies.[151] Principals or directors are generally next in line, followed by associates and analysts who perform a range of duties that include performing due diligence, monitoring existing investments, and evaluating prospective investments.[152] Some firms have venture partners or operating partners, entrepreneurs who have a part time relationship with the firm. In some firms, operating partners take an active role in managing the investment in the portfolio company as chairman or director.[153] Some firms have entrepreneurs in residence who work with the firm while looking for their next entrepreneurial venture and assist the firm with due diligence, introductions, and networking during the residence.[154]

The venture capitalist's role in the transaction is to "provide advice, guidance and even supervision to the firms in their portfolios." [155] This financial, administrative, marketing, strategy,

150. Rosenburg, *supra* note 143, at 364.

151. JEFFREY BUSSGANG, MASTERING THE VC GAME 50 (2011).

152. *Id.* at 50-51; BRAD FELD & JASON MENDELSON, VENTURE DEALS: BE SMARTER THAN YOUR LAWYER AND VENTURE CAPITALIST 7 (2d ed. 2013).

153. FELD & MENDELSON, *supra* note 152, at 7.

154. *Id.* at 7-8; BUSSGANG, *supra* note 151, at 53-54; ANDREW ROMAS, THE ENTREPRENEURIAL BIBLE TO VENTURE CAPITAL: INSIDE SECRETS FROM THE LEADERS OF THE STARTUP GAME 67 (2013).

155. Rosenburg, *supra* note 143 at 364.

and management support – or "coaching" – is usually lacking in "young innovative firms operating in high-tech industries."[156] Scholars note that the active nature of venture capitalist involvement gives investees competitive advantage over passive-investor firms.[157] And it is common for venture funds to communicate daily with their startups to grow and build the company.[158] Eventually, the venture capitalist will help mold the company's business model and help recruit talent to work towards high-yield exit strategies.[159]

While venture capitalists offer the entrepreneur technical and commercial advice, they also expand the entrepreneur's network.[160] Venture capital networks "facilitate the sharing of information, contacts, and resources" among other venture capital firms and can "improve the chances of securing follow-on VC funding for portfolio companies, and may indirectly provide access to other VC's relationships with service providers . . . ."[161] In fact, a "VC's network centrality has a positive and significant effect on the probability that a portfolio company survives to a subsequent funding round or exits successfully."[162] Further, firms may specialize in specific markets and can provide otherwise unavailable insight to the investee company.[163]

Venture capital firms also provide unapparent value to the transaction by legitimizing the firm, focusing the firm on key activities, and preventing distraction.[164] Because venture capital firms act as an intermediary between the investors and the inves-

156. *See* LUUKKONEN, ET. AL, *supra* note 148, at 3.

157. *See* Rosenberg, *supra* note 143, at 367.

158. 2016 YEARBOOK, *supra* note 42, at 6.

159. *Id.*

160. LI & ABRAHAMSSON, *supra* note 132, at 14.

161. Yael V. Hochberg, et. al, *Whom You Know Matters: Venture Capital Networks and Investment Performance*, 62 J. FIN. 251, 252 (2007).

162. *Id.* at 253.

163. *See* LI & ABRAHAMSSON, *supra* note 132, at 18-19.

164. *See id.* at 18. *See also* Michael Klausner & Kate Litvak, *What Economists Have Taught Us About Venture Capital Contracting* 3 (Stan. L. Sch. Program L. & Econ., Working Paper No. 221, 2001). Value-added services can be as important as financial capital. eBay, for instance, was a profitable start-up that did not require outside funding. Yet it sought venture capital, which was provided by Benchmark Partners, in recognition that a venture capitalist's connections and expertise would be essential in securing a seasoned CEO and other executives. RANDALL E. STROSS, eBOYS: THE TRUE STORY OF THE SIX TALL MEN WHO BACKED EBAY, WEBVAN, AND OTHER BILLION-DOLLAR START-UPS 22 (2002).

tees, their selection of a fund for investment confirms the investee's quality internally to the entrepreneur and externally through reputational validation.[165] Opposed to other financing methods, venture capital equity investments (by their nature) do not impose continual costs like debt financing does.[166] Venture capitalists will also likely hire human resources consultants to recruit along with optimal staffing for the venture.[167] In addition, venture capitalists can provide management advice to founders who lack managerial skills.[168]

Thanks to these non-monetary benefits, venture-backed companies have an advantage over their passive-investor and non-investor counterparts regarding sales growth, employee growth, professionalization, time to market, technology strategy selection, likelihood of public offering, risk of underpricing IPOs, and post-IPO survival.[169]

III. ANGELS—THE OTHER PRIVATE EQUITY INVESTOR

The term angel investors originated from Broadway Theater, where wealthy patrons would provide initial capital to get a new production off the ground in exchange for a share of the productions earnings.[170] In 1978, William Wetzel, a professor at the University of New Hampshire and founder of the Center for Venture Research, studied how entrepreneurs raised seed capital and adopted the term "angel" to describe the individuals who invested

165. *See* Darian M. Ibrahim, *Financing the Next Silicon Valley*, 87 WASH. U. L. REV. 717, 749 (2010) ("[P]rivate VCs serve as reputational intermediaries, meaning that if the signals they send ae not credible, their reputation will suffer.").

166. *Advantages and Disadvantages of Taking Venture Capital*, MYTOPBUSINESSIDEAS, http :// www.mytopbusinessideas.com /advantages- venture- capital / [https://perma.cc/GMJ3-DZKW].

167. *Id.*

168. *Id.*

169. *Venture Capital*, KAUFFMAN FOUND. (June 15, 2016), http://www.kauffman.org /microsites/state-of-the-field/topics/finance/equity/venture-capital [https://perma.cc/X579-7S5X].

170. Tom Britton, *A Brief History of Angel Investing*, SYNDICATE ROOM (Apr. 16, 2015),https: //www.syndicateroom.com /learn /overview /angel-investing [https://perma.cc /83R5-XA3A].

in the venture.[171] Angel investors are often retired executives or entrepreneurs themselves, looking for opportunities to make use of their experience and networks on a less than full time basis.[172] Unlike venture capital funds, angels invest their own money into the start-up.[173] Often, potential return on the investment is not the only or even primary reason the angel is making the investment. Sometimes they invest for more altruistic reasons such as a desire to give back to the community, spur economic development, or simply the gratification of using their skills to develop and establish relationships with entrepreneurs.[174]

The typical angel investor is looking for many of the same attributes in a start-up as is a venture capitalist when investing. However, they are willing to provide funding when the start-up is in the earliest stage of development and before there is enough of a reputation for venture funding to become interested.[175] Angel investors provide value through mentorship and establishing later rounds of financing.[176] Because angels typically invest in earlier financing rounds, their financial guidance provides uniquely beneficial value to a young firm.[177] In fact, raising additional capital is likely a service angels frequently provide.[178] In addition to the financial benefit, the most effective growth value angels provide

171. *See* Jonathon Ortmans, *The Rise of Angel Investing*, KAUFFMAN FOUND. (Mar. 28, 2016) http://www.kauffman.org/blogs/policy-dialogue/2016/march/the-rise-of-angel-investing [https://perma.cc/U88Y-ZE89].

172. *See Angel Investor*, ENTREPRENEUR, https://www.entrepreneur.com/ encyclopedia /angel-investor [https://perma.cc/E5GV-YHWG].

173. Ortmans, *supra* note 171.

174. *Id.*

175. *See* Jeffrey E. Sohl, *The U.S. Angel and Venture Capital Market: Recent Trends and Developments*, 6 J. PRIVATE EQUITY 7, 14 (2003) ("The [capital] gap ranges from $100,000 at the low end, the point at which the money raised from friends and families and bootstrapping runs out, to the $2 million range on the high end, the time when the venture would historically become attractive enough to catch the eye of venture fund investors.").

176. Jess H. Chua & Zhenyu Wu, *Value Added by Angel Investors through Post-Investment Involvement: Exploratory Evidence and Ownership Implications*, EUR. FIN. MGMT. ASS'N 1, 25-26 (OCT. 2009), http:// www.efmaefm.org /0EFMSYMPOSIUM /2010-Canada /papers/Value%20Added%20by%20Angel%20Investors%20through%20Post-Investment %20Involvement.pdf [https://perma.cc/2NMG-D6LS].

177. "[B]y investing in ventures at their earlier stage . . . when problems related to idea maturity, uncertainty, and legitimacy are more acute, angels may be able to add more value through their business expertise, industry experience, networks, and rapport with the entrepreneurs." *Id.* at 7 (citations omitted).

178. *Id.* at 3.

concerns mentorship.[179] Some believe monitoring activities act to spur firm growth, but studies have displayed that mentorship activities add more value to the firm's overall growth.[180]

Unlike the venture capitalists that employ comprehensive investment contracts to protect their investments, angel investing has traditionally been practiced in an informal fashion.[181] Although investing in start-ups is speculative at the earliest stages of the venture and subject to even greater information asymmetry and agency costs then the venture capitalists confront, the traditional angel enters into investment contracts that are both less complex and contain more entrepreneur-friendly terms.[182]

One explanation for the use of simple investment contracts by the traditional angel investor is that their role is relationship-driven. The source of deal flow generally comes from trusted business associates which serves as an effective screening process.[183] Since angels actively participate in the development of the venture, "contractual monitoring rights and control mechanisms used by venture capitalists" are unnecessary.[184] Given the level of participation in the venture, there is also a need to establish and maintain trust in the working relationship between the parties. Requiring an entrepreneur to enter into a venture capital-like contract may send a signal of lack of trust in both the venture and entrepreneur. Such angel-protective contracts risk the perception that the angel lacks confidence in the start-up, and instead signals desire to limit financial loss, or extract a disproportionate share of financial gains.[185] Overly detailed contracts may also suggest to the entrepreneur that the relationship may turn out to be more "combative than cooperative."[186]

In the mid-1990's angels began to deviate from this informal approach to venture investing and began to invest with other accredited investors[187] in informal groups or in syndicates that are

179. *Id.* at 2.

180. *Id.*

181. Darian M. Ibrahim, *The (Not So) Puzzling Behavior of Angel Investors*, 61 VAND. L. REV. 1405, 1407-08 (2008).

182. *Id.*

183. *Id.* at 1432.

184. *Id.* at 1433.

185. *Id.* at 1442.

186. Ibrahim, *supra* note 181, at 1441.

187. An angel typically qualifies as an "accredited investor" under the securities laws, which means it has over $1 million in net worth, or income over $200,000 in each of the last

formed within an organized angel network. Angel investing has made a resurgence in recent years as a wider audience has been introduced to the concept of angel investing through the rise of accredited online platforms such as AngelList and SeedInvest, which offer new deal structures and connects entrepreneurs with angels electronically.[188] Innovations in angel investing are speeding up the deal process by synchronizing investment activities.

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two years (or $300,000 with spouse) and reasonably expects to reach the same income level in the current year. 17 C.F.R. § 230.501(a) (2017).

188. AngelList and SeedInvest were the first two accredited platforms admitted to the Angel Capital Association. *See SeedInvest and AngelList are First Accredited Platforms Admitted to Angel Capital Association*, SEEDINVEST: ANGEL GROUPS (Sept. 15, 2016), https://www.seedinvest.com /blog/ angel-groups /seedinvest-angellist-first-accredited-platforms-admitted-angel-capital-association [https://perma.cc/X5GC-K3FS]. Angel List was founded in 2010 and aims to connect angel investors with tech startups over the internet. Nate C Hindman, *Naval Ravikant, AngelList: A Social Network That Connects Startups with Investors*, HUFFINGTON POST (Nov. 20, 2011), http://www.huffingtonpost.com/2011/09/20/naval-ravikant-angellist-startups-investors_n_966167.html [https: // perma.cc/N9XV-BCSH]. In addition, to providing a marketplace where start-ups can connect with investors, AngelList also has a job marketplace that links up job seekers with startups hungry for new talent. Kim-Mai Cutler, *AngelList Raised $163M for Startups in 2015, Up 56% Year-Over-Year*, TECHCRUNCH (Feb. 8, 2016), https://techcrunch.com /2016 /02 /08 /angellist- raised- 163m -for -startups- in- 2015-up-56-year-over-year/. [https://perma.cc/23BD-6KPB]. In 2015, 548,000 "job matches" were made on the platform. *Id.* Professional angel investors, along with any member, who have access to deal flow and a tremendous amount of experience can choose to lead a syndicate. *Syndicates*, ANGELLIST: HELP (Aug. 15, 2016), https://angel.co /help /syndicates [https:// perma.cc/7AV5-A654]. In exchange, they get access to more investors for the deal and get carry. *Id.* Carry is a form of compensation to the head of the investment syndicate. Simply put, it's a percentage of the fund's net profits. *Id.* The lead investor usually provides about 16% of the overall capital. Salvador Briggman, *AngelList vs SeedInvest*, CROWDCRUX, http://www.crowdcrux.com/angel-list-vs-seed-invest/. [https://perma.cc/L4GN-JQ46]. The start-up will get more capital with fewer investor interactions and back and forth communication with the lead investor. *Syndicates*, ANGELLIST: HELP (Apr. 12, 2016), https://angel.co/help. [https://perma.cc/LDV2-SSNE]. Investors pay 0-25% deal carry to the lead of their syndicate and 5% deal carry to AngelList Advisors, along with out-of-pocket costs. *Id.* There are no management fees. *Investors*, ANGELLIST: HELP (Sept. 26, 2016), https://angel.co/help [https://perma.cc/HCP7-BVVV]. SeedInvest was launched in 2013 with "the mission to connect startups and investors online." Briggman, *supra*. Most start-ups on SeedInvest are looking to raise between $100,000 – $50,000,000 and are technology or consumer-centric businesses. SEEDINVEST: FREQUENTLY ASKED QUESTIONS, https://www.seedinvest.com/faqs [https://perma.cc/GC7W-VUMD]. They should have already attracted a lead investor and set their funding terms. *Id.* The platform charges a 7.5% placement fee on the total amount raised, if successful, plus a 5% warrant coverage. *Id.* Warrant coverage is basically the option to buy more stock in the start-up at the price that was originally paid. *See Warrant Coverage*, INVESTOPEDIA, http://www.investopedia.com /terms/w/warrantcoverage.asp [https://perma.cc/XY7Q-V5JZ]. "The placement fee is paid to North Capital or SI Securities, which are the website's partner broker-dealers." Briggman, *supra*. "[The start-

Angel investing is more broadly available than venture capital to seed and early stage start-up companies. According to the University of New Hampshire Center for Venture Research, there were 304,930 active angel investors in 2015.[189] During this period, angels invested $24.6 billion in 71,110 start-up companies, 73% of which was seed or early financing.[190] Compared to venture capital, angel investments are more widespread regionally; although California, New York and New England still attract 40.4% of all investments.[191] With the advent of online angel platforms, funding opportunities can be pursued by remotely located entrepreneurs. However, extending the reach of angel investments through such platforms may come at the expense of the professional interest and guidance provided by the traditional angel.

While group-angel investors still primarily focus on seed and early stage start-up financing, pooling investment resources allows them to pursue larger investments at later stages of start-up development.[192] However, pooling resources and the forming angel groups change the traditional angel investment model. Now that the angels are investing money with others, there is a need to employ more formalized screening and contracting mechanisms. Evidence suggests that "the more sophisticated angel groups" are moving toward adopting contracting terms like those found in

up] should [also] expect up to $4,000 in due diligence, escrow, marketing and legal expense reimbursements." *Id.*

189. Jeffrey Sohl, *The Angel Investor Market in 2015: A Buyers' Market*, UNH CTR. FOR VENTURE RESEARCH (May 25, 2015), https://paulcollege.unh.edu /sites /paulcollege.unh.edu /files /cvr-reports /Full %20Year %202015 %20 Analysis %20Report.pdf [https://perma.cc/MD74-B3C9]. Although the size of angel investment market in the U.S. cannot be measured precisely (because many investments are made on an individual basis and therefore are not subject to disclosure rules), estimates indicate that the number of angel investment deals have far surpassed the number of venture capital investments. *Id.* (noting 71,110 individual angel deals).

190. Sohl, *supra* note 189. Angel investments in the seed and start-up stage were 28%; early stage investing was 45%; expansion financing 25%; and late stage investing 2% in 2015. *Id.* "Software maintained its top sector position with 18% of total angel investments in 2015, followed by Healthcare Services/Medical Devices and Equipment (16%), Biotech (13%), Industrial/Energy (11%), Retail (10.6%), and Media (9%)." *Id.*

191. *2015 Annual Halo Report*, ANGEL RESOURCE INSTITUTE, https:// angelresourceinstitute.org /reports/ halo-report-full-version-ye-2015.pdf [https://perma.cc/3JND-49P6].

192. Ibrahim, *supra* note 181, at 1445.

venture capital contracts.[193] Transitioning to this new angel investment model may diminish the unique relationship between the angel and entrepreneur and introduce some of the operational conflicts of interest found in the venture capital entrepreneur relationship. Essentially, angel investors are turning into venture capitalists in both form and substance.

IV. FEDERAL GOVERNMENT POLICY INITIATIVES DESIGNED TO ENHANCE INNOVATION FINANCE

In an effort to expand the availability of start-up capital to small innovative businesses, federal policy makers have initiated programs that provide grants and loans and liberalize certain securities regulations, making it easier for entrepreneurs to reach investors interested in purchasing equity in their start-up or other privately held small business. The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs provide grants to encourage the commercialization of intellectual property developed through federally sponsored research.[194] The State Small Business Credit Initiative (SSBCI) is designed to strengthen state programs that support private financing to small businesses.[195] The program allows "states, territories and eligible municipalities . . . to build upon or create" successful small business financing programs.[196] Perhaps the program that has the greatest potential for providing access to a new group of investors is the Jumpstart Our Business Startups Act (JOBS Act), which was enacted to incentivize capital formation in the private market for small businesses by easing many of the country's securities regulations.[197]

193. *Id.* at 1447.

194. *About SBIR*, SMALL BUSINESS INNOVATION RESEARCH, https://www.sbir.gov/about/about-sbir [https://perma.cc/Y6BL-66YE]; *About STTR*, SMALL BUSINESS INNOVATION RESEARCH, https://www.sbir.gov/about/about-sttr [https://perma.cc/9RJK-98P].

195. *See State Small Business Credit Initiative: General Information*, U.S. DEPARTMENT OF THE TREASURY, https://www.treasury.gov/resource-center/sb-programs/Pages/ssbci-faqs.aspx#gen1 [https://perma.cc/EZ2X-RTV7]; *State Small Business Credit Initiative (SSBCI)*, U.S. DEPARTMENT OF THE TREASURY, https://www.treasury.gov/resource-center/sb-programs/Pages/ssbci.aspx [https://perma.cc/Z84B-YT9].

196. *State Small Business Credit Initiative: General Information*, *supra* note 195.

197. Todd Blakeley Skelton, *2013 Jobs Acts Review & Analysis of Emerging Growth Company IPOs*, 15 TRANSACTIONS: TENN. J. BUS. L. 455, 456 (2014).

A. Small Business Innovation Research and Small Business Technology Transfer Programs

The SBIR and STTR programs are, together, one of the largest sources of early-stage technology venture financing.[198] Since 1982, the SBIR program has provided small businesses in the early stages of research and development with federal funding and support.[199] Modeled after the SBIR program, the STTR program was established ten years later as a sister program that promotes cooperative research and development between small businesses and research institutions.[200] The SBIR and STTR programs encourage US owned-and-operated small businesses to commercialize the scientific and technological innovations developed from federal research funds.[201] While federal research focuses on discovering and fostering fundamental scientific knowledge, research and development attempts to translate that fundamental research into the development of new products and services.[202] As a result, research and development shall greatly influence the advancement and development of industry as well as the national economy.[203] Many small businesses do not have the necessary capital for conducting research and development programs and are competitively disadvantaged.[204] The SBIR/STTR programs address this issue by investing federal funds in small businesses that would otherwise be unable to conduct research and development; thus, the SBIR/STTR programs lead to the commercialization of novel technological innovations and the stimulation of economic activity.[205]

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198. *What are SBIR and STTR Programs*, U.S. DEP'T OF HEALTH & HUM. SERVICES: NAT'L INSTITUTES OF HEALTH, https://sbir.nih.gov/ [https://perma.cc/XKU8-LWYV].

199. Small Business Innovation Development Act of 1982, Pub. L. No. 97-219, 96 Stat. 217, 217-21 (codified as amended at 15 U.S.C. § 638 and establishing the SBIR program).

200. *See generally* Small Business Research and Development Enhancement Act of 1992, Pub. L. No. 102-564, 106 Stat. 4249, 4256-61 (establishing the STTR program).

201. *See* 15 U.S.C. § 638(a) (2012); *see also About SBIR*, *supra* note 194; *What are SBIR and STTR Programs*, *supra* note 198.

202. *See What are SBIR and STTR Programs*, *supra* note 198.

203. *See* § 638(a) (2012).

204. *Id.*

205. *See id.*; *About SBIR*, *supra* note 194; *About STTR*, *supra* note 194.

Under the SBIR/STTR programs, federal agencies must reserve a portion of their research and development awards for small business concerns through the SBIR/STTR programs.[206] Awards through the SBIR/STTR programs can be in the form of "any contract, grant, or cooperative agreement entered into between any Federal agency and any small business" for developmental or research work funded at least in part by the federal government.[207] Every federal agency with a research and development budget of greater than $100 million must participate in the SBIR program by setting aside a certain percentage of their research and development budget for small businesses.[208] Prior to 2012, this percentage was 2.5%; however, it has increased by 0.1% each year since and will continue to increase until reaching a base requirement of 3.2% in 2017.[209] Additionally, every federal agency with research and development budgets greater than $1 billion must participate in the STTR program by reserving 0.45% of their budget for small businesses that cooperate with universities, federally funded research and development centers, and other non-profit scientific and educational institutions.[210]

To be eligible for an SBIR/STTR award, a firm or entrepreneur must meet several eligibility criteria. A company must be for-profit and U.S. owned and operated with fewer than 500 employees.[211] Notably, the average SBIR funding recipient has only

206. *Id.* at 638(f)(1).

207. *Id.* at 638(e)(3).

208. 15 U.S.C. § 638(f)(1) (2012). Currently, eleven federal agencies participate in the SBIR program: Department of Agriculture; Department of Commerce—Both the National Institute of Standards and Technology and the National Oceanic and Atmospheric Administration; Department of Defense; Department of Education; Department of Energy; Department of Health and Human Services; Department of Homeland Security; Department of Transportation; Environmental Protection Agency; National Aeronautics and Space Administration; and National Science Foundation. *About SBIR*, *supra* note 194.

209. *See* § 638(f)(1).

210. *Id.* at 638(n)(1)(A), (B). Currently, five federal agencies participate in the STTR program: Department of Defense; Department of Energy; Department of Health and Human Services; National Aeronautics and Space Administration; and National Science Foundation. *About STTR*, *supra* note 194.

211. *The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Program*, U.S. SMALL BUS. ADMIN. OFFICE OF INV. & INNOVATION, https://healthsciences.ucsd.edu /vchs /research-services /funding-opportunities /Documents /SBIR%20Overview%20Slides_25Jan12.pdf [https://perma.cc/G2Q4-E6UJ].

nine employees.[212] Furthermore, an SBIR/STTR firm is primarily a research and development organization and focuses on research and development and not on purchasing equipment or commercializing an existing technology.[213] To obtain an STTR award, there is an additional requirement that the small business must collaborate with a research institution.[214] The partnering research institution must "be a nonprofit college, university, or research organization, or a federally funded [research and development] center" that is located in the U.S.[215]

The SBIR/STTR program offers a milestone-driven funding process that is divided into three phases.[216] Phase I awards are granted based on "the scientific and technical merit and feasibility of ideas that appear to have commercial potential . . . ."[217] Phase II awards are granted to continue the research and development commenced in Phase I and are "based on the results achieved in Phase I and the scientific and technical merit and commercial potential of the project proposed in Phase II."[218] Phase III's objective is to pursue commercialization of the results obtained from Phase I and II.[219] However, Phase III awards are distinct from Phase I and II in that no further government funding is provided, rather all commercial applications and development are to be funded through non-federal capital.[220] Finally, an awardee's failure to meet the minimum commercialization benchmarks bars that awardee for qualifying for awards for one year.[221]

Obtaining an SBIR award has other ancillary advantages. An empirical study of the long-run effects of receiving such an award revealed that compared to similarly situated companies that did not receive such funds, winning an SBIR award positively influenced an awardee's growth, particularly in locations in which

212. *SBIR-STTR Program Presentation*, U.S. SMALL BUS. ADMIN. OFFICE OF INV. & INNOVATION. [PowerPoint presentation].

213. *Id.*

214. Tina Reynolds, *Why Congress Should Quickly Re-Up 2 Small Biz Programs*, LAW360 (Aug. 31, 2016, 11:15 AM), https://www.law360.com/ articles/ 832912/ why- congress- should- quickly-re-up -2-small-biz- programs [https://perma.cc/HSP5-G2D2].

215. *Id.*

216. *About SBIR*, *supra* note 194; *About STTR*, *supra* note 194.

217. 15 U.S.C. § 638(e)(4)(A) (2012).

218. *Id.* at 638(4)(B); *About SBIR*, *supra* note 194.

219. § 638(e)(4)(c)(i), (ii).

220. *Id.*

221. *Id.* at 638(qq)(1)(B).

there was access to venture-capital activity.[222] Such data suggests the presence of a "certification effect," where awardees can more easily obtain private capital after receiving an SBIR/STTR grant.[223] However, SBIR/STIR are highly competitive programs. Because these grants are viewed as somewhat of an investment by the federal government, applicants are held to the highest of standards. The proposal requirements and project-management criteria are rigorous and often overwhelming to a first-time applicant.[224]

While the federal agencies that oversee the SBIR/STIR awards provide information on how to apply for the grants, they do not provide technical assistance to the researchers on how to put a project team together or provide the necessary information to submit a winning proposal. In addition to having an innovative idea worthy of funding to achieve commercialization, it is necessary for the applicant to develop business plans, conduct market and competitive research, and demonstrate both technical and project management capabilities. In some instances, this will require networking and bringing individuals or companies into the project management team to compliment the scientific and technical skills of the principal investigators. In essence, there is a need to develop a capacity much like the venture capital model to assist in the SBIR/STIR innovation development process.

B. State Small Business Credit Initiative

The 2008 financial crisis and the subsequent recession were exceptionally hard on small businesses. Between 2008 and 2010,

222. Josh Lerner, *The Government as Venture Capitalist: The Long-Run Impact of the SBIR Program*, 72 J. BUS. 285, 301-03 (1999) [hereinafter *Long-Run*]. Lerner compared the growth of Phase II awardees with matching firms that did not receive such funding. The results revealed that the Phase II awardees experienced a mean employment increase of 32.6 employees from 1985 to 1995 as compared to the matching firms' mean employment increase of 5 employees. Likewise, the Phase II awardees saw a $4 million sales increase compared to only $1.1 million for the matching firms. For the mean SBIR awardee, these statistics represented a 56% increase in employment and a 98% boost in sales. The differences were determined to be statistically significant by t-tests and Wilcoxon rank-sum tests.

223. Camilla A. Hrdy, *Commercialization Awards*, 2015 WIS. L. REV. 13, 63 (2015). Hrdy suggests that Lerner's finding that SBIR awardees grew significantly faster than matched companies in areas with substantial venture capital activity is evidence that awardees could more easily acquire private investors due to their receipt of an SBIR award.

224. *See Long-Run*, *supra* note 222, at 294-96.

small business lending fell more than 8% after rising steadily for several years.[225] "The recession also constrained [the] private equity" markets that supported high growth start-ups.[226] During a period when small business needed access to capital the most to help the country recover from the recession, debt and equity financing became scarce.[227] In response, Congress, through the Small Business Jobs Act of 2010, allocated $1.5 billion as a "credit support program" to fund small businesses facing barriers to obtaining necessary financing.[228] The Act created the State Small Business Credit Initiative (SSBCI) which permitted states to use federal funding to leverage private lending and equity, allowing states to build upon successful state models for small business development programs.[229] A departure from federal credit programs with uniform requirements, states were given flexibility to design programs that address local market conditions.[230] This has allowed states to build upon existing state programs as well as develop new state-run initiatives.[231] SSBCI rules only require that states develop a plan to target underserved communities, small businesses, and leverage ten dollars of new small business lending or investing for every one dollar of public funds allocated during the life of the program.[232]

225. EVALUATION OF SMALL BUSINESS CREDIT INITIATIVE, *supra* note 101, at 9. Small business loans in this context are considered $1 million dollars or less. Such loans fell from $712 billion to $652 billion from 2008 to 2010.

226. *Id.*

227. *Id.*; *see also* Karen Gordon Mills & Brayden McCarthy, *The State of Small Business Lending: Credit Access During the Recovery and How Technology May Change the Game*, 15 (Harv. Bus. Sch., Working Paper 15-004, 2014).

228. GRAVES & KELLOGG, *supra* note 49. While the SSBCI is one example, the Department of Treasury "manages a large portfolio of programs and fiscal policies intended to strengthen the U.S. Economy . . . ." CROMWELL & SCHMISSEUR , *supra* note 49, at 1.

229. CROMWELL & SCHMISSEUR, *supra* note 49, at 1.

230. *See id.*

231. INCITE CO-INVESTMENT FUND, *supra* note 50 ("Since its founding in 2011, INCITE has used $28.8 million in federal funding under the State Small Business Credit Initiative . . . ."). *But see* CROMWELL & SCHMISSEUR, *supra* note 49, at 1-2 (describing how 30 states participate in SSBCI and that California and Massachusetts do not use SSBCI capital for state venture capital programs).

232. EVALUATION OF SMALL BUSINESS CREDIT INITIATIVE, *supra* note 101, at 10. "All states were eligible to participate and 47 states, the District of Columbia, five territories, and four municipalities or consortia of municipalities ultimately applied. The municipal consortia came together to create initiatives when three states opted not to participate directly." *Id.* at 11. "The consortia from North Dakota include 38 municipalities led by the City of Mandan and 36 municipalities led by the City of Carrington. In Wyoming, 17 municipalities led by the City of Laramie formed a consortium." *Id.* at 11 n.3.

Participating states administer the SSBCI funds through three primary management structures: state agencies,[233] quasi-public agencies,[234] or contracted private entities.[235] The organizations that administer the funds within the state work with participating lenders and investors to structure small business financing programs that address the investment gaps in a particular regional ecosystem.[236] The initiative allowed states to employ alternative program designs and offer different terms and conditions to address different capital gaps and types of customers. Despite these differences, the programs are classified into five design models or types.[237] Four of the five design models are lending programs, with community banks, mid-sized banks, and community development financial institutions accounting for 94% of all program supported loans.[238] From 2011 to 2015, states

233. *Id.* at 12. "[S]tate agencies most frequently administered programs when expanding on existing credit support programs." *Id.* at 13.

234. *Id.* "[Q]uasi-public agencies [are] legislatively created, independent organizations such as housing or business financing authorities or economic development corporations, [that are] well-situated to operate small business finance programs because they [have] existing relationships with private lenders and/or investors." *Id.* at 13.

235. *Id.* "[S]tates contracted with a wide array of private entities including non-profit [Community Development Financial Institutions] CDFIs, for-profit business development corporations (BDCs), and SBA [Certified Development Companies] CDCs, among others. [Venture Capital Programs] contracted with private sector venture capital funds and specialized non-profits." *Id.* at 13.

236. *Id.* at 81.

237. EVALUATION OF SMALL BUSINESS CREDIT INITIATIVE, *supra* note 101, at 10-11. Capital access programs (CAPs) provide reserve funds to protect lenders from losses. These programs provide working capital to micro-enterprises (less than 10 employees or $1 million in sales). Loan guarantee programs (LGPs) provide repayment guarantee for a large portion of loan in the event of default, once the lender makes a reasonable attempt to liquidate available collateral and collect on personal guarantees. LGPs are used for lines of credit, working capital, asset purchases, and commercial real estate for established businesses. Collateral support programs (CSPs) provide cash to lenders to boost the value of available collateral in the event of default. This program can be used for asset purchases, commercial real estate purchases, and gap financing for SBA 504 transactions. Loan participation programs (LPPs) provide subordinated or *pari passu* debt to encourage senior lenders to increase loan size or reduce interest rate. Venture capital programs (VCPs) provide risk capital to small businesses with high growth potential. This program is focused on providing capital to seed and early stage, or growth capital to start-ups or emerging small businesses (businesses with new products or growing markets).

238. *Id.* at 13. "Large national banks tended not to participate because of operational challenges of implementing multiple sets of compliance and reporting requirements, which varied from state to state." *Id.*

allocated 69% of the SSBCI funds to credit support programs.[239] While certain small innovative start-up businesses might qualify for SSBCI lending programs once they become growth or later stage enterprises that generate revenue, perhaps a more appropriate source of funding would come through the fifth design model, venture capital programs.

States that that had less access to venture capital tended to use SSBCI funds for venture capital programs.[240] Thirty eight states implemented, modified, or expanded venture capital programs with $448 million or 31% of SSBCI funding from 2011 to 2015.[241] Although venture capital programs varied widely between states, they all tended to address the gaps in their existing venture capital availability.[242] States also took different approaches to how they managed their venture capital programs, ranging from making direct investments in businesses to the traditional approach of investing in or through private investment funds.[243]

While stages of small business development are not always easily defined, "[t]he venture capital industry commonly uses terms such as 'seed,' 'early,' 'growth,' and 'latter,' to describe the stages of small businesses receiving venture capital investments . . . ."[244] Many inventors seek small amounts of money at the time of business formation to demonstrate the potential of the intellectual property or prove technical concepts.[245] Since the risk of failure is high at this pre-seed or proof of concept stage, SSBCI co-investments of less than $50,000 are important in attracting private capital for such purposes, either through angel investors or accelerator programs.[246] At these early stages of investment, the

239. *Id.* at 31. The $766 million in SSBCI funds triggered $5.3 billion in new small business loans. *Id.*

240. *See id.* at 61.

241. *Id.* at 1, 59. The $488 million in SSBCI funds "leveraged nearly $1.7 billion in co-investment and more than $3 billion inclusive of private financing . . . ." *Id.*

242. EVALUATION OF SMALL BUSINESS CREDIT INITIATIVE, *supra* note 101, at 12. "Reflecting the variety of equity capital needs, states created programs that targeted pre-seed and 'proof of concept' investments, seed stage and early stage investments, growth stage and later stage investments, as well as mezzanine and debt investments." *Id.*

243. *See id.* at 12, 65-71 (analyzing the states' approaches).

244. *Id.* at 74 (citation omitted).

245. *Id.*

246. *Id.* At this stage of development, "business value determination is sometimes deferred until a future 'institutional' investment round through the use of a convertible note

SSBCI venture capital program would contribute a much higher ratio of capital than would the private investor.[247]

Most state venture capital programs focused investments on seed and early stage investments.[248] Seed stage businesses typically have the "founding team working to develop product prototypes or business model concepts . . . ."[249] Early stage businesses are ventures with a proven concept or product ready for market introduction with a developed management team, but without positive cash flows from operations.[250] In areas that have significant venture capital presence, investment rounds are typically in the $1 million to $5 million range.[251] Because the great majority of investments in early stage businesses were outside these regions, the SSBCI venture capital program investment was less than $1 million. Angel investors were important co-investors in these early stage investments, with the SSBCI funds accounting for a higher percentage of each round, resulting in lower private capital investments, than in later rounds.[252]

Growth stage businesses are those that have received previous rounds of investment and are generating significant revenues from operations.[253] Additional capital is necessary for business expansion.[254] While some states used SSBCI financing to invest in businesses that they had invested in during seed and early stage financing rounds, private capital is more willing to invest in

structure, in which the loan value can be converted to equity with the same terms as the other investors." *Id.* at 74-75.

247. EVALUATION OF SMALL BUSINESS CREDIT INITIATIVE, *supra* note 101, at 75. *See also*, Gabriel Horowitz, *Does VC Mean Venture Capital or Very Concentrated?*, FORBES (Feb. 16, 2017, 5:55 AM), http:// www. forbes.com /sites /washingtonbytes /2017 /02/16 /does -vc -mean -venture -capital -or-very-concentrated/2/#18995bf25e8c[https://perma.cc/3FZP-ZSYL].

248. EVALUATION OF SMALL BUSINESS CREDIT INITIATIVE, *supra* note 101, at 76. About two-thirds of the program-wide transactions supported pre-seed and seed investments. *Id.* at 4.

249. *Id.* at 75.

250. *Id.*

251. *Id.*

252. *Id.* "[C]onvertible notes structure is also used in early stage investments, but transactions were more likely to be structured as priced equity rounds, typically as preferred stock rather than the common stock held by founders and employees of the small businesses." *Id*. The business is valued based upon the amount of capital invested and related percentage of ownership purchased by the investors. *Id.*

253. EVALUATION OF SMALL BUSINESS CREDIT INITIATIVE, *supra* note 101, at 75.

254. *See id.*

greater percentages in this phase due to decreased risk of failure.[255] Although growth stage investment rounds of $5 million or more are common in areas of high venture capital concentration, SSBCI venture capital program investments in this phase outside such areas were in the million-dollar range.[256]

Those states that have SSBCI programs that provide financing to "later stage" businesses did so with both debt and equity.[257] These maturing small businesses usually have sufficient cash flows to service debt, but have other risk factors that disqualify them from obtaining a traditional bank loan.[258] The additional financing may be necessary for such reasons as gaining market share, diversifying product lines or preparing for a liquidity event.[259] The typical state SSBCI investment in latter stage equity investment or debt/mezzanine investment was greater than $5 million.[260] States that focused their venture capital programs on this business phase appeared to place greater emphasis on near-term job creation than in attracting outside or growing internal private capital investments in seed and early stage small business.[261]

Once the states had developed their structure for delivering the SSBCI programs, funding was allocated to the states by formula and distributed in one-third increments.[262] "As of March 31, 2016, Treasury had disbursed $1.38 billion, or about 95%, of the $1.45 billion available to states" or "[] $1.5 billion minus Treasury's administrative costs[]."[263] In most instances, the initial tranche of funding took place in fiscal year 2011.[264] Most states received their second tranche during fiscal year 2013.[265]

255. *Id.*

256. *Id.* "The terms of growth stage investments typically provide investors with preferred stock at specified valuations." *Id.*

257. *Id.* at 76.

258. EVALUATION OF SMALL BUSINESS CREDIT INITIATIVE, *supra* note 101, at 76.

259. *Id.*

260. *Id.* State venture capital programs typically structured later stage equity investments as preferred stock at specified valuations. *Id.* "Debt/mezzanine investments were typically structured as loans with stock warrants or royalties based on revenues." *Id.*

261. *Id.*

262. SENIOR SPECIALIST IN AMERICAN NATIONAL GOVERNMENT, CONG. RESEARCH SERV., R42581, STATE SMALL BUSINESS CREDIT INITIATIVE: IMPLEMENTATION AND FUNDING ISSUES Summary (2016) [hereinafter SENIOR SPECIALIST].

263. *Id.* at 2.

264. *Id.* at 1.

265. *Id.* at summary.

"As of March 31, 2016, 95% of total allocated funding had been disbursed to the states and all 57 participants had received their first tranche, 55 had received at least two tranches, and 47 had received their third and final tranche."[266]

At this point, it is difficult to determine the impact that such funding has had on enhancing small business financing at the state and local level.[267] The flexibility that the Treasury gave to the states to determine the appropriate program design to address local market conditions may not have sufficient programmatic uniformity to make the programs easily accessible to small businesses seeking funding. Unless a small business had been working with a state program that received SSBCI funding, information about the program and how to access funds are not readily available or easily accessible. Those states that instituted new funding programs had the additional burden of creating a program design and then obtaining the necessary staffing to plan and implement the program. If the initiative is to achieve a level of success, start-ups and small businesses need assistance on how to gain access to such funding.

C. The Jumpstart Our Business Startups Act

"Securities laws require that all offers and sales of securities be either registered with the Securities and Exchange Commission (SEC) under the Securities Act of 1933 or made in reliance upon an exemption from registration."[268] The purpose of the Securities Act of 1933 is to ensure that investors in securities receive complete and accurate information from the issuer prior to investing.[269] "When raising capital through the sale of securities to any potential investors in the public capital market (a 'public' offering), the issuer must generally register the offer and sale of securities with the SEC, a process that is accompanied by extensive

266. *Id.*

267. SENIOR SPECIALIST, *supra* note 262, at 2-3.

268. Scott Bauguess, et al., *Capital Raising in the U.S.: An Analysis of the Market for Unregistered Securities Offerings, 2009-2014*, U.S. SECURITIES AND EXCHANGE COMMISSION 3 (Oct. 2015), https://www.sec.gov/files/unregistered-offering10-2015.pdf [https://perma.cc/8XEU-BYTN].

269. *See Small Business and the SEC*, U.S. SECURITIES AND EXCHANGE COMMISSION, https:// www.sec.gov /info /smallbus /qasbsec. htm#fsl [https://perma.cc/BQ3A-7GDP].

information production and subsequent reporting."[270] While these laws helped reduce fraud at the time, they also had the unintended consequences of restricting small business owners and entrepreneurs in their efforts to attract potential investors for critical early stage or growth capital.[271]

"Alternatively, a company can raise capital by accessing the private capital markets through an unregistered ('private') offering in a transaction exempt from registration."[272] This alternative "allows issuers to avoid certain regulatory burdens and the increased oversight that comes with a public offering, with the intended effect of reducing issuance costs and the time required to raise new capital."[273] "This particularly benefits smaller firms, for whom accessing public capital markets may generally be too costly."[274] "However, because of these accommodations, private offering alternatives are generally subject to investor restrictions and/or offering limits."[275] "These investor protection provisions must be met to qualify for an exemption from registration."[276]

In 2012, Congress passed the Jumpstart Our Business Startups Act (JOBS Act), which amended the Securities Act of 1933 to expand the number of investors that companies can solicit and also the amount of money that may be raised privately.[277] Title II (Access to Capital for Job Creators) Title III (Crowdfunding),[278] and Title IV (Small Company Capital Formation) focus on helping start-ups and small businesses obtain the private equity they need to develop and grow.[279] Crowdfunding allows a company to raise up to $1 million dollars in the private equity market in a twelve-month period, which may meet the needs of seed and

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270. Scott Bauguess, et al., *supra* note 268.

271. Chance Barnett, *The Crowdfunder's Guide to General Solicitation and Title II of the JOBS Act*, FORBES (Sept. 23, 2013, 10:40 AM), https:// www.forbes.com/ sites/ chance-barnett/ 2013/ 09/ 23 /the-crowdfunders-guide-to-general-solicitation-title-ii-of-the-jobs-act/#6256c6666022 [https://perma.cc/2JNR-DNKD].

272. Scott Bauguess, et al., *supra* note 268.

273. *Id.*

274. *Id.*

275. *Id.*

276. *Id.*

277. *See* Jumpstart Our Business Startups Act, Pub. L. No. 112-106, § 101, 126 Stat. 307 (2012).

278. CROWDFUND stands for "Capital Raising Online While Deterring Fraud and Unethical Non-Disclosure Act . . . ." *Id.* at §§ 201, 301.

279. *See generally id.* at §§ 101-08, 201, 301-12.

early stage companies.[280] Both Title II and IV provide an opportunity for growth or later stage enterprises to access the private capital market for even greater levels of equity funding.[281]

It took more than a year for the SEC to promulgate rules and implement Title II of the JOBS Act.[282] Prior to this time, it was illegal to advertise and generally solicit private placement securities offerings.[283] Companies can now undertake wider marketing efforts to obtain unregistered private equity funding; however, they must first take steps to verify that the purchasers are accredited investors.[284] Now that the general solicitation ban has been lifted, start-ups and small businesses can seek an unlimited amount of capital and leverage the internet for marketing their fundraising and access investment platforms to attract potential investors.[285]

Title II requires relatively streamlined reporting requirements, filing a Form D with the SEC before solicitation and disclosing details of the general solicitation to them within fifteen

280. *Id.* at § 302(a)(6)(A).

281. *Title III Equity Crowdfunding on SeedInvest*, SEEDINVEST, https://www.seedinvest.com/blog/raising-capital/title-iii-equity-crowdfunding [https://perma.cc/8JSH-KZNF].

282. Barnett, *supra* note 271.

283. *Id.*

284. § 201. Individuals are accredited investors if their net worth (including spouse net worth) is more than $1 million notwithstanding the value of their primary residence or they meet three income requirements: (1) individual income of $200,000 annually for the two most recent years, (2) annual family income greater than $300,000 for the last two years, and (3) has a "reasonable expectation" of maintaining those income levels in the present year. 17 C.F.R. § 230.501(a)(2017). The Code of Federal Regulations also has qualifying levels for banks, savings and loan associations, broker, dealers, insurance companies, investment companies, business development companies, trusts, and other entities. *Id.* at (a)(1). An investment company is an issuer of securities whose primary business dealings involve investing, reinvesting, or trading securities, engages in "the business of issuing face-amount certificates of the installment type," or has assets comprised of greater than 40% of its total assets. Investment Company Act of 1940, PUB. L. 112-90 § 3(a)(1) (2012). A business development company is defined as a publicly traded business entity who is functionally an investment company that also "makes available significant managerial assistance" to companies if they comprise 70% of its total assets and makes an election under section 55 of the Investment Company Act of 1940. *Id.* at § 2(48)(B). Business development companies came about in 1980 by amendment to the Investment Company Act. Kevin Mahn, *The ABCs of Business Development Companies*, FORBES (Dec. 1, 2014, 10:18 AM), https://www.forbes.com/sites/advisor/2014/12/01/the-abcs-of-business-development-companies/#7c51fd2369db [https://perma.cc/B6DL-N2BZ].

285. *See* Press Release, U.S. Securities and Exchange Commission, SEC Approves JOBS Act Requirement to Lift General Solicitation Ban (July 10, 2013) (on file at website), https://www.sec.gov /News /PressRelease /Detail /PressRelease /1370539707782 [https://perma.cc/3XHQ-P4HA].

days from such solicitation.[286] Strict verification is required to confirm that investors are accredited. The penalty for not following the general solicitation requirements with the SEC is being banned from fundraising for a full year,[287] a penalty that would prove disastrous to a start-up seeking necessary funding. However, since only about 3% the United States' 8 million accredited investors are investing in this space, there is a large opportunity for growth.[288]

Title III amends Section 4(a)(6) of the Securities Act of 1933[289] and allows companies to sell a small amount of stock to a large number of people via web sites called funding portals.[290] Additionally, it exempts securities sold pursuant to Section 4(a)(6) from the registration requirements of Section 12(g) of the Securities Exchange Act of 1934.[291] The SEC adopted final rules for equity crowdfunding that became effective on May 16, 2016.[292] Unlike Title II, the sale of securities to individuals do not have to be accredited investors.[293] It allows a company to raise $1 million in a twelve month period, sets limits on how much an unaccredited investor can invest,[294] and requires the transaction to be conducted through a broker or "funding portal that complies" with 15 U.S.C. § 77d-1.[295] A "funding portal" is a financial

286. § 201(a)(1); § 230.503(a)(1); *see also Small Business and the SEC*, *supra* note 269.

287. *See* 15 U.S.C. § 78c (a)(39)(B)(II).

288. Mike Norman, *Why General Solicitation Matters: The JOBS Act Eliminates the Ban on Advertising*, WEFUNDER (Nov. 27, 2012), https://wefunder.com/post/33-why-general-solicitation-matters [https://perma.cc/6XAH-Q5YB].

289. *See* § 302(a)(6); § 77(d)(a)(6).

290. *Funding Portals: Investor Education*, FINRA, https://www.finra.org/industry/funding-portals [https://perma.cc/A5W3-PQGC].

291. §§ 77d(a)(6)(c)-(d), 77d-1(a).

292. *Crowdfunding*, SECURITIES AND EXCHANGE COMMISSION, https://www.sec.gov/rules/final/2015/33-9974.pdf [https://perma.cc/FGS3-HAWB].

293. § 303(a)(6); Chance Barnett, *SEC Approves Title III of JOBS Act, Equity Crowdfunding with Non-Accrediteds*, FORBES (Oct. 30, 2015, 2:24 PM) [hereinafter *SEC Approves Title III*], https://www.forbes.com/sites/chancebarnett/2015/10/30/sec-approves-title-iii-of-jobs-act-equity-crowdfunding-with-non-accredited/#d7fb50f419e7 [https://perma.cc/G5T2-RNPM].

294. The language from the JOBS Act lays out several investor income requirements. *See* §§ 302(a)(6)(A), (B).

295. *Id.* at § 302(a)(6)(C).

intermediary that can sell stock online to non-accredited investors.[296]

One of the objectives of the JOBS Act was to encourage small business and startup funding by easing federal regulations and allowing average individuals to become investors.[297] However, in order to protect the unsophisticated investor and prevent fraud, there are still a significant number of regulations and disclosure requirements with which the issuing company and financial intermediary must comply.[298] Any financial intermediary engaging in crowdfunding must register with the SEC and the Financial Industry Regulatory Authority (FINRA).[299] The funding portal may not advertise for securities on its website, pay anyone to solicit investors, manage customer funds or securities, or offer investment advice or recommendations.[300]

The issuing company must register with the SEC and provide comprehensive company information to both the intermediary facilitating the offerings and the potential investors.[301] The Crowdfunding rules require investors have access to business plans, financial statements, the price of the security and how it

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296. § 78c(a)(80). *See* Joan Macleod Heminway, *The New Intermediary on the Block: Funding Portals Under the CROWDFUND Act*, 13 U.C. DAVIS BUS. L. J. 177, 190-91 (2013) (citation omitted).

297. Press Release, U.S. Securities and Exchange Commission, SEC Adopts Rules to Permit Crowdfunding (Oct. 30, 2015) (on file at website), https://www.sec.gov/news/pressrelease/2015-249.html [https://perma.cc/LZ3J-9AL5].

298. *See generally The Laws that Govern the Securities Industry*, U.S. SECURITIES AND EXCHANGE COMMISSION, https:// www.sec.gov /about /laws.shtml [https://perma.cc/YYQ5-5RJN] (noting several regulations); *see also* PROTECTING INVESTORS: A HALF CENTURY OF INVESTMENT COMPANY REGULATION, U.S. SECURITIES AND EXCHANGE COMMISSION *xvii* (May 1992), https://www.sec.gov/divisions/investment/guidance/icreg50-92.pdf [https://perma.cc/C54G-6RZJ].

299. *Updated: Crowdfunding and the JOBS Act: What Investors Should Know*, FINRA, http://www.finra.org/investors/alerts/crowdfunding-and-jobs-act-what-investors-should-know [https://perma.cc/M9ED-XVZ2].

300. 15 U.S.C. §§ 78c (80)(a)(A)-(E); *Updated: Crowdfunding and the JOBS Act: What Investors Should Know*, FINRA, http://www.finra.org/ investors/ alerts/ crowdfunding-and- jobs- act- what- investors- should- know [https://perma.cc/M9ED-XV2]; *Regulation Crowdfunding: A Small Entity Compliance Guide for Crowdfunding Intermediaries*, U.S. SECURITIES AND EXCHANGE COMMISSION, https://www.Zsec.gov /divisions /marketreg /tmcompliance /cfintermediaryguide.htm#_ftn4 [https://perma.cc/PM44-7ZJF].

301. Sherwood Neiss, *It Might Cost You $39k to Crowdfund $100k Under the SEC's New Rules*, VENTUREBEAT (Jan. 2, 2014, 2:14 PM), https://venturebeat.com/2014/01/02/it-might-cost-you-39k-to-crowdfund-100k-under-the-secs-new-rules/ [https://perma.cc/2ZX8-45M7] (explaining a recent SEC cost–benefit report that looked at success fees, compliance costs, and costs of CPA review or audit).

was determined, and how the proceeds from the sale will be used.[302] The price of professional services to complete the required documents and assist in compliance, can be costly. The SEC estimates that raising $100,000 may cost up to $39,810[303] and as much as $151,660 for a $1 million dollar raise.[304] If, during the course of advertising, an issuer[305] "makes an[y] untrue statement of material fact or omits to state a material fact" that makes any "means or instruments of transportation or communication" misleading, the JOBS Act specifically creates liability for the investor against the issuer.[306]

In June 2015, the SEC issued final rules under Title IV that amended Regulation A of the Securities Act to apply to public offerings of securities that do not exceed $50 million dollars in a one-year period.[307] Commonly referred to as Regulation A+, Title IV allows non-accredited investors to participate in private offerings, subject to certain provisions.[308] The rule establishes two tiers under Regulation A.[309]

Tier 1, which covers exempt public offerings of up to $20 million within a twelve-month period, retains many of the previous requirements of Regulation A.[310] Tier 2 allows exempt public offerings of up to $50 million within twelve months but requires

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302. *Id.*

303. *Id.* For raises of less than $100,000 cost estimates range from $12,960 - $17,960. For raises between $100,000 and $500,000 cost estimates range from $39,810 - $69,810. *Id.*

304. *Id.* For raises between $500,000 and $1 million cost estimates range from $76,660 – $151,660. *Id.*

305. In this context, issuer includes a director or partner of the issuer, the CEO, CFO, and "principal accounting officer" or controller of the issuer. 15 U.S.C. § 77d-1(c)(3) (2012).

306. *Id.* at 77d-1(c)(2). The communication must also use means of or travel in interstate commerce. *Id.* Also, it is a defense if the purchaser knew of the "untruth or omission." *Id.*

307. *See* Press Release, U.S. Securities and Exchange Commission, SEC Adopts Rules to Facilitate Smaller Companies' Access to Capital, (Mar. 25, 2015) (on file at website), https://www.sec.gov/news/pressrelease/2015-49.html [https://perma.cc/2VG4-JPQP].

308. *Id.*

309. *Id.*

310. *Id.* *See generally Amendments for Small and Additional Issues Exemptions under the Securities Act*, U.S. SECURITIES AND EXCHANGE COMMISSION 7-9, https://www.sec.gov/rules/final/2015/33-9741.pdf [https://perma.cc/HN9Q-9JTM] (containing citations to codified sections of Regulation A). Companies utilizing the Regulation A exemption are still required to file offering statements with the SEC; however, the companies utilizing the exemption are given distinct advantages over companies that must fully register. *Id.* The issuer of a Regulation A offering must give buyers documentation with the issue, similar to the prospectus of a registered offering. *Id.*

more robust initial and ongoing reporting.[311] Tier 2 offerings are intended to preempt state securities laws known as Blue Sky laws.[312] Tier 1 offerings will continue to be subject to state securities law registration and qualification requirements.[313] However, Tier 1 issuers may be able to benefit from the multistate review protocol for Regulation A filings that was implemented by the North American Securities Administrators Association, Inc. (NASAA).[314]

The above three titles of the JOBS Act all promise to increase the amount of private equity available to entrepreneurs in need of capital. While it is impossible to predict how much additional capital will be brought to market through these new funding mechanisms, it is estimated that $1 billion was invested online under Title II in 2014 and $2.5 billion in 2015.[315] There is also an estimated 8 million accredited investors in the United States, and only 3% of them have ever invested in a start-up.[316] There is approximately $26 trillion in savings and long-term investments

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311. SEC Adopts Rules to Facilitate Smaller Companies' Access to Capital, *supra* note 307.

312. *Id.* Companies rarely used the previous Regulation A exemption for public offerings. The JOBS Act required the Comptroller General of the Government Accountability Office (GAO) to study the effect of state securities laws on Regulation A offerings. In its report to Congress, the GAO discussed factors that contributed to the limited use of Regulation A, including the small size of the offerings, the significant time and cost of complying with both federal and state securities laws and the availability of other offering exemptions. *Amendments for Small and Additional Issues Exemptions under the Securities Act*, *supra* note 310, at 31.

313. SEC Adopts Rules to Facilitate Smaller Companies' Access to Capital, *supra* note 307.

314. *See Coordinated Review*, NASAA, http://www.nasaa.org/industry-resources/corporation-finance/coordinated-review/ [https://perma.cc/P5FQ-DUFN].

315. Chance Barnett, *Trends Show Crowdfunding To Surpass VC in 2016*, FORBES (June 9, 2015, 5:33 PM) [hereinafter *Trends Show*], http://www.forbes.com/sites/chancebarnett/2015/06/09/trends-show-crowdfunding-to-surpass-vc-in-2016/#56dfe399444b [https://perma.cc/C47B-QEBR]. Since this is "private equity," accurate statistics are difficult to collect.

316. Chance Barnett, *SEC Democratizes Equity Crowdfunding With JOBS Act Title IV*, FORBES (Mar. 26, 2015, 8:41 PM) [hereinafter *SEC Democratizes*], http://www.forbes.com/sites/chancebarnett/2015/03/26/infographic-sec-democratizes-equity-crowdfunding-with-jobs-act-title-iv/#1585185f5a71 [https://perma.cc/Z2K9-4J4P].

in the United States. If only 1% of that amount was shifted to private equity through these exemptions, an additional $260 billion could be used to support small and start-up businesses.[317]

Critics argue that potential investors will be misled by a company's prospects and fraud will run rampant.[318] Federal and state securities regulators agree that investments such as these are particularly prone to affinity frauds.[319] Crowdfunding could make it easier for people to solicit money from their own social networks using online services. However, the SEC rulemaking process structured the investment limits for non-accredited investors to protect them from losing their life savings.[320] Both FINRA and the funding portals provide some safe guards to the process, but ultimately it is the issuing company that is responsible for the accuracy of the information provided.[321]

Investing in start-up companies is also very risky. About three quarters of venture backed companies don't return the initial investment; venture capitalists and angel investors know this and invest in many companies hoping a few succeed.[322] In addition, these professional investors also provide strategic and management assistance to such ventures to increase the probability of success. Even entrepreneurs with promising, commercially viable products or services are simply ill-equipped to pursue such funding opportunities on their own.

V. FROM FEDERAL POLICY TO EFFECTIVE PROGRAM DELIVERY

The federal programs described above are designed to help small businesses and start-ups get the capital necessary to grow

317. *See* AMY CORTESE, LOCAVESTING: THE REVOLUTION IN LOCAL INVESTING AND HOW TO PROFIT FROM IT 16 (2011) (citation omitted) (noting that more money needs to go into local businesses).

318. *See* Timothy Spangler, *Is Crowdfunding Good for Investors?*, THE NEW YORKER (Oct. 30, 2013), https://www.newyorker.com/business/currency/is-crowdfunding-good-for-investors [https://perma.cc/E5GK-ZG5K].

319. *Id*.

320. *See* Josh Cline, *The Six Things Non-Accredited Investors Need to Know About Title III of the JOBS Act*, HUFFINGTON POST (May 24, 2017), https://www.huffingtonpost.com/josh-cline/the-six-things-nonaccredi_b_10104512.html [https://perma.cc/R5B3-KABB].

321. *Id*.

322. Spangler, *supra* note 318.

and contribute to the economy. These programs have the capability to fill the gaps outside of California, Massachusetts, and New York that do not have a significant venture or angel capital presence.[323] This is especially true in areas that have national laboratory and university research presence, but can prove equally important in underserved urban and rural areas that seek to foster economic development through entrepreneurship.

However, the realization of this potential is heavily dependent on how well-prepared the entrepreneur is to successfully access those sources of capital and determine which option is best given the nature of their enterprise, stage of development, and the founders' vision for the future. Absent the active guidance historically provided by venture capitalists and angels, the novice entrepreneur must rely on the local resources available to them to navigate the various potential funding options. Fledgling entrepreneurs look to Small Business Development Centers (SBDCs),[324] business incubators,[325] or merely resort to the Internet for such information.[326] SBDCs provide the entrepreneur with fundamental management advice and training necessary to embark on a venture and incubators provide an environment to nurture the start-up.[327] While not all business incubators are alike, most offer the entrepreneur office space, administrative support, and the ability to work alongside other entrepreneurs

323. Companies in California, New York, and Massachusetts were the beneficiaries of 78% of all venture capital investments. 2016 YEARBOOK, *supra* note 42, at 14. Although more widespread regionally, companies in California, New York and New England attract 41.8% of angel investments. *See 2015 Annual Halo Report*, *supra* note 191, at 12-19.

324. Small Business Development Centers were created by the Small Business Development Act of 1980, and provide management and technical support to an estimated 1 million people annually through nearly 1,000 centers nationally. *Our History*, AMERICA'S SBDC, http://americassbdc.org/about-us/history/ [https://perma.cc/R27T-87R7].

325. A business incubator is "[a]n organization designed to accelerate the growth and success of entrepreneurial companies through an array of business support resources and services that could include physical space, capital, coaching, common services, and networking connections." Entrepreneur Staff, *Business Incubator*, ENTREPRENEUR, https://www.entrepreneur.com/encyclopedia/business-incubator [https://perma.cc/H7S9-6QUJ].

326. Darren Dahl, *Percolating Profits: A New Generation of "Virtual" Business Incubators is Jump-Starting Start-Ups Nationwide*, INC. (Feb. 1, 2005), http://www.inc.com/magazine/20050201/getting-started.html [https://perma.cc/JF62-CFPH] (discussing the use of virtual business incubators to allow entrepreneurs to garner the advice of the business incubator without actually being located at the incubator site).

327. *About Office of Small Business Development Centers*, U.S. Small Bus. Admin., https://www.sba.gov/offices/headquarters/osbdc/about-us [https://perma.cc/8TH4-N3AD].

who are pursuing their own ventures.[328] Many incubators also offer connections to legal and accounting professionals, as well as exposure to potential financing opportunities.[329] These organizations are primarily concentrated near universities or in major metropolitan areas.[330] When associated with universities, business incubators may also provide services related to intellectual property and assist in transferring knowledge from university researchers to firms that are commercializing intellectual property.[331] Although these support organizations certainly provide useful information and support services to the entrepreneur, unlike the angel investor or venture capitalist, they do not take a personal stake in the venture and provide ongoing guidance throughout the life of the venture.

Business accelerators are the most recent organizational entrant on the scene.[332] Accelerators share many of the same attributes as incubators, but have two major differences. Accelerators generally make investments in the companies enrolled in their programs and limit the amount of time that the company stays with the accelerator to three to four months.[333] The amount of money invested varies based upon the amount of equity the accelerators receive in return. Estimates range from $15,000 to $40,000 for between 5-8% of equity in the company, with the median investment of 5% for $20,000.[334] Participation in accelerator

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328. David Mielach, *Business Incubators & Accelerators: Here's the Big Difference*, BUS. NEWS DAILY (June 19, 2013, 10:22 AM), http://www.businessnewsdaily.com/4658- business-incubator-accelerator difference.html [https://perma.cc/4BSC-KP88].

329. Sean M. Hackett and D. M. Dilts, *A Systematic Review of Business Incubation Research*, 1 J. TECH. TRANSFER 29, 64 (2004) (citation omitted).

330. *See 900 Service Sites to Serve Your Local Business Needs*, U.S. SMALL BUS. ADMIN., https:// www.sba.gov /offices /headquarters /osbdc /resources /11409 [https://perma.cc/Z4CV-AXNR]. The SBDC National Information Clearinghouse serves the Small Business Development Center Network and America's small business community.

331. *See* Frank T. Rothaermel & Marie Thursby, *Incubator Firm Failure or Graduation?: The Role of University Linkages*, 34 RESEARCH POLICY 1076, 1077-78 (2005).

332. *See* Kourosh Malek, et al., *A Typology of Clean Technology Commercialization Accelerators*, 32 J. ENGINEERING & TECH. MGMT. 26, 27-28, 32 (2014). The first seed accelerator was Y Combinator, which started in Cambridge, Massachusetts in 2005 and was later moved to Silicon Valley by Paul Graham. Paul Graham, *How Y Combinator Started*, Y COMBINATOR (Mar. 15, 2012), http:// old.ycombinator.com /start.html [https://perma.cc/DW4N-EQ47].

333. Mielach, *supra* note 328.

334. Paula Andruss, *What to Look for in an Accelerator Program*, ENTREPRENEUR (Jan. 30, 2013), https:// www.entrepreneur.com /article /225242 [https://perma.cc/Z357-ETR8].

programs is very competitive. The top tier programs only accept about 1% of applications.[335] The limited duration of the program forces the founders to focus exclusively on their business development, sometimes working seven days a week to prepare for graduation, which is ultimately a pitch day to future investors.[336] Although a connection remains between the start-up and the accelerator program through equity ownership, further mentoring and business development is dependent on the angel investors or venture capitalist that provide follow on funding.

SBDCs, business incubators, and accelerators are all capable of delivering information concerning federal policy initiatives designed to improve access to capital for entrepreneurs. However, they may not be the most effective mechanisms to integrate these policies into the innovative-finance ecosystem. Not all small businesses are alike.[337] The vast majority of small businesses are sole proprietorships that cover a wide range of sectors and do not have employees.[338] Research suggests that while this small business segment continues to grow and achieve record profits with advancements in technology, it does not create jobs.[339] The next largest segment are small retailers that provide goods and services to consumers and other local businesses.[340] Such businesses generally exist to support a family and employ a significant portion of the local workforce.[341] The next largest segment are those businesses that support commercial and government supply chains.[342] These businesses are typically growth oriented and operate with a higher degree of management sophistication.[343] The

335. *Id.*

336. Susan Cohen, *What Do Accelerators Do? Insights from Incubators and Angels*, 8 INNOVATIONS 19, 21 (2013).

337. The Small Business Administration establishes small business size standards on an industry-by-industry basis, but generally specifies small businesses as having fewer than five hundred employees for manufacturing businesses and less than $7.5 million in annual receipts for most non-manufacturing businesses. *Summary of Size Standards by Industry Sector*, U.S. SMALL BUS. ADMIN. (Oct. 1, 2017), https://www.sba.gov/contracting/getting-started-contractor/make-sure-you-meet-sba-size-standards/summary-size-standards-industry-sector [https://perma.cc/Z5NL-QHFR].

338. Mills, *supra* note 118. 23 million firms are sole proprietorships. *Id.*

339. *Id.*

340. *Id.* There are approximately four million small "Main Street" entrepreneurs, which include such businesses as dry cleaners, restaurants, car repair operations, etc. *Id.*

341. *Id.* There are approximately 1 million suppliers to other businesses. *Id.*

342. *Id.*

343. Mills, *supra* note 118.

smallest segment of this group is fast growing start-ups.[344] These companies have a disproportionate effect on the economy and are responsible for as much as 50% of new job creation.[345] Each type of small business is important to the economy for different reasons, but their need for funding and technical assistance are significantly different.

For those innovation driven start-ups, the future of available funding has never looked more promising. The SBIR/STIR programs have the potential of providing small businesses attempting to commercialize federal research and development with the seed capital necessary to reach the proof of concept stage of development. The SSBCI program provides states with the funding necessary to leverage private investments, and the flexibility to provide access to funding to the full range of small business segments. The JOBS Act makes it easier for small businesses to solicit funding from investors across the country, as long as they comply with the provisions of the Act. However, the question remains: Is there an effective program-delivery mechanism in place to provide comprehensive guidance to entrepreneurs on how to access and coordinate such funding opportunities, based upon their particular business segment?

Innovation focused small businesses can apply to business incubators and accelerators for office support, guidance and exposure to funding opportunities, but only for a limited duration. Incubation is a process, not a place. Venture Capitalists work with the portfolio companies for as much as ten years or more before they are monetized.[346] An innovative technology or business idea does not ensure a successful business. Nor are entrepreneurs born with all the requisite skills to be successful. Introducing new funding opportunities to first time entrepreneurs without ongoing dedicated business guidance and acumen could be a recipe for disaster.

After evaluating the strengths and limitations of the venture capital model, and particularly the operational philosophy of

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344. *Id.* There are approximately 200,000 fast growing – innovation driven firms.

345. Emily Fetsch, *The Economic Impact of High-Growth Startups*, KAUFFMAN FOUND. (June 7, 2016), http://www.kauffman.org /~ /media /kauffman_org /resources /2016 /entrepreneurship%20policy%20digest/pd_highgrowth060716.pdf [https://perma.cc/7PGQ-RVV8].

346. 2016 YEARBOOK, *supra* note 42, at 6.

Georges Doriot,[347] it appears that a "Venture Development Company" (VDC) may be the next step in the evolution of innovation finance. VDCs could provide an effective, local mechanism to work with innovative small businesses to access these new federal funding opportunities. They have the potential of filling the gaps that exist nationally in the provision of venture capital financial resources and guidance. Additionally, they can provide a mechanism to promote regional and economic development, since start-ups will no longer need to relocate to Silicon Valley or other areas of venture-capital density to receive funding.

VDCs would be comprised of individuals from various professional backgrounds and experiences—the type of people that historically became angel investors and formed early venture capital firms.[348] In order to avoid the potential operational conflicts of interest that exist in the venture capital model, members of VDCs would not be suppliers of capital, but advisors and managers that would guide the company through the growth process in exchange for negotiated fees and equity positions in the company. In contrast to venture capital contracts, which are typically nonnegotiable and drafted to maximize control of the company by the venture capitalist, VDC agreements can offer more equitable terms. Because the VDC is not trying to protect the members' personal financial investment, only the company's potential investment opportunity, there is no need for such one-sided contract provisions. Because the VDC will be an equity holder in the business, its interests will be aligned with those of the founders. The venture development relationship proves to be most successful when all of the parties' interests are aligned.[349]

VDCs will identify promising start-ups through their participation in incubator and accelerator programs or through other business networks. Many entrepreneurs adopt an informal board

347. *See generally* Christina Pazzanese, *The Talented Georges Doriot*, HARVARD GAZETTE (Feb. 24, 2015) http://news.harvard.edu/ gazette/ story/2015/02/ the-talented-georges-doriot/ [https://perma.cc/CFR8-ATAC]; Tren Griffen, *A Dozen Things I've Learned from Georges Doriot (The Founder of the Modern VC Industry)*, 25IQ (June 4, 2016),https://25iq.com/2016/06/04/a-dozen-things-ive-learned-from-georges-doriot-the-founder-of-the-modern-vc-industry/ [https://perma.cc/2L42-ETF9]; Beattie, *supra* note 61.

348. VDCs would be formed by former entrepreneurs, executives, accountants, attorneys, and finance professionals that want to keep abreast of current developments in a particular business arena, mentoring another generation of entrepreneurs, and making use of their experience and networks.

349. 2016 YEARBOOK, *supra* note 42, at 7-8.

of advisors during these programs to assist them in their development, so the concept of entering into an agreement with a VDC for long-term advisory and management assistance will not be a foreign concept. The support and technical assistance that the venture has relied upon during these early experiences will be in even greater demand as the venture progresses. Like the original venture capital firms, VDCs will provide both strategic and operational guidance. This will prove especially important as funding opportunities expand through the liberalization of securities laws through the JOBS Act.[350] Entrepreneurs will need guidance and operational assistance on funding opportunities to achieve optimal strategic results.[351]

For example, many young entrepreneurs are intrigued with the idea of crowdfunding and feel that it presents the best opportunity for their venture to obtain the necessary funding.[352] However, they may only have a casual understanding of what crowdfunding is, and certainly less of an understanding of the options available to raise private equity through Titles II, III, and IV of the JOBS Act.[353] Although the potential exists for this source of

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350. *Trends Show*, *supra* note 315; Zack Miller, *Crowdbuilding: The Real Story Behind Crowdfunding That No One's Telling*, FORBES (Jan. 13, 2014, 7:45 AM), http://www.forbes.com/sites/zackmiller/2014/01/13/crowdbuilding-the-real-story-behind-crowdfunding-that-no-ones-telling/print/ [https://perma.cc/V8ZL-2WWV].

351. With funding opportunities ranging from SBIR/STIR, SSBCI, JOBS Act, angel investors and venture capital, entrepreneurs will need to critically evaluate which source of funding to pursue as it may have consequences on the options available for subsequent rounds of financing. In addition, accessing these sources of financing in some instances require extensive preparation of supporting materials to substantiate and justify obtaining such funding.

352. *See* Bill Carmody, *Top 10 Reasons You MUST Crowdfund in 2017*, INC., https://www.inc.com/bill-carmody/crowdfunding-the-ultimate-tool-for-entrepreneurs.html [https://perma.cc/FZ9Y-Q9HU].

353. Prior to the JOBS Act, rewards, donation, and lending based crowdfunding were, and continue to be, used by some small start-ups to obtain funding for their ventures. Reward-based financing involves offering some tangible benefit or service for a financial contribution. Donation-based crowdfunding entails seeking contributions where nothing of value is promised in return (typically a charitable contribution). Lending crowdfunding allows entrepreneurs to raise funds in the form of loans that they will pay back to the lenders over a pre-determined timeline with a set interest rate. *See generally* Joan MacLeod Heminway, *Securities Crowdfunding and Investor Protection* 12 (Legal Stud. Res. Paper Series, Research Paper No. 292, 2016), https://ssrn.com/abstract=2810757 [https://perma.cc/2K4T-4P3S]; Sally Outlaw, *Which Type of Crowdfunding Is Best for You?*, ENTREPRENEUR (Oct. 3, 2013) https://www.entrepreneur.com/article/228524 [https://perma.cc/KB9A-KZ5C].

funding to outpace that available through angel and venture capital investing in the future, a clear understanding of the costs, benefits, and responsibilities associated with each funding option is critical to the sound financial management of a start-up.[354]

Although Congress and the SEC have made it easier for small businesses to access the private equity market for funding, there still is a significant amount of work involved with conducting a successful fundraising campaign and complying with SEC rules. The VDC can play an important role in this process. Once the short and long-term financing needs are determined and a market analysis is performed, a valuation is established.[355] Valuations are difficult to determine during early stages of venture development and depend on such factors as the number of potential users, the size of the market they serve, distribution channels, and reputation.[356] Venture capitalists and angels employ several different methods to determine valuation.[357] Without existing revenues however, such methodologies are still based upon assumptions and guesses. Without expert experience and guidance to temper the entrepreneur's optimism, the valuations may be misleading potential investors.

For example, in the event that a novice entrepreneur pursues funding through Title III (Crowdfunding), the company must reg-

354. *Trends Show*, *supra* note 315.

355. A valuation is how much the company is worth. Valuation of the company matters because it represents the portion of the company that the founders need to give away to investors in exchange for funding. Early stage valuations are an art, rather than a science. Since the company really is not worth anything until it is profitable, valuation at early stages is more about the growth potential than the actual present value of the venture. *See* ASWATH DAMODARAN, THE DARK SIDE OF VALUATION: VALUING YOUNG, DISTRESSED, AND COMPLEX BUSINESSES 8, 213 (2d ed., 2010).

356. Anna Vital, *How Startup Valuation Works – Infographic*, ADIOMA (July 1, 2013), http://fundersandfounders.com/how-startup-valuation-works/[https://perma.cc/2FG5-B7BF].

357. A few of the most popular methodologies follow. The Venture Capital Method calculates valuation based on expected rates of return at exit. The Berkus Method attributes a range of dollar values to the progress startup entrepreneurs have made in their commercialization activities. The Scorecard Valuation Method adjusts the median pre-money valuation for seed/startup deals in a particular region and in the business vertical of the target based on seven characteristics of the company. Finally, the Risk Factor Summation Method compares twelve characteristics of the target company to what might be expected in a fundable seed/startup company. Stéphane Nasser, *Valuation for Startups – 9 Methods Explained*, STARTUPS & VENTURE CAPITAL (June 14, 2016), https:// startupsventurecapital.com/ valuation-for-startups-9-methods-explained-53771c86590e [https://perma.cc/Q5TV-Z2M2].

ister with the SEC and provide comprehensive company information to both the financial intermediary facilitating the offerings as well as the potential investors.[358] This information includes business plans, financial statements, the price of the security, how it was valued, and how the proceeds from the sale will be used.[359] A VDC can play a critical role in this process by validating the information provided to investors and evaluating the selection of the financial intermediary to facilitate the offering. Since the VDC will have a financial stake in the company through the ownership of shares, they are accountable, along with the founders, for any untrue statement or omission of material fact that misleads the investors. The selection of the financial intermediary can be very complicated and time consuming. Currently there are 34 funding portals registered with the SEC and members of FINRA,[360] all having slightly different operating philosophies, services, and fee structures. In addition, there are more than 4,000 broker-dealers, who may choose to establish platforms to take advantage of the market opportunities presented by the JOBS Act.[361] Both portals and platforms have SEC compliance obligations to ensure the eligibility of investors and issuers.[362] They also must publish issuer information and disclosures and provide a way for investors to communicate with issuers.[363] However, there are a number of important differences. Portals cannot solicit offers to purchase securities, hold investor money, or provide investment advice.[364]

Portals and broker-dealer platforms are under no obligation to work with a company that is seeking funding. The VDC can play a vital role in establishing the credibility of the company with

358. *Regulation Crowdfunding: A Small Entity Compliance Guide for Crowdfunding Intermediaries*, *supra* note 300.

359. *Id.*

360. *Funding Portals We Regulate*, FINRA (Oct. 11, 2017), https://www.finra.org /about /funding-portals-we-regulate [https://perma.cc/UHN4-CT3K].

361. Jonathon Sandlund, *Crowdfunding Platforms and Broker Dealers: An Evolving Relationship*, THE CROWD CAFE (Oct. 23, 2012), http://www.thecrowdcafe.com/ crowdfunding- platforms- and- broker-dealers/ [https://perma.cc/8HNZ-ZZGV].

362. David M. Freedman, *Distinguishing Crowdfunding Portals and Broker-Dealer Platforms Under Title III*, FINANCIAL POISE (Apr. 4, 2016), https://www.financialpoise.com/ columns/ crowdfunding-for-investors/ distinguishing-crowdfunding-portals-and-broker-dealer-platforms-under-title-iii/ [https://perma.cc/4WQC-2NDJ].

363. *Id.*

364. *Id.*

these intermediaries. As VDCs work with start-ups, they will establish reputations in the marketplace. Those that work well with the financial intermediaries will be sought after, along with the small businesses with which they are associated.[365] The VDC can also serve to add an element of integrity in this nascent on-line marketplace for private equity. Much like the premier venture capitalists, investors will gravitate towards those with the best reputations and records of accomplishment.

VI. CONCLUSION

Throughout history, private equity has played an important role in assisting entrepreneurs in transforming innovations into commercially viable products for the consuming public. This innovation has been the most important component of long-term economic growth in the United States. However, funding alone does not transform an idea into a vibrant successful business. Strategic guidance and management support from those providing the private equity is perhaps even more important.

Much of the success that Georges Doriot achieved as the father of venture capital was due to his hard work and the personal interest he took in his companies.[366] Toward the end of his career, however, he lamented the fact that venture capital was turning into a method of speculation, focusing on a quick profit.[367] VDCs will be a vehicle for investor/mentors to work with entrepreneurs in the way Doriot did.

Similarly, the federal policy initiatives discussed in this article can make more money available to more investors in more parts of the country. For them to do this effectively, however, there must be a cadre of dedicated experienced investors willing to contribute not only their money, but also their time, effort, and expertise. Such investors are now in short supply. The Venture Development Company can be a vehicle to bring these investors into the system and to put their talents to the best use.

365. Although it is beyond the scope of this paper, there could also be a certification process that Venture Development Companies could undertake to be accredited.

366. Scott Kirsner, *Venture Capital's Grandfather*, BOSTON.COM (Apr. 6, 2008), http://archive.boston.com/business/articles/2008/04/06/venture_capitals_grandfather/ [https://perma.cc/4WQC-2NDJ].

367. *See* Beattie, *supra* note 61.