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# Mergers, Antitrust, and the Interplay of Entrepreneurial Activity and the Investments That Fund It

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## Mergers, Antitrust, and the Interplay of Entrepreneurial Activity and the Investments That Fund It

Gary Dushnitsky\* & D. Daniel Sokol\*\*

#### ABSTRACT

This Article addresses the potentially negative implications of proposed antitrust legislation on the entrepreneurial ecosystem in general, with a particular focus on the venture capitalists (VCs) that fund it. First, it offers a review of how antitrust merger law currently works and how proposed legislative changes to antitrust may threaten the innovative Venture Capital (VC)-backed ecosystem that has made the United States the center of global innovation across many different industries. Accompanying this review are some empirical observations. recognizing that the understanding of innovative entrepreneurial activity calls for a deep appreciation of those who back it, the Article also provides an overview of the entrepreneurial ecosystem and VCs' motivations within this niche environment. In so doing, the Article identifies the drivers of entrepreneurial innovation and explains why changes to merger law may threaten these models of facilitating innovative, growth-orientated entrepreneurs. Finally, the Article concludes that changes to merger law may negatively affect the entire entrepreneurial ecosystem and hinder innovation in the United States.

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#### I. INTRODUCTION

Proposed antitrust legislation focused on regulating mergers threatens the entrepreneurial ecosystem, a significant driver of innovation. Several members of Congress have recently proposed antitrust legislation which would change decades of antitrust practice embraced by antitrust agencies and courts. These bills would alter merger presumptions and burdens of proof in court and create outright prohibitions for some mergers. This Article anticipates that additional

<sup>1.</sup> See Jeff Farah, Restrictions on Acquisitions Would Stifle the US Startup Ecosystem, Not Rein in Big Tech, TECHCRUNCH (May 19, 2021, 11:08 AM), https://techcrunch.com/2021/05/19/restrictions-on-acquisitions-would-stifle-the-us-startup-ecosystem-not-rein-in-big-tech/ [https://perma.cc/65FC-R9ML].

<sup>2.</sup> See, e.g., Platform Competition and Opportunity Act of 2021, H.R. 3826, 117th Cong. (2021); Tougher Enforcement Against Monopolies Act, S. 2039, 117th Cong. (2021); Bust Up Big Tech Act, S. 1204, 117th Cong. (2021); Trust-Busting for the Twenty-First Century Act, S. 1074, 117th Cong. (2021); Competition and Antitrust Law Enforcement Reform Act of 2021, S. 225, 117th Cong. (2021).

<sup>3.</sup> See H.R. 3826 § 2; S. 2039 § 202; S. 1204 § 2; S. 1074 §§ 3–4; S. 225 §§ 4, 9.

antitrust legislation will be introduced covering the area of merger enforcement.

Proposed legislation would affect horizontal mergers (e.g., Coca-Cola acquiring Pepsi) and non-horizontal mergers (e.g., Coca-Cola acquiring a distributor or a data analytics company), which courts and agencies have viewed as less problematic from a competition perspective. The result is that certain potential merger deals will never leave the boardroom, and others will be abandoned because the possibility of antitrust intervention is too high from a risk perspective. Many economically-beneficial deals will be challenged under these lower liability standards, with merging parties required to prove efficiencies to overcome a presumption that the deal is anticompetitive. For certain industries and business models built upon acquisitions, such as hardware, software, biotechnology, finance, and various industrial applications, change will fundamentally alter the ability to innovate.

Altering this entrepreneurial ecosystem creates significant barriers to innovation and reduces the incentives for firms to exit the market via acquisition.<sup>8</sup> The danger of the proposed legislative changes is that these regulatory interventions may destroy entrepreneurial value in terms of a firm's financial value, as well as innovation (with different forms of innovation described later in this Article) in the economy more broadly.<sup>9</sup>

This Article addresses the potentially negative implications of proposed antitrust legislation on the entrepreneurial ecosystem in general and particularly focuses on the Venture Capitalists (VCs) that

<sup>4.</sup> See generally 1 ANTITRUST SECTION, AM. BAR ASS'N, ANTITRUST LAW DEVELOPMENTS Ch. 3 (8th ed. 2016) (describing developments in how courts and agencies view mergers); Roger D. Blair, Christine S. Wilson, D. Daniel Sokol, Keith Klovers & Jeremy A. Sandford, Analyzing Vertical Mergers: Accounting for the Unilateral Effects Tradeoff and Thinking Holistically About Efficiencies, 23 GEO. MASON L. REV. 761 (2020) (discussing the development of vertical merger case law as well as the economics of vertical mergers).

<sup>5.</sup> See Farah, supra note 1.

<sup>6.</sup> See id.; S. 225 §§ 4, 9; S. 1074 §§ 3–4.

<sup>7.</sup> See D. Daniel Sokol,  $Vertical\ Mergers\ and\ Entrepreneurial\ Exit,$  70 FLA. L. REV. 1357, 1362 (2018).

<sup>8.</sup> See id.

<sup>9.</sup> See James B. Bailey & Diana W. Thomas, Regulating Away Competition: The Effect of Regulation on Entrepreneurship and Employment, 52 J. REGUL. ECON. 237, 238–40, 247 (2017). In other settings, regulation has been found to destroy entrepreneurial value. See id.; see also Paul Gompers, Will Gornall, Steven N. Kaplan & Ilya A. Strebulaev, How Venture Capitalists Make Decisions, HARV. Bus. Rev., Mar.—Apr. 2021, at 70, 72 ("[P]ublic companies that had received VC backing accounted for 20% of the market capitalization and 44% of the research and development spending of US public companies.") [hereinafter How Venture Capitalists Make Decisions].

fund it. First, it offers a review of how antitrust merger law currently works and how proposed legislative changes to antitrust may threaten the innovation in the Venture Capital (VC)-backed ecosystem that has made the United States the center of global innovation across many different industries. Accompanying this review are some empirical observations. Second, recognizing that understanding innovative entrepreneurial activity calls for a deep appreciation of those who back it, the Article provides an overview of the entrepreneurial ecosystem and the motivations of VCs. In so doing, it identifies the drivers of entrepreneurial innovation and explains why changes to merger law may threaten these models of facilitating innovative, growth-orientated entrepreneurs. Lastly, the Article concludes that changes to merger law may have negative effects on the entire entrepreneurial ecosystem and hinder US innovation.

#### II. ANTITRUST MERGER LAW

Under Section 7 of the Clayton Act, plaintiffs (whether government or private parties)<sup>10</sup> can enjoin a merger that may result in anticompetitive effects.<sup>11</sup> Case law interpreting Section 7, as well as both Department of Justice Antitrust Division (DOJ) and Federal Trade Commission (FTC) Horizontal Merger Guidelines (HMG) establish the parameters of merger law based on economic analyses of a particular transaction.<sup>12</sup> Recently, the DOJ and FTC promulgated Vertical Merger Guidelines (VMG), which adopt a similar economics-based approach,<sup>13</sup> although the FTC, but not the DOJ, recently withdrew the VMG.<sup>14</sup>

This Article focuses on an analysis of antitrust case law, as the proposed legislation seeks to override long-standing cases.<sup>15</sup> Courts in

- 10. See 15 U.S.C. § 18.
- 11. See id.; United States v. Phila. Nat'l Bank, 374 U.S. 321, 362-63 (1963).
- 12. See DEP'T OF JUST. & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES 2–6 (2010), https://www.justice.gov/sites/default/files/atr/legacy/2010/08/19/hmg-2010.pdf [https://perma.cc/X2Y8-Y2MG].
- 13. See DEP'T OF JUST. & FED. TRADE COMM'N, VERTICAL MERGER GUIDELINES 3 (2020), https://www.ftc.gov/system/files/documents/reports/us-department-justice-federal-trade-commission-vertical-merger-guidelines/vertical\_merger\_guidelines\_6-30-20.pdf [https://perma.cc/389K-H8FP]; Blair et al., supra note 4, at 761, 765, 772, 784, 796.
- 14. See Federal Trade Commission Withdraws Vertical Merger Guidelines and Commentary, FED. TRADE COMM'N (Sept. 15, 2021), https://www.ftc.gov/news-events/press-releases/2021/09/federal-trade-commission-withdraws-vertical-merger-guidelines [https://perma.cc/Y8WM-ULV4].
- 15. See, e.g., United States v. Baker Hughes, Inc., 908 F.2d 981, 982–83 (D.C. Cir. 1990); Competition and Antitrust Law Enforcement Reform Act of 2021, S. 225, 117th Cong. § 9 (2021).

the United States use the burden-shifting framework first articulated in *United States v. Baker Hughes, Inc.*, <sup>16</sup> for horizontal mergers. <sup>17</sup> This framework was first applied to vertical mergers in *United States v. AT&T, Inc.* <sup>18</sup> In prior merger cases, as far back as, *Brown Shoe Co. v. United States*, the Supreme Court has held that "the government must show that the proposed merger is likely to substantially lessen competition, which encompasses a concept of 'reasonable probability." <sup>19</sup> As part of this burden-shifting framework, the plaintiff bears the initial burden to establish a prima facie case that the merger is anticompetitive. <sup>20</sup> As courts recognize, "[t]o establish a prima facie case, the Government must (1) propose the proper relevant market and (2) show that the effect of the merger in that market is likely to be anticompetitive." <sup>21</sup>

If the plaintiff meets this prima facie burden, the defendants may rebut by providing "sufficient evidence that the prima facie case 'inaccurately predicts the transaction's probable effect on competition." <sup>22</sup> This stage in the burden shift is, for example, where defendants address and substantiate potential efficiencies for the transaction and cast doubt on potential anticompetitive harms that would result from the merger. <sup>23</sup> If the defendant can successfully rebut the prima facie case, the burden of production shifts back to the plaintiff. <sup>24</sup>

- 16. Baker Hughes, 908 F.2d at 982-83.
- 17. See, e.g., United States v. Anthem, Inc., 855 F.3d 345, 349-50 (D.C. Cir. 2017); Fed. Trade Comm'n v. Sanford Health, 926 F.3d 959, 962-63 (8th Cir. 2019).
  - 18. See United States v. AT&T Inc., 310 F. Supp. 3d 161, 190–91 (D.D.C. 2018).
- 19. Brown Shoe Co. v. United States, 370 U.S. 294, 323 n.39 (1962); United States v. AT&T, Inc., 916 F.3d 1029, 1032 (D.D.C. 2019).
  - 20. Baker Hughes, 908 F.2d at 982.
- 21. Fed. Trade Comm'n v. Penn State Hershey Med. Ctr., 838 F.3d 327, 337–38 (3d Cir. 2016). See generally Herbert Hovenkamp & Carl Shapiro, Horizontal Mergers, Market Structure, and Burdens of Proof, 127 YALE L.J. 1996 (2018) (discussing how the burdens work in practice and their current limitations).
  - 22. Anthem, 855 F.3d at 349 (quoting Baker Hughes, 908 F.2d at 991).
- 23. Baker Hughes, 908 F.2d at 991; United States v. H&R Block, Inc., 833 F. Supp. 2d 36, 89 (D.D.C. 2011) (quoting DEP'T OF JUST. & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES 30 (2010)) ("[I]t is incumbent upon the merging firms to substantiate efficiency claims . . . .").
- 24. Baker Hughes, 908 F.2d at 983 ("If the defendant successfully rebuts the presumption, the burden of producing additional evidence of anticompetitive effect shifts to the government, and merges with the ultimate burden of persuasion, which remains with the government at all times.").

This burden-shifting framework would change under a number of current legislative proposals. For example, Senator Klobuchar's proposed legislation, the Competition and Antitrust Law Enforcement Reform Act of 2021 (CALERA), would change the current legal standard in two ways. First, it would replace the "substantially lessen competition" standard under Section 7 of the Clayton Act (such as the elimination of competition between two firms) and create in its place an "appreciable risk of materially lessening competition" standard. In this new standard, the bill defines "materially" as "more than a de minimus [sic] amount." This would be a lower standard for the government to meet under the current framework. Indeed, most mergers would seem to be captured under such a standard because "more than a de minimus [sic] amount" is such a low threshold.

Further, for a significant portion of these transactions, Senator Klobuchar's proposed bill would shift the burden onto the merging parties to overcome a presumption of anticompetitive effects because of the relatively easy burden for the government to meet.<sup>31</sup> This, in turn, shifts the burden to the merging parties to prove pro-competitive effects, thus increasing the deal cost for most mergers that do not have actual anticompetitive effects.<sup>32</sup> Mergers that fall within the following categories would be required to meet the standard for proving a transaction's efficiency:

- 1. Mergers that significantly increase market concentration;
- 2. Mega-mergers valued at more than \$5 billion;
- 3. Acquisitions of competitors or nascent competitors by a dominant firm (where the bill defines dominance as a 50% market share or possession of significant market power); and
- 4. Any acquisition valued over \$50 million by a company valued at or more than \$100 billion in market capitalization.<sup>33</sup>

<sup>25.</sup> See, e.g., Competition and Antitrust Law Enforcement Reform Act of 2021, S. 225, 117th Cong. §§ 4, 9 (2021).

<sup>26.</sup> See id.

<sup>27.</sup> Id. § 4.

<sup>28.</sup> Id.

<sup>29.</sup> Compare 15 U.S.C. § 18 (prohibiting mergers that would substantially lessen competition), with S. 225 § 4 (prohibiting mergers that would create an appreciable risk of lessening competition).

<sup>30.</sup> See S.  $225 \S 4$ .

<sup>31.</sup> See id. § 9.

<sup>32.</sup> See id.

<sup>33.</sup> Id. § 4.

Senator Hawley's bill (the Trust-Busting for the Twenty-First-Century Act) would also prohibit mergers by companies with a market capitalization greater than \$100 billion, make acquisitions by a "dominant digital firm" valued at over \$1 million presumptively unfair, and remove the agency presumption that vertical mergers are typically not anticompetitive.<sup>34</sup>

The Authors are particularly concerned about the "acquisitions of . . . nascent-competitors" language because of the potential chilling effect it may have on the VC ecosystem.<sup>35</sup> The change would make it more difficult for entrepreneurs and VCs to reap the rewards of a successful exit through an acquisition by another firm, as discussed in Part III.<sup>36</sup> Additionally, the Authors are concerned that many acquisitions of VC-funded startups surpass the \$50 million threshold while not necessarily rising to the level of a "mega-merger."<sup>37</sup> As Part III illustrates, changing the current entrepreneurial ecosystem may have significant negative consequences.<sup>38</sup> This ecosystem largely relies upon exit through acquisition to maintain its vitality—which founders and investors want in order to have an opportunity to reap a financial return.<sup>39</sup> The proposed legislation by Senators Klobuchar and Hawley would significantly limit such acquisitions.<sup>40</sup>

<sup>34.</sup> Trust-Busting for the Twenty-First Century Act, S. 1074, 117th Cong. §§ 3–4 (2021).

<sup>35.</sup> See S. 225 § 4; Farah, supra note 1.

<sup>36.</sup> See Farah, supra note 1.

<sup>37.</sup> See infra Figure 6.

<sup>38.</sup> See infra Part III.

<sup>39.</sup> See Competition in Digital Technology Markets: Examining Acquisitions of Nascent or Potential Competitors by Digital Platforms: Hearing Before the Subcomm. On Antitrust, Competition Pol'y, and Consumer Rts. Of the S. Comm. On the Judiciary, 116th Cong. 5 (2019) [hereinafter Competition in Digital Technology Markets] (statement of Patricia Nakache, General Partner, Trinity Ventures) ("If the government makes it more challenging for incumbents to acquire these companies, this will have the devastating effect of making it less attractive to launch a new enterprise and for people like myself to fund and partner with those companies. The end result will be harm to the American innovation economy."); see also Darian M. Ibrahim, The New Exit in Venture Capital, 65 VAND. L. REV. 1, 2 (2012) ("The success of venture capital depends on the ability of venture capitalists ("VCs") to exit their investments by taking the start-ups they fund public or selling them to a large company.").

<sup>40.</sup> See Farah, supra note 1.

#### III. WHY DOES EXIT VIA ACQUISITION MATTER TO ENTREPRENEURSHIP?

The ability to realize returns on investment and effort, commonly referred to as "exit" from entrepreneurial ventures, is important for both investors and founders. <sup>41</sup> Without the ability to exit via acquisition, neither founders nor investors would be able to reap the gains of a business' appreciation in value. <sup>42</sup> And without appropriate incentives to form new businesses (because the proposed legislation may foreclose many mergers and acquisitions (M&A) exits), the incentives for founding and growing a business decrease. <sup>43</sup> When potential acquirers can no longer make bids for such VC-backed startups and acquisitions disappear or may be significantly diminished, the prospect of VCs making necessary returns on their investment decreases. <sup>44</sup> Further, limited partners are less willing to invest in VCs. <sup>45</sup>

It is important to explore the structure of the entrepreneurial ecosystem since the tech boom of the late 1990s to explain this adverse scenario. 46 The nature of most entrepreneurial exits is different in the current post-Great Recession financial ecosystem compared to the late 1990s. 47 In the late 1990s, the focus in the business press regarding entrepreneurial exits was on initial public offerings (IPOs). 48

<sup>41.</sup> See Ji Youn (Rose) Kim & Haemin Dennis Park, Two Faces of Early Corporate Venture Capital Funding: Promoting Innovation and Inhibiting IPOs, 2 STRATEGY SCI. 161, 163–64 (2017); Dawn R. DeTienne, Alexander McKelvie & Gaylen N. Chandler, Making Sense of Entrepreneurial Exit Strategies: A Typology and Test, 30 J. BUS. VENTURING 255, 256–57 (2015); Ibrahim, supra note 39, at 11–12.

<sup>42.</sup> See Sokol, supra note 7.

<sup>43.</sup> See id. There is also an important "recycling effect" for VC investors. Farah, supra note 1. VC-backed entrepreneurs who sell companies often go on to found new companies, or become angels or VCs and invest in other companies. Id. Money based on exits often get redeployed into new endeavors, which propels innovation. Id.

<sup>44.</sup> See Competition in Digital Technology Markets Competition in Digital Technology Markets, supra note 39, at 5–7; Farah, supra note 1.

<sup>45.</sup> See Tomer Dean, The Meeting that Showed Me the Truth About VCs, TECHCRUNCH (June 1, 2017, 5:00 PM), https://techcrunch.com/2017/06/01/the-meeting-that-showed-me-the-truth-about-vcs/ [https://perma.cc/BN35-UW3K]. The article offers more discussion of limited partners and their relationship with venture capitalists in Part IV. See infra Part IV.

<sup>46.</sup> See Timothy B. Lee, 4 Charts that Show How Today's Tech Boom Is Different from the 1990s, VOX (Aug. 19, 2015, 3:20 PM), https://www.vox.com/2015/8/19/9178837/ipo-decline-microsoft-facebook [https://perma.cc/C54M-JKAY].

<sup>47.</sup> See id.

<sup>48.</sup> See id.

Entrepreneurial exits in the current post-Great Recession era are largely a function of acquisitions rather than IPOs. <sup>49</sup> Perhaps more importantly, the reality is that most exits are not based on IPOs at all but on acquisitions. <sup>50</sup> Indeed, a recent study suggests that 58 percent of US startup founders and executives expect to be acquired. <sup>51</sup> This Article explores the development of the modern entrepreneurial ecosystem in greater detail in Part IV. <sup>52</sup>

There are many reasons why larger firms acquire smaller firms, but the primary motivation is that the nascent firm will allow the acquiring firm to create efficiencies that otherwise would not be possible merely by utilizing various strategies short of a merger, such as bilateral contracts (integration via contract), strategic alliances, or joint ventures.<sup>53</sup> Because the target firm is often a strategic complement to the acquiring firm, the merger may reduce transaction costs and asymmetric risk.<sup>54</sup> The merger may also enable learning by doing, encourage knowledge transfers, reduce information leakages, improve investment coordination, or create research and development synergies.<sup>55</sup> It is also important to adapt quickly to competitive threats from other larger firms (e.g., adding new products or features through acquisition can be less costly and time-consuming compared to build-outs from scratch).<sup>56</sup> In Part VI, this Article explores the importance of complementary assets in greater detail.<sup>57</sup>

Both large and small firms bring different potential value to a merger;<sup>58</sup> this Article provides a number of such value-creation justifications. One justification for a merger is that the acquirer and

<sup>49.</sup> See Xiahoui Gao, Jay R. Ritter & Zhongyan Zhu, Where Have All the IPOs Gone?, 48 J. FIN. & QUANTITATIVE ANALYSIS 1663, 1663 (2012); Ibrahim, supra note 39, at 11–12; Farah, supra note 1.

<sup>50.</sup> See infra Figure 1.

<sup>51.</sup> SILICON VALLEY BANK, 2020 GLOBAL STARTUP OUTLOOK 7 (2020), https://www.svb.com/globalassets/library/uploadedfiles/content/trends\_and\_insights/reports/startup\_outlook\_report/suo\_global\_report\_2020-final.pdf [https://perma.cc/8AHT-BNM8]. The survey did not ask the basis for this view.  $See\ id$ .

<sup>52.</sup> See infra Part IV.

<sup>53.</sup> See generally Jaideep Shenoy, An Examination of the Efficiency, Foreclosure, and Collusion Rationales for Vertical Takeovers, 58 MGMT. Sci. 1482 (2012) (explaining the rationales behind vertical mergers).

<sup>54.</sup> See Sokol, supra note 7, at 1372.

<sup>55.</sup> Blair et al., *supra* note 4, at 776–80.

<sup>56.</sup> See Louis Kaplow, Efficiencies in Merger Analysis, 83 ANTITRUST L.J. 557, 581–84 (2021).

<sup>57.</sup> See infra Section VI.B.

<sup>58.</sup> See, e.g., Kaplow, supra note 56, at 576–84.

acquired firms have different strengths.<sup>59</sup> The value of the larger acquiring firm includes scale and scope efficiencies.<sup>60</sup> Such efficiencies allow for better investment and marketing of the acquired firm's assets through integration with the larger acquiring firm.<sup>61</sup> Further, the very process of integration may introduce increased process innovation into the acquired firm.<sup>62</sup> Various routines and processes allow the larger firm to integrate the acquired firm in order to reduce search and information costs.<sup>63</sup>

Smaller companies also win from being acquired.<sup>64</sup> These types of acquisitions allow VCs and founders to exit the opportunity at valuations of multiples of the investment.<sup>65</sup> Given uncertainties in scaling up, exit through an acquisition allows the smaller firm a viable exit strategy that benefits both founders and investors.<sup>66</sup>

Finally, entrepreneurial exit via merger provides an important signaling mechanism to the market.<sup>67</sup> When larger publicly traded companies acquire smaller companies, the market incorporates the information into the pricing of other deals.<sup>68</sup> Increased transparency in deals allows for more accurate pricing and entrepreneurial financing rounds because there are additional similar deals to those acquisitions by prominent tech firms.<sup>69</sup> These deals aid in accurately pricing other proposed deals by creating comparable benchmarks.<sup>70</sup> For example, it is easier to value real estate if there are similar transactions where the closing price is publicly available; they offer a related context for how

- 59. See id. at 581–84.
- 60. See id. at 576-84.
- 61. See id.
- 62. See Bruno Cassiman, Massimo G. Colombo, Paola Garrone & Reinhilde Veugelers, The Impact of M&A on the R&D Process: An Empirical Analysis of the Role of Technological- and Market-Relatedness, 34 RSCH. POL'Y 195, 196 (2005).
- 63. See Gautam Ahuja & Riitta Katila, Technological Acquisitions and the Innovation Performance of Acquiring Firms: A Longitudinal Study, 22 STRATEGIC MGMT. J. 197, 200 (2001).
  - 64. See Sokol, supra note 7, at 1374.
  - 65. See id. at 1362.
- 66. See id. at 1374. ("One might imagine that the entrepreneurial firm may position itself so that it is rational to be vertically acquired. It, in fact, may base its business model on such an acquisition. The objective of the entrepreneurial firm is to create a bidding war for its specialized assets among potential acquirers.").
  - 67. See Robert J. Rhee, Corporate Finance 112–13 (2016).
- 68. See id. ("In M&A deals, transaction comparables, which are multiples of transaction price, are also considered along with data on merger premiums.")
  - 69. See id.
- 70. See Paul Gompers, Anna Kovner, Josh Lerner & David Scharfstein, Venture Capital Investment Cycles: The Impact of Public Markets, 87 J. FIN. ECON. 1, 10–11 (2008).

pricing works.<sup>71</sup> These motivations for why acquisitions occur should be put into context of entrepreneurial activity overall and the VCs' model.

# IV. A BRIEF EXPLANATION OF THE BUSINESS MODEL OF VENTURE CAPITAL INVESTORS

VC is independently managed, dedicated capital, which focuses on equity or equity-linked investments in privately held, high-growth companies.<sup>72</sup> Typically, these funds are raised from institutional and wealthy individual investors through partnerships and exist only for a finite, ten-year period.<sup>73</sup> These funds invest in young firms, usually in exchange for preferred stock with various special privileges.<sup>74</sup> VCs sell these firms to corporate acquirers or liquidate their holdings after taking the firms public or selling their interests.<sup>75</sup>

VC funds have a notable impact on innovation.<sup>76</sup> Academic work suggests that VCs have stimulated innovation by backing entrepreneurial technology-based ventures.<sup>77</sup> For example, the influx of capital into VC funds during the decade following the 1978 "prudent man" change in pension fund rules has been associated with increases in VC investments and subsequent patenting rates.<sup>78</sup> Similar evidence

<sup>71.</sup> See The Sales Comparison Approach to Real Estate Valuation, PROPERTYMETRICS (July 23, 2019), https://propertymetrics.com/blog/sales-comparison-approach/[https://perma.cc/JKD6-NE77].

<sup>72.</sup> See Paul Gompers & Joshua Lerner, The Venture Capital Cycle 4–10 (2004) [hereinafter Venture Capital Cycle]. Other sources of entrepreneurial finance often include corporate VC funds, crowdfunding platforms and startup accelerators. For an overview, see Will Drover, Lowell Busenitz, Sharon Matusik, David Townsend, Aaron Anglin & Gary Dushnitsky, A Review and Roadmap of Entrepreneurial Equity Financing Research: Venture Capital, Corporate Venture Capital, Angel Investment, Crowdfunding, and Accelerators, 43 J. MGMT. 1820, 1843 (2017).

<sup>73.</sup> See VENTURE CAPITAL CYCLE, supra note 72, at 5.

<sup>74.</sup> JOSH LERNER, ANN LEAMON & FELDA HARDYMON, VENTURE CAPITAL, PRIVATE EQUITY, AND THE FINANCING OF ENTREPRENEURSHIP 56-64, 121-38 (2012).

<sup>75.</sup> Bronwyn H. Hall & Josh Lerner, *The Financing of R&D and Innovation, in* 1 HANDBOOK OF THE ECONOMICS OF INNOVATION 609, 627–28 (Bronwyn H. Hall & Nathan Rosenberg eds., 2010).

<sup>76.</sup> Roberta Dessí & Nina Yin, *The Impact of Venture Capital on Innovation*, in The Oxford Handbook of Venture Capital 668, 668–69 (Douglas Cumming ed., 2012).

<sup>77.</sup> See id. at 668 ("There is evidence of a substantial impact of venture capital on innovation, measured by patent counts, at the industry level (at least for the United States).").

<sup>78.</sup> See Pub. L. No. 93-406, 88 Stat. 829 (codified as amended in scattered sections of 29 U.S.C.); Samuel Kortum & Josh Lerner, Assessing the Impact of Venture Capital on Innovation, 31 RAND J. ECON. 674, 675 (2000).

of VC-driven innovation has been documented in Europe.<sup>79</sup> A recent analysis of patenting outcomes in the United States during the 1976–2017 period finds that VC-backed ventures were between two and four times as likely to have impactful patents as calculated by various measures, including citations, originality, generality, and closeness to science.<sup>80</sup> Relatedly, another work illustrates that as the accessibility of VCs to a specific region increases, the innovation and financial outcomes of the entrepreneurial ventures that VCs backed in the region rise too.<sup>81</sup>

The impact of VC investment on patents and innovation is also reflected in VC-backed companies' commitments to research and development (R&D) activities. A recent study compared the performance of VC-backed companies that were publicly listed as of the end of 2019 to other publicly listed companies that were not VC-backed. While the two groups of companies are similar in terms of aggregate levels of revenues and profits, the former group accounts for the lion's share (89 percent) of the recorded R&D expenditures that year. A Taken together, these patterns in VC patenting and R&D highlight the role of VC in stimulating novel technologies over the span of many decades. For example, VC funding stimulated semiconductor and mainframe computing ventures in the 1960s, for pioneering biotechnology ventures in the 1980s, internet and e-commerce innovators in the 1990s, and a host of novel services and business models over the 2010s.

<sup>79.</sup> See Ana Faria & Natália Barbosa, Does Venture Capital Really Foster Innovation?, 122 ECON. LETTERS 129, 130 (2014).

<sup>80.</sup> Sabrina T. Howell, Josh Lerner, Ramana Nanda & Richard R. Townsend, Financial Distancing: How Venture Capital Follows the Economy Down and Curtails Innovation 16 (Nat'l Bureau of Econ. Rsch., Working Paper No. 27150, 2020), https://www.nber.org/system/files/working\_papers/w27150/revisions/w27150.rev0.pdf [https://perma.cc/8L6A-V3F4].

<sup>81.</sup> See Shai Bernstein, Xavier Giroud & Richard R. Townsend, The Impact of Venture Capital Monitoring, 71 J. FIN. 1591, 1592 (2016).

<sup>82.</sup> See Josh Lerner & Ramana Nanda, Venture Capital's Role in Financing Innovation: What We Know and How Much We Still Need to Learn, 34 J. ECON. PERSPS. 237, 241 (2020).

<sup>83.</sup> Id. at 240.

<sup>84.</sup> Id

<sup>85.</sup> See Dessí & Yin, supra note 76, at 670–74.

<sup>86.</sup> Lerner & Nanda, supra note 82.

<sup>87.</sup> Id.

<sup>88.</sup> Id.

<sup>89.</sup> *Id*.

The funding to support and stimulate entrepreneurial activity often originates from VC investors. 90 Therefore, it is important to understand VC structures and objectives in order to recognize how VCs support innovative ventures. Typically, a VC firm will create a Limited Partnership with the investors as limited partners (LPs) and the firm itself as the General Partner. 91 Examples of LPs include public pension funds, corporate pension funds, insurance companies, family offices, university endowments, and foundations. 92

The basic structure of a VC fund is as follows. A new fund is established when the VC firm obtains necessary commitments from its investors, for example, \$100 million. A fund is usually structured as a closed-end fund with a duration of eight to ten years, at the end of which the capital and any applicable gains are returned to the LPs. Uring the first few years, the venture firm seeks out and invests in innovative startups and spends the remaining years working with the founders to grow their ventures. The ultimate payoff to the founders, LPs, and VCs is in the form of a "liquidity event," (also known as an "exit") where shareholders can turn their equity stake into cash either when the venture is acquired or goes public. Fewer mergers mean fewer opportunities for a liquidity event.

A closer look at liquidity events, since the Great Recession, offers complementary insights. First, there has been growth in the number of liquidity events over the past fifteen years, partially reflecting the overall increase in investment activity during that time period.<sup>97</sup> Moreover, the number of M&A deals significantly exceeds that of IPOs

<sup>90.</sup> See Ronald J. Gilson, Engineering a Venture Capital Market: Lessons from the American Experience, 55 STAN. L. REV. 1067, 1070 (2003).

<sup>91.</sup> See id. at 1070–71.

<sup>92.</sup> *Id.* at 1070.

<sup>93.</sup> See Venture Capital Fund, CORP. FIN. INST., https://corporatefinanceinstitute.com/resources/knowledge/trading-investing/venture-capital-fund/ [https://perma.cc/T6BX-EQ3Z] (last visited Dec. 22, 2021).

<sup>94.</sup> See Pocket Sun, Venture Capital 101: Structure, Returns, Exit and Beyond, MEDIUM: SOGAL (June 30, 2015), https://medium.com/sogal-adventures/venture-capital-101-structure-returns-exit-and-beyond-2048f22247a5 [https://perma.cc/PLD7-PCZE].

<sup>95.</sup> See Adam Hayes, Venture Capital, INVESTOPEDIA (Nov. 8, 2021), https://www.investopedia.com/terms/v/venturecapital.asp [https://perma.cc/FK7J-MG3L].

<sup>96.</sup> See Adam Hayes, Liquidity Event, INVESTOPEDIA (Nov. 8, 2021), https://www.investopedia.com/terms/l/liquidity\_event.asp [https://perma.cc/BRE2-Y96P] [hereinafter Liquidity Event]; infra Part VI. See generally ANDREW METRICK & AYAKO YASUDA, VENTURE CAPITAL AND THE FINANCE OF INNOVATION 3–122 (2d ed. 2010) (providing an overview of VC firms, funds, and investors with an emphasis on their respective financial interests).

<sup>97.</sup> See infra Figure 1.

each year.<sup>98</sup> In any given year, there are at least five times more M&A events than there are IPOs.<sup>99</sup> While less frequent, IPOs tend to take place at higher valuations, with the average IPO valuation hovering around \$500 million and peaking at above \$2 billion more recently.<sup>100</sup> Conversely, average M&A activity involves much lower valuations.<sup>101</sup> Insights into the frequency and valuations at different liquidity events are developed in Part VI and Figures 5 and 6.<sup>102</sup>

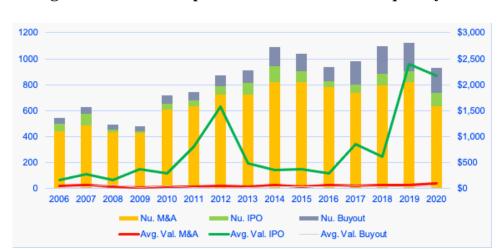


Figure 1: Venture Capital Common Paths to Liquidity<sup>103</sup>

The compensation and longevity of VCs govern their success.<sup>104</sup> The compensation of a VC fund is usually comprised of two parts: an annual management fee (often 2 percent of assets under management) and carried interest (broadly speaking, about 20 percent of the returns generated on assets under management).<sup>105</sup> A VC's longevity and ability to launch subsequent funds significantly shape its success.<sup>106</sup> The VC firm is likely to raise several funds; as each fund approaches its

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98. See infra Figure 1.
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MONITOR (2021), https://nvca.org/research/pitchbook-nvca-venture-monitor/

[https://perma.cc/G3LC-LCN3] (select "Download the XLS Data Pack"; then navigate to the "Exits x Type" tab). Additional analysis provided by the authors.

<sup>99.</sup> See infra Figure 1.

<sup>100.</sup> See infra Figure 1.

<sup>101.</sup> See infra Figure 1.

<sup>102.</sup> See infra Part VI; Figures 5, 6.

<sup>103.</sup> See PITCHBOOK & NAT'L VENTURE CAP. ASS'N, PITCHBOOK-NVCA VENTURE

<sup>104.</sup> See Sun, supra note 94.

<sup>105.</sup> See id.

<sup>106.</sup> See id.

predetermined end date, the firm engages in fundraising for its subsequent fund. 107

The public listing of a portfolio company (a company in which a VC holds an interest) represents a successful event for the VCs who funded it:108 not only do they stand to profit through their carried interest in the current VC fund, but they have also increased the likelihood of securing LP commitments for the next fund.109 At the same time, IPOs are less common than M&A events,110 and although the latter usually take place at lower valuations, they may represent a substantial return on assets under management for smaller VC funds.111

This primer on VCs helps explain the current phase of entrepreneurial activity in the United States since the Great Recession, which Part V explores.<sup>112</sup>

#### V. VC-BACKED ENTREPRENEURIAL ACTIVITY IS AT A RECORD HIGH

Entrepreneurial growth plays a significant role in US innovation in terms of new ideas which can be commercialized. <sup>113</sup> For this analysis, we focus on VC-backed, technology-based entrepreneurship, which requires the appropriate mix of legal institutions, capital, and ideas. <sup>114</sup> When the mix of legal institutions creates certain barriers to entrepreneurship, entrepreneurial investment and innovation suffer because of the increased uncertainty of reaping investment rewards and blocking certain exit opportunities. <sup>115</sup> In short, if mergers become more

<sup>107.</sup> See id.

<sup>108.</sup> See Venture Capital Fund, supra note 93. Because VC funds are limited in duration, VCs seek to maximize their investments during the life of the fund. See Drover et al., supra note 72, at 1821. VCs have a choice of exit via IPO or acquisition. Id. In principle, the motivation between the two is the same, namely, to maximize returns for the investors of each IPO fund. See id. Hence, one form of exit is not superior to the other. Both are merely vehicles to achieving returns for VC investors. See id.

<sup>109.</sup> See Jason Fernando, Initial Public Offering (IPO), INVESTOPEDIA (Nov. 30, 2021), https://www.investopedia.com/terms/i/ipo.asp [https://perma.cc/XQQ6-PL3M].

<sup>110.</sup> See supra Figure 1.

<sup>111.</sup> See supra Figure 1.

<sup>112.</sup> See infra Part V.

<sup>113.</sup> See Gilson, supra note 90, at 1068.

<sup>114.</sup> See id. See generally Joseph Bankman & Ronald J. Gilson, Why Start-Ups?, 51 STAN. L. REV. 289 (1999) (providing an overview of the economic foundation of high-tech start-ups).

 $<sup>115. \</sup>hspace{1.5cm} See \hspace{0.1cm} Philippe \hspace{0.1cm} Aghion, Antonin Bergeaud \& \hspace{0.1cm} John \hspace{0.1cm} Van \hspace{0.1cm} Reenen, The \hspace{0.1cm} Impact \hspace{0.1cm} of \hspace{0.1cm} Regulation \\ on \hspace{0.1cm} Innovation \hspace{0.1cm} 2 \hspace{0.1cm} (Nat'l \hspace{0.1cm} Bureau \hspace{0.1cm} of \hspace{0.1cm} Econ. \hspace{0.1cm} Rsch., \hspace{0.1cm} Working \hspace{0.1cm} Paper \hspace{0.1cm} No. \hspace{0.1cm} 28381, \hspace{0.1cm} 2021), \\ https://www.nber.org/system/files/working_papers/w28381/w28381.pdf \hspace{0.1cm} [https://perma.cc/8X2P-ZABC]. \\ \hspace{0.1cm} ZABC]. \hspace{0.1cm} Paper \hspace{0.1cm} Aghion, Antonin Bergeaud & John Van Reenen, The Impact of Regulation \\ Paper No. \hspace{0.1cm} 28381, \hspace{0.1cm} 2021), \\ \hspace{0.1cm} Paper No. \hspace{0.1cm} 28381, \hspace{0.1cm} 2021), \\ \hspace{0.1cm} Paper No. \hspace{0.1cm} 28381, \hspace{0.1cm} 2021), \\ \hspace{0.1cm} Paper No. \hspace{0.1cm} 28381, \hspace{0.1cm} Paper No. \hspace{0.1cm} Paper N$ 

difficult, limited exit via mergers cannot be shifted through more IPOs. <sup>116</sup> This displacement also cannot be overcome by organic internal R&D growth (at least not of the same type that focuses on high-risk innovation). Rather, there would be less innovation and investment. <sup>117</sup> The Authors detail the reasons herein, but first, the question of what might happen as a result of changes in merger law is a question best understood when applied to the current environment of entrepreneurial growth in the United States.

First, the Authors identify the current trends in new startups. The US-entrepreneurial ecosystem has risen to new heights since the end of the Great Recession. As the chart below shows, entrepreneurship, with a system of larger companies acquiring smaller ones as the most common form of exit, exhibits significant growth in the number of startups founded since the financial crisis. 119

In Table 1, the Authors provide data with regard to both the number of deals and deal value in the United States on an annual basis from 2006 to 2020. 120 The Authors further break down the data into different stages of investment—angel and seed investment, early-stage VC, and later-stage VC. 121 A number of factors drive these investment decisions. 122 They include, among others, technological advancement (technology), disruption to business models and organizational structures and routines (strategy), employment opportunities (economics), and the increasing focus on sustainability, diversity, and overall societal impact (social). 123

<sup>116.</sup> See id.

<sup>117.</sup> See id.

<sup>118.</sup> See infra Table 1.

<sup>119.</sup> See infra Table 1.

<sup>120.</sup> See infra Table 1.

<sup>121.</sup> See infra Table 1.

<sup>122.</sup> See Paul A. Gompers, Josh Lerner, Margaret M. Blair & Thomas Hellman, What Drives Venture Capital Fundraising?, 1998 BROOKINGS PAPERS ON ECON. ACTIVITY 149, 150–52 (1998).

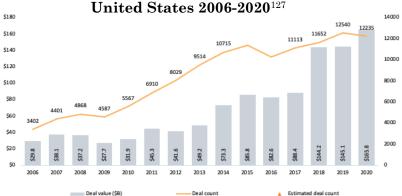
<sup>123.</sup> See id.; VENTURE CAPITAL CYCLE, supra note 72, at 127–28.

Table 1: Startup Snapshot in the United States 2006-2020<sup>124</sup>

	2011	2012	2014	2015	2016	2017	2012	2013	2014	2015	2016	2017	2018	2019	2020
Deal Value	\$29.8	\$38.1	\$37.2	\$27.7	\$31.9	\$45.3	\$41.6	\$49.2	\$73.3	\$85.8	\$82.6	\$88.4	\$144.2	\$145.1	\$165.8
Deal count	3402	4401	4868	4587	5567	6910	8029	9514	10715	11356	10251	11113	11652	12540	12235
Estimated deal count															
Actual + estimated deal count															
Angel & Seed	455	789	929	1223	1748	2578	3467	4597	5220	5725	4939	5231	5203	5574	5361
Early VC	1727	2094	2277	1837	2152	2501	2657	2911	3229	3325	3056	3418	3559	3662	3377
Later VC	1220	1518	1662	1527	1667	1831	1905	2006	2266	2306	2256	2464	2890	3304	3497
Angel & Seed	13.4%	17.9%	19.1%	26.7%	31.4%	37.3%	43.2%	48.3%	48.7%	50.4%	48.2%	47.1%	44.7%	44.4%	43.8%
Early VC	50.8%	47.6%	46.8%	40.0%	38.7%	36.2%	33.1%	30.6%	30.1%	29.3%	29.8%	30.8%	30.5%	29.2%	27.6%
Later VC	35.9%	34.5%	34.1%	33.3%	29.9%	26.5%	23.7%	21.1%	21.1%	20.3%	22.0%	22.2%	24.8%	26.3%	28.6%

Figure 2 provides a graphic illustration of the data in Table  $1.^{125}$  It charts both deal count and value over time from 2006 to  $2020.^{126}$ 

Figure 2: Startup Deal Value and Deal Count in the



The X-axis denotes the calendar year. The left (bar plots) and right (line plot) Y-axes represent the aggregate dollar amount (\$B) and the number of deals, respectively.  $^{128}$ 

<sup>124.</sup> See PITCHBOOK & NAT'L VENTURE CAP. ASS'N, supra note 103 (select "Download the XLS Data Pack"; then navigate to the "Deal Activity" tab). Additional analysis provided by the authors.

<sup>125.</sup> See infra Figure 2; supra Table 1.

<sup>126.</sup> See infra Figure 2.

<sup>127.</sup> See PITCHBOOK & NAT'L VENTURE CAP. ASS'N, supra note 103 (select "Download the XLS Data Pack"; then navigate to the "Deal Activity" tab). Additional analysis provided by the authors.

<sup>128.</sup> See id.

# VI. THE CATAPULT-ERS: DRIVING ENTREPRENEURIAL INNOVATION AT SCALE

What has caused the rapid expansion in entrepreneurial activity? Based on an examination of the academic literature, this Article identifies two drivers—the two "Cs"—that catapult entrepreneurial capital forward: (1) Capital and (2) Complementary assets. These two drivers have been missing from the antitrust debate.

### A. Capital

VC funds finance innovative ventures to monetize their proceeds and deliver returns to their LPs. <sup>129</sup> The ultimate payoff to the founders, LPs, and VCs is in the form of a "liquidity event," which enables shareholders to turn their equity stakes into cash when the venture is acquired or goes public. <sup>130</sup> It follows that the health of the VC model and the model's support of innovative ventures is largely contingent on the health of the market for liquidity events. <sup>131</sup> As noted above, VCs' ability to monetize their portfolio companies is key to their compensation and longevity. <sup>132</sup>

An extensive survey of VCs conducted during the first half of the previous decade reveals that about a third of the ventures they funded are outright failures, about half are acquired, and 15 percent go public. 133 The analysis further notes that the acquisitions are usually at valuations that are substantially lower than IPO valuations, and some are "disguised failures" in the sense that they do not return the risk-adjusted investment amount. 134

#### 1. Going Public is One Source of Liquidity Events

Figure 3 records historical patterns of IPO activity from 1980 through 2020.<sup>135</sup> It highlights a stark change in this important liquidity event: the number of IPOs grew dramatically through 2000, suffered a

<sup>129.</sup> See Paul Gompers & Josh Lerner, Money Chasing Deals? The Impact of Fund Inflows on Private Equity Valuation, 55 J. FIN. ECON. 281, 285 (2000).

<sup>130.</sup> See Liquidity Event, supra note 96.

<sup>131.</sup> See Andrew Metrick & Ayako Yasuda, Venture Capital and Other Private Equity: A Survey, 17 EUR. FIN. MGMT., 619, 628 (2011).

<sup>132.</sup> See generally Part IV (explaining how the longevity of a VC depends on its ability to monetize its portfolio companies).

<sup>133.</sup> See How Venture Capitalists Make Decisions, supra note 9, at 185.

<sup>134.</sup> See id. at 185–86.

<sup>135.</sup> See infra Figure 3.

precipitous drop coinciding with the burst of the dot-com bubble, and has remained low ever since. <sup>136</sup> Moreover, the age of companies at IPO also changed pre-and post-2000. <sup>137</sup> Whereas the average age of a company at IPO was eight years during the period leading up to the year 2000—the average age is usually over ten years for post-2000 IPOs. <sup>138</sup>

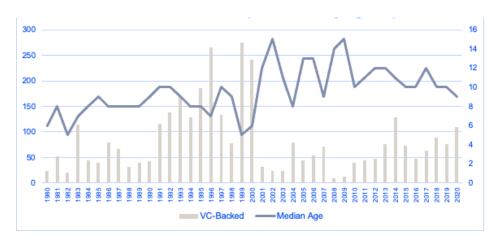
There are several reasons for the marked change in the frequency and nature of IPOs over the past few decades.<sup>139</sup> A few explanations suggest a problem of regulatory overreach, specifically overly burdensome compliance costs. 140 The first explanation concerns the Sarbanes-Oxley Act of 2002 (SOX). 141 Section 404 of SOX imposes additional compliance costs on publicly traded firms. 142 These costs have been especially onerous for small firms because they constitute a large fraction of IPO proceeds. 143 The second explanation underscores another impact of SOX, the decline in the number of underwriters that provide analyst coverage of smaller firms. 144 There are various other explanations regarding the decline in IPOs. 145 One focuses on the SEC's Regulation Fair Disclosure (Reg FD) in 2000 and the 2003 Global Settlement as sources of the decline. 146 Another explanation is that in recent years, a large fraction of the "public" exits were in the form of Special Purpose Acquisition Companies (SPACs). 147 Finally, mergers may be a priority because it takes a longer amount of time to reach IPO maturity, and some investors need an early payoff because their time

- 136. See infra Figure 3.
- 137. See infra Figure 3.
- 138. See infra Figure 3.
- 139. See infra text accompanying notes 141–47.
- 140. See infra text accompanying notes 141–47.
- $141.\quad$  See Pub. L. No. 107-204, 116 Stat. 745 (codified as amended in scattered sections of 15, 18, 28, 29 U.S.C.).
- 142. See Sarbanes-Oxley Act § 404; Kimberly Krawiec, Let's Talk: What FinReg Can Learn from New Governance (and Vice Versa), 44 L. & Soc. INQUIRY 1241, 1243 (2019) ("These requirements have significantly increased firms' costs of internal controls.").
  - 143. See Gao et al., supra note 49, at 1664.
  - 144. See id.
  - 145. See infra text accompanying notes 145–47.
- $146. See \ Gao \ et \ al., supra \ note \ 49; \ Narasimhan \ Jegadeesh \ \& \ Woojin \ Kim, \ Do \ Analysts \ Herd? An \ Analysis \ of \ Recommendations \ and \ Market \ Reactions. \ 23 \ Rev. \ FIN. \ STUD. \ 901, 911–12 (2010); \ David \ Weild, \ How \ to \ Revive \ Small-Cap \ IPOs, \ WALL \ ST. \ J., \ https://www.wsj.com/articles/SB10001424052970203554104577001522344390902 \ [https://perma.cc/5S7E-JEL3] \ (Oct. \ 27, 2011, 9:22 \ PM).$
- 147. See Anna-Louise Jackson & Benjamin Curry, Special Purpose Acquisition Company: What Is a SPAC?, FORBES (Mar. 9, 2021, 9:15 AM), https://www.forbes.com/advisor/investing/spac-special-purpose-aquisition-company/ [https://perma.cc/YN89-Q3YG].

horizons are a function of when their fund closes.<sup>148</sup> Hence, the M&A route remains a viable exit window.<sup>149</sup> This may be particularly important for first-time managers or those who back non-traditional companies.<sup>150</sup>

Figure 3 provides historical IPO numbers and the median age of the firm at IPO.

Figure 3: Historical IPO Numbers (and Median Age at IPO)<sup>151</sup>



Although the number of IPOs has been significantly lower over the past couple of decades, it is still the case that some innovative ventures follow this route and list on public markets. Two observations follow: the first is that there are more diverse routes to public markets, including the traditional IPO route, direct listing, and

<sup>148.</sup> See Tom Huddleston, Jr., What is a SPAC? Explaining One of Wall Street's Hottest Trends, CNBC, https://www.cnbc.com/2021/01/30/what-is-a-spac.html [https://perma.cc/P3GC-NZUA] (Feb. 23, 2021, 11:13 PM).

<sup>149.</sup> See Ben Boissevain, How to Prepare for M&A, Your Most Likely Exit Avenue, TECHCRUNCH (July 26, 2021, 2:09 PM), https://techcrunch.com/2021/07/26/how-to-prepare-for-ma-your-most-likely-exit-avenue/ [https://perma.cc/HHT4-8PXG].

<sup>150.</sup> See Bill Carlino, Why the Spike in Non-Traditional Firm Mergers?, ACCT. WEB (Nov. 17, 2017), https://www.accountingweb.com/practice/growth/why-the-spike-in-non-traditional-firm-mergers [https://perma.cc/9PDQ-WXJ8].

<sup>151.</sup> See PITCHBOOK & NAT'L VENTURE CAP. ASS'N, supra note 103 (select "Download the XLS Data Pack"; then navigate to the "Deal Activity" and "Exit Medians and Avg" tabs). Additional analysis and data provided by the authors.

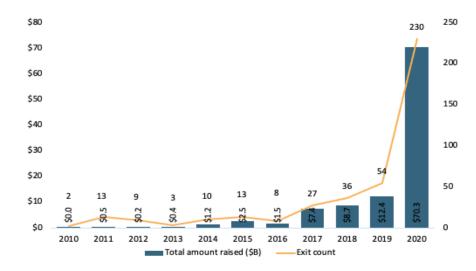
<sup>152.</sup> See Ari Levy, Three of the 10 Biggest Tech IPOs Have Happened in 2020—Including Two in the Last Week, CNBC, https://www.cnbc.com/2020/12/12/10-biggest-tech-ipos-ever-three-in-2020-two-last-week.html [https://perma.cc/X243-4ML8] (Dec. 12, 2020, 3:31 PM) (noting that the largest tech IPOs have included Uber, Doordash, Lyft, Snowflake, Snap, and Airbnb).

most recently, SPACs.<sup>153</sup> Figure 4 records the dramatic rise in the number and aggregate valuation supported under the latter approach.<sup>154</sup> Figure 4 also provides the number of exits and the amount raised, as well as historical SPACs numbers and total amount raised.<sup>155</sup>

Table 2: SPAC Activity in the United States 2010-2020<sup>156</sup>

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total amount raised (\$B)	\$0.0	\$0.5	\$0.2	\$0.4	\$1.2	\$2.5	\$1.6	\$7.4	\$8.6	\$12.4	\$70.3
Exit count	3	13	9	3	10	13	8	27	36	54	229

Figure 4: SPAC Activity in the United States 2010-2020<sup>157</sup>



Another observation is that the scale and value creation behind many innovators that have gone public traces back to M&A activity, some of which may be threatened by certain antitrust bills.<sup>158</sup> Consider

<sup>153.</sup> See Yunpeng (Patrick) Xiong, SPACs and Direct Listings: The Death Knell for Traditional IPOs?, CALIF. L. REV. (Apr. 2021), https://www.californialawreview.org/spacs-and-direct-listings-the-death-knell-for-traditional-ipos [https://perma.cc/QLY3-NQMB].

<sup>154.</sup> See infra Figure 4.

<sup>155.</sup> See infra Figure 4.

<sup>156.</sup> PITCHBOOK & NAT'L VENTURE CAP. ASS'N, *supra* note 103 (select "Download the XLS Data Pack"; then navigate to the "SPAC Activity" tab).

<sup>157.</sup> Id

<sup>158.</sup> See Jan Rybnicek, Op-Ed: Recent Antitrust Proposals Could 'Throw Sand in the Gears' of Economic Recovery by Stalling M&A, CNBC, https://www.cnbc.com/2021/02/12/op-ed-recent-antitrust-proposals-add-friction-to-ma-at-wrong-time.html [https://perma.cc/N54Y-T4DR] (Feb. 12, 2021, 3:07 PM).

the lodging innovator, Airbnb, which debuted on NASDAQ on December 10, 2020.<sup>159</sup> As illustrated by Figure 5, the company has engaged in over a dozen acquisitions of companies in related spaces during the decade leading up to its IPO,<sup>160</sup> a trend that has high significance.<sup>161</sup> For example, Unity Software acquired over a dozen companies before its September 2020 IPO, including the \$53 million acquisition of Artomatix (March 2020) and the \$25 million acquisition of Multiplay (November 2017).<sup>162</sup> Similarly, the software company, Palantir Technologies, engaged in about a half-dozen acquisitions prior to its September 2020 IPO. The cloud-computing-based data warehousing company, Snowflake Inc., also acquired Numeracy (March 2019) and CryptoNumerics (July 2020) before its IPO (September 2020).<sup>163</sup>Figure 5 provides a graphical illustration of Airbnb's M&A investment history.<sup>164</sup>

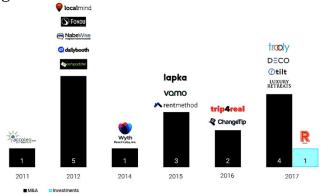


Figure 5: Airbnb M&A and Investment History<sup>165</sup>

- 159. See Lauren Feiner, Airbnb Skyrockets 112% in Public Market Debut, Giving It a Market Cap of \$86.5 Billion, CNBC, https://www.cnbc.com/2020/12/10/airbnb-ipo-abnb-starts-trading-on-the-nasdaq.html [https://perma.cc/N94N-EA9F] (Dec. 10, 2020, 7:57 PM).
  - 160. See infra Figure 5.
  - 161. See, e.g., infra text accompanying note 172.
- 162. See Charlie Taylor, Unity Technologies to Create 100 Jobs After Completing Artomatix Deal, IRISH TIMES (Mar. 10, 2020, 12:37 PM), https://www.irishtimes.com/business/technology/unity-technologies-to-create-100-jobs-after-completing-artomatix-deal-1.4198666 [https://perma.cc/Y9M2-TMQX]; Dean Takahashi, Unity Buys Game's Multiplay Game Server Hosting Business for \$25.2 Million, VENTUREBEAT (Nov. 28, 2017, 10:32 AM), https://venture-beat.com/2017/11/28/unity-buys-games-multiplay-game-server-hosting-business-for-25-2-million/ [https://perma.cc/WA2D-UJ9A].
- 163. See Snowflake Investments & Acquisitions, PITCHBOOK, https://pitchbook.com/profiles/company/61489-18 [https://perma.cc/76SS-PTDD] (last visited Jan. 10, 2022).
  - 164. See infra Figure 5.
- 165. Airbnb Strategy Teardown: Ahead of Potential IPO, Airbnb Looks Beyond The Hotel Industry, CBINSIGHTS (Nov. 8, 2017), https://www.cbinsights.com/research/airbnb-strategy-teardown-expert-intelligence/#acquisitions [https://perma.cc/4GXA-EEE4].

#### 2. Trade Sales

Acquisitions constitute the most common liquidity event for VC-backed companies. <sup>166</sup> Not only do acquisitions account for the largest number of liquidity events, but they also cover a wide range of exits at low and medium valuations. <sup>167</sup> Figure 2 above and Figure 6 below offer insights into M&A activity over the past fifteen years. <sup>168</sup> It underscores that *most* exits are at a low valuation. <sup>169</sup>

To complement the discussion, the Authors touch below on the role of M&A activity for VC funds. Figure 6 shows that M&A plays a sizable role in entrepreneurial exits. There are numerous explanations for the amount and impact of M&A activity over the past decade. The Abundant academic work explored the relationship between M&A and innovation, often with conflicting findings. Extant explanations range from the value-creating view, by which M&A is an efficient way to realize economies of scope through value-destroying arguments, to views whereby acquisitions are motivated by an attempt to shelf the innovation of the acquired startup (i.e., a killer acquisition) or stifle other startups from operating and innovating in the space (i.e., a kill zone). The innovation of the latter arguments do not criticize all M&A activity. The example, the work on killer acquisitions focuses on the pharmaceutical industry, reporting that over 90 percent of the M&A deals analyzed do not exhibit such a pattern. The case by case

<sup>166.</sup> See Onur Bayar & Thomas J. Chemmanur, IPOs Versus Acquisitions and the Valuation Premium Puzzle: A Theory of Exit Choice by Entrepreneurs and Venture Capitalists, 46 J. FIN. & QUANTITATIVE ANALYSIS 1755, 1756 (2011).

<sup>167.</sup> See supra Figure 2; infra Figure 6.

<sup>168.</sup> See supra Figure 2; infra Figure 6.

<sup>169.</sup> See supra Figure 2; infra Figure 6.

 $<sup>170. \</sup>hspace{1.5cm} \textit{See infra} \hspace{0.1cm} \textbf{Figure} \hspace{0.1cm} 6.$ 

<sup>171.</sup> See infra note 172.

<sup>172.</sup> Compare Gordon M. Phillips & Alexei Zhdanov, R&D and the Incentives from Merger and Acquisition Activity, 26 REV. FIN. STUD. 34, 71–72 (2013) (finding that smaller firms may innovate more when they could potentially be acquired by larger firms), with Amit Seru, Firm Boundaries Matter: Evidence from Conglomerates and R&D Activity, 111 J. FIN. ECON. 381, 402 (2014) (finding that firms acquired in conglomerate mergers, as measured by patent-based metrics, produce a smaller number and less novel innovations).

<sup>173.</sup> See Gao et al., supra note 49, at 165; Sai Krishna Kamepalli, Raghuram Rajan & Luigi Zingales, Kill Zone 1 (Nat'l Bureau of Econ. Rsch., Working Paper No. 27146, 2021), https://www.nber.org/system/files/working\_papers/w27146/w27146.pdf [https://perma.cc/AV9A-AVYH]; Colleen Cunningham, Florian Ederer & Song Ma, Killer Acquisitions, 3 J. POL. ECON. 129, 129 (2021).

<sup>174.</sup> See infra text accompanying notes 179.

<sup>175.</sup> See Cunningham et al., supra note 173.

antitrust analysis of particular deals allows for a more nuanced approach to address particular potentially problematic deals in such settings.<sup>176</sup>

Similarly, the recent work on kill zones focuses on multi-sided software platforms.<sup>177</sup> Even if taken in its most favorable light, this work suggests the proposition is limited to M&A activity by two software companies but does not characterize the universe of software M&As.<sup>178</sup> The empirical record on the types of acquisitions made, and the impact therein, is still at a nascent stage; broad inferences cannot be drawn except that antitrust and regulatory interventions should be revisited given that some of these acquisitions may be value creating.<sup>179</sup>

<sup>176.</sup> See, e.g., D. Daniel Sokol, Merger Law for Biotech and Killer Acquisitions, 72 FLA. L. REV. 1, 8 (2020) (explaining that innovation is fact dependent).

<sup>177.</sup> See Kamepalli et al., supra note 173, at 2.

<sup>178.</sup> See id.

<sup>179.</sup> See Milan Miric, Margherita Pagani & Omar A. El Sawy, When and Who Do Platform Companies Acquire? Understanding the Role of Acquisitions in the Growth of Platform Companies, 45 MIS Q. 2159, 2174 (2021); Zhuoxin Li & Ashish Agarwal, Platform Integration and Demand Spillovers in Complementary Markets: Evidence from Facebook's Integration of Instagram, 63 MGMT. SCI. 3138, 3139 (2017); Annabelle Gawer & Rebecca Henderson, Platform Owner Entry and Innovation in Complementary Markets: Evidence from Intel, 16 J. ECON. & MGMT. STRATEGY 1, 28–29 (2007). See generally Blair et al., supra note 4 at 773–82 (discussing various efficiency rationales for vertical mergers and mergers of complementary or adjacent products).

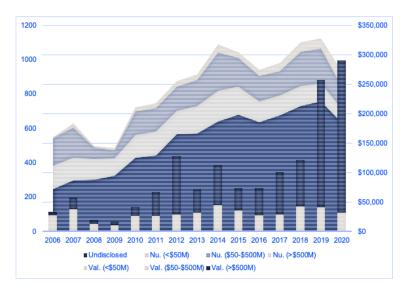


Figure 6: M&A Activities by VC Funds<sup>180</sup>

The X-axis denotes the calendar year.<sup>181</sup> The left Y-axis and area plot represents the number of deals of each size bracket.<sup>182</sup> Similarly, the right Y-axis and bar plot represent the aggregate dollar amount (\$M) of deals of each size bracket.<sup>183</sup>

### B. Complementary Assets

Growth and successful commercialization often require more than just money; they call for complementary assets.<sup>184</sup> This includes things such as manufacturing, regulatory expertise, marketing, and distribution, which are typically held downstream in the firm's value chain.<sup>185</sup> Startup success calls not only for the development of a novel product or a service, but also for complementary assets that are key to speeding and successfully introducing innovation in the market.<sup>186</sup>

<sup>180.</sup> See PITCHBOOK & NAT'L VENTURE CAP. ASS'N, supra note 103 (select "Download the XLS Data Pack"; then navigate to the "Exit x Size" tab). Additional analysis and data provided by the authors.

<sup>181.</sup> See supra Figure 6.

<sup>182.</sup> See supra Figure 6.

<sup>183.</sup> See supra Figure 6.

<sup>184.</sup> See David J. Teece, Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing and Public Policy, 15 RSCH. POLY 285, 288–90 (1986).

<sup>185.</sup> See id

<sup>186.</sup> Joshua S. Gans & Scott Stern, *The Product Market and the Market for "Ideas": Commercialization Strategies for Technology Entrepreneurs*, 32 RSCH. POL'Y 333, 334–35 (2003).

Numerous academic studies have demonstrated the role complementary assets play in successfully commercializing innovation. These studies range from the traditional typesetter industry to biotechnology, and even the solar photovoltaic industry. 188

The growth in the number of M&A deals and their fraction of all liquidity events have been attributed to the need to speed and strengthen commercialization efforts. The gradual decrease in the number of small-company IPOs is consistent with the rise in scaling efficiency through merging with an incumbent firm.

The aforementioned argument holds specifically for specialized complementary assets.<sup>191</sup> Whereas generic complementary assets are commodity-type assets available on the open market (and thus do not endow their owners an advantage),<sup>192</sup> specialized complementary assets are frequently built over long periods and thus are path dependent and often idiosyncratic.<sup>193</sup> The property rights theory of the firm suggests that when contracts are incomplete, the novel innovation and complementary assets should be owned by the same firm to minimize

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<sup>187.</sup> See, e.g., Rahul Kapoor & Nathan R. Furr, Complementarities and Competition: Unpacking the Drivers of Entrants' Technology Choices in the Solar Photovoltaic Industry, 36 STRATEGIC MGMT. J. 416 (2015) (using a complementary-assets framework to predict entrant's technology choices in an emerging industry); Gary P. Pisano, The Governance of Innovation: Vertical Integration and Collaborative Arrangements in the Biotechnology Industry, 20 RSCH. POLY 237 (1991) (analyzing the forward and backward integration between biotechnology firms and industry firms like pharmaceutical companies); Mary Tripsas, Unraveling the Process of Creative Destruction: Complementary Assets and Incumbent Survival in the Typesetter Industry. 18 STRATEGIC MGMT. J. 119 (1997) (arguing that appropriability through specialized complementary assets is one of three major factors in the commercial success of incumbents versus new industry entrants).

<sup>188.</sup> See, e.g., Kapoor & Furr, supra note 187 (analyzing the solar photovoltaic industry); Pisano, supra note 179 (primarily analyzing the biotechnology industry); Tripsas, supra note 185 (analyzing the typesetter industry).

<sup>189.</sup> See Sokol, supra note 7, at 1373 ("In order to innovate, larger firms need to acquire smaller firms to utilize the technology that the target firm possess. A number of reasons explain this strategy of acquisition vis-à-vis internal growth. This includes lower entry barriers via acquisition, acquisition of intellectual property and research and development (R&D) that can be used strategically, knowledge, economies of scale and scope, and the ability to exert greater control rights through vertical integration via merger rather than via contract.").

<sup>190.</sup> See Kaplow supra note 56, at 572–84.

<sup>191.</sup> See Xiaoshu Bei, Trademarks, Specialized Complementary Assets, and the External Sourcing of Innovation, RSCH. POL'Y, Nov. 2019, at 1, 1.

<sup>192.</sup> See David Teece, Gary Pisano & Amy Shuen, Dynamic Capabilities and Strategic Management, 18 STRATEGIC MGMT. J. 509, 524–25 (1997).

 $<sup>193. \</sup>hspace{1.5cm} \textit{Id.} \hspace{1.5cm} \text{at } 523.$ 

the negative effect of the hold-up problem.<sup>194</sup> It follows that incumbent firms, who possess complementary assets developed over years or decades, offer an opportunity to speed time to market and profit from entrepreneurial innovation.<sup>195</sup>

Acquisitions of nascent firms may allow the larger firm to replenish its basic R&D with new approaches. This R&D replenishment may be more difficult if a large firm tries to innovate itself. 196 For example, if a large firm was to try a high-risk but high-reward innovation and spend \$800 million on it, and if the return on investment was zero, investors would punish the firm with a lower stock valuation when the loss was announced. 197 For this reason, such risky undertakings are less likely to occur in large firms. 198 In contrast, many VC-backed firms take on exactly this sort of risk. 199 Finally, because it is likely easier to acquire a complementary asset rather than develop it, 200 it can become easier for an acquiring firm to be more competitive vis-à-vis its competition.<sup>201</sup> The proposed legislation makes pro-competitive acquisitions by firms harder (there are limits on what sorts of acquisitions may be undertaken) and more costly (because with higher antitrust risk, one needs to spend more on lawyers and economists to defend deals).<sup>202</sup> This limitation on acquisitions also has geopolitical implications if a market leader in a particular industry is a non-US firm. The VC-based entrepreneurial environment is critical to US-based companies remaining not just innovative, 203 but more so relative to rising non-US competitors where such limits may not be in place.

<sup>194.</sup> Sanford Grossman & Oliver Hart, *The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration*, 94 J. Pol. Econ. 691, 716 (1986); Oliver Hart & John Moore, *Property Rights and the Nature of the Firm*, 98 J. Pol. Econ. 1119, 1120 (1990).

<sup>195.</sup> Gatum Ahuja & Riittaa Katila, Technological Acquisitions and the Innovation Performance of Acquiring Firms: A Longitudinal Study, 22 STRATEGIC MGMT. J. 197, 198 (2001); Elisa Alvarez-Garrido & Gary Dushnitsky, Are Entrepreneurial Venture's Innovation Rates Sensitive to Investor Complementary Assets? Comparing Biotech Ventures Backed by Corporate and Independent VCs, 37 STRATEGIC MGMT. J. 819, 823–26 (2016).

<sup>196.</sup> See Ahuja & Katila, supra note 195, at 198–200.

<sup>197.</sup> See, e.g., Alvarez-Garrido & Dushnitsky, supra note 195, at 830.

<sup>198.</sup> See Sophia Kunthara, Risky Business: The Difference Between Private Equity and Venture Capital, CRUNCHBASE NEWS (Oct. 18, 2019), https://news.crunchbase.com/news/risky-business-the-difference-between-private-equity-and-venture-capital/ [https://perma.cc/JG2X-PQHZ].

<sup>199.</sup> See id.

<sup>200.</sup> See Kaplow, supra note 56.

<sup>201.</sup> See id.

<sup>202.</sup> See supra Part II.

<sup>203.</sup> See Kortum & Lerner, supra note 78, at 674.

#### VII. MAINTAINING THE HEALTH OF THE ENTREPRENEURIAL ECOSYSTEM

This Article has presented the discussion of liquidity events with a focus on M&A activity through the lens of founders, acquirers, and VCs, as well as their collective ability to deliver and benefit from consistent innovation.<sup>204</sup> As this is an important topic, one should carefully take stock of the multiple issues at play, including some that may have received less attention to date. The current discussion focuses on the entrepreneurial ventures being acquired and the viability of their innovation. Below, the Authors highlight a related view that has received less attention to date. It concerns the health of the VC model as a whole, shifting attention from specific ventures that are to be acquired while taking a broader perspective that focuses on the VC firms that fund those ventures and the firms' ability to back other innovative ventures. Limitations to M&A through antitrust legislation hurt a number of traditional LPs investing in VC funds, 205 such as public pensions and universities, 206 which use VC investment to increase the returns on their assets for the reasons we outline below.

#### A. First-Time Funds

The view pertains specifically to first-time VC funds. Figure 7 reports the median fund size for first-time VCs and further compares it to the median M&A size.<sup>207</sup> Because the former is in the sub-\$50 million range,<sup>208</sup> on average, such funds can be significantly sensitive to even a single M&A deal, which falls in the \$50 million-\$100 million range.<sup>209</sup> The "ratio" line in the figure divides the latter by the former and shows that a single M&A deal represents, on average, a 2x return on the size of a first-time fund.<sup>210</sup> Moreover, as Figure 8 below illustrates, the time to a liquidity event is usually faster under the M&A track (compared to the IPO track).<sup>211</sup> Taken together, these observations suggest that the

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204. See supra Part IV.
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<sup>205.</sup> See supra Part VI.

<sup>206.</sup> See Gilson, supra note 90.

<sup>207.</sup> See infra Figure 7. Increasingly, first time VCs include more diverse teams. See, e.g., Reanna Zuniga, 53 Black Founders and Investors to Watch in 2021, PITCHBOOK (Feb. 9, 2021), https://pitchbook.com/blog/53-black-founders-and-investors-to-watch-in-2021 [https://perma.cc/JV3B-D442].

<sup>208.</sup> See infra Figure 7.

<sup>209.</sup> See infra Figure 7.

<sup>210.</sup> To calculate the returns for a specific deal, one requires information on the equity stakes of the VC fund. See METRICK & YASUDA, supra note 96, at 108.

<sup>211.</sup> See infra Figure 8.

viability of first-time funds is particularly sensitive to the market for sub-\$100 million M&As.<sup>212</sup> One or two M&A deals can make a substantial contribution to the compensation of a first-time fund.<sup>213</sup> Crucially, it also plays an instrumental role in the longevity of the VC firm by allowing it to raise follow-on funds successfully.<sup>214</sup> In summary, these figures suggest that M&As play a crucial role in the health of the VC ecosystem, including new VCs.<sup>215</sup>

This observation is important because many of the first-time funds launched in the last couple of years focus on inclusion and diversity. Many of these funds are raised by investors of more diverse backgrounds. Moreover, the new cadre of investors makes it their mission to support founders of diverse backgrounds. As a result, smaller new funds often pursue innovation in sectors or geographies that have been neglected in the past through their investment strategies in new products and services that reach under-tapped communities. Taken together, these figures suggest that M&As play a crucial role in the health of the VC ecosystem. This may be particularly so for first-time funds where the time and ability to execute a median-sized M&A can unlock the ability to raise a follow-on fund and further advance diversity and inclusion in the entrepreneurial

<sup>212.</sup> See infra Figures 7, 8.

<sup>213.</sup> Gary Dushnitsky, *Venture Capital: An Ecosystem Under Threat*?, LONDON BUS. SCH. (Nov. 24, 2021) https://www.london.edu/think/iepc-venture-capital-an-ecosystem-under-threat [https://perma.cc/4QFT-RBH2].

<sup>214.</sup> Id.

<sup>215.</sup> Gary Dushnitsky & Daniel Sokol, Competition Laws Could Be a Death Knell for Startup Mergers and Acquisitions, THE HILL (July 22, 2021, 4:31 PM) https://thehill.com/opinion/white-house/564321-competition-laws-could-be-a-death-knell-for-startup-mergers-and [https://perma.cc/VAW8-WM52] [hereinafter Competition Laws].

<sup>216.</sup> Bowdeya Tweh, *A New Push for Diversity in Funding Tech Startups*, WALL ST. J., https://www.wsj.com/articles/a-new-push-for-diversity-in-funding-tech-startups-11603303872 [https://perma.cc/BRT2-WSVK] (Oct. 21, 2020, 10:15 PM).

<sup>217.</sup> Kiara Taylor, Venture Capital Firms Expand Opportunities for Diverse Investors, CRUNCHBASE (Apr. 26, 2021), https://about.crunchbase.com/blog/venture-capital-firms-expand-opportunities-for-diverse-investors/ [https://perma.cc/2474-X72Q].

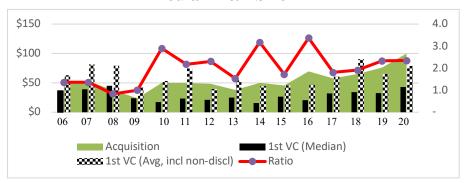
<sup>218.</sup> Tweh, supra note 216.

<sup>219.</sup> Competition Laws, supra note 215.

<sup>220.</sup> Gary Dushnitsky & Daniel Sokol, Mergers, Antitrust, and the Interplay of Entrepreneurial Activity and the Investments that Fund It, COLUM. L. SCH.: CLS BLUE SKY BLOG (June 23, 2021) https://clsbluesky.law.columbia.edu/2021/06/23/mergers-antitrust-and-the-interplay-of-entrepreneurial-activity-and-the-investments-that-fund-it [https://perma.cc/27MB-UDJT].

ecosystem.<sup>221</sup> Thus, a change in merger law may threaten such diversity and inclusion efforts.<sup>222</sup>

Figure 7: Median Fund Size for First-Time VCs and Median M&A Size<sup>223</sup>



The X-axis denotes the calendar year. $^{224}$  The left Y-axis refers to the bar (VC fund size) and area (M&A size) median dollar amount (\$M). $^{225}$  The right Y-axis and line plot represent the ratio of the latter to the former. $^{226}$ 

Figure 8 below demonstrates that the timing to liquidity for a venture fund is lower for M&A than other forms of exit.<sup>227</sup> A change in antitrust-merger standards likely would shift this liquidity window further into the future because of increased antitrust scrutiny.<sup>228</sup>

Table 3: US VC Median Time (Years) from First VC to Exit by Type<sup>229</sup>

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Acquisition	4.7	4.7	4.6	4.3	4.3	4.2	4.4	3.6	4.1	4.0	4.3	4.8	4.9	4.9	5.2
Buyout	5.9	5.9	5.4	5.8	5.3	4.4	5.7	5.6	6.7	7.2	7.8	7.5	6.3	6.2	6.2
IPO	5.0	5.2	3.9	7.3	6.3	5.5	7.1	6.6	7.0	6.6	7.4	6.8	4.6	6.2	5.3

 $<sup>221. \</sup>hspace{1.5cm} \textit{Id}.$ 

<sup>222.</sup> Id

<sup>223.</sup> See PITCHBOOK & NAT'L VENTURE CAP. ASS'N, supra note 103 (select "Download the XLS Data Pack"; then navigate to the "First Financings" and "Median First vs. Follow On" tabs). Additional analysis and data provided by the authors.

 $<sup>224. \</sup>hspace{0.5cm} \textit{See supra} \hspace{0.1cm} \textbf{Figure} \hspace{0.1cm} 7.$ 

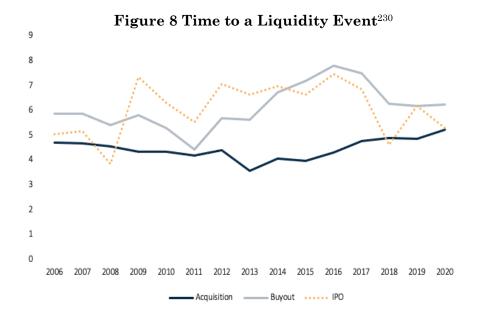
 $<sup>225. \</sup>hspace{0.5cm} \textit{See supra} \hspace{0.1cm} \textbf{Figure} \hspace{0.1cm} 7.$ 

<sup>226.</sup> See supra Figure 7.

<sup>227.</sup> See infra Figure 8.

<sup>228.</sup> See, e.g., Figure 8.

<sup>229.</sup> See PITCHBOOK & NAT'L VENTURE CAP. ASS'N, supra note 103 (select "Download the XLS Data Pack"; then navigate to the "Exit Medians and Avg" tab).



The X-axis denotes the calendar year.<sup>231</sup> The Y-axis reports the number of years (median value) to exit.<sup>232</sup>

## B. Corporate Venture Builders and Walled Gardens

In parallel to the vibrant world of grassroots VC-backed entrepreneurial ventures, the Authors also witnessed the evolution of the corporate-venture-builder phenomenon. It includes entities such as BCG Digital Ventures, which self-describes as "a corporate investment and incubation firm. . .[that] invent[s], build[s] and invest[s] in startups with the world's most influential companies."<sup>233</sup> The latter exemplifies a growing model whereby incumbent corporations collaborate with a venture builder to seed and nurture innovations in certain areas through (one or more) pre-designated ventures to be assimilated within the incumbent, not through acquisition, but from something short of acquisition such as an alliance or through contracting.<sup>234</sup>

<sup>230.</sup> See id.

<sup>231.</sup> See supra Figure 8.

<sup>232.</sup> See supra Figure 8.

<sup>233.</sup> See Belief, BCG DIGIT. VENTURES, https://www.bcgdv.com/belief [https://perma.cc/AR57-HWX5] (last visited June 1, 2021).

<sup>234.</sup> See id.

To the extent that incumbents may be precluded or delayed from accessing the broader universe of entrepreneurial ventures, the entrepreneurial ecosystem may end up with a set of contractual-based "walled innovation gardens." One concern is that such an approach effectively creates these walled gardens where only pre-selected startups can reach and win incumbents' attention. 236 This runs the risk of stifling innovation (for incumbents) and can also impact scale-up opportunities (for startups) and compensation and longevity of the VC funds that backed them.<sup>237</sup> For incumbents, the risk is that they draw from a limited pool of innovators and, therefore, may miss out on other or better innovations beyond the focal pool.<sup>238</sup> For entrepreneurs, it implies that many would be unable to scale or sell their companies, especially if the trade-sale route is blocked.<sup>239</sup> Finally, for VC funds, the shift of incumbents' resources towards corporate-venture builders can decrease capital availability and the prospects of future funds in two ways: first, a decrease in established corporations as an important source of LPs, and, second, a decrease in M&A activity.<sup>240</sup>

#### VIII. CONCLUSION

The world of entrepreneurship is complex. There is a history of poorly thought-out legal rules which negatively impact business growth and innovation. The proposed change in merger presumptions, motivated by the increasing number of tech firms, will instead reduce M&A-exit opportunities for founders and VC investors, decrease the number of new VC funds founded, and may have a disproportionate impact on social-based investing relating to sustainability and diversity that plays a large role in many first-time funds' investment decisions. He limiting the number of companies that can make acquisitions through a proposed change in merger law, limitations would be placed on the ability of new ventures to exit. It also potentially chills

<sup>235.</sup> Joanna Stern, *iPhone? AirPods? MacBook? You Live in Apple's World. Here's What You Are Missing.*, WALL St. J. (June 4, 2021, 10:40 AM), https://www.wsj.com/articles/iphone-airpods-macbook-you-live-in-apples-world-heres-what-you-are-missing-11622817653 [https://perma.cc/6BVD-D2BB] [hereinafter *Apple's World*].

<sup>236.</sup> Competition Laws, supra note 215.

<sup>237.</sup> See Apple's World, supra note 235.

<sup>238.</sup> See Competition Laws, supra note 215.

<sup>239.</sup> Id.

<sup>240.</sup> Id.

<sup>241.</sup> Id.

<sup>242.</sup> See supra Parts III, VII.

<sup>243.</sup> See supra Part III.

incentives for such firms to scale up because they may be punished for being too successful with such restrictions placed upon them.<sup>244</sup> The tradeoffs for a change in merger laws in terms of reducing entrepreneurial exits do not merit such a change in the law.