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Disrupting Venture Capital: Carrots, Sticks, and Artificial Intelligence

Kimberly A. Houser* Kathryn Kisska-Schulze**

Despite the massive dollars invested each year by Venture Capital (VC) firms, more than two-thirds of the companies they fund will provide zero return. More problematic, less than 3% of VC funds go to female-led startup teams, and less than 1% to racially diverse founders. While many argue that this underrepresentation will work itself out over time, in reality, these numbers have remained stagnant for over 30 years. This is especially perverse given that diverse startups, when funded, appreciably outperform male-only founding teams.

The VC industry operates under an antiquated model of investing in founders with demographics reflecting those of VC partners (white men control 93% of VC funds, and only 0.2% of VC partners are Black or Latina women). While antidiscrimination law was intended to create a level playing field for all, the VC field operates outside of this regulatory scheme. In addition to its lack of diversity, ironically it also has a technology problem. Despite the incredible advances in artificial intelligence (AI), and the industry’s focus on tech startups, many VC firms fail to incorporate data analytics and machine learning to guide their decision-making, relying instead on “gut instinct.” This is the first article to comprehensively explore the current state of the VC industry through the lens of behavioral law and economic theory, revealing the field’s intransigence and the heuristics and biases infecting its decision-making.

Using insights gained from this analysis, this Article suggests that disruption is possible through a combination of policy and legal initiatives as well as leveraging advances in technology. The Article concludes by offering a novel multipronged solution comprised of a combination of carrots (incentives), sticks (penalties), and AI to motivate behavioral change within the VC industry and stimulate a true meritocracy where gender and racially diverse startups are equitably funded, and innovation flourishes.

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INTRODUCTION

The Venture Capital (VC) industry is at an inflection point with little awareness that the entire industry is at risk. It is out of touch with advancements in technology, changes occurring in society, and in the VC space itself. Despite the massive dollars invested each year by VC firms, more than two-thirds of the companies they fund will provide zero return on investment, and only a handful will deliver any significant return. According to Tomer Dean, a serial tech entrepreneur, “[n]inety-five percent of VC firms aren’t actually returning enough money to justify the risk, fees and illiquidity their investors are taking on by investing in their funds.”

In fact, VC returns haven’t outperformed the stock market since the late 1990s. A failure rate of such proportion would motivate organizations in most fields to find a new solution, but VC is not like most fields.

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1. Bob Zider, How Venture Capital Works, HARV. BUS. REV., Nov.–Dec. 1998, at 131, 135 (“The venture capital industry has four main players: entrepreneurs who need funding; investors who want high returns; investment bankers who need companies to sell; and the venture capitalists who make money for themselves by making a market for the other three.”).
4. Tomer Dean, The Meeting that Showed Me the Truth About VCs, TECHCRUNCH (June 1, 2017, 3:00 PM), https://techcrunch.com/2017/06/01/the-meeting-that-showed-me-the-truth-about-vc/ [https://perma.cc/UP57-HSP5]. Investors, known as limited partners (LPs), invest money in VC funds created by VC firms. LPs can include pensions funds, university endowments, banks, and insurance companies.
Venture capital is a form of financing where capital is provided to a new company with a unique, innovative idea (known as a startup) in exchange for an equity position in the company. The 1990s introduced the first venture-backed private companies to achieve unicorn status (a valuation of over $1 billion). However, VC today is operating under an antiquated model, investing in founders with demographics reflecting those of VC partners (white men control 93% of VC funds, and only 0.2% of VC partners are Black or Latina women). Financial gambles taken on male-led ventures in the hopes of securing the next unicorn ignore the fact that women and Black, Indigenous, and People of Color (BIPOC) are increasingly responsible for creating new enterprises. In fact, a recent report revealed that entrepreneurship among women is on the uptick. Representing just


8. The authors recognize that “Latina,” “Latino,” and “Latinx” are used throughout academic literature when referencing to the female gender. Given these inconsistencies, the authors chose to use the term “Latina” in this instance solely due to its reference in the citation source that supports the broader textual statement.


10. A note on gender and race: The authors acknowledge that the concept of gender is complex and does not exist on a binary. The authors also acknowledge that biological sex as assigned at birth, and gender or gender identity, are distinct. Nonetheless, current empirical research and the vast majority of the popular literature on the VC industry exists on the woman-man or female-male gender binary due to data having been collected in this manner. As such, this document examines gender in the binary context, using “female” and “woman” interchangeably to reference individuals who self-identify as female, and likewise for male. Moreover, given the minute number of women in VC, little academic research exists on the intersectional experiences of women (and for that matter, men) of different races and ethnicities in this area. It should be noted that research suggests that women of different races have meaningfully different experiences in the workplace. See Jamillah Bowman Williams, Maximizing #MeToo: Intersectionality & the Movement, 62 B.C. L. REV. 1797, 1800-02, 1843–44, 1834 n.254 (2021). This Article makes an effort to include intersectional data wherever possible; however, it is important to recognize that the analyses presented herein are primarily based on white, heterosexual women and men’s experiences, and the generalizability of findings as they apply to other demographic groups is as of yet unknown. Although we use the term BIPOC (Black, Latino, Indigenous and Native American persons, Asian American, Native Hawaiian, and Pacific Islander, and other persons of color) to represent non-white entrepreneurs, where race was provided in the data, we used the designation provided in the source.

11. See Woman-Owned Businesses Are Growing 2X Faster on Average than All Businesses Nationwide, BUS. WIRE (Sept. 23, 2019, 10:00 AM), https://www.businesswire.com/news/home/20190923005500/en/Woman-Owned-Businesses-Growing-2X-Faster-Average-Businesses [https://perma.cc/TWXW-RDDB] (noting that entrepreneurship is up 99% among African American women; 70% among Native Hawaiian/Pacific Islander women; 63% among Asian American women;
39% of the total female population, BIPOC accounted for 89% of new female-owned businesses in 2019. Despite these substantial growth figures, only 2% of VC funding is directed to female, BIPOC founders. While all-female U.S. founding teams reached a VC funding “high” of 3.4% in 2019, that percentage dropped 30% just one year later. No matter their race, the inability of females to obtain VC funding was further exacerbated by the COVID-19 pandemic. Even more disturbing, such woefully unbalanced funding distributions across gender and racial lines has not budged in the last thirty years. While antidiscrimination law was intended to create a level playing field for all, the VC field operates outside of this regulatory scheme.

Women and racially diverse founders present an enormous untapped market in innovative services and products, and are consistently more profitable than homogenous all-male startups. Despite the prevalence of gender stereotyping in the science, tech, engineering, and math (STEM) fields, women were behind the creation of the first computer algorithm and the first word processor, and are

46% among Latina/Hispanic women; and 35% among Native American/ Alaskan Native businesswomen.

Id.


If women entrepreneurs were equitably funded, it would boost the global economy by $2.5 trillion. Shalini Umnikrishnan & Roy Hanna, The Trillion-Dollar Opportunity in Supporting Female Entrepreneurs, HARV. BUS. REV. (Oct. 31, 2019).


Siri Chilazi, Advancing Gender Equality in Venture Capital 42 (2019) (“Shockingly, these numbers have barely budged in the last three decades, as the 30-year average of female founders’ share of VC funding is 2.4%.”); Galen Gruman, Minority Tech Startups in the U.S. Have Seen Almost No Progress in VC Funding, COMPUTERWORLD (Oct. 7, 2020, 6:02 AM), https://www.computerworld.com/article/3584734/minority-tech-startups-in-the-us-have-seen-almost-no-progress-in-vc-funding.html [https://perma.cc/PC2J-DDTY].


behind some of the most promising tech companies today. In addition, women and BIPOC founders are able to tap into consumers’ needs in a way that white male founders cannot. In fact, despite receiving less than 3% of VC funds, in 2021 11.4% of unicorns had a female founder and 13% of unicorns with female founders matured to exit. Imagine the number of unicorns that could be achieved if women, instead of men, received 97% of VC funds?

Astonishingly, the VC industry also ironically harbors a tech problem. Despite the incredible advances in AI, and the industry’s focus on tech startups, VC firms themselves have failed to implement data analytics and machine learning into their own decision-making, relying instead on gut instinct, or copying the investments of other firms. Currently, less than 5% of all VC firms implement data analytics and machine learning into their investment decision-making. The use of AI by VC firms not only improves investment outcomes, it also mitigates the effect of unconscious biases resulting in the lack of funding to women and BIPOC founders.

Although many have noted the inequities and poor performance statistics resulting from the way in which VC firms operate, few have examined the reasons underlying such obstinacy. Behavioral law and economic theory is increasingly being used to both motivate policy and examine the law.

21. These include: Mighty Network, a growing social media company; Canva, a graphic design company (valued at $6 billion); Cisco, a networking, cloud and cybersecurity company (with a market cap of $237 billions); VMWare, a cloud computing and virtualization software company; DIBS, a surge pricing technology company; and Lynda.com, a web graphic design company (sold to LinkedIn in 2015 for $1.5 billion). 7 Successful Female-Owned Tech Companies: Stories of the Founders’ Grit, THE PIPELINE, [https://pipeline.zoominfo.com/marketing/female-owned-tech-companies](https://pipeline.zoominfo.com/marketing/female-owned-tech-companies) (last visited Jan. 23, 2023).


24. See discussion infra Section I.D.

25. See Jared Council, VC Firms Have Long Backed AI. Now, They Are Using It, WALLST. J. (Mar. 25, 2021, 7:00 AM), [https://www.wsj.com/articles/vc-firms-have-long-backed-ai-now-they-are-using-it-11616670000](https://www.wsj.com/articles/vc-firms-have-long-backed-ai-now-they-are-using-it-11616670000) (referencing a Gartner, Inc. forecast that VC firms’ use of AI in their investment decision-making processes will increase over time, noting that it is used by less than 5% of firms today).

26. See discussion infra Sections I.A.

27. See discussion infra Sections I.D, II.C.

28. See, e.g., Pui Ki, Addressing the Reality of Funding Discrimination Against LGBTQ Entrepreneurs, ENTREPRENEUR (Mar. 19, 2021) (describing inequity in the funding of LGBTQ+ founders); Mary Ann Azevedo, Practical Steps to Combat Discrimination in VC: A Q&A with DivInc’s Preston James, CRUNCHBASE NEWS (Jun. 4, 2020) (describing racial discrimination in VC); Ximena Aleman, Startup Fundraising Is the Most Tangible Gender Gap. How Can We Overcome It?, TECHCRUNCH (Nov. 9, 2020, 12:36 PM) (covering the gender bias in VC).

29. Reynolds, supra note 5 (describing the VC model as investing in “a lot of junk” with the hope of finding a unicorn).

30. See generally EYAL ZAMIR & DORON TEICHMAN, BEHAVIORAL LAW AND ECONOMICS (2018) (covering the empirical and philosophical work in the behavioral sciences field).
to gambling law, securities law, consumer finance, contract law, and tort law. Underlying the behavioral sciences is the recognition that humans use shortcuts in thinking (known as heuristics) due to cognitive limitations. Relevant studies of such are based on the dual system, groundbreaking approach crafted by Kahneman and Tversky. System 1 is automatic, unconscious, and fast; System 2 is logical, conscious, and rational. Harvard economist Andrei Shleifer explains how important Kahneman and Tversky’s work is to the area of financial decision-making, in that System 1 thinking is not subject to deliberation, and is thus error-prone. This provides a better understanding of why VC acts against its own interests. The more frequent the shortcuts in System 1 thinking, the more deeply imbedded they become in System 2 analysis. UCLA Law professor Russell Korobkin notes that in the area of law, Kahneman’s work inspired legal scholars to examine how law and policy could be designed to influence socially desirable behavior, opining that behavioral law and economics are the “future of legal policy analysis.”

34. See, e.g., Thomas Ulen, Behavioral Contract Law, 17 REV. I. & ECON. 281 (2021) (exploring contract formation, performance, and remedies through the behavioral sciences).
35. See, e.g., Robert A. Bohrer, Crisis and Cultural Evolution: Steering the Next Normal from Self-Interest to Concern and Fairness, 54 IND. L. REV. 1 (2021) (applying classical and behavioral economics, evolutionary biology, liberal political philosophy, and feminist theory to tort law).
38. With the availability heuristic, for example, people increase the frequency or probability of an event occurring based on how easily it is brought to mind. This is because with System 1 thinking, the brain wishes to minimize effort to come to a quick conclusion. DANIEL KAHNEMAN, THINKING, FAST AND SLOW 20–21 (2013).
41. Russell Korobkin, Daniel Kahneman’s Influence on Legal Theory, 44 LOY. U. CHI. L.J. 1349, 1356 (2013); Thomas Ulen, The Importance of Behavioral Law, in THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW 93, 120 (Eyal Zamir & Doron Teichman eds., 2014) (“[B]ehavioral law is one of the most important developments—and probably the most important—in legal scholarship of the modern era.”); see, e.g., Ryan Bubb & Richard H. Pildes, How Behavioral
This Article employs the term ‘behavioral decision theory’\(^{42}\) as an umbrella term for multiple subspecialty areas, including behavioral finance,\(^{43}\) behavioral economics,\(^{44}\) traditional law and economics,\(^{45}\) and behavioral law and economics.\(^{46}\) Traditional economic theory holds that people are rational and make decisions based on utility, while the newer field of behavioral economics shows that decisions made under uncertainty, which applies to investment decisions, reflect cognitive biases and incomplete information leading to error-prone decisions.\(^{47}\) Behavioral ethicists have identified “a large number of related (and sometimes overlapping) heuristics, biases, and other cognitive errors that ensure that people generally fall short of full rationality when they make decisions.”\(^{48}\)

\(^{42}\) Behavioral Decision Theory


\(^{45}\) ROBERT COOTER & THOMAS ULEN, LAW AND ECONOMICS 9 (6th ed. 2016) (Traditional law and economics “conceives of laws as incentives for changing behavior (implicit prices) and as instruments for policy objectives (efficiency and distribution).”)


\(^{47}\) Bohrer, supra note 35, at 5–6.

\(^{48}\) Donelson & Prentice, supra note 32 (describing Robert Prentice’s view of the importance of the research completed by Nobel Prize-winner Daniel Kahneman, Amos Tversky, and their progeny in establishing these related and overlapping heuristics, biases, and errors).
Nobel Prize recipient Richard Thaler, the father of behavioral law and economics, projected that people can be nudged into prosocial behaviors through various design methods.\textsuperscript{49} Although “nudges” are effective in some situations,\textsuperscript{50} proposed solutions to increase the funding of diverse startups, such as improved corporate governance,\textsuperscript{51} setting diversity goals,\textsuperscript{52} and diversity riders,\textsuperscript{53} fail to address the inherent cultural problem within the industry itself, and the heuristics and biases impacting investor decision-making.\textsuperscript{54} Legal scholarship addressing equity and inclusion in VC is particularly scant.\textsuperscript{55} This Article seeks to fill this gap by providing the first comprehensive analysis of VC through the lens of behavioral decision theory. It demonstrates how social psychological phenomenon, such as herd mentality, stereotyping and other heuristics and biases affect VC. In addition, this Article incorporates insights from this analysis to construct a normative proposal that counters these heuristics and biases which result in the skewed technology. There is a $4 trillion opportunity\textsuperscript{56} being overlooked by the VC industry due to its obdurate “mirrortocracy” whereby VC partners overwhelmingly favor founders who mirror them in gender, race, and background.\textsuperscript{57} Based on our analysis, behavioral science tools involving carrots and sticks, along with the incorporation

\textsuperscript{50} Ulen, \textit{supra} note 41, at 103.
\textsuperscript{54} For an explanation of the ineffectiveness of nudes in certain situations, see ZAMIR & TIECHMAN, \textit{supra} note 30, at 178–85, and Bubb & Pildes, \textit{supra} note 41, at 1673–74.
\textsuperscript{56} Geri Stengel, \textit{The Next Decade Will Bring More Venture Capital to Female Founders}, FORBES (Jan. 1, 2020, 7:00 AM), https://www.forbes.com/sites/geristengel/2020/01/01/the-next-decade-will-bring-more-venture-capital-to-female-founders/?sh=6176e0e5e8a0 [https://perma.cc/3994-75EJ] (explaining that, according to Morgan Stanley, VC firms are losing out on a $4 trillion opportunity due to their failure to invest in women and diverse founders).
of AI into investment decision-making, can disrupt the VC industry and create a true meritocracy where innovation flourishes.

The VC industry’s lack of awareness extends to the changes in the VC field itself. Increasingly, large institutional investors that previously relied on VC firms to connect them with the startup community are now working to engage directly with these startups, potentially disintermediating VC firms. According to William & Mary law professor Darian Ibrahim, corporate venture capitalists are also beginning to enroach on VC territory. Consequently, the industry as a whole is headed toward a period of intense consolidation, where VC firms that are unable to adapt will either be cut out of the equation as the limited partners go direct and corporations increasingly move their VC investments in-house, or risk being absorbed by the few firms that have adapted to this new reality.

To address all of these issues, this Article proceeds as follows. Part I describes the features of the archaic culture plaguing the VC industry, including: (A) financial speculation and herd mentality, (B) internal sexism, (C) unchecked sexual harassment, and (D) unconscious biases that impact funding to women and BIPOC startups. Part II examines VC culture through the lens of behavioral decision theory and suggests that change can be effectuated through (A) increasing gender and racial diversity at both the firm and founder levels, (B) closing loopholes that allow for unabated sexism, harassment, and biased investment decision-making without legal recourse, and (C) enhancing the deployment of AI within firms to mitigate cognitive biases impacting investment decision-making.

Leveraging the insights from the behavioral decision theory analysis, Part III then


59. The Bright New Age of Venture Capital, ECONOMIST (Nov. 25, 2021), https://www.economist.com/finance-and-economics/2021/11/23/the-bright-new-age-of-venture-capital/21806438 [https://perma.cc/2N38-VS5L] (explaining that “deals led or solely struck by private-equity shops, hedge funds and others that used to conduct little venture activity are on track to nearly double from $144bn in 2020 to $260bn this year”); see also Alex Wilhelm, Venture Capital Probably Isn’t Dead, TECHCRUNCH (Aug. 6, 2021, 11:40 AM), https://techcrunch.com/2021/08/06/venture-capital-probably-isnt-dead/ [https://perma.cc/9X6A-BY33] (“All signs seem to indicate that by 2022, for the first time, nontraditional tech investors — including hedge funds, mutual funds and the like — will invest more in private tech companies than traditional Silicon Valley-style venture capitalists will.”) (quoting Slow Venture partner, Sam Lessin).


62. See infra Section I.A.

63. See infra Section I.B.

64. See infra Section I.C.

65. See infra Section I.D.

66. See infra Section II.A.

67. See infra Section II.B.

68. See infra Section II.C.
recommends a tripart solution to instigate this disruption, including: (A) implementing a tax credit to incentivize diversity within VC firms,\(^69\) (B) extending antidiscrimination and antiharassment laws to protect female founders,\(^70\) and (C) promoting AI as a means to improve VC investment quality and alleviate the impact of cognitive and unconscious biases.\(^71\) Part IV offers a brief summary and concluding thoughts.

I. VC'S ARCHAIC CULTURE

As the United States continues to deal with the economic fallout of COVID-19, there is renewed focus on encouraging innovation.\(^72\) Startups are among the main drivers of innovation\(^73\) and funding is critical to their successes.\(^74\) VC evolved to fund promising startups that otherwise lacked the established presence necessary to secure business loans in exchange for an equity position. While traditional debt financing is integral to many business operations,\(^75\) the rise of Silicon Valley tech clusters in the 1970s led to private equity overtaking debt as the premier method for funding startups.\(^76\) During this era, VC served an important role in enabling cutting edge technology to be made available to the public, thus catapulting the United States as the world leader in technology.\(^77\) Without VC, the world may not have known the full impact of Steve Jobs’ imagination fused with Steve Wozniak’s genius.\(^78\) Social media would not exist without Facebook, Snapchat or Twitter,\(^79\) just as music would not be the same without Spotify.\(^80\)

\(^{69}\) See infra Section III.A.
\(^{70}\) See infra Section III.B.
\(^{71}\) See infra Section III.C.
\(^{75}\) See Darian M. Ibrahim, Debt as Venture Capital, 2010 U. ILL. L. REV. 1169, 1174 (2010) (documenting that debt is a vital source of business finance).
\(^{76}\) See Brian Kingsley Krumm, Fostering Innovation and Entrepreneurship: Shark Tank Shouldn’t Be the Model, 70 ARK. L. REV. 553, 558–59 (2017) (offering that private equity funding directed at small, innovative companies, began taking off in the 1970s and 1980s).
\(^{77}\) See Johannes Lenhard & Susan Winterberg, How Venture Capital Can Join the ESG Revolution, STAN. SOC. INNOV. REV. (Aug. 26, 2021), https://ssir.org/articles/entry/how_venture_capital_can_join_the_esg_revolution [https://perma.cc/MT7K-7VDL] (“Startup founders and investors originally sought to use technology to solve the world’s biggest problems, from saving and processing data (solution: microchip) to communicating seamlessly (solution: the internet).”).
\(^{79}\) See From Alibaba to Zynga: 45 of the Best VC Bets of All Time and What We Can Learn from Them, CBINSIGHTS (June 9, 2021), https://www.cbinsights.com/research/best-venture-capital-investments/ [https://perma.cc/6HZ6-E4HR] (explaining the importance of venture capital investments to the development of social media platforms such as Facebook, Snapchat, and Twitter).
\(^{80}\) See id.
While society may savor the third-party benefits of VC investments, such appeal lies in stark contrast to the internal culture infecting VC firms. Over the past few decades, VC firms have shifted away from the role of advisor, providing governance and oversight to startups, to that of speculative hands-off financier. Today, due diligence has been replaced with copying the investments of the firm across the street. Sexism is rife, making it exceedingly difficult for women to rise in rank within these firms, and enabling the “bro culture” to endure. The power imbalance between male-dominated VC firms and female entrepreneurs has led to harmful and pervasive sexual harassment. In addition, unconscious bias in the VC industry has resulted in tens, if not hundreds, of thousands of potentially world-changing innovative startups that are unable to obtain the capital they need to grow. As the following sections detail, (A) financial speculation and herd mentality, (B) sexism, (C) discrimination and harassment, and (D) persistent unconscious biases permeate VC culture.

A. Speculation and Herd Mentality

Although initially VC firms played active management roles in their seedlings by providing both oversight and corporate governance, this is no longer the case. Today, these firms are more apt to take a “hands-off” approach, relinquishing managerial oversight to male (and predominantly white) founders. Indeed, there has been a marked shift away from novel and varied business ventures that garner higher probabilities of success, to instead funneling significant funds to select, highly volatile ventures in search of the next Twitter or Uber. Fewer VC firms engage in detailed due diligence; instead, they treat other firms’ investments as social proof of quality. As entrepreneur-turned-venture capitalist David Siegel offers, “Venture capitalists have always been herd animals,

83. Lenhard & Winterberg, supra note 77, at 2 (explaining the shift to the funding of businesses with the potential for swift growth regardless of the social cost to “generate above-market rate returns from funds investing predominantly in companies that fail”).
84. Duhigg, supra note 82; see also Peter Drizikes, Study: Attractive Men Fare Best in Gaining Venture Capital, MIT NEWS (Mar. 17, 2014), https://news.mit.edu/2014/study-says-attractive-men-fare-best-in-gaining-venture-capital [https://perma.cc/L2GT-MQRH]; Alison Wood Brooks, Laura Huang, Sarah Wood Kearney & Fiona E. Murray, Investors Prefer Entrepreneurial Ventures Pitched by Attractive Men, 111 PROCS. NAT’L ACAD. SCI. 4427, 4429 (2014) (“[I]nvestors prefer entrepreneurial pitches presented by male entrepreneurs compared . . . [to] female(s), even when the content of the pitch is the same. This effect is moderated by male physical attractiveness . . . .”) (emphasis added).
85. See Duhigg, supra note 82 (“Steve Blank, an entrepreneur who currently teaches at Stanford’s engineering school, said, ‘... V.C.s today aren’t interested in the public good. They’re not interested in anything except optimizing their own profits and chasing the herd, and so they waste billions of dollars that could have gone to innovation that actually helps people.’”).
chasing the ‘sexy’ deals that everyone wants to get into.”

This fear-of-missing-out mentality results in copycat investing, with firms risking funds on poorly managed startups in the hope of scoring a homerun among the losers, and fearing ridicule if they miss out. VC firms appear less interested in developing and growing emergent businesses, instead capitulating to the whims of their founders whose business strategies are based on undercutting the competition so as to dominate the market. Scholars Martin Kenney and John Zysman explored this ethically questionable approach in their 2000 dot-com bust research, noting that VC firms continued to dedicate funds to founders, even after businesses suffered economic losses and displayed managerial issues, to assist the startup in outlasting and potentially eliminating competitors, rather than growing and improving the startup’s business.

Few VC failures better illustrate the negative impact of financial speculation than that of WeWork, and its founder Adam Neumann. Neumann exhibited the “qualities [craved] in Silicon Valley founders,” handsome, magnetic, and alluring. His appearance and charisma outweighed his lack of business experience when he pitched his shared office space startup in 2012. Within twenty minutes of meeting Neumann, SoftBank Group Corp.’s (SoftBank) CEO handed him a $4.4 billion check. Continuing to fund WeWork, VC firms ignored “its corporate culture and strategy [that] were completely in hock to Neumann and his family’s bizarre ideas and whims.” As a reporter for the New Yorker revealed:

[T]op employees were told to attend weekly sessions with a guru; tales circulated of office tequila parties and recreational drug use among the staff. Sex at the WeWork headquarters was so commonplace, one employee told me, that everyday (sic) for a week she found a different used condom in a stairwell. Neumann smoked marijuana at the office; someone who worked closely

89. Duhigg, supra note 82.
90. See Martin Kenney & John Zysman, Unicorns, Cheshire Cats, and the New Dilemmas of Entrepreneurial Finance, 21 VENTURE CAP. 35, 43 (2019); see also Duhigg, supra note 82 (defining a “unicorn” as a privately-held company valued at over $1 billion).
92. Id. For a detailed report on the lack of governance in VC-startup relationships today, see Langevoort & Sale, supra note 51.
93. Duhigg, supra note 82.
with him told me that, on her first day, Neumann ‘lights up a joint and starts blowing it in my face, almost like a test.’ Neumann also spent lavishly on perks for himself, such as a Maybach car and a chauffeur, and a cold-plunge pool and an infrared sauna in his office.95

Despite obvious warning signs,96 and the company’s annual billion-dollar losses, over a seven-year period SoftBank funded $18 billion to WeWork.97 However, its initial public offering (IPO)98 was scrapped after the company’s SEC Form S-1 was made public, revealing its internal failings and financial situation.99 Harvard Business scholar Nori Gerardo Lietz noted that the S-1 exposed a “byzantine corporate structure, its woeful (or nonexistent) corporate governance, and most of all [the mismanagement and questionable transactions by] its flamboyant founder, Adam Neumann.”100 Within weeks, SoftBank offered Neumann a $1.7 billion buyout to leave the company.101 By 2020, WeWork’s valuation was reduced to $2.9 billion from its pre-IPO evaluation of $47 billion.102

The WeWork saga exemplifies a crisis of big money being funneled into startups led by inexperienced white males engaging in unchecked and incompetent management, cult leadership, and risky operations.103 As one report concluded, WeWork illustrates “how broken the [VC] system has become.”104 This strategy of focusing on the next unicorn, rather than cultivating unique and promising business opportunities, has resulted in the VC industry being woefully underinvested in

95.  Duhigg, supra note 82.
96.  Reeves Wiederman, author of BILLION DOLLAR LOSER, detailed Neumann’s unrestrained and offensive conduct, which included him referring to women as “bitch,” “slut,” and “whore”; the company’s $13 million wave pool business investment; WeWork’s $60 million corporate jet purchase; the $700 million stock sales and loans made between WeWork and Neumann; and Neumann’s personally-owned building lease contracts entered into with WeWork. See also Duhigg, supra note 82.
99.  Duhigg supra note 82.
102.  Feiner, supra note 97.
gender and racially diversified markets.\textsuperscript{105} As financial speculation and herd mentality intensified, so too did the hypermasculine competitiveness across the entire industry, resulting in women being inherently disadvantaged and sexually victimized.\textsuperscript{106}

\textbf{B. Sexism and Ellen Pao}

Sexism is rampant in VC firms, and is inseparable from the lack of diversity within VC firms.\textsuperscript{107} Yale law professor Vicki Schultz explains that sexism is the "nonsexual, but still sex-based harassment . . . against women in traditionally male-dominated job settings" and consists of "a wide range of nonsexual actions . . . used to denigrate women."\textsuperscript{108} As women in the VC industry report, such treatment ranges from being ignored during meetings, to having their ideas mansplained and credited to male partners.\textsuperscript{109} Others report being excluded from the informal VC community and networking opportunities that fellow male partners are invited to, to being asked out on dates when attending VC events.\textsuperscript{110} In addition, female partners have been asked to hang coats, retrieve coffee, and take meeting notes.\textsuperscript{111}

Former Kleiner Perkins investor Ellen Pao publicly exposed the VC industry's culture of sexism and sexual harassment in her 2017 memoir, \textit{Reset}.\textsuperscript{112} In her account, Pao shared numerous examples of being openly denigrated, which included male partners discussing pornography and their preferences in sex workers in front of her during a business trip.\textsuperscript{113} She also contended that she was never elevated to partner status because she was excluded from firm engagements that were critical to her advancement, critiqued for complaining too much, disparaged for being too quiet, criticized for exercising male brusqueness, and yet decried for being unassertive and fragile.\textsuperscript{114} As scholar Catherine Dunham opines, "Pao was forced to walk the impossible tightrope between femininity and perceptions of job-related masculine superiority."\textsuperscript{115}

\begin{itemize}
\item \textsuperscript{105} See Graham, supra note 58.
\item \textsuperscript{106} Chilazi, supra note 17 at 33 (noting that the hypermasculine "bro culture" in VC derives in part from extreme competitiveness).
\item \textsuperscript{107} Fan, supra note 55 at 346–49.
\item \textsuperscript{108} Vicki Schultz, Reconceptualizing Sexual Harassment, Again, 128 YALE L.J.F. 22, 33, 37–38 (2018).
\item \textsuperscript{110} Id. ("Though I’ve never faced issues in formal, direct conversations with other investors or investment bankers, as a woman you do tend to get left out of informal communities and networking (where many deals are struck) . . . .").
\item \textsuperscript{111} Monica Leas & Julie Oberweis, Venture Capital’s Next Venture? Women, TECHCRUNCH (June 3, 2015, 6:35 PM), https://techrunch.com/2015/06/03/venture-capitals-next-venture/#sus50rNi4e [https://perma.cc/G8GB-TQPk].
\item \textsuperscript{112} See ELLEN PAO, RESET (2017).
\item \textsuperscript{114} Catherine Ross Dunham, Third Generation Discrimination: The Ripple Effects of Gender Bias in the Workplace, 51 AKRON L. REV. 55, 58 (2017).
\item \textsuperscript{115} Id.
Pao and another female colleague, who likewise raised claims of sexual harassment, filed internal complaints.\(^\text{116}\) Pao’s complaints were never addressed, and she was ultimately fired, resulting in her filing a lawsuit against the firm for gender discrimination.\(^\text{117}\) Although the jury found in favor of Kleiner Perkins, the trial shed light on the rampant sexism within the industry.\(^\text{118}\) It also exposed the firm’s vitriolic response to Pao,\(^\text{119}\) ultimately propelling the Silicon Valley #MeToo movement as numerous female founders similarly came forward with claims of sexist treatment and sexual harassment.

**C. The Silicon Valley #MeToo Movement**

The same year that Pao’s memoir was published, a survey revealed that 65% of female founders had been *quid pro quo* propositioned by investors, with funding offered in exchange for sex.\(^\text{120}\) In 2017, the media began reporting on the pervasive sexual harassment by powerful VC partners.\(^\text{121}\) The *New York Times* detailed the accounts of more than twenty women who had been sexually harassed by male investors and advisors.\(^\text{122}\) Instigated by a now-infamous blog post by Susan Fowler, a former software engineer at Uber, the Silicon Valley #MeToo movement came to fruition.\(^\text{123}\) In one highly publicized account, a prominent venture capitalist was accused of sexually harassing multiple female entrepreneurs.\(^\text{124}\) Victims alleged that

\(^{116}\) Pao, supra note 113.  
\(^{117}\) See Dunham, supra note 114, at 58.  
\(^{118}\) Pao, supra note 113.  
\(^{123}\) See Susan Fowler, Reflecting on One Very, Very Strange Year at Uber, SUSAN FOWLER (Feb. 19, 2017), https://www.susannfowler.com/blog/2017/2/19/reflecting-on-one-very-strange-year-at-uber [https://perma.cc/UNQ6-MR57] (describing how after Fowler reported requests for sex to HR from her manager, she was told that the initiator was a high performer implying that his status made him immune from consequences). Susan Fowler was named TIME magazine’s person of the year in 2017 due to her blog post shedding a light on the sexual harassment in Silicon Valley in an issue titled The Silence Breakers. Molly Redden, #MeToo Movement Named Time Magazine’s Person of the Year, GUARDIAN (Dec. 6, 2017, 2:59 PM), https://www.theguardian.com/media/2017/dec/06/metoo-movement-named-time-magazines-person-of-the-year [https://perma.cc/Q2C3-GBGU].  
\(^{124}\) Emily Chang, Uber Investor Shervin Pishevar Accused of Sexual Misconduct by Multiple Women, BLOOMBERG (Nov. 30, 2017, 5:09 PM), https://www.bloomberg.com/news/articles/2017-
he used his position of power to make unwanted sexual advances, including physical touching, forcible kissing, and groping.125 One woman claimed he showed her graphic pornographic photos; another asserted he touched her inappropriately during a party.126 Entrepreneur Laura Fitton revealed he invited her to his hotel room following a party, where he assured her others would join.127 Inside the elevator, she claimed he kissed her against her will, leading to further sexual advances inside his empty hotel room as he spoke of marital woes.128 Although he denied all wrongdoing and called himself the victim, he ultimately resigned from Sherpa Capital, which he co-founded in 2017.129

Around the same time, the founding partner of DFJ Capital was relieved of his duties following an internal investigation regarding sexual harassment and predatory behavior toward female entrepreneurs.130 Also in 2017, multiple reports emerged of a Binary Capital partner engaging in inappropriate sexual behavior, including having sex with a woman he attempted to recruit and sending explicit text messages to another with whom he engaged in regular business transactions.131 San Francisco entrepreneur Lindsay Meyer disclosed that after investing in her venture, “it gave him access to [her], and that put [her] in a difficult position,” resulting in unsolicited encounters including touching, kissing, and groping.132 Despite repeated complaints, Binary Capital—emblematic of the toxic VC culture—denied the

128.  Id.
partner’s involvement in any improper or unwanted sexual behavior.\textsuperscript{133} However, the partner resigned in the wake of the scandal.\textsuperscript{134}

Despite the highly publicized Silicon Valley #MeToo movement, harassment continues to plague the VC industry.\textsuperscript{135} Black women tend to be especially targeted.\textsuperscript{136} The acute power imbalance between funders and founders, and white men and Black women, along with the lack of any legal accountability, have combined to permit this situation to fester.\textsuperscript{137} Such unchecked and discriminatory culture is likewise impacting VC investment decisions.

\textbf{D. Unconscious Bias in VC}

Just as destructive as the overt discrimination described above, unconscious biases result in covert discrimination, or “unintentional discrimination” against women and BIPOC in the VC industry. Human decision-making is subjective, often premised on an individual’s personal beliefs, education, and historical experiences.\textsuperscript{138} Unconscious biases have been acutely observed within the corporate and employment sectors.\textsuperscript{139} Likewise, unconscious biases have been detected in VC.
decision-making practices resulting in unbalanced startup funding.\textsuperscript{140} A 2020 \textit{Journal of Financial Economics} study found that female-led startups are at a significant disadvantage when compared to similarly-situated male-led startups in raising capital from male investors.\textsuperscript{141} This is true even in circumstances where male-led startups underperform female-led startups, thus implicating gender bias in male investors’ preferences in funding male founders.\textsuperscript{142} Although such biases can infiltrate all aspects of the VC funding process, they are particularly prominent during the pitching phase.\textsuperscript{143} The following explains these biases and how they impact the VC industry.

Within VC, \textit{similarity or affinity bias} occurs when investors prefer founders who share likenesses, including gender, race, education, or work experience.\textsuperscript{144} Currently, women make up less than 5% of the VC partner population.\textsuperscript{145} In fact, three quarters of VC firms employ no female partners at all.\textsuperscript{146} Racially, about 97% of investment partners are either white or Asian,\textsuperscript{147} with Black and Latina women each


\textsuperscript{141} See Michael Ewens & Richard R. Townsend, \textit{Are Early Stage Investors Biased Against Women?}, 135 J. FIN. ECON. (2020).

\textsuperscript{142} Id. at 653 (“We find that female founders are significantly less successful garnering interest and raising capital from male investors compared to observably similar male founders. In contrast, the same female founders are actually more successful than male founders with female investors. The results do not appear to be driven by differences across founder gender in startup quality, industry focus, communication costs, or risk. Overall, our results are consistent with some form of bias among male investors.”).


\textsuperscript{145} WOMEN IN VC, \textit{The Untapped Potential of Women-Led Funds} 5 (Oct. 2020) [hereinafter, \textit{The Untapped Potential}].


\textsuperscript{147} KAPOR CENTER FOR SOCIAL IMPACT, \textit{The Leaky Tech Pipeline: A COMPREHENSIVE FRAMEWORK FOR UNDERSTANDING AND ADDRESSING THE LACK OF DIVERSITY ACROSS THE TECH ECOSYSTEM} 6 (Feb. 28, 2018) (citing Richard Kerby, \textit{Who Is A VC?}, TECHCRUNCH (Feb. 10, 2016, 4:00 PM), https://techcrunch.com/2016/02/10/who-is-a-vc/ [https://perma.cc/QKE4-GV7R] (showing that only two percent of investment professionals are Black, and only one percent are Hispanic)); \textit{see also} Maryam Haque, \textit{Black History Month: Celebrating Leaders & Initiatives Driving More Black Representation in VC}, NVCA (Feb. 26, 2021), https://nvca.org/black-history-month-celebrating-leaders-initiatives-driving-more-black-representation-in-vc/ [https://perma.cc/WS78-3CQD] (documenting that only three percent of all investment partners at U.S. VC firms are Black).
encompassing just 0.2%.\textsuperscript{148} Given these statistics, it is unsurprising that the homogenous demographics of VC firms often replicate themselves in their funded startups.\textsuperscript{149} 

Gender bias ensues from an investor’s unconscious belief that men are superior to women in business matters.\textsuperscript{150} Similarly, cupcake stigma derives from perceptions that female entrepreneurs are less serious than their male counterparts.\textsuperscript{151} While investors often ask male founders questions that highlight positivity and promotion, female founders tend to receive questions about loss and risk mitigation.\textsuperscript{152} Data confirms that 67% of questions directed at male founders are promotion-oriented, while 66% of questions asked of female founders are prevention-oriented.\textsuperscript{153} Male founders receiving promotion-oriented questions garner an average of $16.8 million in aggregate funding,\textsuperscript{154} while recipients of prevention-oriented questions receive seven times less.\textsuperscript{155} One oft-cited study concludes that even when the content is equivalent, investors prefer a pitch given by a man over a pitch made by a woman.\textsuperscript{156}

\begin{itemize}
\item \textsuperscript{148} Burkhovic, supra note 9.
\item \textsuperscript{149} Richard Kerby, \textit{Where Did You Go to School?}, MEDIUM (July 30, 2018), https://medium.com/@kerby/where-did-you-go-to-school-b92d846188 [https://perma.cc/HNA3-MLGU].
\item \textsuperscript{152} Cath Everett, \textit{Are Venture Capitalists Really Guilty of Bias Against Tech’s Female Entrepreneurs?}, DIGINOMICA (Jan. 28, 2020), https://diginomica.com/are-venture-capitalists-really-guilty-bias-against-techs-female-entrepreneurs [https://perma.cc/N57A-KP9Q]; see also Fabiola Cincaes, \textit{Wharton Prof Says VCs Keep Women-Led Startups From Raising More Money}, PHILA. MAG. (Aug. 3, 2017), https://www.phillymag.com/business/2017/08/03/laura-huang-venture-capital-funding-women/ [https://perma.cc/ZLM4-V9AN] (stating that male founders tend to receive questions like, “\textit{[h]ow do you plan to monetize this?},” while women founders are asked, “\textit{[h]ow long will it take you to break even?”}).
\item \textsuperscript{154} Id.
\item \textsuperscript{155} Id.
\item \textsuperscript{156} Brooks, Huang, Wood & Fiona E. Murray, supra note 84, at 4429. In 2018, Swedish researchers identified four gender stereotypes based on commentary provided by VC partners regarding female founders: (1) women are cautious and risk averse, while men test ideas; (2) women eschew business growth, whereas men indulge in it; (3) women lack high growth resources, while men capitalize on them; and (4) women-led startups underperform, whereas male-led startups thrive. After testing these subjective assumptions, the study confirmed no existing statistical difference between male and female ventures. Researchers concluded that VCs evaluate entrepreneurial genders differently, resulting in female entrepreneurs having greater difficulty in earning credibility. What is especially fascinating about this study is that Sweden is traditionally ranked first in the world in gender equality on the EU Gender Equality Index. Malin Malmsström, Aija Voitkane, Jeaneth Johansson & Joakim Winceent, \textit{When Stereotypical Gender Notions See the Light of Day, Will They Burst? Venture Capitalists’ Gender Constructions Versus Venturing Performance Facts}, 9 J. BUS. VENTURING INSIGHTS 32 (2018), https://doi.org/10.1016/j.jbvi.2018.01.002 [https://perma.cc/3HE7-CJ95].
\end{itemize}
Black entrepreneurs are particularly subject to VC investors’ unconscious biases. Detailed accounts resonate, including being mistaken for a delivery person when showing up to a pitch meeting,\(^{157}\) or being asked, “Were your grandparent’s slaves?”\(^{158}\) Frederick Hutson, founder of Pigeonly, reports that during a pitch, one investor indicated a hesitancy to invest because Frederick “looked like he spent more time working out in prison than reading books.”\(^{159}\) A Stanford University study confirmed racial bias by institutional investors who, when asked to evaluate VC firms with identical qualifications, gave lower ratings to firms with Black partners.\(^{160}\) Such racial discrimination stems from multiple biases, including stereotyping and pattern matching.\(^{161}\)

With respect to race, stereotyping is reflected in the belief that “qualified Black candidates are rare and that Black employees are not as qualified as their white colleagues.”\(^{162}\) This trope is often provided when companies do not meet diversity goals. It also results in Black applicants facing additional tests of suitability not faced by white applicants.\(^{163}\) The same has been found with BIPOC founders during the pitch phase, who are questioned with more severity and made to prove their expertise in their own business.\(^{164}\) Additionally, questions are asked seeming to require Black founders to prove that they are trustworthy and honest.\(^{165}\) These are questions that are not asked of white male founders. Because humans fail to recognize their own prejudices, unconscious bias remediations are challenging.\(^{166}\)

160. Sarah Lyons-Padilla, Hazel Rose Markus, Ashby Monk, Sid Radhakrishna, Radhika Shah, Norris A. “Daryn” Dodson IV & Jennifer L. Eberhardt, Race Influences Professional Investors’ Financial Judgments, PROC. NAT’L ACADEM. SCI. (2019), https://docs.wixstatic.com/ugd/34f020_5dafb0523d8740d3a2c3ee497be5f6c.pdf [https://perma.cc/TVM6-KJUU] (“Our data indicate that top-performing managers of color may be most harmed by racial bias. Even when funds led by people of color possess identical, strong credentials as White-male–led funds, they are judged more harshly. In contrast, White-male fund managers are advantaged by these biases, which perpetuate their disproportionate representation in the industry, and the association between whiteness and investment success.”).
161. Pantin, supra note 55, at 1472.
163. See id.
164. Pantin, supra note 55, at 1458.
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With the pattern matching bias, VC partners not only demonstrate a preference for founders who look like them, but also evaluate pitches based on how closely they resemble a past successful pitch.167 If a VC partner has never invested in a Black business, they have no frame of reference and, due to heuristics, conclude that the new pitch is a larger risk.168 VC partners who only invest in white-male-founded companies have no other model from which to define success.169 This is due in part to the availability heuristic which provides that humans place undue weight on what most easily comes to mind.170

Each of these biases impact VC partner decision-making. However, affinity bias and network homophily (a related principle that likewise supports the notion that similarity breeds connection)171 are particularly prevalent in VC partner decision-making, leading white male partners to dedicate the overwhelming majority of funding to founders who look like them.172 Such bias is written into the fabric of VC firms’ investment interests through network-based structures that rely on “warm introduction” referrals benefitting those “already tapped into [VC] networks.”173 Because women and BIPOC do not have the same level of access to these networks, they are at an enormous disadvantage.174 Such homogenous internal networking depresses potential funding opportunities by ignoring innovators who may otherwise harbor upside business potential. Relying on historic networking


169. See id.


171. Miller McPherson, Lynn Smith-Lovin & James M Cook, Birds of a Feather: Homophily in Social Networks, 27 ANN. REV. SOCIO. 415, 415–16 (2001) (“[P]eople’s personal networks are homogeneous with regard to many sociodemographic, behavioral, and intrapersonal characteristics. Homophily limits people’s social worlds in a way that has powerful implications for the information they receive, the attitudes they form, and the interactions they experience.”).


174. See Del Johnson, Ban Warm Introductions!, MEDIUM (Aug. 6, 2019), https://blog.usejournal.com/ban-warm-introductions-1e69169a57ba [https://perma.cc/QWA6-SPTT]; see also Paul Gompers & Silpa Kovvali, The Other Diversity Dividend, HARV. BUS. REV. (July-Aug. 2018), (“Because social and professional circles often overlap, homogeneous personal networks can have a deleterious effect on organizational diversity. That’s why some companies have deemphasized referrals, or at least cautioned against their pitfalls. But reliance on personal networking is still crucial to the functioning of certain industries. A survey of venture capitalists, for example, showed that social connections are essential to generating deal flow. But investors’ personal networks tend to be closed, given that most VCs have the same educational background, are the same gender and race, and have worked at similar firms. Consequently, they can miss a lot of opportunities.”).
opportunities, investors can “miss a true disruptor.” In VC firms, cognitive biases are especially troubling as studies maintain that humans are poor predictors of future events. In fact, humans tend to overrate their prediction capabilities (referred to as validity illusion). This illusion exists because confirmation biases allow humans to interpret information that sanction their predictions, while discarding evidence that does not. This results in gut instinct being touted when a startup is successful, and ignored when it is not.

Financial speculation, herd mentality, sexism, power imbalance, and unconscious biases not only result in the underfunding of female and BIPOC startups, but also poor financial investment outcomes. This is particularly striking given that female-led startups are more profitable, and that VC firms with diversified teams are more successful. All of these factors contribute to the continued use of an outdated investment decision model and are why the vast majority of the startups funded fail to provide any profit. The next Part provides an analysis of VC’s culture and its resistance to change.

II. A Behavioral Decision Theory Analysis of VC

According to Harvard law professor and founder of the Program on Behavioral Economics and Public Policy at Harvard Law School, Cass R. Sunstein, heuristics also play a role in risk evaluation, behavior and discrimination. These shortcuts in thinking are replete with unconscious biases built up over a lifetime, filling gaps based on stereotypes and cultural norms, which then become automatic rather than subject to skepticism or mental reflection. Although humans may think they are open-minded and able to make unbiased decisions and predictions, research fails to support this. Many of the unconscious biases discussed in Part I

175. Johnson, supra note 174.
176. See David Shariatmadari, Daniel Kahneman: ‘What Would I Eliminate if I Had a Magic Wand? Overconfidence’, GUARDIAN (July 18, 2015, 4:00 PM), https://www.theguardian.com/books/2015/jul/18/daniel-kahneman-books-interview [https://perma.cc/2K6G-88Q7] (explaining the overconfidence bias; this is particularly true when it comes to predicting which startups will be successful).
178. Raymond S. Nickerson, Confirmation Bias: A Ubiquitous Phenomenon in Many Guises, 22 REV. GEN. PSYCHOL. 175, 175–76 (1998) (citing Leon Festinger, A THEORY OF COGNITIVE DISSONANCE (1957) (demonstrating confirmation bias amongst students in relation to capital punishment where undergraduates rated articles that supported their initial beliefs as “more convincing” and rejected opposing articles)).
179. See infra Part II.
180. See discussion infra notes 1–4; see also Mary Jo White, Chair, Keynote Address at the SEC-Rock Center on Corporate Governance Silicon Valley Initiative (Mar. 31, 2016) (transcript available at https://www.sec.gov/news/speech/chair-white-silicon-valley-initiative-3-31-16.html [https://perma.cc/D2ER-P7MK]) (noting that nine out of ten startups fail).
182. Kahneman, supra note 38, at 20–22.
either derive from or evolve from the work of Kahneman, Tversky and their colleagues. Through the lens of the behavioral decision theory, we explore the reasons behind the behavior discussed in Part I and the illogic of directing 97% of available VC funds to male-led startup teams.

Law professors Choi and Pritchard note that “there is no shortage of evidence that many investors’ decisions are influenced by systematic biases that impair their abilities to maximize their investment returns.”

In addition to representing an immense untapped market, multiple studies show that female-led teams are more successful than male-only teams, and diverse teams are more prosperous and innovative than homogeneous teams. A ten-year study conducted by First Round Capital reveals that female-led startup teams perform 63% better than single-sex male-founded teams. The Boston Consulting Group similarly reports that female-led startups generate 151% more revenue than male-led teams. Had the firms participating in this study distributed funds more equitably across gender lines, they would have earned an additional $85 million in revenue. An American Express investigation further confirms that women-led businesses generate revenue that doubles the amount of their investment funding. Gender diversity delivers higher rates of return, with lower risk of failure, than all-male teams. In addition, ventures led by all-female teams sell, or go public, more rapidly than all-male teams, while also enjoying higher values.

Behavioral decision theory helps answer the question: Why do VC firms act against their own self-interest?

Behavioral decision theory helps answer the question: Why do VC firms act against their own self-interest?


188. Abouzahr, Krenz, Harthorne & Taplett, supra note 185.


191. Stengel, supra note 56.


According to MIT economist, Abhijit V. Banerjee:

> People's susceptibility to social forces is also evident in herd behavior, which occurs when people do what others are doing instead of using their own information or making independent decisions . . . It is particularly relevant in the domain of finance, where it has been discussed in relation to the collective irrationality of investors.\footnote{Alain Samson, \textit{An Introduction to Behavioral Economics}, BEHAV. ECON., https://www.behavioraleconomics.com/resources/introduction-behavioral-economics/ [https://perma.cc/5FJZ-YJF5] (last visited Feb. 24, 2023) (citing Abhijit V. Banerjee, \textit{A Simple Model of Herd Behavior}, 107 Q. J. ECON. 797, 802–03 (1992)).}

Rather than performing due diligence research, herd behavior results in contagious investing behavior where VC firms simply copy the investments made by other firms.\footnote{This lack of due diligence results in unsuccessful investment decisions. In addition, by copying the choices of other firms, the homogeneity of the startups is all but assured, preventing women and BIPOC from making inroads.}

With the \textit{optimism bias}, positive outcomes are overestimated, while negative outcomes are underestimated.\footnote{With overconfidence bias, people tend to show undue confidence in their own decision-making. Kahneman proposed that optimism bias, intertwined with the overconfidence bias, “may well be the most significant of the cognitive biases.” Among VC investors, it results in reliance on gut instinct over information, excessive risk-taking, and concentrated portfolios. These biases cause VCs to wrongfully rely on their own impressions rather than seek more information or make an objective decision.}

Kahneman proposed that optimism bias, intertwined with the overconfidence bias, “may well be the most significant of the cognitive biases.”\footnote{Tali Sharot, \textit{The Optimism Bias}, 21 CURRENT BIOLOGY R941, R941 (2011) (“This phenomenon [overestimating the likelihood of a positive event and underestimating the likelihood of a negative event] is known as the optimism bias, and it is one of the most consistent, prevalent, and robust biases documented in psychology and behavioral economics.”).}


and concentrated portfolios.\footnote{It is well-documented that relying on gut instinct leads to error-prone decision-making. Amos Tversky & Daniel Kahneman, \textit{The Framing of Decisions and the Psychology of Choice}, 211 SCIENCE 453, 453 (1981) (arguing that intuitive thinking can lead to severe and systematic errors).}

For example, Pan notes that “this pattern appears at the individual level as well as at the aggregate level.”\footnote{See David Dunning, Kerri Johnson, Joyce Ehrlinger & Justin Kruger, \textit{Why People Fail to Recognize Their Own Incompetence}, 12 CURRENT DIRECTIONS SOC. SCI. 83 (2003) (“People base their perceptions of performance, in part, on their preconceived notions about their skills. Because these notions often do not correlate with objective performance, they can lead people to make judgments about their performance that have little to do with actual accomplishment.”).}
The fear of missing out associated with herd mentality is amplified by envy and excitement that overrides rational behavior, which helps explain the WeWork saga. In addition, loss aversion elucidates why investors continued to fund WeWork, even after significant losses were recorded. Professors Choi and Pritchard note that “[i]nvestors with intractable loss aversion will continue holding a losing position in hopes of reversing their losses.” One of the most impactful cognitive biases in this area is the status quo bias, where “people systematically favor maintaining a state of affairs that they perceive as being the status quo rather than switching to an alternative state, all else being equal,” even when presented with new options. Such bias helps clarify the lack of change in VC investment habits for over thirty years. Firms are more comfortable investing the same way they have for thirty years because they do not want to face the uncertainty of investing in someone new even when presented with more favorable options.

The following sections demonstrate where the VC industry acts against its own interests and how the status quo can be disrupted. Using insights from behavioral decision theory and empirical data from robust studies, this Part advocates for (A) increasing gender diversity in VC firm’s decision-making positions to mitigate sexism within firms, normalize professional interactions with women, and increase the funding of diverse startups; (B) the closing of legal loopholes in order to influence behavioral changes and establish a new social norm, hold VC firms accountable for sexual harassment and discrimination, and serve as a normative moral deterrent; and (C) increasing the use of AI during startup evaluations to enhance investment decision-making, overcome heuristics and biases, and instigate more successful and equitable investments.

A. Increasing Diversity within VC Firms

Moderating financial speculation and herd mentality and increasing funding to female and BIPOC-led startups requires that diversity expand within VC firms themselves. Research demonstrates that female investors tend to be data-driven, mitigating risk while searching for successful investments. While such differences are not binary, women tend to be more inquisitive and reference data, while men are more task-driven and rely on information in front of them. A recent

205. Choi & Pritchard, supra note 32, at 23.
208. Chris Bart & Gregory McQueen, Why Women Make Better Directors, 8 INT. J. BUS. GOVERNANCE ETHICS 93, 97 (2013) (“[M]ale directors . . . prefer to make decisions using rules, regulations and traditional ways of doing business or getting along. Female directors, in contrast, . . . are significantly more inclined to make decisions by taking the interests of multiple stakeholders into account in order to arrive at a fair and morally consistent decision. They will also tend to use cooperation, collaboration and consensus-building more often—and more effectively—in order to make sound decisions.”).
Australian study confirmed that men are more likely to make extreme choices, which helps explain male investors’ tendency to fund singular startups in the hopes of securing a unicorn, rather than diversifying their funding across multiple prospective startups. According to CB Insights, a global market intelligence company, the chances of a venture-backed startup becoming a unicorn is less than 1%. Such gender differences in decision-making may also explain why women achieve better investment outcomes. A Goldman Sachs study revealed that female-managed hedge funds outperform male-led hedge funds, with 48% of female-led funds beating the market compared to 37% of male-led funds. The same study surmised that women outperform men because they enjoy better decision-making skills, and employ longer decision-making processes. A seven-year study involving over 35,000 brokerage accounts likewise confirmed that women investors outperform male investors, suggesting that because men traded 45% more than women, they were making a higher quantity of bad financial decisions than women.

Such findings are also confirmed in studies performed by financial expert and author, Meredith Jones and Betterment Retirement. Additionally, empirical findings employing behavioral decision theory offer that men are burdened by overconfidence and short-term thinking, which impacts their ability to make good financial decisions. Including more women at the VC partner level could reduce speculation. Rather than relying on investments by other firms as indicative of a promising startup, diversified partner-groups would reach better investment outcomes through greater discussion and due diligence.


213. Id.


217. Barber & Odean, supra note 214, at 286.
Still, with 93% of all VC dollars controlled by white men, homogeneity is pervasive in the inner workings of VC firms. \footnote{218. GALLOWAY, supra note 7, at 184.} A \textit{Harvard Business Review} study found that VC firms’ demographic composition has remained stagnant over a 28-year period, \footnote{219. Gompers & Kovvali, supra note 174.} with women and BIPOC representing 5% or less of all domestic VC partners. \footnote{220. The Untapped Potential, supra note 145, at 2 (fig. 1). As noted above, nearly three-quarters of VC firms in the United States have no female partners at all. See generally Stewart, supra note 146.} While firm-level diversity gaps stem from a number of factors, \footnote{221. See generally Collin West & Gopinath Sundaramurthy, Women VCs Invest in Up to 2x More Female Founders, KAUFFMAN FELLOWS (Mar. 25, 2020), https://www.kauffmanfellows.org/journal_posts/women-vcs-invest-in-up-to-2x-more-female-founders [https://perma.cc/A283-268C].} data supports that 69.2% of the top-performing VC funds boast female partners. \footnote{222. Stengel, supra note 56.} Similar to the successes attributable to female-led startups, VC firms that retain women at the partner level also generate larger profits. \footnote{223. See Chilazi, supra note 17, at 2 (citing Michael Blanding, Diversity Boosts Profits in Venture Capital Firms, H. BUS. SCH. WORKING KNOW. (Oct. 4, 2018); Gompers & Kovvali, supra note 174).} Statistics indicate that firms that increase their proportion of female partner hires by 10% enjoy a 1.5% average increase in overall annual fund returns and 9.7% more profitable exits. \footnote{224. Gompers & Kovvali, supra note 174.} In addition, firms with ethnically diverse partners enjoy 26.4% to 32.2% higher acquisition and IPO success rates. \footnote{225. Id.} In fact, the more homogenous a firm at the partner level, the lower its financial performance. \footnote{226. Id. (demonstrating that non-diversified homogenous VC firms attained 26.4% to 32.2% lower investment performance).} VC firms with increased gender and racial diversity at the partner level average 30% higher multiples on invested capital upon acquisition or going public. \footnote{227. Lisa Stone, The Power of Diversity: Why Homogeneous Teams in Venture Capital Are Bad for Business, W. RIVER GRP. (Sept. 21, 2020), https://www.wrg.vc/diversity [https://perma.cc/RS86-T4PT].} Increasing the number of female and BIPOC VC partners will increase the diversity of funded companies. \footnote{228. Lakshmi Balachandra, How Gender Biases Drive Venture Capital Decision-Making: Exploring the Gender Funding Gap, 35 GENDER MGMT. 261, 261 (2020), DOI 10.1108/GM-11-2019-0222 (“The findings reveal how the 93 per cent male context of the VC industry is in itself a significant cause of the gender gap in funding. If there were more women VCs, more women entrepreneurs would be funded.”); see also Sophie Calder-Wang, Paul Gompers & Patrick Sweeney, Venture Capital’s “Me Too” Movement 3 (Nat’l Bureau Econ. Rsch. Working Paper No. 28679, 2021), https://www.nber.org/system/files/working_papers/w28679/w28679.pdf [https://perma.cc/M69B-ZZ9R] (demonstrating that an increase in the hiring of female venture capital partners is directly associated with an increased in the funding of female founders).} Likewise, diverse firms tend to invest in diverse founders. \footnote{229. Ximena Aleman, Startup Fundraising Is the Most Tangible Gender Gap. How Can We Overcome It?, TECHCRUNCH (Nov. 9, 2020, 12:36 PM), https://techcrunch.com/2020/11/09/startup-fundraising-is-the-most-tangible-gender-gap-how-can-we-overcome-it/ [https://perma.cc/S8J8-82SD].} In particular, female-led VC firms are twice as
likely to invest in gender-diverse founders and three times more likely to invest in start-ups with a female CEO.\textsuperscript{231} VC firms with female leadership invest in female-founded tech companies 63% more often than male-led VC firms.\textsuperscript{232} This percentage climbs to 108% with respect to female-founded consumer companies.\textsuperscript{233} Explanations vary as to why more diversified VC firms are successful. Some attribute it to increased investment in female-led startups.\textsuperscript{234} Others suggest that diversified firms exercise better decision-making skills,\textsuperscript{235} are more innovative, and generate improved business outcomes.\textsuperscript{236} No matter the reasoning, the above data supports that firms with greater gender and racial diversity at the helm achieve positive spillover effects, including more diversified investment portfolios.

In addition to the above-described benefits to increasing diversity within VC firms, increasing the presence of women and BIPOC in leadership roles also serves to overcome the negative impact of heuristics and biases harming the VC industry. First, it will help gender bias and racial stereotyping. According to Kahneman’s research, the greater the exposure to a new idea, the more acceptable it becomes.\textsuperscript{237} Normalizing the presence of women and BIPOC in firm leadership roles will mitigate the effect of pattern matching where the image of a white male as leader more easily comes to mind.\textsuperscript{238} Accordingly, increasing the number of female and diverse partners within VC firms will instigate a culture change within such firms, and women who serve in leadership roles will help deter the current culture which tolerates sexual harassment within the VC industry as a whole.\textsuperscript{239} Although elevating


\textsuperscript{232.} Id.

\textsuperscript{233.} Id.


\textsuperscript{235.} Chris Bart & Gregory McQueen, Why Women Make Better Directors, INT’L J. BUS. GOVERNANCE & ETHICS (2013), https://www.inderscienceonline.com/doi/abs/10.1504/IJBGE.2013.052743 [https://perma.cc/72N9-GFZ7] (finding that women’s higher quality decision-making ability makes them more effective than their male counterparts and gives boards a method to deal with the multifaceted social issues and concerns currently confronting corporations.).

\textsuperscript{236.} Stone, infra note 227, at 3.

\textsuperscript{237.} See KAHNEMAN, infra note 38, at 59–60, 65–67 (explaining that repeated exposure to new ideas contributes to the positive feelings associated with “cognitive ease”).

\textsuperscript{238.} See Kimberly A. Houser & Jamilah Bowman Williams, Board Gender Diversity: A Path to Achieving Substantive Equality in the United States, 63 WM. & MARY L. REV. 497, 513–14 (2021) (explaining the importance of exposing men to highly qualified women to reduce unconscious bias and to normalize women in leadership roles); Lori Beaman, Raghabendra Chattopadhyay, Esther Dufo, Rolini Pandi & Petia Topalova, Powerful Women: Does Exposure Reduce Bias?, 124 Q.J. ECON. 1497, 1497 (2009) (explaining that exposure to women in prominent leadership roles reduces the impact of representative bias).

more women and BIPOC to partner level status can help to alleviate sexual harassment in the VC industry, the next Section examines the corresponding need for increased legal protections for female founders.

**B. Closing the Legal Loophole on Sexual Discrimination in VC**

Columbia Law professor Suzanne Goldberg explains that sexual harassment is a manifestation of power dynamics “best understood in the context of broader inequities related to sex and gender in the workplace and surrounding society.” With men controlling 93% of all available VC funding in the United States, there exists an enormous gender power imbalance within the industry. In addition, the embedded “bro culture” within VC exacerbates misogyny against women:

[Bro culture] typically exist[s] in male-dominated industries that lack significant, if any, female leadership representation and/or in environments whose leaders perpetuate stereotypes about traditional male and female roles within the organization. “Bro culture” is defined in various ways, but it is fundamentally an accepted culture of bias manifested in behaviors and decisions that support the exclusion of women in the organization, both socially and professionally. Environments like this are typically characterized by behavior that is, perhaps, found in a locker room, not in a professional work environment. In cultures like this, males who do not “go along” with the sexist and unprofessional behaviors are also excluded.


Rights Act of 1866 (Section 1981) prohibits discrimination based on race in the making and enforcement of contracts. While Title VII covers race, color, sex, national origin, and religion, Section 1981 refers to race only. Although Section 1981 would appear to provide a remedy for founders who were discriminated against based on race, a recent Supreme Court decision has all but shut the door on this remedy.

Despite the evidence of racial discrimination against an African-American owned media company, Entertainment Studios Network (ESN), the Court in Comcast v. National Association of African American-Owned Media reversed the lower court’s decision, ruling that the plaintiff failed to show that “but for” race, the network would have entered into a contract with ESN. While most Title VII cases allow a plaintiff to prevail if race, color, national origin, religion or sex is a “motivating factor” in the adverse employment action, the use of the term “because of” in Section 1981 resulted in the Supreme Court requiring the “but for” test. Thus, despite the racial animus demonstrated, the plaintiff needed to prove that the network contract would have been awarded to him had he not been Black. This would be incredibly difficult to prove with respect to a VC firm as so few pitches are funded overall, and it would be relatively easy for a VC firm to name an alternate reason for the denial.

Title VII, which applies the “motivating factor” test in discrimination cases, likewise fails to provide a remedy for founders who have been discriminated against or sexually harassed when not actual employees. Recently, scholars have begun to examine antidiscrimination law’s failure to extend protections to employment-like relationships (such as gig workers). Although investors are not employers, and founders are not their employees, some suggest that the investor-investee relationship is akin to that of the employer-employee due to the control factor, and should be protected as such.

As Yale Law scholar Vicki Schultz explains,

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245. Additionally, Title VII requires the exhaustion of administration remedies, while Section 1981 does not.


247. Id.


249. See, e.g., Arianne Renan Barzilay & Anat Ben-David, Platform Inequality: Gender in the Gig Economy, 47 SETON HALI. L. REV. 393, 394–97 (2017) (noting that despite the significant control that platforms have over gig workers, they are not likely to fall under the protection of employment and labor laws); see also Heather McLaughlin & Christine Thomas, Costs vs. Compensation: Legal and Policy Recommendations for Addressing Workplace Sexual Harassment, 14 ST. LOUIS U. J. HEALTH L. & POL’Y 139, 143 (2020) (“[[Individuals who are self-employed, independent contractors, or employed in small companies have no legal recourse under federal law.]”); Minna J. Kotkin, Uberizing Discrimination: Equal Employment and Gig Workers, 87 TENN. L. REV. 73, 73 (2019) (explaining how, with 40% of the workforce soon to be gig workers, employment laws must be updated).

“employment discrimination law has not caught up with evolving work relationships” that include VC firms and their startups.\(^ {251} \) Although Schultz proposes that Title VII evolve to categorize venture capitalists as employers, others doubt this could be accomplished at the federal level.\(^ {252} \)

Behavioral decision theory posits that penalties are effective in promoting behavioral change due to the loss aversion heuristic. Tversky and Kahneman describe that the pain of loss is more powerful than the pleasure of gain.\(^ {253} \) In fact, research demonstrates that the fear of loss is in many cases more effective as a behavior change strategy than the promise of gain.\(^ {254} \) In other words, just the existence of a penalty can motivate behavioral change.\(^ {255} \) Including VC firms in antiharassment law leverages the loss aversion heuristic.

In addition, closing legal loopholes will change the VC culture by signaling that the current “bro-culture” is unacceptable.\(^ {256} \) The behavioral sciences posit that legal penalties both reflect and influence cultural norms.\(^ {257} \) Sunstein explains that “law is an instrument of norm production and guidance that influences people’s behavior by indirectly signaling what society thinks is good or bad, moral or evil, appropriate or not.”\(^ {258} \) Georgetown Law scholar Jamillah Bowman Williams makes clear that imposing legal consequences can effectively alter the trajectory of decision-making processes to better moderate biased and discriminatory outcomes.\(^ {259} \) Her research indicates that antidiscrimination laws command submission, enhance inclusion, and induce recognition of institutional bias.\(^ {260} \) Williams’ findings further impart that “striving for inclusion is the right thing to do

[^251]: [https://perma.cc/H7XB-FWTB] (“[According to] Miriam Cherry, a law professor at Saint Louis University and director of its center for employment law, ‘[investors] are there as advisors and to look for out their investment, but they’re also working together really closely with the management of the company they’re investing in.”).

[^252]: Id.


[^255]: See Jasmin Mahmoodi, Ashreeta Prasanna, Stefanie Hille, Martin K. Patel & Tobias Brosch, *Combining “Carrot and Stick” to Incentivize Sustainability in Households*, 123 ENERGY POLY 31, 32 (2018); see also Simon Gächter, Henrik Orzen, Elke Renner & Chris Starmer, *Are Experimental Economists Prone to Framing Effects? A Natural Field Experiment*, 70 J. ECON. BEHAV. & ORG. 443, 444 (2009) (explaining that the framing of a price differential in a registration fee as a late fee (penalty) was more effective in getting people to register early than when framing it as an early bird discount (gain)).

[^256]: Matthew Tokson & Ari Ezra Waldman, *Social Norms in Fourth Amendment Law*, 120 MICH. L. REV. 265, 268 (2021) (“Law has the capacity to alter social norms through its expressive force and ability to reshape behavior and social values.”).

[^257]: See generally Mahmoodi Prasanna, Hille, Patel & Brosch, supra note 255.

[^258]: Tokson & Waldman, supra note 256 at 280–81.


[^260]: Id. at 1509–10.
morally,” thereby supporting the normative perspective that laws and regulations can influence moral judgment by symbolically conveying that certain actions are improper or wrong. Still, while closing legal loopholes will provide legal protections to female founders and improve the overall VC culture by normalizing respect for women, the next Section explains how the use of AI can improve VC firm decision-making.

C. Improving Firm Decision-Making

As described in Part I, VC investment choices remain stuck in the 1990s, reflecting multiple cognitive biases such as status quo bias and pattern matching. With status quo bias, “people systematically favor maintaining a state of affairs that they perceive as being the status quo rather than switching to an alternative state, all else being equal.” This remains true even when presented with new options. In other words, because VC firms have always invested in male-led startups, there is a preference for maintaining that behavior. As explained with pattern matching, rather than evaluate a new pitch based on its own merits, a VC partner will use past deals as a frame of reference. If 97% of their funds go to male-led startups, that is their frame of reference. This heuristic leads to investing in the same types of deals over and over.

In a 2013 published dialogue, the late Justice Ruth Bader Ginsburg articulated a correlation between unconscious bias and gender discrimination using symphony orchestras as an example. Until 1970, the gender makeup of U.S. symphonies was exceedingly male. Symphonies introduced blind auditions to minimize gender bias and enrich male-to-female ratios within orchestras at large. Specifically, orchestral gender progression evolved thanks to the addition of an unassuming curtain hung during auditions shielding the musicians from the evaluators’ gaze. This allowed musical expression to be evaluated without the encroachment of gender bias. The modest solution proved fruitful—fifty years later, women make

261.  Id. at 1510.
262.  See KENWORTHY BILZ & JANICE NADLER, LAW, MORAL ATTITUDES, AND BEHAVIORAL CHANGE, THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW 253–58 (Eyal Zamir & Doron Teichman eds., 2014) (discussing how law can be used to influence moral attitudes); see also Williams, supra note 259, at 1509–10 (noting that under normative theory, select actions are found to be “good,” “proper,” and “morally right,” while others, like racial discrimination, are identified as “improper” and “morally wrong”).
263.  Korobkin, supra note 206, at 625.
266.  See supra text accompanying notes 167–170.
268.  See id. at 18; see also Claudia Goldin & Cecilia Rouse, Orchestrating Impartiality: The Impact of “Blind” Auditions on Female Musicians, 90 AM. ECON. REV. 715, 715 (2000) (“Among the five highest-ranked orchestras in the nation . . . none contained more than 12 percent women until about 1980.”).
269.  Desmond Charles Sergeant & Evangelos Himonides, Orchestration Sex: The Representation of Male and Female Musicians in World-Class Symphony Orchestras, 10 FRONTIERS PSYCH. 1, 6 (2019); see also Goldin & Rouse, supra note 268, at 715–18 (positing that prior to the introduction of blind auditions, orchestral members were made up of hand-selected male musicians).
270.  See Ginsburg, Metzger & Gluck, supra note 267.
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up 40% of all U.S. orchestras.271 As Ginsburg mused, “Wouldn’t it be wonderful if we could drop a curtain in every field of endeavor?”272 While physical curtains cannot so easily be dropped during investment pitches, research suggests that the responsible use of AI can mitigate the effect of unconscious biases by inserting more objective criteria into the decision-making process.273

Research demonstrates that AI can allay unconscious biases that impact decision-making.274 The Federal Reserve’s Advisory Council encourages AI use to improve accurate and fair credit decisions, thereby increasing overall credit availability.”275 Similarly, transitioning to data-based decisions would improve the quality and fairness of VC firms’ funding decisions. Not only is financial speculation rampant, but due diligence has been abjured in favor of copying the investment choices of other firms. In addition, investors tend to rely on network affiliation and subjective criteria to predict startup success.276 A recent study found that almost half of all venture capitalists admit to frequent gut-instinct decision-making.277

273. See Irene Y. Chen, Shalmali Joshi & Marzyeh Ghassemi, Treating Health Disparities with Artificial Intelligence, 26 NATURE MED. 16 (2020) (explaining that AI can be used to mitigate unconscious bias in treating and diagnosing patients that create inequities in healthcare); Houser, supra note 139 (explaining that AI can be used to mitigate unconscious bias in employment decisions); JAKE SILBERG & JAMES MANYIKA, NOTES FROM THE AI FRONTIER: TACKLING BIAS IN AI (AND IN HUMANS) 2 (2019) (“In many cases, AI can reduce humans’ subjective interpretation of data, because machine learning algorithms learn to consider only the variables that improve their predictive accuracy, based on the training data used.”); see also Alex P. Miller, Want Less-Biased Decisions? Use Algorithms, HARV. BUS. REV. (July 26, 2018), https://hbr.org/2018/07/want-less-biased-decisions-use-algorithms [https://perma.cc/2AZU-86WC]; Sian Townson, AI Can Make Bank Loans More Fair, HARV. BUS. REV. (Nov. 6, 2020), https://hbr.org/2020/11/ai-can-make-bank-loans-more-fair [https://perma.cc/M2N9-BQRD].
274. See James Pethokoukis, Nobel Laureate Daniel Kahneman on AI: ‘It’s Very Difficult to Imagine that with Sufficient Data There Will Remain Things that Only Humans Can Do’, AM. ENTER. INST. (Jan. 11, 2018), https://www.aei.org/economics/nobel-laureate-daniel-kahneman-on-a-i-is-very-difficult-to-imagine-that-with-sufficient-data-there-will-remain-things-that-only-humans-can-do/ [https://perma.cc/4QXK-LWZC] (quoting Kahneman, postulating that because human decision-making is so inconsistent (noisy), “[y]ou should replace humans by algorithms whenever possible.”); J. Nathan Matias, Bias and Noise: Daniel Kahneman on Errors in Decision-Making, MEDIUM (Oct. 17, 2017), https://natematias.medium.com/bias-and-noise-daniel-kahneman-on-errors-in-decision-making-6bc844f5194 [https://perma.cc/CH22-6BW9] (discussing a series of experiments that revealed algorithms to be superior to humans in making decisions); Do Algorithms Beat Us at Complex Decision Making?, FARNAM ST. MEDIA, INC. (last visited Dec. 7, 2021), https://fs.blog/algorithms-complex-decision-making/ [https://perma.cc/RYT5-NKZR] (“With algorithms, the same inputs generate the same outputs every single time. They don’t get distracted, they don’t get bored, they don’t get mad, they don’t get annoyed. Basically, they don’t have off days. And they don’t fall prey to the litany of biases... that humans do, like the representativeness heuristic...”).
276. See discussion supra Section I.A. on herd behavior.
fact, less than one-third of venture capitalists employ financial metrics when making investment decisions. 278 This seems especially short-sighted given that the use of simple algorithms can overcome the harm caused by cognitive biases and can be designed to avoid discriminatory decisions. 279

Since the 1990s there have been major advances in AI, particularly with regard to investment decision-making. 280 Despite VC firms touting that they are “instigators of innovation,” they remain effective luddites when using modern technology in their own firms. 281 Transitioning away from gut-instinct decision-making, toward a more objective data-driven investment approach, can bridge the gender- and race-gap in funding and lead to more successful outcomes. 282

Trillions of dollars are left on the table when VC firms repeatedly invest in the same types of deals and ignore the evolving market. 283 Women and BIPOC founders can tap into their own demographics, offering new ideas for underserved markets. 284 VC firms, on the other hand, are “dismissive of big markets that don’t personally relate to.” 285 Such biases result in enormous opportunities being overlooked across major sectors. For example, big data has led to a revolution in the biotech sector. 286 Today, there are more female biotech founders than in traditional tech fields, and their companies tend to go

278. Id.
281. Diane Mulcahy, 6 Myths About Venture Capitalists, HARV. BUS. REV. 80, 83 (May 2013) (suggesting that VC “has been devoid of innovation for the past 20 years”).
282. How AI Is Changing the Investing Process, INT’L BANKER (Sept. 16, 2020), https://internationalbanker.com/technology/how-ai-is-changing-the-investing-process/ [https://perma.cc/Y334-63YF] (“By using AI to make important investment decisions, moreover, the errors associated with human decision-making can be drastically minimised, if not completely eliminated, from the investing process. Even the best fund managers will invariably succumb to the emotional and cognitive biases that are inherent in all of us, whether that be confirmation bias, bandwagon effect, loss aversion or numerous other biases that have been formally identified by behavioural psychologists. Failure to acknowledge these problems can and often does lead to sub-optimal asset-allocation decisions. But implementing a system that omits these human errors allows investment strategies to be chosen that are significantly more objective, in both their formulation and execution.”).
283. See Stengel, supra note 56.
285. Id. (providing, for example, that despite one startup pointing out during their pitch that there are three million Muslim consumers in the United States, “and that the average Muslim woman wears four hijabs a day and owns more than 100,” VC firms insisted that the “market was too small”).
public faster than those in traditional tech fields. In one prominent example, the co-recipient of the 2020 Nobel Prize in chemistry, Jennifer Doudna, founded two unicorns: Caribou Biosciences, a CRISPR gene editing company, valued at $1.4 billion and Editas Medicine, another gene-editing company, valued at $4 billion. Both biotech companies were funded through IPOs, rather than VC firms.

AI usage has been largely successful in making loans available to those who did not traditionally qualify for them. To combat biases in the banking industry, lenders incorporated algorithms into decision-making processes that considered numerical information like borrower income, assets, credit scores, debt, liabilities, and cash reserves (rather than face-to-face interaction), thus resulting in increased loans to women and underrepresented parties. A University of California, Berkeley study found that FinTech companies using algorithmic processes discriminated 40% less as compared to face-to-face lending. Similarly, data derived from a digital lending platform evidenced a 500% increase in BIPOC female borrowers in 2020. In addition, the U.S. government notes that “big data provides opportunities for innovations that reduce discrimination and promote fairness and opportunity, including . . . removing subconscious human bias . . . .” Recently, the Federal Trade Commission emphasized that AI tools in lending are both “empirically derived, [and] demonstrably and statistically sound.”

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288. Id.

289. Id.

290. See Laura Grace Tarpley, Research Shows Online Mortgage Lenders Are Less Likely to Discriminate Against Applicants than In-Person Lenders, BUS. INSIDER (June 12, 2020), https://www.businessinsider.com/personal-finance/online-mortgage-lenders-less-likely-discriminate-2020-6 [https://perma.cc/W4T2-AJN]; see also Miller, supra note 273 (explaining that potential borrowers can access these digital mortgage websites and input financial information without having to reveal their gender or racial background). See generally Townsend, supra note 273 (providing examples of such lenders including Better.com, Rocket Mortgage by Quicken Loans, SoFi, Vylla, and Guaranteed Rate).


294. Andrew Smith, Using Artificial Intelligence and Algorithms, FTC BUS. BLOG (Apr. 8, 2020), https://www.ftc.gov/news-events/blogs/business-blog/2020/04/using-artificial-intelligence-algorithms [https://perma.cc/4U77-G1UZ] (“The lending laws encourage the use of AI tools that are . . . based on data derived from an empirical comparison of sample groups, or the population of creditworthy and noncreditworthy applicants who applied for credit within a reasonable preceding period of time; that they are developed and validated using accepted statistical principles and methodology; and that they are periodically revalidated by the use of appropriate statistical principles and methodology, and adjusted as necessary to maintain predictive ability.”).
By utilizing AI, investors can save time and money, increase efficiencies, gather intelligence, and improve pricing models in prospective startups. By accessing startup data, AI can predict a wide range of outcomes, including potential acquisitions, going public, subsequent funding rounds, and company closures. The accumulated data allows firms to establish separate portfolios that identify high-risk and/or high-reward startups, as well as lower-risk startups. Studies confirm the positive utility of AI usage in analyzing startups. In one Imperial College of London study, a machine-learning model analyzed 64,197 startups over a four-year period, correctly identifying successful investments in approximately 50% of early-stage companies, thereby outperforming the average VC fund. AI applications are also becoming more integral to the investment industry. Hedge funds using AI report triple the returns provided by actively managed funds. Danelfin, a retail financial advice company, used AI to evaluate and score individual stocks, which provided returns of 35.2% annually over a three-year period.

When used responsibly, AI can help increase investment diversification by identifying and eliminating human biases linked to unconscious factors. Although only a small fraction of VC firms currently use AI to mitigate unconscious bias in their funding decisions, AI is increasingly being used by investment managers with incredible results. Of those firms already utilizing AI platforms, a number are founded or co-founded by women. Fundr, for example, is an investment marketplace for (largely) angel investors that allows startups to share quantitative


296. See Corea, supra note 295.

297. See id.


303. Sean J. Chan, Superior Portfolio ROI with Artificially Intelligent Algorithms, SEEKING ALPHA (Jun. 25, 2017), https://seekingalpha.com/article/4083754-superior-portfolio-roi-artificially-intelligent-algorithms [https://perma.cc/N6Q-DGMF] (“While some mutual funds and other traditional investment firms boast consistent portfolio returns between 5-8% annually, a recent emergence in firms specializing in artificially-intelligent or machine-learning algorithms are averaging between 13% to 5,200% in annualized returns.”).
data to minimize unconscious biases.\textsuperscript{304} This process has significantly diversified Fundr’s portfolio, which now identifies 56\% of its founders as BIPOC, and 44\% as females.\textsuperscript{305} Fairview Capital likewise uses a data-driven platform that better diversifies its startup funding, resulting in 38\% of investment funds being directed at women and BIPOC founders.\textsuperscript{306} Female Founders Faster Forward uses a Startup Investment Model Index to create objective measurements, thereby providing equal opportunity for first-time BIPOC founders to access VC funding.\textsuperscript{307} Connetic Ventures uses AI to analyze data from 3,000 startups.\textsuperscript{308} Although its initial purpose was to streamline due diligence and discover opportunities for positive returns, Connetic Ventures inadvertently found that 52\% of the startups identified by AI were founded by female and BIPOC entrepreneurs.\textsuperscript{309} Currently, 36\% of the firm’s portfolio includes female CEOs, and 18\% of its startups are led by BIPOC executives.\textsuperscript{310}

VC firms are not only losing opportunities in emerging markets, but they are also failing to increase their profits. The present model of funding companies founded by those who look like the founders of tech companies in the 1990s, funding startups simply because other firms have funded them, and relying on gut instinct have led to VC partners’ poor investment choices and outcomes.\textsuperscript{311} By taking advantage of the enormous advances in AI technology, VC firms can improve their efficiency and investment outcomes, while simultaneously reducing the subjectivity of their decisions, thus resulting in increased diversity among the founders they fund. Incorporating objectivity through the use of data analytics and machine learning into investment decision-making will improve decisions and counter the effect of affinity bias, gender bias, stereotyping, pattern matching, and


\textsuperscript{309} Id.

\textsuperscript{310} Id.

\textsuperscript{311} See supra Part I. For example, despite the paltry amount of funding directed to Black and Latino female-led startups, their failure rate is significantly lower than the national average of all VC-funded startups. The State of Black & Latinx Women Founders, DIGITAL UNDIVIDED (2020), https://www.projectdiane.com [https://perma.cc/HTQ7-KPSD] (finding a failure rate of 27\% compared to the national average of 40\%).
the other biases discussed in Section I.D. that result in the underfunding of women and BIPOC founders.

Based on the previous analysis, the following Part outlines the steps needed to disrupt VC culture. Part III explains how policy and legal initiatives, along with the promotion of objective investment decision-making through the use of AI, will increase diversity within VC firms and the startups they fund, as well as improve overall decision-making.

III. A PROPOSAL TO DISRUPT VC CULTURE

As demonstrated, heuristics and biases permeate VC firms’ investment decisions, resulting in substantially underfunded female- and BIPOC-led startups, and a lack of profit on the vast majority of investments made.312 Given the significant changes in society and technology since the 1990s and the new entrants into the VC marketplace, the VC industry must adapt. Because the VC industry’s investment model has remained rigid for the past thirty years, impactful change is unlikely without disruption. Building on the recent momentum from the #MeToo and Black Lives Matter movements,313 this Article proposes a multipronged solution to address the outdated VC paradigm, motivate behavioral changes, and leverage technological advancements in investment decision-making. Influential scholars Christine Jolls, Sunstein, and Thaler describe how law can be designed to deter socially undesirable behavior.314 It is widely accepted that positive and negative reinforcement induce behavioral change.315 In the legal system, positive reinforcement (known as a carrot strategy), and negative reinforcement (recognized as a stick strategy), are implemented to enforce social norms, encourage compliance, and deter violations.316 Based on the analysis in Part II, this Article offers a tripart solution visualized in Figure 1: (A) creating tax incentives to increase internal firm diversity and initiate prosocial behavior within firms, (B) establishing legal accountability to address investor sexual harassment claims and influence cultural norms, and (C) promoting AI to facilitate unbiased and high-quality investment decision-making practices.

312. See supra Part I.
314. See generally, Jolls, Sunstein & Thaler, supra note 46.
The following sections describe the three interrelated and necessary components of the solution incorporating the behavioral insights gained from the analysis in Part II.  

**A. Leveraging the Carrot Through Tax Credits**

A *carrot* is a positive reinforcement strategy that refers to the provision of incentives to encourage compliance with a desired outcome. The first part of the tripart solution leverages the carrot strategy by incentivizing VC firms to hire and promote women and BIPOC to partner-level positions with decision-making power. Studies substantiate that people are more likely to engage in voluntary behavior when it is framed as *advantaging* those who act desirably (rather than disadvantaging those who do not). Rewards are an effective way to encourage compliance.

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318. Kim & Lim, supra note 315, at 3.

desired behavior. As such, we propose rewarding firms that actively diversify their leadership.

Research demonstrates that tax incentives are effective in promoting prosocial economic behavior. Although a variety of tax incentives exist, such as prizes and grants, tax credits reign predominant. Directly applicable to the VC industry, Internal Revenue Code (IRC) Section 1202 provides non-corporate taxpayers a 100% capital gains tax exclusion on the sale or exchange of qualified small business stock (QSBS) acquired in 2010 and after, so long as it has been held for at least five years. Enacted in 1993, this tax credit incentivizes individuals to invest in small businesses. Another credit that particularly targets VC founders in the tech industry is IRC Section 174 which allows taxpayers to immediately deduct research and development expenses connected with their business ventures, thereby reducing their tax bases.

Various state agencies likewise offer tax credits that promote VC investments. For example, Arizona’s Angel Investment Bill offers tax credits of 10% annually over three years, to a total maximum of 30%, for investments of at least $25,000 in qualified Arizona small businesses. In the law’s first decade, 125 small businesses reportedly received $62 million in certified investments.

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323. See 26 U.S.C.A. § 1202(a)(4), (d)(1) (West 2021) (QSBS is a C corporation whose gross assets do not exceed $50 million on or immediately after its stock issuance).


325. 26 U.S.C.A. § 174(a) (West 2017); see also Kisska-Schulze & Davis-Nozemack, supra note 73, at 1031.


states provide tax credit programs targeting investors. However, none of the available tax credits—either at the federal or state levels—specifically incentivize gender or racial diversification efforts within VC firms. This is surprising given that Congress provides tax credits to promote the hiring of other protected classes, like U.S. veterans with the Veteran Opportunity to Work Act of 2011. In a similar light, federal and state tax credit programs are available to encourage investment in undercapitalized communities.

Because tax incentives are effective in modifying behavior, this Article proposes that Congress promulgate laws that provide firms with a tax credit for every female and BIPOC successfully elevated or hired to partner-level status. Such an initiative could be added to President Joe Biden’s proposed 2024 budget, which would fit squarely with his National Strategy on Gender Equity and Equality, the first-ever national strategy on advancing gender equality. To incentivize VC firms to increase the number of women and BIPOC to partner-level status, this Article suggests that the following (or similar) language be considered for inclusion in the IRC as an available VC Diversity Tax Credit:

Venture capital firms that hire or promote female and Black, Latino, Indigenous and Native American persons, Asian American, Native Hawaiian, and Pacific Islander, and other persons of color to partner-level status within the firm shall be entitled to the VC Diversity Tax Credit. Each credit shall be applicable for two years following the hiring or promotion of such individual to partner-level status. In addition, a tax credit may be taken for every female or individuals identifying as Black, Latino, Indigenous and Native American persons, Asian American, Native Hawaiian, and Pacific Islander, and other persons of color hired or promoted within the three years prior to the effective date of this proposed legislation.

See generally Douglas Cumming & Dan Li, Public Policy, Entrepreneurship, and Venture Capital in the United States, 23 J. CORP. FIN. 345 (2013) (describing an EU study analyzing the effectiveness of tax incentives on Small and Medium Enterprises (SMEs) that found tax incentives to have a positive impact on the VC investment industry both abroad and in the U.S.).

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329. See id.


331. See Michelle D. Layser, The Pro-Gentrification Origins of Place-Based Investment Tax Incentives and a Path Toward Community Oriented Reform, 2019 Wis. L. Rev. 745, 747 (2019); see also I.R.C. §§ 1400Z-1, 2.

332. PricewaterhouseCoopers LLP, Effectiveness of Tax Incentives for Venture Capital and Business Angels to Foster the Investment of SMEs and Start-Ups, EUROPEAN COMM’N, at 52, 54 (June 2017), https://ec.europa.eu/taxation_customs/sites/taxation/files/final_report_2017_taxind_venture-capital_business-angels.pdf [https://perma.cc/5SQS-99KB]. See generally Douglas Cumming & Dan Li, Public Policy, Entrepreneurship, and Venture Capital in the United States, 23 J. CORP. FIN. 345 (2013) (describing an EU study analyzing the effectiveness of tax incentives on Small and Medium Enterprises (SMEs) that found tax incentives to have a positive impact on the VC investment industry both abroad and in the U.S.).


date of the regulation. This credit may be taken for each hire or promotion made for the ten-year period following the effective date of the statute.

The purpose of the three-year retroactive period is to reward firms that have already taken measures to improve diversity. The ten-year window will allow firms time to hire, advise, mentor, and otherwise ensure that female and BIPOC employees have the requisite experience to successfully elevate to partner-level status. In addition, the impact of this tax credit should be audited, evaluated, and extended as necessary based on accumulated results over the established time period. Further, the law should allow for bonus credits for firms maintaining an established diversity threshold (e.g., a 30–40% overall partner-level diversity demographic) over a select time period (e.g., five years). Bonus credits would further incentivize firms to target mid- to long-term investments in female and BIPOC partner relationships. Similar tax credits could be provided by the states.

This reward opportunity leverages insights from behavioral decision theory by first creating an incentive for compliance that would increase the presence of female and BIPOC leaders within these firms. This in turn would create a new social norm to counter the negative impact of the heuristics and biases discussion in Parts I and II. In addition to motivating firms to elevate women and BIPOC to partner-level status, measures must be taken to extend antidiscrimination protections to founders. While carrots are effective at encouraging behavior, sticks help to deter undesirable behavior. The next Section proposes updating employment law to serve as a stick in penalizing sexual harassment in the VC industry.

B. Using Sticks to Ensure Legal Accountability

A stick is a negative reinforcement strategy referring to the imposition of penalties to deter undesirable behavior. To both deter sexual harassment and create a new norm for the treatment of women in VC, the second part of the tripart solution is the incorporation of the stick strategy to penalize discrimination and sexual harassment by VC firms. Some studies show that laws that penalize undesirable behavior can serve as a deterrent. However, mandates that include

335. This retroactive application leverages research from the behavioral sciences demonstrating that the perception of fairness increases compliance. Firms that have already modernized are able to receive the incentive. See generally Tom R. Tyler, Procedural Fairness and Compliance with the Law, 133 SWISS J. ECON. STAT. 219 (1997); Ernst Fehr & Klaus M. Schmidt, A Theory of Fairness, Competition, and Cooperation, 114 Q. J. ECON. 817 (1999).


337. Giuseppe Dari-Mattiacci & Gerrit De Geest, Carrots, Sticks, and the Multiplication Effect, 26 J. L. ECON. ORGAN. 365, 366 (2010) (“Sticks can, under some conditions, be multiplied. That is, the same stick can be applied repeatedly to incentivize the same party in different periods or several parties simultaneously.”).

338. Kim & Lim, supra note 315, at 3.

both penalties and rewards, are more effective at reducing undesirable behavior. As discussed, loss aversion results in greater behavioral change because people are more willing to take action to avoid punishment than to achieve benefit. In addition, legal consequences strongly influence cultural norms and, as a result, behavior. Laws that penalize undesirable behaviors not only provide legal accountability and remedies for those harmed but also serve as a signal that society eschews such conduct.

Given the continued disparity across gender and racial lines in VC, antidiscriminatory protections must evolve to better protect women, BIPOC, and all underrepresented parties by providing legal accountability. Already, select states have taken steps to extend antidiscrimination laws to VC firms. In New York, for example, an employer may be liable to a non-employee contractor, subcontractor, or other person who provides a contract service for sexual harassment in the workplace. Eight states (and New York City) impose laws that protect independent contractors from discrimination. Minnesota and Rhode

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341. See discussion supra notes 253–255; see also Mahmoodi, supra note 255, at 32 (“[R]ewards and punishments are perceived as deviations from a neutral reference point, with rewards being perceived as gains and punishments being perceived as losses. As the value function for losses is steeper than for gains, the displeasure associated with losses is up to twice as intense as the pleasure associated with gains.” (citations omitted)).

342. See discussion supra notes 256–262.

343. Tokson & Waldman, supra note 258, at 280.


345. N.Y. EXEC. LAW § 296-d (McKinney 2019); see also Mohan, supra note 250 (noting that an existing concern with New York’s statute is that it fails to identify how to protect against work-related, out-of-office discriminatory behavior—such as might occur during an informal meeting, dinner, or over drinks).

346. California makes it unlawful for an employer or a person who provides services pursuant to a contract to direct negative, inappropriate, or unwanted conduct at a worker based on certain protected characteristics. Those can include the employee’s race, disability, religion, sex, gender identity, marital status, sexual orientation, or pregnancy. See CAL. GOV’T CODE § 12940(j) (West 2020). Illinois law protects contractors and consultants against harassment. See Illinois Human Rights Act, 775 ILL. COMP. STAT. ANN. 5/2-102 (West 2020). Maryland law provides protections against discrimination for independent contractors to the same extent as employees. See MD. CODE. ANN., STATE GOV’T § 20-601(c) (West 2019). Minnesota law protects those doing business with or who have a contract with a person providing a service. See MINN. STAT. ANN. § 363A.17 (West 2020). New Jersey law protects a person who contracts with someone from discrimination in the making of a contract. See N.J. STAT. ANN. § 10:5-12.8 (West 2020); J.T.’s Tire Serv., Inc. v. United Rentals N. Am., Inc., 985 A.2d 211, 215...
Island prohibit businesses from refusing to contract with someone on the basis of race, color, religion, sex, disability, age or national origin, or other protected categories except for a legitimate business purpose. California’s Unruh Civil Rights Act of 1959 (Unruh Act) prohibits business establishments from discrimination based on a person’s sex, race, color, religion, national origin, disability, marital status, and other protected and immutable characteristics, requiring “full and equal accommodations, advantages, facilities, privileges or services in all business establishments.” Effective 2019, Section 51.9 of the Unruh Act was amended to add “investor” to the list of persons prohibited from sexual harassment.

This Article proposes that state legislatures implement legal protections that extend to the investment industry and better align with the spirit of antidiscrimination law. As such, this Article recommends that individual state employment laws be updated to expressly include VC as part of their coverage:

It shall be unlawful for any employer or investor to engage in the sexual harassment of an employee, independent contractor, or founder or entrepreneur seeking funding. Sexual harassment is defined as any unwelcome sexual advances, requests for sexual favors, or any conduct of a sexual nature when (1) submission to such conduct is made either explicitly or implicitly as a term or condition of an individual’s employment, granting of contract, or funding (e.g., quid pro quo, or “this for that”); (2) submission to or rejection of such conduct by an individual is used as the basis


347. R.I. GEN. LAWS ANN. § 42-112-1 (West 2012) (“All persons within the state, regardless of race, color, religion, sex, disability, age, or country of ancestral origin, have, except as is otherwise provided or permitted by law, the same rights to make and enforce contracts, to inherit, purchase, to lease, sell, hold, and convey real and personal property, to sue, be parties, give evidence, and to the full and equal benefit of all laws and proceedings for the security of persons and property, and are subject to like punishment, pains, penalties, taxes, licenses, and exactions of every kind, and to no other.”); MINN. STAT. § 363A.17 (West 2020) (“It is an unfair discriminatory practice for a person engaged in a trade or business or in the provision of a service: . . . (3) to intentionally refuse to do business with, to refuse to contract with, or to discriminate in the basic terms, conditions, or performance of the contract because of a person’s race, national origin, color, sex, sexual orientation, or disability, unless the alleged refusal or discrimination is because of a legitimate business purpose.”).


349. See id.; CAL. CIV. CODE § 51.9; see also Joseph E. Abboud, California Wants to Crack Down on Sexual Harassment by Venture Capitalists, KMBLEGAL.COM (Oct. 17, 2017), https://www.kmblegal.com/employment-law-blog/california-wants-crack-down-sexual-harassment-venture-capitalists [https://perma.cc/Q4XD-AXMS] (“If venture capitalists know that they can no longer exploit women entrepreneurs with impunity, more women entrepreneurs might gain access to funding and take strides to counteract the gender imbalance in Silicon Valley.”).
for employment, contracting, or funding decisions affecting such individual or their business or work; or (3) such conduct has the purpose or effect of interfering with an individual’s work performance or business or creating an intimidating, hostile, or offensive environment. This definition further prohibits harassment based upon an individual’s actual or perceived gender identity or sexual orientation.

Extending antidiscrimination laws to the VC industry will serve as a stick to penalize injurious VC firms. Because laws serve as cultural norms, the risk of potential penalty will motivate firms to avoid behaviors that could be perceived as sexual harassment and acknowledge that society does not condone this behavior. Combining the use of both carrots and sticks will facilitate cultural and behavioral shifts within the firms; however, VC firms must likewise actively work to mitigate the impact of heuristics and biases from their investment decision-making. The following Section outlines how the use of AI can accomplish this.

C. Promoting Artificial Intelligence in Investment Decision-Making

The third part of the tripart solution is the promotion of data-driven investment decision-making by limited partners in VC funds. As discussed supra, heuristics and biases plague decision-making in VC firms, including herd mentality, gender bias, cupcake stigma, racial stereotyping bias, pattern matching, similarity or affinity bias, and network homophily. Not only does subjective decision-making result in the underfunding of female and BIPOC startups; it also results in unsound and unacceptably risky investment decisions. Objective criteria can serve to mitigate such biases, resulting in more consistent decisions based on data, rather than the fear-of-missing-out mentality.

As explained in Section II.C., the use of AI in investment decision-making not only provides better investment outcomes, but a body of research shows that it is also effective in reducing the impact of heuristics and biases resulting in increased funding to female- and BIPOC-led startups. Although AI deployment across industries is on the uptick, there is some anxiety regarding the use of AI, including algorithmic aversion and fear of machine bias. The concern is that

350. See Tokson & Waldman, supra note 256.
351. See supra Section I.D.
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with quality data at the input. Houser, As computer scientists indorse: “Garbage in, garbage out” automated machine learning must begin with the reason for biased outcomes).

671, 671 (2016) (“[A]n algorithm is only as good as the data it works with.”).

In his article, Algorithms, Correcting Biases, Sunstein explains that fears over algorithmic bias are not supported by research, and decisions made by algorithm may perform “much better” than humans. Even judges, whose job it is to be impartial, are subject to cognitive biases despite their training. In fact, current research demonstrates “that algorithms can overcome the harmful effects of cognitive biases.” Sunstein goes on to explain how “algorithms can be designed so as to avoid racial (or other) discrimination in its unlawful forms.” Essentially, as explained earlier, people are not very good at making predictions. They suffer from availability heuristic, overconfidence bias, validity illusion, and confirmation bias.


356. To illustrate, consider the Amazon.com example. In 2014, Amazon’s machine learning specialists created an AI recruiting tool to mechanize job applicant searches. Unexpectedly, the AI software produced anything but neutral results; instead, methodically favoring male candidates over female, discounting degrees earned from women’s colleges, and lessening the value of resumes explicitly identifying female applicants. Upon closer examination, Amazon discovered that its computer models were scrutinizing applicants by discerning resume patterns historically submitted. Because Amazon’s previous software technician hires were overwhelmingly male, the AI software charted similar patterns previously adopted by humans. Relying on prior data, the AI software learned that “ideal” applicants stem from male-specific resumes. Amazon’s AI did not acquire such bias of its own accord; it was the unconscious bias of human programmers and unbalanced data that caused the discriminatory results. As computer scientists indorse: “Garbage in, garbage out” automated machine learning must begin with quality data at the input. Houser, supra note 273, at 334–35. See also Kimberly A. Houser, Artificial Intelligence and the Struggle Between Good and Evil, 60 WASHBURN L.J. 475, 482–86 (2021) (describing the reason for biased outcomes).


358. CTR. FOR DATA INNOVATION, supra note 357 (emphasis added).


360. Sunstein, supra note 279 (explaining the earliest research by Meehl, demonstrating that statistical predictions are more accurate than those of clinicians due to clinicians’ cognitive biases). See generally PAUL E. MEEHL, CLINICAL VERSUS STATISTICAL PREDICTION: A THEORETICAL ANALYSIS AND A REVIEW OF THE EVIDENCE (Echo Point Books & Media 2013) (1954).

361. Sunstein, supra note 279.

362. Id. at 500 (citing research on the variation between judges and algorithms in pretrial release decisions concluding that, on every measure, the algorithms outperform the judges).
bias. By incorporating objective decision-making through AI, VC firms can make more accurate and fairer investment decisions.

Disrupting the VC industry requires the reintroduction of due diligence, and a commitment by firms to fund a larger and more varied assortment of potentially successful investments, rather than submitting to the current modus operandi where significant funds are furnished to a miniscule number of white-male-led startups in the hopes of finding a unicorn. Given that less than 1% of VC-funded startups will become a unicorn, such guesswork only serves to reinforce funding speculation and lack of returns by VC funds.363 AI can objectively transform the entire VC industry landscape, opening the door for a greater number of successful startup opportunities, while simultaneously diversifying firm investments. As multiple scholars have ascertained, incorporating AI into the decision-making process can mitigate the impact of noise and human bias and provide more accurate decisions than those furnished by human experts.364 Firms that utilize objective, data-driven approaches to investment platforms will outperform those that do not. Incorporating data analytics into VC investment decision-making will increase profit opportunities, expand portfolio diversification, and boost funding to female- and BIPOC-led startups.

CONCLUSION

As the VC market changes with corporate VC firms and institutional investors infringing on their space, the entire VC industry is at a critical juncture. While the economic fallout from the COVID-19 pandemic has been far-reaching, it has been especially devastating for women and BIPOC.365 Too few women secure VC investment funding,366 and an even smaller percentage sit at the helm of VC firms.367 Equally troubling is the lack of racial diversity within VC firms and their funded ventures.368 Given that the overwhelming majority of VC partners are white and male, it is unsurprising that such homogenous demographics replicate themselves in funded startups.369 This type of funding allocation is counterintuitive, however, considering that female- and BIPOC-led startups enjoy greater success, broader market advantage, and increased profits, thus resulting in more robust VC performance.370 By failing to invest in gender- and ethnically-diverse startups, VC firms harm not only their own returns, but also those of their investors.

The outdated paradigm under which VC firms have continued to operate for the last thirty years derives from four key factors. First, investors have shifted away
from serving as advisors to funded startups, to instead relinquishing due diligence, engaging in wild speculation, and appealing to herd mentality.\(^{371}\) Second, sexism within VC firms results in homogeneity, making it remarkably difficult for women to break in and elevate in status.\(^{372}\) Third, discrimination and sexual harassment present significant obstacles to funding female- and BIPOC-led startups.\(^{373}\) Finally, the majority of investors, unaware of their own cognitive and unconscious biases, rely on gut instinct rather than objective criteria to make funding decisions, resulting in meager returns on their investments.\(^{374}\)

Behavioral decision theory provides helpful insights into why VC firms continue investing in such an archaic manner, and why it has been so difficult for them to change.\(^{375}\) To invoke necessary transformation, the current VC culture demands disruption. This Article posits the need for increased diversity within VC firms to mitigate sexism:\(^{376}\) the closure of legal loopholes that prevent VC firms from being held accountable for sexual harassment and discrimination claims,\(^{377}\) and the incorporation of objective criteria through the use of AI during startup evaluations in order to improve investor decision-making and mitigate the negative impact of heuristics and biases.\(^{378}\) This Article proposes a trifecta of measures to promote cultural and behavioral changes within VC firms, namely the combined use of carrots in the form of tax credits,\(^{379}\) sticks in the form of expanded employment law to ensure legal accountability,\(^{380}\) and a shift to data-driven investment decision-making in VC.\(^{381}\)

This proposal seeks to disrupt VC culture, incentivizing firms to evolve, diversify, and advance technologically. VC firms that tap into the trillion-dollar emerging market of women- and BIPOC-led startups stand to thrive. The time is ripe for creating a true meritocracy within the VC industry, invoking an industry-wide culture where gender and racially diversified innovation have the opportunity to flourish. The next generation of unicorns will not be those founded by the white male tech founders of the 1990s, but instead by women and BIPOC. VC beware.

\(^{371}\) See supra Section I.A.
\(^{372}\) See supra Section I.B.
\(^{373}\) See supra Section I.C.
\(^{374}\) See supra Section I.D.
\(^{375}\) See supra Part II.
\(^{376}\) See supra Section II.A.
\(^{377}\) See supra Section II.B.
\(^{378}\) See supra Section II.C.
\(^{379}\) See supra Section III.A.
\(^{380}\) See supra Section III.B.
\(^{381}\) See supra Section III.C.