TRENDS IN ENTREPRENEURSHIP

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Agenda

• What Is the Trends in Entrepreneurship Report?
• Behind the scenes - Production
• How to use and contribute to the report
• Highlighting a few trends
• Call to action
• Additional Resources from the Institute
• Q&A
What is the Trends in Entrepreneurship Report?

- The Kenan Institute of Private Enterprise and its affiliated UNC Entrepreneurship Center produced the inaugural Trends in Entrepreneurship Report in January 2020 in an effort to broaden the conversation around key issues in Entrepreneurship and Innovation. We have produced two special topic updates in June and November 2020.
- The next annual report will be released in April 2020 at the virtual Kenan Institute Frontiers of Entrepreneurship Conference.
- All reports and related content can be found here: [https://frontiers.unc.edu/](https://frontiers.unc.edu/)
Behind the Scenes: The Producers

About the Kenan Institute of Private Enterprise (https://kenaninstitute.unc.edu/)

• The Kenan Institute of Private Enterprise is a nonprofit, nonpartisan think tank within UNC Kenan-Flagler Business School.
• Together with our affiliated centers, we disseminate research and convene diverse groups of cross-sector leaders to address the most pressing challenges facing business today.
• We translate research from Kenan-Flagler Business scholars and disseminate through various content vehicles including our Kenan Insight Series, white papers, video, social media, and more.

About the UNC Entrepreneurship Center (https://eship.unc.edu/)

• Affiliated center of the Kenan Institute
• The Entrepreneurship Center inspires, motivates, and develops entrepreneurial leaders from diverse backgrounds who can recognize opportunities and solve complex problems that lead to positive social change. They achieve this by connecting our world-class research with our exceptional hands-on teaching and practice.
# Behind the Scenes: The Thought Leaders

## Kenan-Flagler & UNC Faculty
- Prof. Chris Bingham, area chair for Strategy & Entrepreneurship
- Prof. Greg Brown, Kenan Institute Executive Director & finance faculty
- Prof. Maryann Feldman (public policy & finance)
- Prof. Mahka Moeen (S&E)
- Prof. Paige Ouimet (finance)
- Prof. Christian Lundblad (finance)
- Prof. Jim Johnson (S&E)
- Eship working group – Interdisciplinary group of scholars across UNC

## Partner Schools (affiliated faculty)
- Wharton School
- Stanford Technology Ventures Program
- Polsky Center for Entrepreneurship and Innovation at U. of Chicago
- Duke I&E
- Yale School of Management

## Industry Influencers
- Amy Nelson, CEO, Venture for America
- Arlan Hamilton, Founder and Managing Partner, Backstage Capital
- Ryan Decker, Senior Economist, Federal Reserve Board
- John Dearie, Founder & President, Center for American Entrepreneurship
- Among others...

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The Kenan Institute Research Services and External Affairs teams, plus the UNC Entrepreneurship Center provided research, writing, design, and editing support.
Themes In Entrepreneurship

Annual Report
• Funding
• Teams and Talent
• Ecosystems
• Emerging Technology
• DEI (as a thread throughout)

June Update
• Policy Response to COVID-19 – Economic Fallout for Small and Entrepreneurial Firms

November Update
• Diversity
  • Immigrant Entrepreneurship
  • Recruiting and Hiring Diverse Teams

Trends from Annual Report:
- Laying the Groundwork: The State of American Business
- The State of Entrepreneurship: Is it Really in Decline?
- The Path of Success No Longer Leads to an IPO
- The Continued Rise of Private Capital
- VC Markets Are Now Global
- Is the China VC Boom Over or Just Pausing?
- Are Unicorns Losing Their Magic?
- Start-up Funding in the U.S. Remains Highly Concentrated
- VC Gender Funding Gap
- Minority Founders Underrepresented in Attaining VC Backing
- Underrepresentation in VC Firms
- Federal Government Business Funding
- Alternative Sources of Funding Arise to Support Non-traditional Ventures
- Recent Federal and State Policies
- Demographics of American Entrepreneurs
- Building and Supporting Founding Teams
- How Do Entrepreneurs Compete for Talent?
- Entrepreneurial Ecosystem: Coworking, incubators and accelerators: Which is best for your business?
How to Use and Contribute to the Report

This is how you can use and contribute to this Trends Report:

• **Use/Share It:** This report starts to analyze a number of different subject areas to highlight trends and ensure that the facts around entrepreneurship are presented and well understood.

• **Discuss It:** This report also highlights a number of subject areas that are still under debate by many thought leaders. The hope is that by understanding all sides of those positions, practitioners and policy makers can make better decisions. We hope this report helps scholars to identify additional new research topics.

• **Help Us With Version 2.0:** This report is meant to highlight gaps in the current research and literature to stimulate further academic and industry exploration and research in these areas. If you have ideas for future research or questions about the report, please reach out to us at frontiers@kenan-flagler.unc.edu.
The State of Entrepreneurship: Is it Really in Decline?
Two Schools of Thought

• **Yes.** There has been a decline in entrepreneurship as seen by the U.S. Business Dynamism data.

• **Not exactly.** If quality of ventures is taken into account, overall quality of entrepreneurship has increased and higher quality, high-growth ventures have received increased levels of funding.

• Other trends affecting the view of the decline in entrepreneurship are related to R&D and technology entrepreneurs.
Entrepreneurship is in Decline

- There has been a steady decline in the firm and establishment startup entry and exit rates, indicating a downward trend in U.S. Business Dynamics Statistics.

- The decline in firm entry is most pronounced among fast-growing young firms. This is troubling since fast-growing young firms have traditionally been a large source of economic growth and innovation.

- Evidence demonstrates a declining trend in job reallocation rates. Job reallocation, which is the sum of job creation and destruction, has historically been seen as a measure of moving resources to more productive businesses.

**Definition:**

**Business dynamism:** Business Dynamism is the process of job creation and destruction, establishment birth and deaths, and firm startups and shutdowns.

Why does it matter? “Creative destruction”, “business churn” or “up-or out” process is critical for innovation, economic job creation and growth and competition. With less economic churn, there tends to be less job switching, less job growth, small wage increases and lower overall productivity.

Source: U.S. Census Bureau, Business Dynamics Statistics (BDS); Decker, Haltiwanger, Jarmin, & Miranda, 2018; Decker, Haltiwanger, Jarmin, & Miranda, 2016; Goldschlag & Tabarrok, 2018; Federal Reserve
However, Entrepreneurship Quality is Increasing

“Simply put, alternative definitions of entrepreneurship suggest different assessments of the state of American entrepreneurship.” - Guzman and Stern, 2016

• Entrepreneurship, especially high-quality entrepreneurship, follows a cyclical pattern and is affected by the overall market.

• There is an upward trend of higher quality startups. The overall level of high-quality startups was higher from 2000 to 2010 than from 1990 to 1995.

• Starting in 2010, there was another upward trend of high-quality firms.

• There has been an increasing trend of venture capital funding of growth-oriented firms since the Great Recession.

How to measure high quality?

Guzman and Stern developed a new methodology for capturing the differences in startup quality. Using predictive analytics along with firm registration, firm characteristics and other variables, the authors developed three statistical instruments to measure quality of entrepreneurship.

Here’s an example of a case where we need better data. The numbers showing a decline in entrepreneurship are based on the census data, which captures lots of cases that most people would not consider entrepreneurship, more cases of self-employment than of founding a firm.

Guzman and Stern’s numbers, while a useful innovation, skew toward capturing a particular type of startup, companies that are attractive to venture capitalists. But venture capital funds only a small fraction of startups, even of the fastest-growing firms, so their numbers cover only a fraction of the ecosystem.

Considering a broader range of indicators, it seems likely that entrepreneurship has declined somewhat but has also shifted in its nature and focus.
**EXPERT INSIGHT**

At Backstage Capital, our experience in early stage venture capital shows entrepreneurship is not in decline—and, in fact, we are seeing the opposite trend.

As we source entrepreneurs for investment, we are seeing a higher number of high-potential entrepreneurs at the early stage (pre-seed and seed level) year over year. An important distinction is that patterns of entrepreneurship growth or decline vary when looking at activity by demographic group. For example, it is clear that the number of women entrepreneurs – and in particular, women of color entrepreneurs – is growing.

Maryann Feldman
Faculty Director, CREATE; Professor of Finance, UNC Kenan-Flagler Business School; Heninger Distinguished Professor in Public Policy, UNC Chapel-Hill

Professor Feldman directs CREATE, an economic development research center at UNC Chapel Hill’s Kenan Institute of Private Enterprise. She also teaches in the UNC Department of Public Policy and at the UNC Kenan-Flagler Business School. Her research and teaching focus on the geography of innovation, the commercialization of academic research and the factors that promote technological change and economic growth. She leads CREATE’s Economic Development Lab, which works to create and curate a body of research that examines the fundamental determinants of shared economic prosperity. Among her honors, Prof. Feldman was awarded the 2013 Global Award for Entrepreneurship Research. She is the editor of Research Policy, and has written for numerous journals, including the American Economic Review and The Brookings Papers on Economic Policy. Prof. Feldman earned a doctorate in economics and management and a master’s degree in public policy analysis from Carnegie Mellon University. She also holds a bachelor’s degree from Ohio State University.

EXPERT INSIGHT

If we care about prosperity we need to understand the root causes of a decline in entrepreneurial dynamism and use policy to address this shortfall. These discrepancies in research findings raise fundamental questions about the type of entrepreneurship we want to encourage in our society, and also if we want to continue the practice of defining firms in a way that reinforces the existing startup models.

We don’t have convincing explanations for why Haltiwanger and co-authors find a decline in new firm formation. Myriad changes in the American economy—from an increase in student debt to a decrease in community banking—warrant further investigation. Also worth further investigation is the rise of market power, as witnessed by an increase in store and restaurant chains. Feldman, Guy and Iammarino (2019) examine the rise of technology platforms that have established market power that limits competition in the entry of new firms.

Most simply, we need better data on new firm startups. This has proven to be elusive. The census data is the gold standard, but it is not accessible to many researchers and certainly not available to local planners. Secretary of state data is collected for administrative purposes. The addition of a few choice questions about intended activity and number of employees could increase the utility of that data for researchers.
Ryan Decker  
*Senior Economist, Federal Reserve Board*

Dr. Ryan Decker is a macroeconomist researching entrepreneurship, business dynamics, and labor markets. Since 2015, Decker has been working for the Board of Governors of the Federal Reserve System. He was previously an adjunct professor at the University of Maryland College Park and an economist for the Center of Economic Studies at the U.S. Census Bureau from 2011-2015.

The analysis and conclusions set forth here are personal views and do not indicate concurrence by other members of the Federal Reserve Staff or the Board of Governors.

**EXPERT INSIGHT**

If high-quality, innovative entrepreneurship is healthy and robust, when will we see it in the employment and productivity data? We usually motivate the importance of startups based on their contributions to U.S. job creation and productivity growth; do we need to rethink this focus?

Alternatively, there might be other explanations for the discrepancies noted above: productivity mismeasurement (but see Byrne et al. 2016 and Syverson 2017), slowing factor reallocation (Decker et al. 2019) or diffusion of technology across firms (Andrews et al. 2015), lags between initial innovation and wider aggregate benefits, limitations of GDP as a concept for defining productivity, and so on.

But the point is: The discrepancy between aggregate statistics and the anecdotal feel in Silicon Valley (and in the VC funding data) is a real puzzle, and we need more data and research to understand what is driving this and if it is real or not.
Building and Supporting Founding Teams
Who Makes Up Founding Teams?

When forming, co-founding teams tend to:

- Gravitate toward individuals with similar backgrounds and/or experiences.
- Place some importance on “chemistry” or interpersonal fit between individuals.
- Rely on their social capital and networks of friends, family members and work colleagues when forming co-founder relationships.

<table>
<thead>
<tr>
<th>Co-founding Teams – Pros and Cons</th>
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</thead>
<tbody>
<tr>
<td>Advantage</td>
</tr>
<tr>
<td>• Wider skill set and idea creation</td>
</tr>
<tr>
<td>• More resources (financial, physical, networks)</td>
</tr>
<tr>
<td>• Shared experience</td>
</tr>
<tr>
<td>Disadvantage</td>
</tr>
<tr>
<td>• Disagreement, stress, conflict</td>
</tr>
<tr>
<td>• Power struggle and distrust</td>
</tr>
<tr>
<td>• Departure of key member of the founding team</td>
</tr>
</tbody>
</table>

Source: Reynolds, Bygrave, Autio, Cox, & Hay, 2002; Middleton & Nowell, 2018; Aldrich & Kim, 2007; Klotz, Hmieleski, Bradley, & Busenitz, 2014
Co-founders: Gift or Curse?

Prior research suggests that larger founding teams perform better because larger teams have access to more resources, more idea generation, etc. But new research challenges that finding.

Team dynamics on survival:
- Ventures with a sole founder survive longer than those with multiple founders.
- Co-founders are a central cause of startup failure. Up to 65% of startup failures are the result of conflicts among co-founders (Wasserman 2012).

Team dynamics on performance:
- There is no significant difference in firm performance between ventures founded by a solo entrepreneur and those founded by teams.
- Solo founders own about twice as many firms as those founded by teams.
- While significant in non-founder-led firms, team structure had little to no effect on the operating performance of founder-led firms.
- Evidence suggested that the founders were relying more on their own intuition and not as much on their team.

Solo-founder caveat: Many successful solo founders are not actually solo; employees, alliance partners and benefactors act as co-creators.

Source: Greenberg & Mollick, 2018; Howell & Bingham, 2019; Wasserman, 2012; U.S. Census Bureau, 2016 Annual Survey of Entrepreneurs
While much has been written about how new ventures overcome the liabilities of newness, this literature surprisingly does not distinguish between new ventures founded by a single founder or new ventures launched by co-founders. Rather, the number of founders is overlooked as the literature largely refers to founders as a collective, assuming away differences between single or co-founded firms. Such an omission is problematic because it obscures understanding of which ventures experience greater liabilities of newness than others and which liabilities may be particularly problematic for particular founder types.

The literature that does exist suggests that solo-founded ventures should experience greater liabilities of newness and so exhibit lower performance. The logic is that founding a venture is too much for one person. Because of this, most new ventures have co-founders vs. solo founders and most VCs are reluctant to fund a company with only one founder (Wasserman, 2012). In addition, research shows that larger founding teams generally have better entrepreneurial performance (Eisenhardt & Schoonhoven, 1990). Indeed, many argue that the selection of co-founders is the most important decision in starting a new venture and that more unicorns – i.e., extremely high-performing new ventures – such as Google, Apple, Microsoft, Intel, YouTube, Skype, Yahoo, Yelp, Twitter and Facebook – have all been started by co-founders, not solo founders.
However, the literature is largely silent on whether and when solo-founded ventures would perform as well as or even better than co-founded ventures. For example, some work suggests that co-founder challenges are a central cause for new venture failure. In particular, co-founders often face role dilemmas (e.g., overlapping roles vs. division of labor) as well as reward dilemmas (division of equity and control) that could exacerbate rather than mitigate liabilities of newness. Given these conflicts among co-founders, it might be that solo founders could equal or outperform co-founders. As support, organizations such as Mint, Amazon, Tumblr, ServiceNow, FireEye and RetailMeNot are all solo-founded ventures worth more on average than companies with co-founders. Further, it might well be that some solo founders could address liabilities of newness through their prior knowledge and networks and so be less likely to need or want co-founders. Overall, unpacking liabilities of newness for different types of founders is both important and underexplored.
Recruiting and Hiring Diverse Teams
Workforce demographics are becoming more diverse on a wide range of employee characteristics.

The data prove that more diverse leadership and teams produce better performance and more innovation.

To continue to recruit, hire and retain the top talent, companies will have to prioritize diversity, equity and inclusion (DEI).
Changing Demographics of the American Workforce

• In 2017, Millennials became the largest generation in the workforce, overtaking Baby Boomers (Fry, 2018).

• Each generation currently in the workforce is more racially and ethnically diverse than its predecessor (Wang, 2018).
The Global Multigenerational Workforce

Companies will have to adapt to multigenerational workforces, as many Baby Boomers continue to work past age 65 and Generation Z enters the workforce (LinkedIn, 2020).

*Calculated from LinkedIn survey, see LinkedIn, 2020
Why Diverse Teams Matter

Diverse teams outperform their peers financially, are more innovative and help attract more top talent.
Why Diversity Matters: Better Performance

Research indicates that more diverse teams outperform their peers on a wide variety of measures, including better financial performance.

- A McKinsey report found companies in the top quartile for racial and ethnic diversity and gender diversity are 36 percent and 25 percent, respectively, more likely to have financial returns above industry medians than firms in the bottom quartile (Dixon-Fyle et al., 2019).

<table>
<thead>
<tr>
<th>Companies with above-average diversity in their leadership teams see</th>
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<tbody>
<tr>
<td>+9% EBIT (earnings before interest and taxes)</td>
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</table>

- Firms with diverse leadership are 45 percent more likely to report growth in market share and 70 percent more likely to experience growth in a new market (Hewlett, Marshall and Sherbin, 2013).
Why Diversity Matters: Increased Innovation

Multicultural teams can spur more significant innovation.

<table>
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<th>Companies with above-average diversity in their leadership teams see</th>
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<tr>
<td>+19% innovation</td>
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</table>

Compared to companies with below-average diversity

- A Harvard study that surveyed millions of scientific papers by U.S.-based authors found papers by ethnically diverse co-authors were cited more frequently and published in higher-impact publications (Freeman and Huang, 2014).

- Collaboration between native and immigrant workers can be more productive. Research shows that 30.4 percent of total U.S. innovative output (i.e., patents, patent citations and the economic value of patents) since 1976 can be attributed to immigrants. Of that 30.4 percent, direct innovative productivity accounts for 8.7 percent and indirect positive spillover effects of immigrants on U.S. native inventors accounts for 21.7 percent. Therefore, two-thirds of immigrant contributions to American innovation are due to the way in which immigrants make natives more productive (Bernstein et al., 2018).
Why Diversity Matters: Attracting Talent

• Diversity and inclusion are important factors for job seekers when evaluating an offer (Glassdoor, 2014).

• Surveys show generational differences in the importance of diversity and inclusion when seeking employment:
  • 47 percent of Millennials, 33 of Gen X and 37 percent of Baby Boomers consider diversity and inclusion an important factor when job hunting (Kochhar, 2017).

• 61 percent of women look at the leadership team’s gender diversity when job hunting (PwC, 2017).

• Women may be discouraged from applying for certain jobs due to the gender wage expectation gap — a phenomenon describing the differences in what distinct groups expect to be paid when applying for the same position (Hired, 2020).
Many startups have challenges with building a diverse team and an inclusive culture. These challenges are influenced by many factors, including diversity issues within the technology and investor sectors, how advisory and fiduciary boards are built, and a lack of proper guidance or recognition that building a diverse and inclusive culture has to be prioritized early in the life cycle of a young organization. Changing an organization’s culture after it is established with hundreds or thousands of employees is very difficult.

Yet as the data prove, more diverse teams perform better.
Many Companies Fail to Meet Their Diversity Goals

- Recently, when discussing why Wells Fargo had not met its diversity goals, CEO Charles Scharf came under fire for stating that “there is a very limited pool of black talent to recruit from” (Sandler, 2020).
- Similarly, though publicly making commitments to hire more women and people of color, large technology firms like Facebook, Apple and Microsoft still struggle to recruit and retain women, as well as Black and Latino workers.
- A 2018 LinkedIn survey found that most companies fall short of their diversity hiring goals. Companies cite the following reasons:

<table>
<thead>
<tr>
<th>Biggest Barriers to Improving Diversity</th>
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<tbody>
<tr>
<td>Finding diverse candidates to interview</td>
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<tr>
<td>Retaining diverse employees</td>
</tr>
<tr>
<td>Getting diverse candidates past the interview stage</td>
</tr>
<tr>
<td>Getting diverse candidates to accept an offer</td>
</tr>
<tr>
<td>None of these</td>
</tr>
</tbody>
</table>
The Problem is Not Just Recruiting

In recent years, industries that have struggled the most with diversity (such as tech and finance) have developed a significant number of programs to recruit women and people of color into STEM fields, and ultimately into their firms. However, many of these efforts have failed to retain workers, signaling that there is more to the story than a recruiting pipeline problem.

• A survey of more than 550 women from the Association for Women in Science indicates that it is often bias, rather than pipeline issues or personal choice, that pushes women out of STEM jobs. Specific findings note:
  • Nearly two-thirds of women surveyed reported having to deal with “prove-it-again bias” — needing to demonstrate their expertise time and again in light of recurring mistrust and questioning. Three-fourths of Black women reported experiencing such bias (Williams et al., 2015).
  • More than one-third of women reported sexual harassment (Williams et al., 2015).
  • A McKinsey and LeanIn.org report notes that the biggest obstacle faced by women reaching senior leadership positions is the “broken rung,” or the initial step to being hired or promoted into a managerial position. For every 100 men hired or promoted to manager, only 72 women are hired or promoted. This leaves many women stuck in entry-level positions.
The Problem is Not Just Recruiting (cont.)

• A Pew study found that 62 percent of Black STEM employees have experienced racial or ethnic discrimination in their jobs. Additionally, 45 percent reported being treated as not competent, 29 percent reported feeling isolated in their workplace and 27 percent reported earning less than a peer doing the same job (Funk and Parker, 2018).

• Research indicates that race can play a role in salary negotiations. Specifically, biased job evaluators expect Black job seekers to negotiate less than white job seekers (Hernandez, Avery, Volpone and Kaiser, 2019).
EXPERT INSIGHT

The pandemic began in March, and immediately placed a ton of stress on working mothers, who suddenly had to grapple with the reality of combining work and family from their kitchen table. We immediately saw how easily mothers were pulled away from their work compared to fathers. In fact, mothers were interrupted every three minutes and 24 seconds, compared to fathers, who were interrupted only every four hours.

Recent reports show that women are leaving the workforce at a higher rate than their male counterparts, a trend that has long-term implications for women’s employment. Since March, more than 2.65 million women have left the workforce, a number that continues to rise as women stay back to support their children’s virtual learning this fall. Working mothers are especially vulnerable, due to the lack of access to childcare, unpaid labor at home, inflexible work demands and a lack of paid parental leave. Mother Honestly recently hosted the nation’s first-ever Caregiving and Work Summit, where more than 35 of the nation’s top leaders came together with roughly 1,200 attendees to discuss the challenges facing mothers in America, and what employers can do to support working families. As it stands, 40 percent of parents have left the workforce or reduced their hours to tend to their family due to the COVID-19 pandemic. These are women with serious careers, many of them in mid-management and executive-level positions. Employers have a mandate to not only ensure women remain in the workforce, but to continue the task of retaining and hiring women to fill those open spots left behind. How employers treat employees now can make a huge difference in whether those parents will be able to stay in their jobs. Flexibility and empathy can truly go a long way in providing the reassurances and support women need to thrive at home and in the workplace. In addition, childcare solutions such as backup care, remote assistants and paid leave are available as turnkey solutions from various benefit providers to immediately ease the burden on working mothers in this moment and beyond.

Blessing Adesiyan
Founder and CEO, Villo; Founder, Mother Honestly

Blessing Adesiyan is a mother of three; a career professional; the founder and CEO of Villo, a startup tackling the burnout epidemic through a personalized household management benefit; and the founder of Mother Honestly, a platform that is reimagining how women thrive in motherhood, work and life. Blessing is a trusted expert in work-life solutions for working parents and has helped transform the role of mothers in the workplace and home, engaging more than 300,000 ambitious women through her platform, podcast and conferences. Blessing obtained a Bachelor of Science degree in chemical engineering from the University of Florida, a Master of Science degree in energy management from the New York Institute of Technology and an MBA from UNC Kenan-Flagler Business School.
High-tech Sector: Greater Diversity Disparities

Although there has been a lot of media attention on the issue, there is still a significant lack of diversity within the startup environment – particularly within high-tech startups. Many firms have worked to recruit diverse talent, but without retention programs and a culture shift, the changes made so far have not had lasting impacts.

In 2016, the U.S. Equal Employment Opportunity Commission released a report exploring diversity in the high-tech industry, and though the data it is a bit dated, the findings are important:

- Employment in computer science and engineering is growing at twice the rate of the national average in other sectors.
- In comparison with the private sector as a whole, the high-tech sector employed a larger share of whites, Asian Americans and men, and a smaller share of Black Americans, Hispanics, and women. Men and whites also hold a greater percentage of executive positions in high-tech firms compared to their counterparts in the private sector overall.
- Age discrimination in the technology sector is also an issue, primarily observed through companies' hiring policies and practices, which are designed to attract and hire younger employees.

<table>
<thead>
<tr>
<th></th>
<th>All Private Sector (%)</th>
<th>High-tech Sector (%)</th>
<th>All Private Sector Executive level (%)</th>
<th>High-tech Sector Executive Level (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>63.5</td>
<td>68.5</td>
<td>68</td>
<td>83.3</td>
</tr>
<tr>
<td>Black</td>
<td>14.4</td>
<td>7.4</td>
<td>5.3</td>
<td>2</td>
</tr>
<tr>
<td>Asian Americans</td>
<td>5.8</td>
<td>14</td>
<td>19.5</td>
<td>10.6</td>
</tr>
<tr>
<td>Hispanics</td>
<td>13.9</td>
<td>8</td>
<td>5.3</td>
<td>3.1</td>
</tr>
<tr>
<td>Men</td>
<td>52</td>
<td>64</td>
<td>71</td>
<td>80</td>
</tr>
<tr>
<td>Women</td>
<td>48</td>
<td>36</td>
<td>29</td>
<td>20</td>
</tr>
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</table>
Startup Boards: Not Diverse By Current Design

Startup firms also have been slow to diversify their boards, even as public firms have moved toward greater board diversity, driven partially by legislation. Most startup boards are built from their investors, which tend to not to be diverse. In order to solve the problem, initial board creation, the diversity of investors and the diversity of leadership teams within startup organizations must be addressed.

- A survey of 200 venture-backed startup boards of firms that had either $100 million in funding or were valued above $500 million found that (Rivera et al., 2019):
  - Women held only 7 percent of private firms’ board seats.
  - Of the boards with women members, the majority only had a single woman member.
  - Sixty percent of private firms did not have a single woman on their board. For reference, there are no all-male boards within the S&P 500.

- A research study with a sample of more than 7,000 startups found that over the startup life cycle, 39 percent, 46 percent and 15 percent of board seats are held by venture capitalists, executives and independent directors, respectively (Ewens and Malenko, 2020).

- Some investors and banks are forcing startups’ board diversification. For example, Goldman Sachs will no longer serve as the IPO underwriter for firms that do not have at least one woman board member. BlackRock called for greater diversity of its portfolio companies, stating that firms should have at least two female directors.
Recruiting From Established Networks to Form Entrepreneurial Executive Teams and Boards

Although relying on already established social networks is an effective way to tap into resources, it can also potentially lead to blind spots when recruiting entrepreneurial teams.

• Founders often rely on their social capital and networks of friends, family and work colleagues to form new entrepreneurial teams (Aldrich and Kim, 2007).

• New entrepreneurial teams tend to gravitate toward individuals with similar backgrounds and/or experiences (Williams, Middleton and Nowell, 2018).

• Venture capitalists are 39.3 percent more likely to invest in a founder’s company when both belong to the same racial group, and 34.4 percent more likely to invest if both went to the same university (Gompers and Kovvali, 2018).
Women and people of color are greatly underrepresented in raising venture capital.

- Even though overall U.S. venture capital investments are about the same as in recent years, in Q3 2020, venture funding for female founders had its lowest quarter in three years. (Pitchbook 2020)
- A joint study by RateMyInvestor (2019) and DiversityVC of nearly 10,000 founders and 135 of the most active venture capital firms in the world illustrates the issue of underrepresentation. The pie charts on the right detail the breakout by ethnicity and gender of founders of VC-backed companies in their study.

### Ethnicity of VC-Backed Founders

- White: 77.1%
- Asian: 17.7%
- Middle Eastern: 2.4%
- Latino: 1.8%
- Black: 1.0%

### Gender of VC-Backed Founders

- Female: 9.2%
- Male: 90.8%

Source: RateMyInvestor, 2019
Underrepresentation as Decision-makers in Venture Capital

Women and people of color are greatly underrepresented as decision-makers in venture capital firms.

• In 2018, women investors constituted only 8 percent of venture capital partners (Teare, 2018) and fewer than 1 percent were Black (Gompers and Kovvali, 2018).

• Fewer than 1.3 percent of all global assets are being managed by people of color or women (Padilla, Markus, Monk, Radhakrishna, Shah, Dodson and Eberhardt, 2019).

• A review of nearly 200 venture capital firms found the following demographic breakdown of investors:

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Asian</th>
<th>Black</th>
<th>Hispanic</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>74</td>
<td>23</td>
<td>2</td>
<td>1</td>
<td>89</td>
<td>11</td>
</tr>
<tr>
<td>2018</td>
<td>70</td>
<td>26</td>
<td>3</td>
<td>1</td>
<td>82</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: Richard Kirby, [https://blog.usejournal.com/where-did-you-go-to-school-bde54d846188](https://blog.usejournal.com/where-did-you-go-to-school-bde54d846188)

• The same review also found that 40 percent of venture investors have attended either Stanford University or Harvard University (Kirby, 2018).
EXPERT INSIGHT

- The tech and startup ecosystems have a dysfunctional diversity problem.
- The data show we are essentially innovating with one hand tied behind our backs, or competing with only part of the team on the playing field. Rather than getting better over time, the problem is troublingly persistent.
- The future is diverse, as U.S. demographics are shifting. Increasingly, there is strong evidence that diversity is associated with better-performing teams and firms. In the case of gender and team performance, recent studies show evidence of a causal interpretation, not merely a correlational one.
- Despite the performance benefits of diversity, startup teams and venture capital firms in particular, are shockingly homogenous. This is not simply a pipeline problem. Instead, it appears to be due to toxic cultures, combined with recruiting, hiring and promotion practices that simply do not follow evidence-based best practices and instead recruit from mostly white, privileged male friendship networks for boards, executives and employees.
- Providing some hope, there is evidence from case studies and research literature that creating a diverse, equitable and inclusive culture from the start of an organization is not only possible, but yields better performance and lasting diversity benefits for both the company and society. Recruiting from minority and female institutions of higher education, voluntary anti-racism training, incorporating diversity into recruitment efforts and addressing the pay gap are practices that have been shown to work.
- We must teach all of our students diversity, equity and inclusion skills and demand much better behavior of the startups and tech companies who come to our campuses to recruit, as well as of the university endowment managers who allocate capital to private equity and venture capital funds.

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As part of the Stanford Technology Ventures Program, Professor Eesley’s research explores the role of the institutional and university environment in high-growth technology entrepreneurship. His research focuses on rethinking how the educational and policy environments shape the economic and entrepreneurial impact of university alumni. Professor Eesley’s field research spans China, Japan, Chile, Bangladesh, Thailand and Silicon Valley, and has garnered awards from the Schulze Foundation, the Technical University of Munich and the Kauffman Foundation. He is a faculty affiliate at the Stanford Center for International Development, the Woods Institute for the Environment and the Stanford King Center on Global Development. Professor Eesley previously was an entrepreneur, early employee, board member/advisor and investor in the areas of life sciences, online education and machine learning.
Recruiting, Hiring, and Retaining Your Workforce as Your Business Scales
Most Common Strategies to Mitigate Bias Have Potential Downfalls

Research on the most common practices to mitigate hiring and workplace bias — diversity training, hiring tests and performance ratings — show these tactics may not be very effective in increasing diversity in the workplace. Dobbin and Kaley (2016) outline some of the pitfalls of these practices in their Harvard Business Review article, “Why Diversity Programs Fail.” The major takeaways include:

**Mandatory diversity training can be ineffective, especially if it is seen as remedial.**

- Multiple studies suggest that mandatory diversity training can initiate bias or cause backlash.
- A study of 829 medium and large firms found that those with mandatory diversity training for managers saw no improvement in the proportion of white women, Black men, or Hispanics in management within five years after instituting training. Management rates for Black women and Asian American men and women even decreased.

**Voluntary training is a better alternative.**

- Voluntary diversity training is more successful in increasing the proportion of women and people of color in management positions within five years after instituting such training.
- Voluntary training allows managers to feel like the training is not remedial; rather, they choose to participate, potentially signaling they are “pro-diversity.”

Source: Dobbin & Kalev, 2016 and citations therein
Most Common Strategies to Mitigate Bias Have Potential Downfalls (cont.)

Be aware that hiring tests can be misused.
- More companies use hiring tests to assess the skills of job candidates in an seemingly unbiased way.
- However, research indicates that some managers use these tests selectively, and may even falsify or ignore results if they have a candidate they would prefer to hire.
- Research also indicates that companies that require written job tests for managerial positions experience decreases of between 4 percent and 10 percent in the share of manager-level jobs held by white women, African American men and women, Hispanic men and women, and Asian American women over the next five years.

Performance rating systems can be flawed.
- Performance ratings, designed to help managers to make fairer promotion and pay decisions, are commonplace in most organizations.
- However, research indicates that ratings can be biased, with women and people of color often unfairly given lower ratings.

Source: Dobbin & Kalev, 2016 and citations therein
Strategies That Work

Although not a comprehensive list, some evidence-backed strategies to promote greater diversity in recruiting, hiring and retaining a diverse workforce for firms to consider include the following:

[1] Companies should make a good first impression by highlighting how diversity and inclusion matter to your organization during the recruitment process.

- The perception and reputation of the organization matter to job seekers and influence whether they see themselves as a good fit with the company (Wei, Chang, Lin, and Liang, 2016; Avery and McKay, 2006).

- Women and people of color seek different employer attributes than their white male counterparts, with both groups putting greater emphasis on workplace diversity (Avery and McKay, 2006; Freeman 2003; Thomas and Wise, 1999).

- Ways to signal your organization cares about diversity include making sure diversity is reflected in recruitment ads, hiring minority and female recruiters, participating in diversity fairs and word-of-mouth input from current women and minority employees (Avery and McKay, 2006; Avery, McKay and Volpone, 2013).
Strategies That Work

[2] Recruit from predominantly minority or female institutions of higher education.

• There is a two-fold benefit:
  • Recruiting from mostly minority or female institutions such as HBCUs or women’s colleges signals to potential hires your organization’s commitment to hiring the respective affinity group (Avery and McKay, 2006).
  • Managers invited to help recruit at these institutions often see it as a compliment, and consequently engage more fully with the opportunity to help the organization identify and hire talented candidates from underrepresented backgrounds (Dobbin and Kalev, 2016).
Strategies That Work

[3] Address company culture to ensure that it is truly inclusive and welcoming for all groups, including women, people of color, parents and others.

• “Oftentimes there are structural impediments that prevent the passions and skills of those recruited from diverse backgrounds from translating into actual careers (inside high-tech startups).” (Sykora, 2019).

• Ensure you have a welcoming environment for all people. This includes attention to cultural norms, language and the physical spaces within an organization’s office.

• “Whether companies want to create a fun environment, give off a relaxed vibe or design a space that encourages open communication, there are ways to reach those goals without resorting to gendered cultural icons.” (Sykora, 2019).

• Recognize that all individuals in an organization, not just parents, need work-life balance. Many times companies think, “We just need to tack on a program for moms,” which is not a healthy way of building an inclusive culture. “Thinking about flexibility as something every human needs is going to destigmatize it in the culture.” (Wynn and Correll, 2018; Sykora, 2019).
Strategies That Work

[4] This is probably the most important strategy: Start building a diverse team, an inclusive culture and internal processes, and a welcoming environment early in the lifecycle of your organization.

• Diversity needs to be part of everything you do — how you hire, how you think about your product and how you develop and interact with your client base (Wynn, 2019).

• Break out of your bubble when you recruit. Early in the life cycle of a startup, recruiting is generally done within known networks. Be intentional about breaking out of your networks and seeking out a more diverse set of job applicants (Avery and McKay, 2006; Wynn and Correll, 2018; Sykora, 2019).

• Most startups do not have a formal performance evaluation process or career path planning. Prioritize these elements so applicants and employees see a fair future with your organization (Wynn and Correll, 2018; Sykora, 2019).

• Establish intentional values, including diversity and inclusion, early in the life cycle of your startup, then live out your values. This is often overlooked in the early stages, when everyone is focused on sales and building a product. But without clear values and being intentional about your culture, things may not go in the direction you intend.
Call to Action

• Visit [frontiers.unc.edu](http://frontiers.unc.edu) to download the Trends in ENtrepreneurship Reports
• Share this report with others – including faculty, ecosystems partners, students, entrepreneurs, etc.
• Send us feedback on the reports or recommend additional topics/papers for potential future trends. Email [frontiers@kenan-flagler.unc.edu](mailto:frontiers@kenan-flagler.unc.edu) or contact me directly at [Ashley_Brown@Kenan-Flagler.unc.edu](mailto:Ashley_Brown@Kenan-Flagler.unc.edu).
• **Save the Date:** Frontiers of Entrepreneurship Conference on April 22 & 23 (virtual, registration coming soon).
Additional Resources from the Institute

• Kenan Insight Series: https://kenaninstitute.unc.edu/research/kenan-insights/


• Homegrown Tools Economic Development Case Studies (CREATE/NCGrowth): https://homegrowntools.unc.edu/

Q&A

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References


The Frank Hawkins Kenan Institute of Private Enterprise develops and promotes innovative, market-based solutions to vital economic issues. With the belief that private enterprise is the cornerstone of a prosperous and free society, the institute fosters the entrepreneurial spirit to stimulate economic prosperity and improve the lives of people in North Carolina, across the country and around the world.

UNC Kenan-Flagler’s Entrepreneurship Center engages and inspires learners to become entrepreneurial leaders who are positive change agents in the world. We combine progressive teaching, experiential clubs and extracurricular programs, and pioneering research that meets learners where they are on their own unique path.