



Deconstructing the Pipeline Myth and the Case for More Diverse Fund Managers

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Part One:

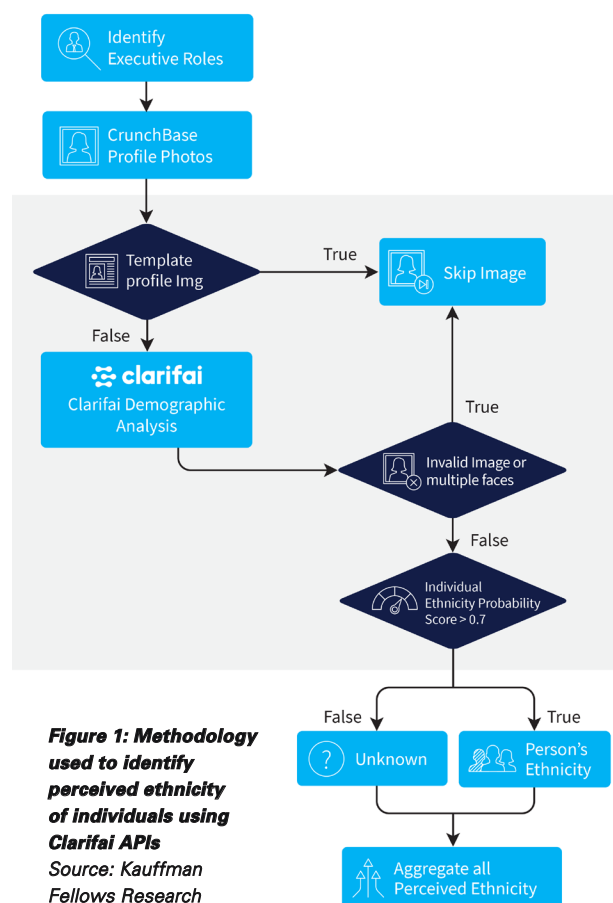
Deconstructing the Pipeline Myth

Entrepreneurship is influenced by many factors, including ones that may not seem obvious, like [ethnicity and culture](#). Much has been written [about diversity](#) in the startup and venture capital worlds in recent years.

Yet there has not been a thorough analysis of the influence of ethnicity in startup teams because studying ethnic and racial backgrounds has traditionally been unwieldy, requiring many expensive surveys. Furthermore, only [3% of Fortune 500 companies](#) make their diversity data accessible to the public, making studies increasingly difficult to conduct.

In a novel approach to studying ethnicity in startups, we leveraged software to analyze the faces of startup executives to gather empirical answers. More specifically, the Kauffman Fellows Research Center analyzed the profile images of 260,000+ startup founders and executives in the United States using publicly available demographic models created by Clarifai (Figure 1).

The photos that had conclusive results (in this case, the algorithm was 70%+ confident of a person's ethnicity) were placed into five perceived ethnic categories: White, Asian, Latinx, Black, and Other.





Key Takeaways

We found that **79.2%** of startup executives were White, **15.6%** Asian, **2.6%** Latinx, **2.1%** Black, and **0.5%** Other.

The data show a large discrepancy between the Latinx working-age population in the United States (17%) and Latinx startup executives (2.6%), as well as the Black working-age population (13%) compared to startup executive representation (2.1%).

Latinx and Black students have been earning bachelor's and master's degrees at record rates, but those gains are not translating into representation. **In fact, U.S. startups need 6.7x more Latinx and 5.6x more Black executives to match working-age U.S. demographics.**

Perceived Ethnicity Matters

We first evaluated perceived ethnicity at a high level to create a baseline. Our analysis of 260,000+ samples found the following breakdown shown below in Figure 2.

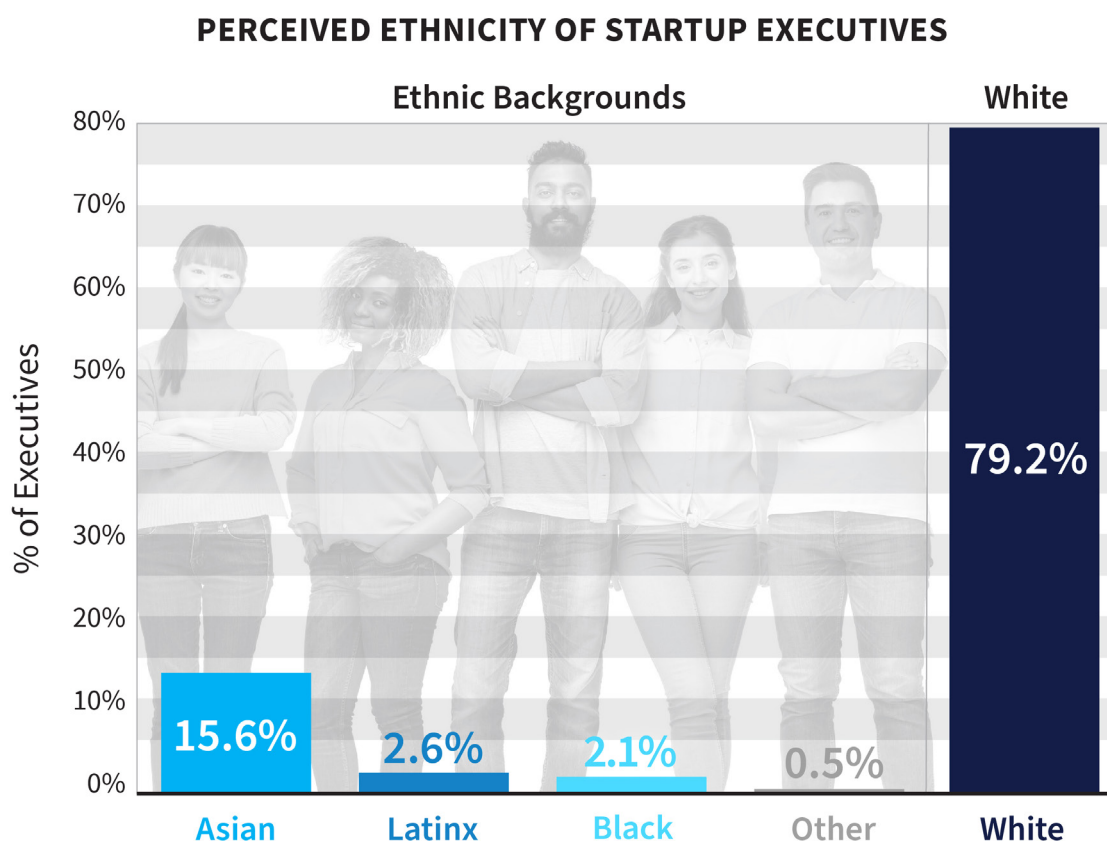


Figure 2. Perceived Ethnicity of U.S. Startup Executives
 Unsurprisingly, 79% of U.S. startup executives are White.
 Source: Kauffman Fellows Research Center.

Our findings show a large discrepancy between the perceived ethnicity of executives in startups and the general demographics in the United States (Figure 3).

According to the projections of [National Center for Higher Education and Public Policy](#) and the [U.S. Bureau of Labor Statistics 2018 report](#), currently about 17.5% of the working-age population is Latinx compared to 2.6% in startup executives. The bureau of Labor Statistics also found that 11.8% of the working-age population is Black compared to only 2.1% of startup executives.

COMPARING STARTUP EXECUTIVES TO U.S. WORKING AGE POPULATION

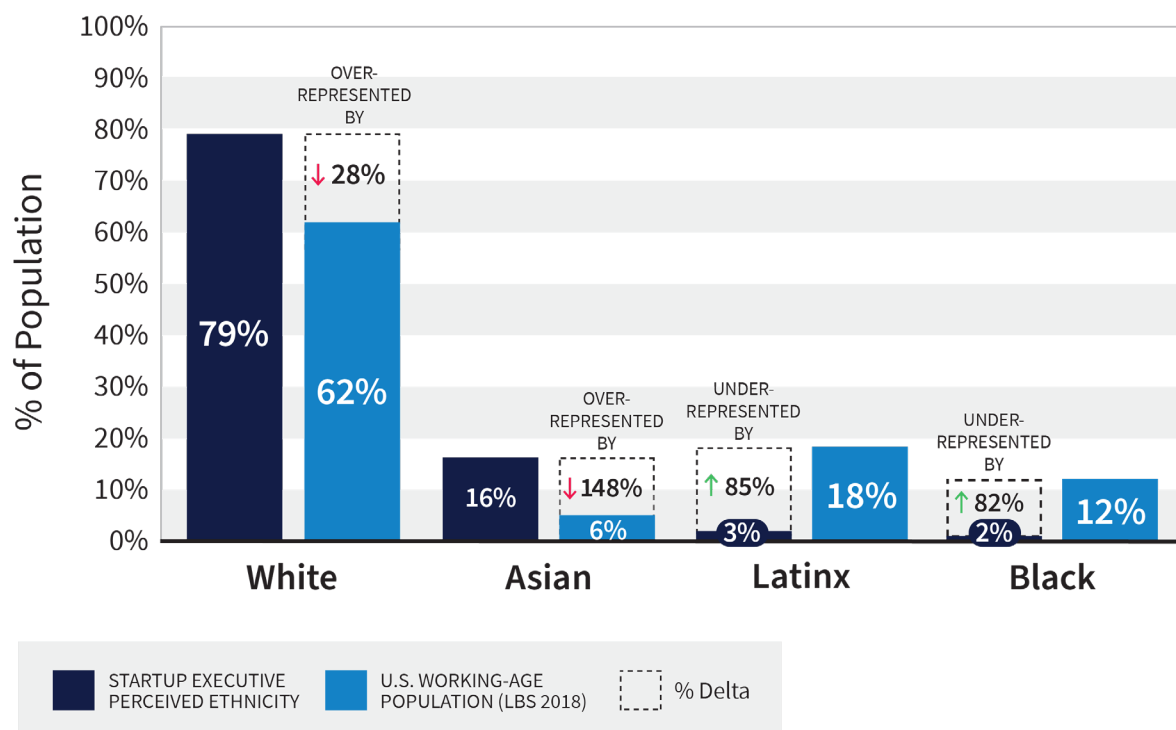


Figure 3. Comparing Kauffman Fellows Startup Executive Perceived Ethnicity to 2018 U.S. Bureau of Labor Report.

Putting our data and the U.S. working-age population side-by-side shows two clear trends (Figure 3).

First, White and Asian groups are both over-represented in startup executive leadership. And second, the data show that both Latinx and Black groups are more than 80% under-represented.

In other words, startups need 6.7x Latinx and 5.6x more Black executives in order to match the U.S. working-age demographics.

Next, we explore education levels and type to see if education helps explain this difference.

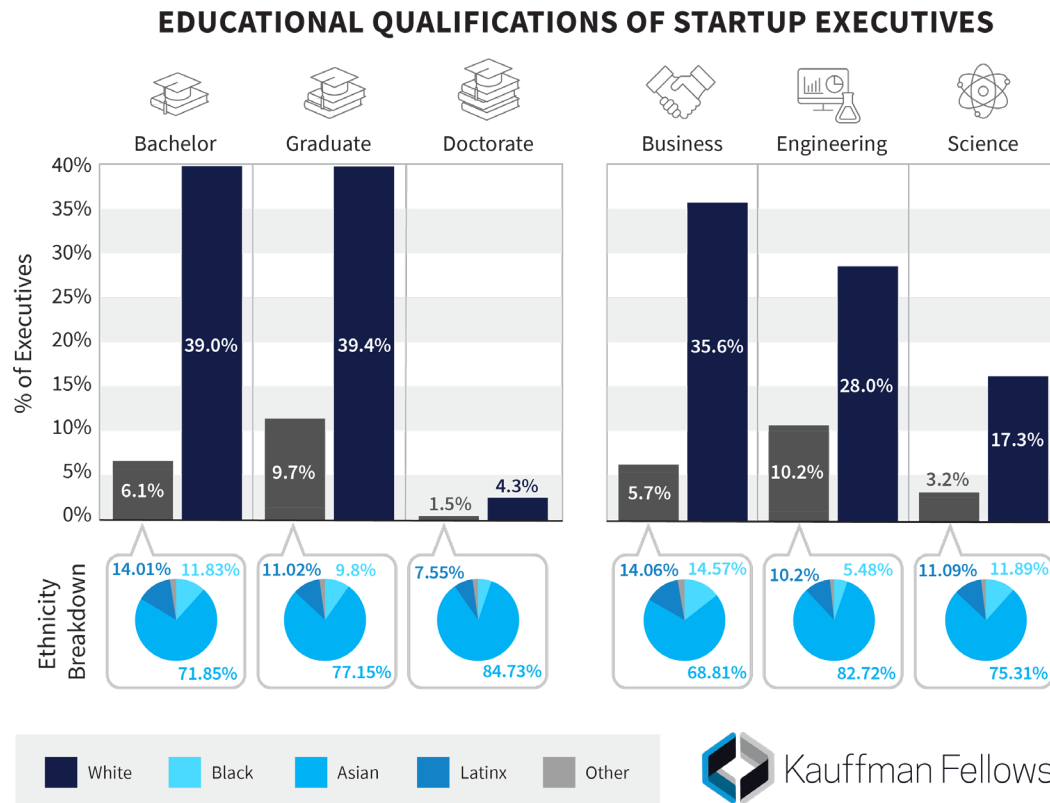
Education Levels and Types Vary by Perceived Ethnicity

There is a large variance in education when segmenting by perceived ethnicity. Asian executives, for example, had the highest percentage of master's and doctoral degrees in our sample.

This finding agrees with national statistics, where [52.3% of Asian-Americans](#) hold a bachelor's degree or higher—the highest for any ethnic group in the United States.

In fact, as shown in Figure 4, education seems to have helped Asian-Americans break into startups, but it does not seem to have the same effect for Latinx or Black graduates.

Figure 4. College Degree Type and Areas of Study for U.S. Startup Executives. College education matters for startup executives, but does not explain the full story. Source: Kauffman Fellows Research Center.



Moreover, we would like to highlight the changing education demographics over the last several decades. Figure 5, showing data from the [National Center for Education Statistics \(NCES\) data](#) shows college enrollment rates by ethnicity for the years 1980 through 2016.

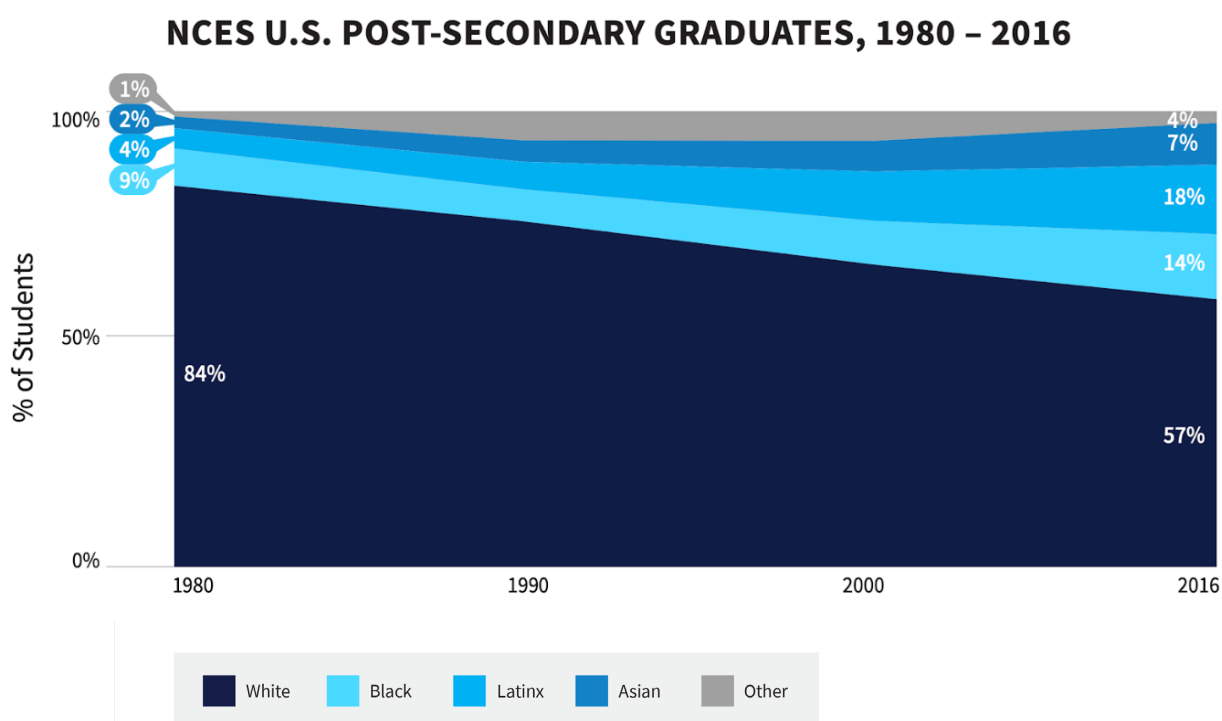


Figure 5. The Changing Demographics of College Enrollment, 1980–2016. All minority groups, particularly Latinx and Blacks, have become much more educated. *Source:* [National Center for Education Statistics](#).

The NCES data show two clear trends. First, that White Americans are becoming a smaller proportion of post-secondary degree holders. And second, Latinx and Black graduation rates have risen 350% and 55%, respectively (Figure 6).

These significantly larger numbers of Latinx and Black Americans with degrees have not translated into similarly higher levels of representation within startups. Education can certainly help, but it does not provide the full picture.

NCES U.S. POST-SECONDARY GRADUATES, 1980 – 2016

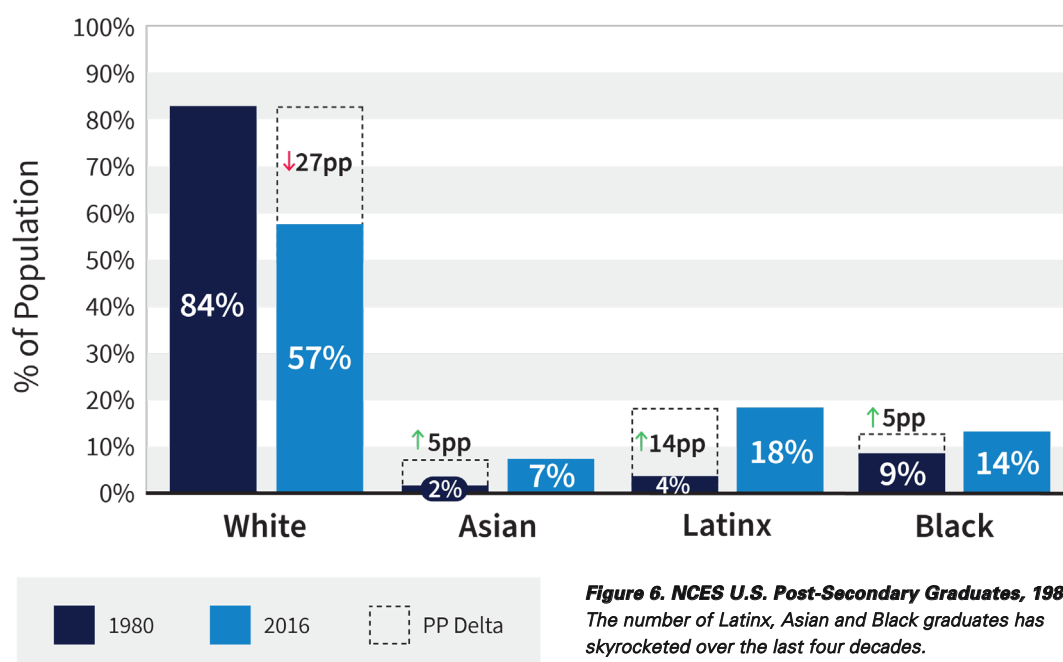


Figure 6. NCES U.S. Post-Secondary Graduates, 1980–2016.
The number of Latinx, Asian and Black graduates has skyrocketed over the last four decades.

The Pipeline Myth

Our results show that White and Asian ethnicities are over-represented in the population of startup executives. 79% of Crunchbase profiles had a perceived ethnicity of White, whereas Whites account for only 63% of the working-age population in the United States, making them 25% over-represented.

Furthermore, 15.6% of profiles had a perceived ethnicity of Asian, whereas Asian Americans account for only 6% of the working-age population in the United States, making them 160% over-represented.

There are also two significantly underrepresented groups: Latinx and Black.

Latinx employees make up 17% of the U.S. working-age population but only 2.6% of startup executives in our dataset, making them 85% underrepresented. It's similar for Black constituents: they comprise 13% of the working-age population, but only 2.1% of startup executives, making them 82% underrepresented.

These numbers drop even further as we move to the highest echelons of Fortune 500 firms. As of 2018, there were [only 3 black CEOs](#) and only [1 out of 5 board members is non-White](#). This finding is particularly surprising because [studies have found](#) that improving ethnic diversity increases EBIT, a measure of corporate profitability.

No, we do not believe this is an educational pipeline problem.

As mentioned, there has been a sharp increase in the number of Latinx and Black students earning post-secondary degrees (Figures 5 and 6).

The [data for master's degrees](#) is even more telling (Figure 7). From 1980 to 2016, the share of master's degrees awarded to White students fell from 89% to 66%. At the same time, Latinx students grew from 2% to 10% and Black students grew from 6% to 14%.

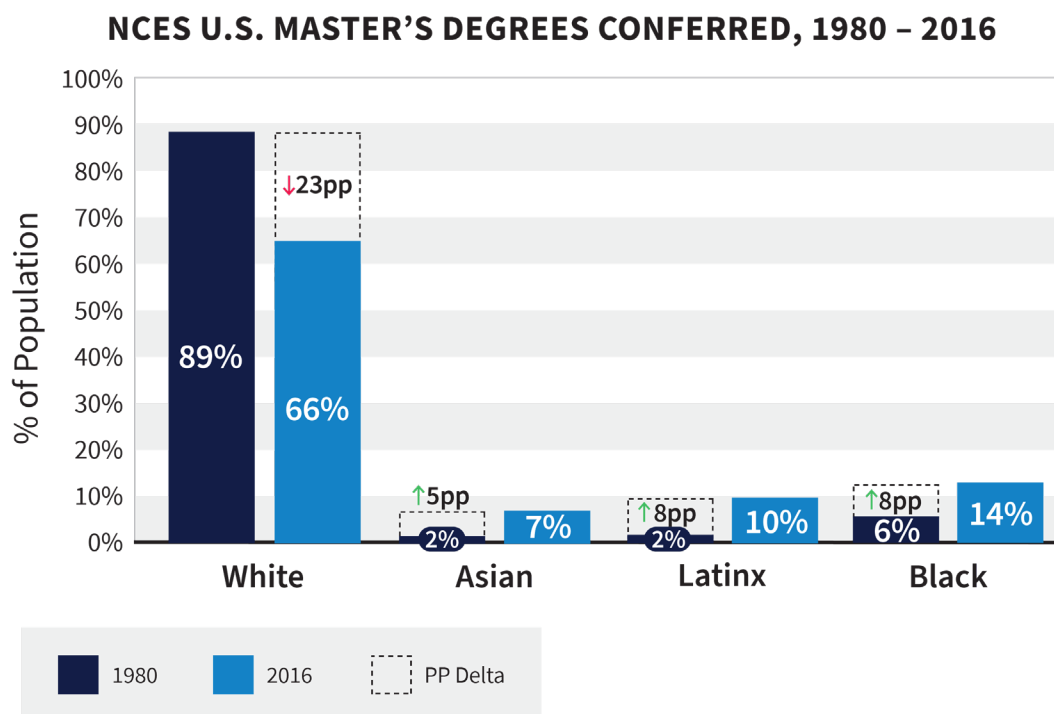


Figure 7. NCES U.S. Master's Degrees Conferred, 1980–2016. Latinx and Black representation have grown 400% and 133%, respectively. [Source: National Center for Education Statistics.](#)

The number of Latinx and Black students seeking all college degree types has grown, while the proportion of White students receiving similar accreditations has consistently decreased, yet the number of technology jobs going to Latinx and Black candidates has not grown.

As Jason Torres, Kauffman Fellow and healthcare angel investor, said: “If you do not have diversity early on, including on the founding team, then you will never have a diverse team. Diverse executives hire more diverse executives, so it’s critical to start early.”

There is enough diverse talent across the country—with the right education and experience—to make better hiring decisions. The “pipeline” is not the problem.

It’s time to put that myth to bed once and for all.

Part Two:

Ethnically Diverse Startups Have Higher Returns, but Still Struggle with Access to Capital

In Part One above, we discuss the impact of the perceived ethnicity of the people behind startups, including the founders and executives. We found that Latinx and Black executives are woefully underrepresented in startup leadership.

Furthermore, we conclude that this underrepresentation is not a pipeline issue, given that Latinx and Black students have increased their educational attainment by 350% and 55%, respectively, over the last four decades.

Here, we examine the composition of firms as a whole. We utilized the same public Crunchbase profiles as we did in part one, fed into publicly available demographic models by Claraifai to better understand these 260,000+ samples.

This report focuses on the median return multiples (RMs) of startups that were acquired or completed an initial public offering (IPO), so that these findings are not influenced by failures or bankruptcies.

We evaluated tens of thousands of diverse teams. Our findings, along with the findings of other studies, show that ethnically diverse teams outperform homogeneous teams.

Our findings are grouped according to the following definitions:

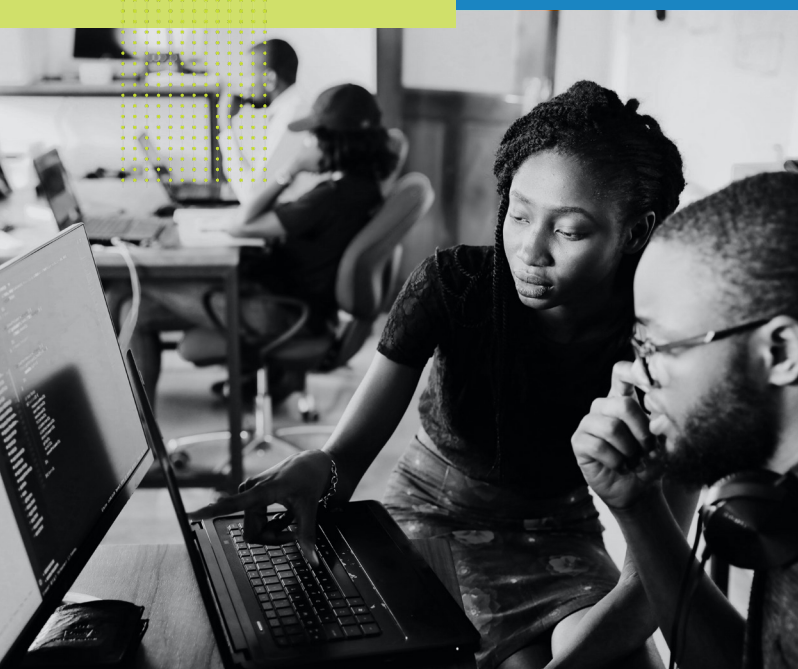
- **White Founding Teams:** Startup founding teams that only have founders with a perceived ethnicity of White
- **Diverse Founding Teams:** Startup founding teams that have at least one founder with a non-White perceived ethnicity
- **White Executive Teams:** Startup executive teams that only have executives (directors, vice presidents, or C-level execs) with a perceived ethnicity of White
- **Diverse Executive Teams:** Startup executive teams that have at least one executive (director, vice president, or C-level exec) with a non-White perceived ethnicity

Key Takeaways

Perceived ethnicity has a large impact on fundraising, with White Founding Teams and White Executive Teams raising venture capital more often.

However, when Diverse Founding Teams do successfully raise capital, they tend to raise more across all rounds (Seed - Series E). For example, Diverse Founding Teams raised **60% more** venture funding than White Founding Teams in late-stage (Series E) private rounds.

Diverse Founding Teams have higher returns when cash is returned to investors. Historically, they have earned a **3.26x median** realized multiple on IPOs and acquisitions, compared to a **2.50x realized** multiple for White Executive Teams, a **30% increase**.



Ethnicity Across Startup Founders and C-Level Executives

It's important to note difference between the ethnicity of startup founders and startup executives. As mentioned above, an "executive" is someone holding a director, vice president, or C-level title. By contrast, a "founder" includes both solo founders and co-founders who turn an idea into a company.

In this report, we discuss the role of founders as well as executives: both are important, so we set out to examine the differences between diversity at company formation and diversity in leadership roles as the company scales.

The vast majority of startup founders (75%) and startup executives (81%) are White (Figure 8). Asians are the second most represented group of founders (18%) and executives (13%).

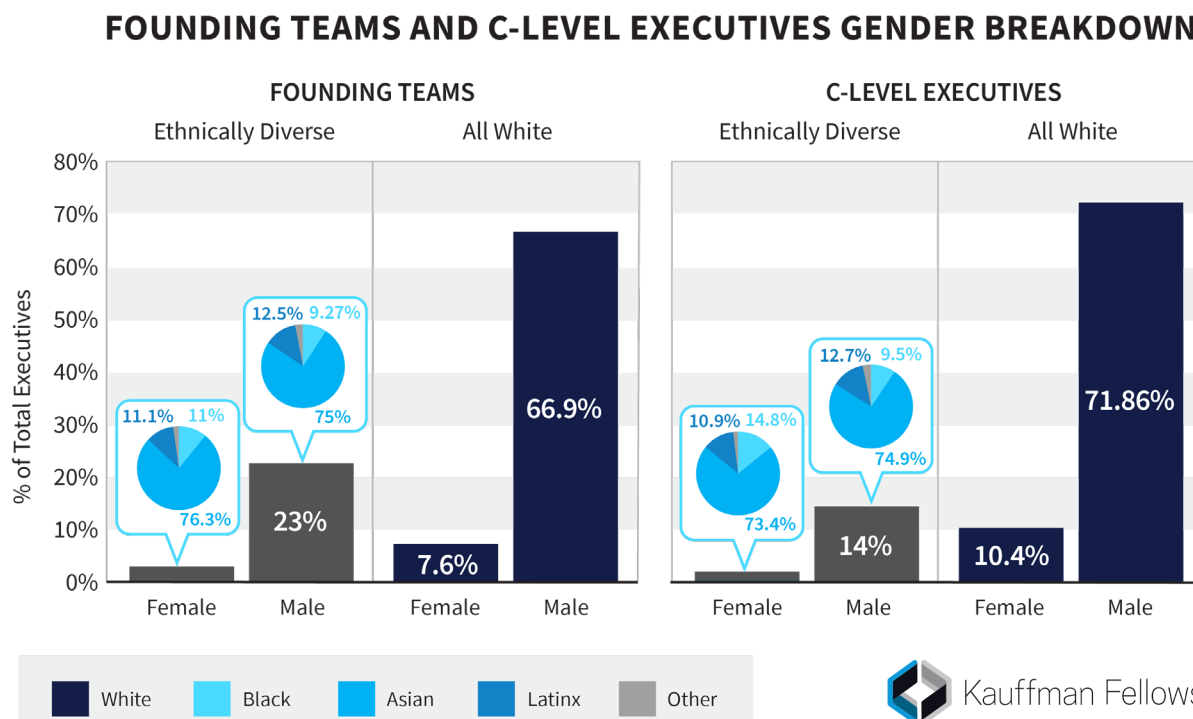


Figure 8. Startup Executives and Founders by Perceived Ethnicity and Gender. Startup leadership is still predominantly White and male. Source: Kauffman Fellows Research Center.

Companies with Diverse Perceived Ethnicity Have Better Financial Returns

The data are clear when it comes to venture capital: Diverse Founding Teams raise significantly more venture capital.

As shown in Figure 9, the median Series B for Diverse Founding Teams was 17% larger than the median Series B for White Founding Teams (\$12.9M vs. \$11M). The difference becomes more pronounced by Series E: Diverse Founding Teams raise 60% more than White Founding Teams.

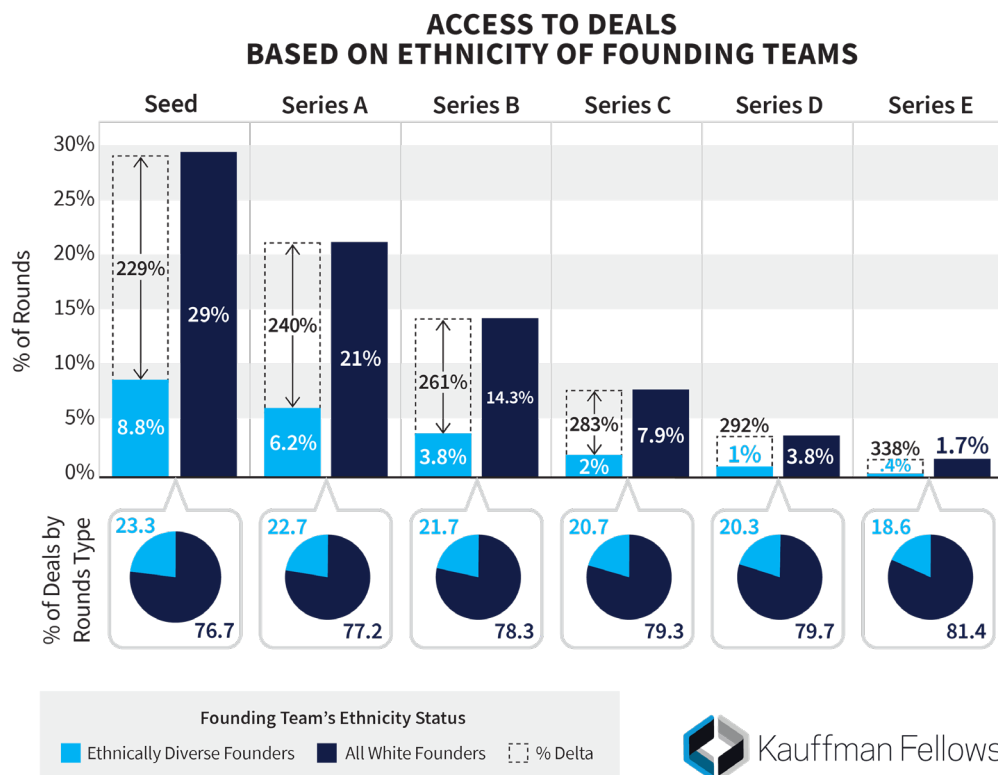


Figure 9. Access to Deals, Amount Raised by Perceived Ethnicity of Founder (2000-2018). White Founding Teams raise the majority of rounds, but when Diverse Founding Teams do raise capital they raise more. Source: Kauffman Fellows Research Center.

That said, Diverse Founding Teams have much more limited access to capital than White Founding Teams (Figure 10).

Our data show that more than 75% of all rounds are raised by White Founding Teams. That means 3 out of 4 venture capital rounds are going to non-diverse teams, who will then go on and become repeat founders or venture partners if their companies are successful.

In the later stages, the numbers are even worse: 80% of Series D and E rounds (4 out of 5) have all-White founders.

AMOUNT RAISED BASED ON ETHNICITY OF FOUNDING TEAMS

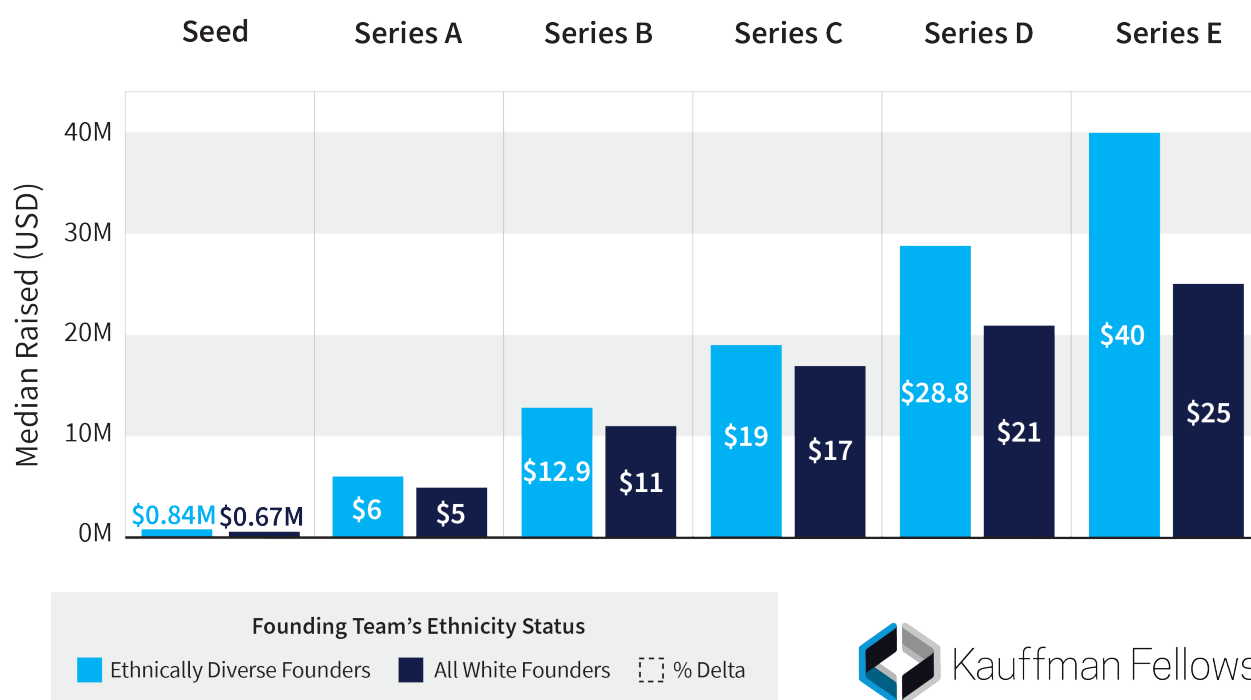
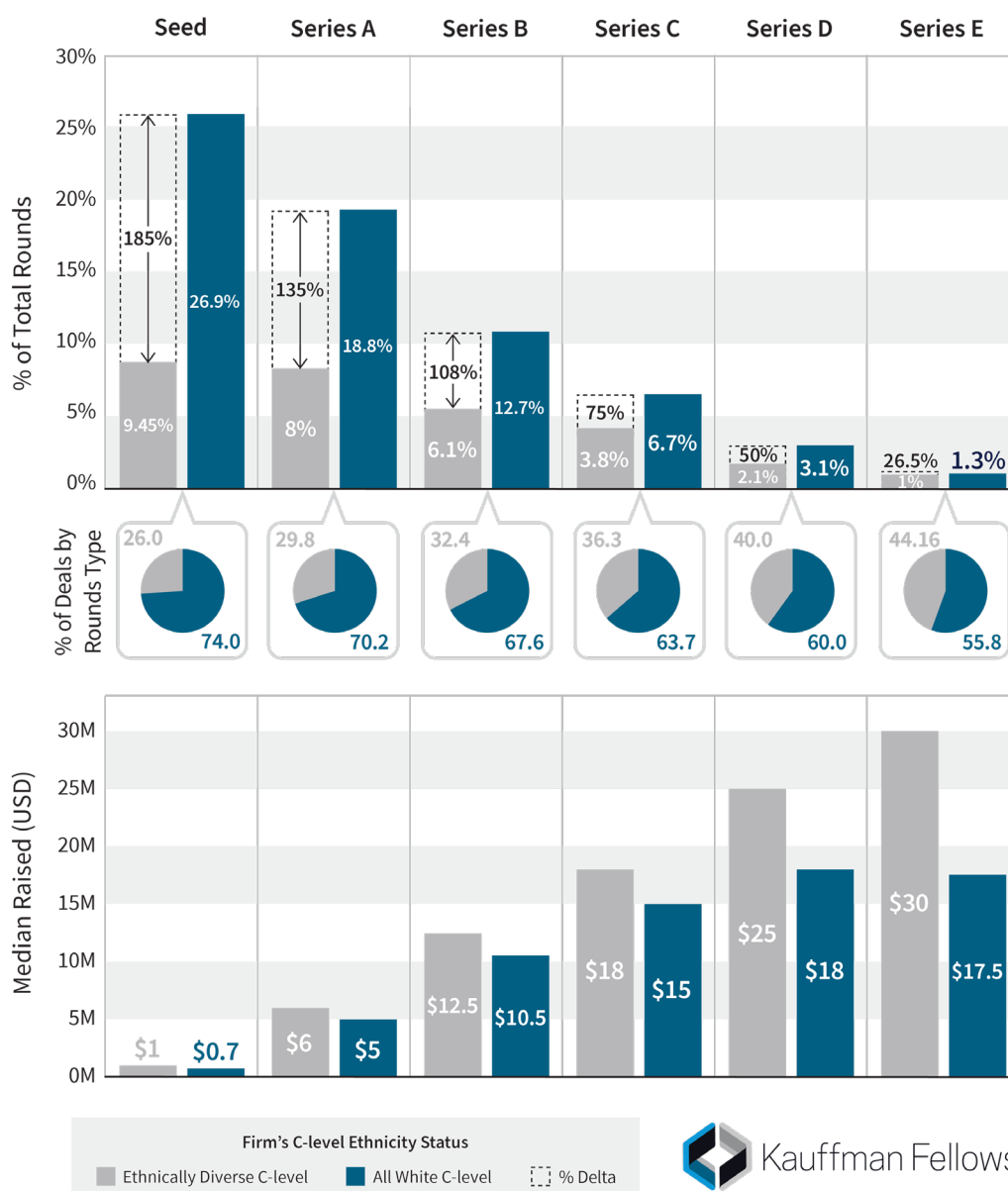


Figure 10. Amount Raised by Perceived Ethnicity of Founding Teams. White Founding Teams raise the majority of rounds, but when Diverse Founding Teams do raise capital they raise more. Source: Kauffman Fellows Research Center.

The data hold true for White Executive Teams, with 74% of Seed and 70% of Series A rounds being invested into teams with no diversity at the highest level (Figure 11).

As a startup grows it has the opportunity to increase executive team diversity with new hires. That said, 55% of companies at the Series E stage still have no ethnic diversity in their C-suite (Figure 11 and 12).

ACCESS TO DEALS AND AMOUNT RAISED BASED ON ETHNICITY OF C-LEVEL EXECUTIVES



Figures 11 and 12. Access to Deals, Amount Raised by Perceived Ethnicity of C-Level Executives. White Executive Teams raise the majority of rounds, but raise less than Diverse Executive Teams. Source: Kauffman Fellows Research Center.

When looking at acquisitions and IPOs, we find that Diverse Founding Teams have a slightly higher likelihood of completing an initial public offering (IPO) than acquisition: 21.7% versus 18.6% (Figure 13).

TYPES OF EXIT SEGMENTED

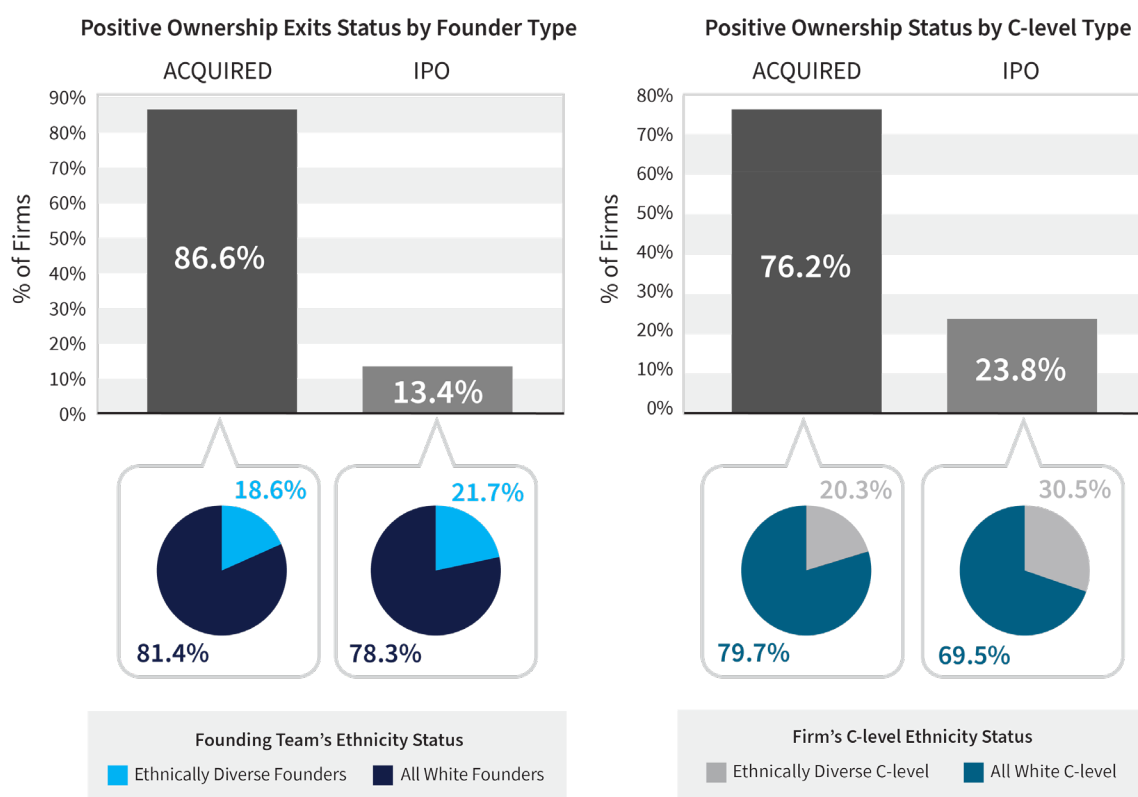


Figure 13. Type of Exit Segmented by Perceived Ethnicity. Diverse Founding Teams and Diverse Executive Teams outperform all White teams. Source: Kauffman Fellows Research Center.

The data also show that Diverse Founding Teams generate higher median realized multiples (RMs) on Acquisitions and IPOs (Figure 14). Diverse Founding Teams returned 3.3x, while White Founding Teams returned 2.5x.

The results are even more pronounced when looking at the perceived ethnicity of the executive team. Diverse Executive Teams returned 3.3x, while White Executive Teams only returned 2.0x.

As mentioned above, we report realized multiples (RMs) only for successful startups that were acquired or went through the IPO process. We have not included companies that fail to reach a successful outcome.

REALIZED RETURNS FROM POSITIVE EXITS

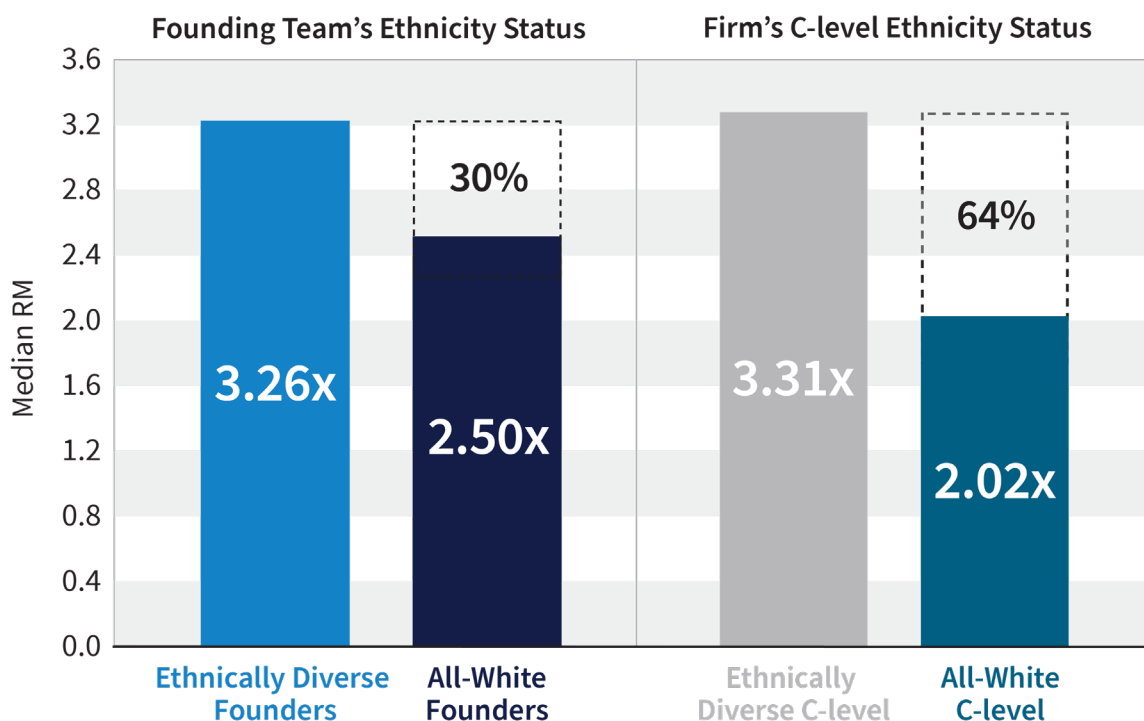


Figure 14. Realized Multiple by Perceived Ethnicity of Found Team and Executives. Diverse Executive Teams earn a 3.3x realized multiple, compared to a 2.0x realized multiple, for White Executive Teams (a 65% increase). Source: Kauffman Fellows Research Center.

Our Analysis Shows the Financial Harm of Bias in Startups

Our data show a clear difference between diverse and non-diverse teams. Ethnically diverse startup founding teams and executive teams both raise more money from and provide higher returns for investors.

These results are consistent with other published findings. A [Boston Consulting Group \(BCG\) report](#) found that companies with diverse executive teams had 19% more revenue than their non-diverse peers. A [recent McKinsey study](#) also found that ethnically and culturally diverse boards of directors were “43% more likely to experience higher profits.”

Previously published reports show that firms with teams having [high racial and ethnic diversity](#) are “35 percent more likely to have financial returns” above the industry median. In our opinion, diverse teams outperform other teams because they have broader viewpoints, have stronger networks, and more closely match their target customers. Specifically, according to the [U.S. Census](#), the United States is roughly 77% White, 18% Latinx, 13% Black, and 6% Asian. It only makes sense to have startup leadership more closely align to those demographics.

However, we also find an alarming difference in the access to capital between White and non-White founders. For example, 77% of all Seed and Series A rounds were raised by startups with zero ethnically diverse founders (Figure 10).

“If you’re looking to invest in the top 2-3% of companies, the pipeline doesn’t matter as much as selection bias,” said Miriam Rivera, co-founder and managing director of Ulu Ventures and Kauffman Fellow. “How can you not find diverse candidates and diverse founders when top universities have been accepting diverse cohorts for the last 30-40 years?”

This data, combined with the education findings from Part One, point to a clear selection bias. As in other professions, venture capitalists invest in people that look like themselves, have similar views, and have similar upbringings.

The data also show that despite the lack of access to capital, diverse teams—when successful in closing a round—raise more money per round (Figures 9 and 12).

For example, White Founding Teams closed 81.4% of all Series E financing rounds while Diverse Founding Teams make up the remaining 18.6%. Despite having a fraction of the access, Diverse Founding Teams raised 60% more in their rounds (median \$40M per Series E financing for diverse teams compared to \$25M per Series E financing for all-White founding teams; see Figure 9).

We need to do a better job as an industry to increase diversity in early-stage venture funds.

As mentioned earlier, people invest in others who are similar to themselves (the “selection bias problem”). Today, 80% of investment partners at venture capital firms are White, compared with only 3% Latinx and 3% Black ([NVCA](#)). This helps explain why 77-80% of venture rounds go to companies with White Founding Teams. In our opinion, there is a strong disconnect between the people writing the checks and those who are working in the trenches to incubate and start companies.

We need ethnically diverse venture capital partners who understand the nuances of different industries, products, cultures, and problems. We believe that there is a moral argument and even a moral necessity to do so—and there is a clear profit argument to be made as well.



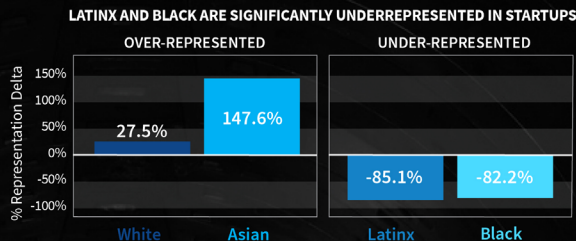


DECONSTRUCTING THE PIPELINE MYTH & THE POWER OF ETHNICALLY DIVERSE TEAMS

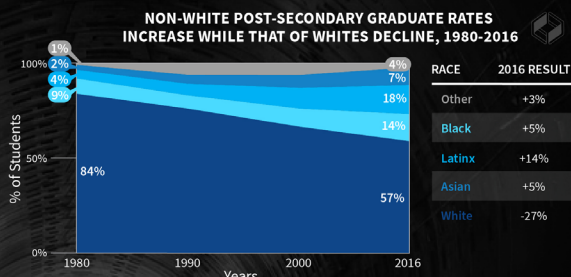
Marlon Nichols, Collin West, and Gopinath Sundaramurthy
Kauffman Fellow Research Center



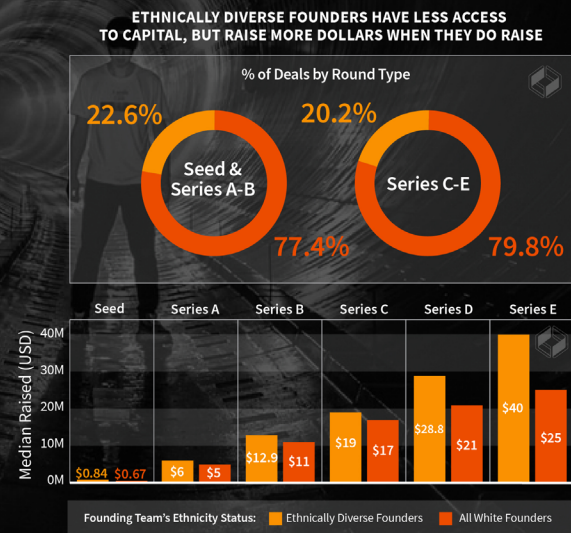
Kauffman Fellows Research Center studied the perceived ethnicity of 260,000+ U.S. startup executives in 20,000+ startups since 2000. When compared to the working-age US population, Latinx and Black executives are dramatically underrepresented.



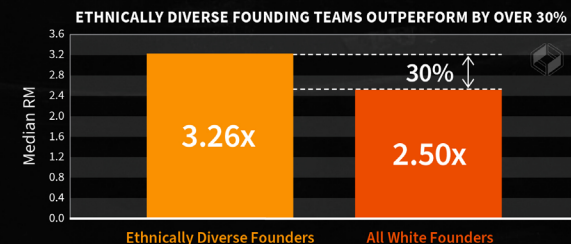
Many factors influence startup hiring, including a college education. The “pipeline problem”, meaning lack of educated and therefore qualified candidates, has been touted as a seemingly reasonable explanation for this underrepresentation. However, from 1980 to 2016, White college graduation rates fell 27% while Asian and Black graduation rates both grew 5%, and Latinx grew 14%.



This larger number of non-White educated candidates is not translating into startup representation. Further, White executives have much better access to capital—but when ethnically diverse teams do successfully raise capital, they tend to raise more money in each round.



Investing in diverse teams is more than just morally and socially necessary—it makes financial sense. Our data show that diverse founding teams who reach an exit by acquisition or IPO return 30% more capital to their investors, compared to their all-White peers.



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This research was funded by the Ewing Marion Kauffman Foundation. The contents of this publication are solely the responsibility of Grantee.

Methodology

All the data used in the development of all charts and insights were obtained from Crunchbase private-market data. Specifications of the analysis include the following.

- Venture-backed rounds for private firms between 01 January 2000 to 31 December 2018 were included.
- All executives whose profile pictures were available on the Crunchbase dataset were analyzed using the Clarifai publicly available API. If the profile image of a person had a logo, multiple faces, or had a low-resolution image, they were skipped.
- The perceived ethnicity of an individual was determined using the flowchart described in Figure 1. Classification of images was accomplished using the publicly available [pre-trained demographic model](#) on the Clarifai platform, which is also owned by Clarifai. If the person's perceived ethnicity could not be conclusively determined using the rules defined in the flowchart, then they were marked "unknown" and not included in our analysis.
- Ethnic groups are all perceived ethnicity
- Executives with "founder" (case insensitive) in the titles were tagged as 'Firm Founders'.
- Executives with titles including "CEO", "CTO", "CFO", "CIO", "chief", "COO", "CRO", "president", "co-owner" and "CDO" (all titles are case insensitive) were marked as 'C-level Executives'.
- The startup industry classification was based on the segment description listed in the dataset.
- College degrees were manually curated and classified based on the number of years and requirements for the degree. For people with multiple degrees, the above degrees were ranked and the top degrees are selected.
- The classifications of degrees used in this study include the following.
 - **Undergraduate degree or less:** containing degrees like High school, Certificate, Diploma, Bachelor's
 - **Graduate degree or higher:** containing degrees such as MBA, Master's, Doctorate/Doctoral, Physician, Law, and Graduate
- Education subjects, like degrees, were also manually curated and classified into the large buckets of "Engineering," "Business," "Science," or "Other," based on subject type listed in the dataset. Subjects are selected for the top degrees for each person. Examples are listed below.
 - **Engineering** - Computer Engineering, Chemical Engineering, Information Technology, Mechanical Engineering
 - **Business** - Business Administration, Marketing, Business, Business Management, International Business, Finance
 - **Science** - Genetics, Physics, Mathematics, Psychology, Biochemistry, Medicine, Molecular Biology, Pharmacy, Neuroscience

- Firms with at least one founder with a perceived ethnicity other than White are referred to as **Diverse Founding Teams** ... All other firms were marked as **White Founding Teams**.
- Firms with at least one C-level executive with a perceived ethnicity other than White are referred to as **Diverse Executive Teams**. All other firms are included as **White Executive Teams**.
- Startup returns were calculated only for firms with positive exits (acquired or IPO). For these firms, the Realized Multiple (RM) was calculated using the money raised and the post-valuation including the dilution that occurs in each round.
- Disclaimer for data: "Crunchbase's dataset is constantly expanding, but there are gaps. A company may not have all the founders and chiefs listed on its Crunchbase profile or have the complete details regarding the executive's education listed in detail."

Please find more information on this article and other related content at www.kauffmanfellows.org/journal

This research was funded by the Ewing Marion Kauffman Foundation. The contents of this publication are

About Kauffman Fellows

Kauffman Fellows is the premier leadership organization in innovation and capital formation, with graduates leading venture capital, government, corporate, university, and startup innovation efforts globally. More than 650 Fellows now lead more than 200 venture capital firms representing funds that invest billions into startups in more than 51 countries around the world. Kauffman Fellows has a strong commitment to diversity and actively recruits women and minorities. Inspired by Ewing Marion Kauffman and his legacy of shared ownership, accountability, and experimentation, we measure success in enduring new businesses that generate long-term returns for principals, investors, and society as a whole. For more information visit www.kauffmanfellows.org and follow us at www.twitter.com/kauffmanfellows.



About MaC Venture Capital

MaC Venture Capital is the result of the merger between successful Los Angeles and Bay Area based Seed funds, across Culture Ventures and M Ventures. MaC Venture Capital is an early stage venture capital firm focused on finding ideas, technology, and products that can become infectious. We invest in technology companies that benefit from shifts in cultural trends and behaviors in an increasingly diverse global marketplace. Marlon Nichols, one of the authors of this report, is the co-founder and co-managing general partner at MaC Venture Capital. He is also a Kauffman Fellow (class 18 and mentor class 19).

