WORKPLACE DIVERSITY AND FINANCIAL PERFORMANCE

AS YOU SOW®

30 YEARS   1992 – 2022

ACKNOWLEDGEMENTS AND GRATITUDE

As You Sow is the nation's leading shareholder advocacy nonprofit, with a 30-year track record of promoting environmental and social corporate responsibility and advancing values-aligned investing. Its issue areas include climate change, ocean plastics, pesticides, racial justice, workplace diversity, and executive compensation.

Whistle Stop Capital is a consultancy that offers outsourced sustainable investment services, working with asset owners and advisors to assess and address material social and environmental exposures within their investment portfolios.

Whistle Stop Capital manages *As You Sow's* workplace equity program. Within that effort, the two organizations developed the Investor Statement referenced on page 8; tracked the Russell 1000 companies for their disclosure of diversity, equity, and inclusion (DEI) data; and have spoken directly with companies, providing guidance and encouragement for increased reporting of DEI data.

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EXECUTIVE SUMMARY

What is the association between the workforce diversity of publicly traded companies and the financial performance of these companies? We ask this question because there are indications that discrimination in the workplace is pervasive and that this discrimination is at odds with the best interests of publicly traded companies.

Historically, there have been limited publicly available quantitative data sufficient to allow investors or other stakeholders to compare firms and empirically assess if company diversity supports a company's financial performance. Corporate disclosures of workplace diversity, equity, and inclusion (DEI) programs were primarily anecdotal and qualitative. The lack of quantitative data prevented systematic review and assessment by investors and made securities analysis based on DEI programs, performance attribution, or anything resembling it impossible.

As a result of cultural and investor pressure, many companies have recently released standardized data on the diversity of their workforce to the public. From August 2020 to October 2022, the number of S&P 100 companies releasing Equal Employment Opportunity Component 1 data (EEO-1) forms publicly more than quadrupled. The U.S. Equal Employment Opportunity Commission (EEOC) requires that all companies with 100 or more employees complete the EEO-1 employee information report to the federal government. In recent years, investors have asked that these forms, which were already prepared, also be provided as material disclosure. Federal contractors with 50 or more employees also must submit this form confidentially to the EEOC. The report includes demographic workforce data, including data by race/ethnicity, sex, and job categories.

> "Assessment of the newly publicly available EEO-1 forms strengthens and confirms previous research as it finds a positive association between diverse representation in management and positive financial performance."

PROCESS

In this report, we analyze point-in-time employee diversity report data from the 277 publicly traded companies that have posted their EEO-1 reports publicly online, matched against financial performance data for those same companies. Only the diversity data that appeared on a company's EEO-1 form was utilized in our analysis. The results for the cross-sectional and diversity growth models were derived from Ordinary Least Squares (OLS) regressions.

There are many ways to define what diversity means and looks like within organizations. The metrics tracked by the EEO-1 form are limited, simplistic, and insufficient to build a nuanced understanding of a company's diverse workforce. However, it is the best available dataset at this point in time, and, despite its flaws, it does allow for meaningful high-level insights and to observe emerging trends.

FINDINGS

This assessment of the newly publicly available EEO-1 forms strengthens and confirms previous research as it finds a positive association between diverse representation in management and positive financial performance. The research also indicates the following key points

- Higher representation of Black, Indigenous, and people of color (BIPOC) employees in management has a positive relationship to higher cash flow, net profit, three- and five-year revenue, and five-year return on equity (ROE), and stock performance. It is also associated with lower volatility.

- There are advantages to corporate cultures that are more inclusive and better at promoting and retaining their diverse talent. Positive financial performance is associated with smaller gaps in overall diversity and the diversity of the management team. Negative financial performance is associated with larger gaps between BIPOC representation in the broader employee base and BIPOC representation in the management team.

- Much diversity is lost between broader organizational representation and the management level, indicating that overarching challenges exist in the cultivation, retention, and promotion of diverse talent regardless of sector.

- The gap between overall female representation in the workforce and female representation in management has a negative performance association for the financial sector; the larger the gap between overall representation and women in management, the larger the underperformance.

- Five-year ROE has a slight negative association across all sectors when representation of White employees in management increases.

A significant finding within this research is related to brokers' projections of companies' expected future growth rates. Brokers provide investment advice and execute trades on behalf of clients. As they provide research and market intelligence, they exert significant influence over share prices. The data used—provided through the Institutional Brokers' Estimate System—showed that, while greater BIPOC representation in management holds a positive relationship with financial performance measures, it is not valued accordingly by brokers. Brokers are more likely to have lower future growth expectations for companies with higher percentages of BIPOC employees in management. This relationship is most clearly seen in brokers' growth projections when there is higher representation of BIPOC women in management. These lowered future expectations are generally out of alignment with the past financial performance of these companies.

In contrast, brokers are more likely to assess future expected performance positively for those companies with high percentages of White managers although the past performance data of these companies does not support these optimistic expectations. Though data is very limited, particularly to make comments about time relationship, this dynamic may already be changing. Brokers did favorably view companies that increased BIPOC hiring between 2020 and 2021.

In line with previous research, we also found that the relationship between diversity and financial performance is complex. There is occasionally an inconsistent relationship between diversity at various levels of a company and financial performance. We see outcomes in relation to gender, race, and ethnicity vary considerably by sector, particularly within the Consumer Discretionary and Consumer Staples sectors. This amplifies the need for a larger dataset—one of sufficient size to allow for sector-specific analysis. The findings in this report show that diversity data is material enough to warrant pressure from investors, legislators, and other stakeholders on companies to increase their disclosure of quantitative diversity and inclusion data.

> " The findings in this report show that diversity data is material enough to warrant pressure from investors, legislators, and other stakeholders on companies to increase their disclosure of quantitative diversity and inclusion data. "

IMPLICATIONS

Broader societal trends indicate that the positive associations between corporate diversity and financial performance identified in this study are likely to become more defined over time. The United States is becoming a more diverse country; census data show that by 2045, non-Caucasian individuals will make up the majority of the population. This change will affect the labor market as well as the customer base. Companies will need to be in tune with these changing demographics in order to remain competitive.

It is anticipated that companies will need to be reflective of their communities to remain relevant and viable. An appreciation of the value of diversity and a clear understanding of current barriers to workplace equity will prepare companies to grow as the world around them changes.

Corporate transparency and reporting, in and of itself, is an important best practice to be celebrated. When a company releases meaningful data on its workforce composition alongside its rates of recruitment, promotion and retention of diverse employees, it:

- illustrates that it understands and takes seriously the fact that discrimination is a systemic problem in corporate America and that it is willing to do its part in addressing it openly;

- demonstrates the depth of its commitment to be accountable to its employees;

- acknowledges its own imperfections honestly; and

- provides data that allow investors and other stakeholders to assess and compare the effectiveness of its programs.

A company's public release of its EEO-1 data is a good first step toward transparency; however, it only provides a snapshot of the company's current employees, does not show how the company is progressing over time, and does not clarify the inclusivity of the company's practices. For investors, EEO-1 data alone is insufficient.

These are complex issues. To better understand the relationship between employee diversity at a company and its performance in the market, there need to be more data, more detailed data, and an expanded array of metrics.

We cannot assume that a company with a diverse workforce ensures an inclusive culture for its diverse employees. The number of available EEO-1 forms, while significantly larger than previously available, remained insufficient for deep analysis by sector. More companies need to publicly disclose their EEO-1 data to facilitate the understanding of deeper correlations. The EEO-1 form is also a limited data set that simplifies complex representation issues. As such, investors have requested—and leading companies are increasingly releasing—inclusion data (i.e., data on hiring, promotion, and retention in alignment with the gender, race, and ethnicity categories established for all protected classes as established by the EEOC).

> "Hiring, promotion and retention data is also needed from employers. This inclusion data illustrates how effectively a company manages its workforce."

INTRODUCTION

For companies, the benefits associated with having diverse employees include access to top talent, better understanding of consumer preferences, a stronger mix of leadership skills, informed strategy discussions, and improved risk management. Diversity, and the different perspectives it encourages, has also been shown to encourage more creative and innovative workplace environments.

However, despite Title VII of the Civil Rights Act of 1964[1] making it unlawful to harass or discriminate in the workplace, a recent NBC poll showed that 48% of self-identified African Americans and 36% of self-identified Hispanics said they had experienced race-based workplace discrimination (Arenge & Perry, 2018). In addition, the consultancy McKinsey found that 55% of senior-level women say that they have been sexually harassed during their careers (Fuhrmans, 2018).

McKinsey's research found that, in 2021, White women made up 30% of entry-level employees but only 20% of the executive suite. Women of color made up 17% of entry-level employees but only 4% of the executive suite. Men of color made up 17% of entry-level employees but only 13% of the executive suite. White men made up 35% of entry-level employees but represent 62% of the executive suite (Krivkovich et al., 2022).

There are indications that discrimination in the workplace is pervasive. This is despite the suggestion from empirical literature that a positive relationship exists between a more diverse workforce and corporate financial performance (Hoogendoorn et al., 2013; Hunt et al., 2015; Moreno-Gómez et al., 2018). The literature also suggests the relationship is notably nuanced (Andrevski et al., 2014; Sharma et al., 2020).

The positive associations between corporate diversity and financial performance are likely to become more defined over time. The United States is becoming a more diverse country; according to census data, by 2045, a majority of the population will be comprised of non-Caucasian individuals. This change in the demographic make-up of the labor market as well as the customer base will require shifts in corporate strategies. In order to remain competitive, companies will need to be attentive to the changing marketplace and its demographics. In recognition of this growing diversity, it is important for corporate America to adapt to and be prepared for this change to ensure that companies can continue to attract and retain the talent they need to serve their customer base. An appreciation of the value of diversity and a clear understanding of current barriers to workplace equity will prepare companies to grow as the world around them changes.

Given this, our motivating question for this analysis was: what is the association between the workforce diversity of publicly traded companies and the financial performance of publicly traded U.S. corporations?

Corporate Disclosure of Workforce Diversity Data

Corporate transparency and reporting, in and of itself, is an important best practice to be celebrated. When a company provides data which allows investors and other stakeholders to assess and compare the effectiveness of workplace equity programs, it shows that it takes seriously that discrimination is a systemic problem in corporate America, and that it is willing to do its part in addressing it openly. As it acknowledges its own imperfections honestly, it illustrates the depth of its commitment to be accountable to its employees.

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1. Title VII of the Civil Rights Act of 1964 (Pub. L. 88-352) makes it unlawful "to discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, sex, or national origin." Available at **https://www.eeoc.gov/laws/statutes/titlevii.cfm**.

Without data, external stakeholders are unable to know the effectiveness of popular programs, such as employee resource groups, engagement surveys, and bias trainings. Without corporate disclosure of key diversity and inclusion metrics, investors are unable to identify which companies "walk the talk" and which only have strong public relations teams.

Historically, there has only been a very limited amount of publicly available quantitative data that would allow investors, securities analysts, or other stakeholders to empirically assess how company diversity might impact financial performance. Corporate disclosures of workplace DEI programs have primarily been anecdotal and qualitative. The fact that anecdotal data has largely been selectively released has hindered efforts to conduct rigorous systematic assessments.

> " Without corporate disclosure of key diversity and inclusion metrics, investors are unable to identify which companies "walk the talk" and which only have strong public relations teams. "

In response to this longstanding data dearth, many investors, employees, and other stakeholders have been pushing their companies to publicly release additional data related to the effectiveness of their human capital management, specifically regarding their DEI programs. Investors and institutions with a combined $4.7 trillion in assets signed an Investor Statement in 2021 that stated, "Investors are concerned that companies are willing to make promises regarding workplace equity, but are unwilling to provide the corroborating data that shows these promises have been integrated into their own human capital management systems. It is essential that investors have access to the most up-to-date and accurate information related to diverse workplace policies, practices, and outcomes."

This Investor Statement supported the work of a protracted campaign waged by a number of investors and other advocates. This included efforts by investment managers, *As You Sow* and Whistle Stop Capital, and public pension funds such as the New York City Comptroller's Office. These organizations had been calling for transparency from companies around their workforce diversity data and were specifically requesting the release of their Equal Employment Opportunity Component 1 data (abbreviated throughout this report as EEO-1). The EEO-1 is a mandatory form, submitted annually to the EEOC and the U.S. Department of Labor. It requires all companies with 100 or more employees, and federal contractors with 50 or more employees, to submit demographic workforce data, including data by race/ethnicity, sex, and job categories. The data reported reflects employees' self-identification of their gender, race, and ethnicity to their employers. This form is the only source of standardized workplace composition data across companies and industries.

EXAMPLE: PROCTER & GAMBLE'S 2021 CONSOLIDATED EEO-1 FORM

JOB CATEGORIES	HISPANIC OR LATINO		NOT HISPANIC OR LATINO												
			************ MALE ************						************ FEMALE ************						
	MALE	FEMALE	WHITE	BLACK OR AFRICAN AMERICAN	NATIVE HAWAIIAN OR PACIFIC ISLANDER	ASIAN	AMERICAN INDIAN OR ALASKAN NATIVE	TWO OR MORE RACES	WHITE	BLACK OR AFRICAN AMERICAN	NATIVE HAWAIIAN OR PACIFIC ISLANDER	ASIAN	AMERICAN INDIAN OR ALASKAN NATIVE	TWO OR MORE RACES	OVERALL TOTALS
EXECUTIVE/SR. OFFICIALS & MGRS.	11	8	47	6	0	8	0	2	37	3	0	7	0	0	129
FIRST/MID OFFICIALS & MGRS.	481	335	2952	356	0	471	13	34	2121	344	1	370	7	48	7533
PROFESSIONALS	118	110	1141	91	2	190	1	19	1033	122	0	170	0	17	3014
TECHNICIANS	228	101	1105	187	5	21	5	12	631	94	1	38	6	20	2454
SALES WORKERS	85	69	605	76	2	38	4	11	487	63	0	52	3	10	1505
ADMINISTRATIVE SUPPORT	31	48	541	73	1	4	1	2	1245	113	0	38	10	12	2119
CRAFT WORKERS	333	66	4587	649	12	97	57	34	1046	259	1	15	16	13	7185
OPERATIVES	242	92	1406	341	5	41	6	53	423	115	0	22	7	19	2772
LABORERS & HELPERS	19	16	70	28	0	2	2	2	47	13	0	1	1	3	204
SERVICE WORKERS	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	1548	845	12455	1807	27	872	89	169	7070	1126	3	713	50	142	26916
PREVIOUS REPORT TOTAL	1363	752	12040	1607	24	786	91	194	6799	1052	2	625	48	131	25514

As a result of cultural and investor pressure, many companies have recently released standardized data on the diversity of their workforce to the public. From August 2020 to October 2022, the number of S&P 100 companies publicly releasing their EEO-1 forms more than quadrupled.

In this report, we analyze point-in-time employee diversity report data from the 277 private sector companies who have posted their EEO-1 reports publicly online, matched against the financial performance data for those same companies. Only the diversity data that appeared on a company's EEO-1 form was utilized in our analysis.

Data limitations

There are many ways to define what diversity means and looks like within organizations. The metrics tracked by the EEO-1 form are limited, simplistic, and insufficient to build a nuanced understanding a company's diverse workforce. However, it is the best available dataset at this point in time, and—despite its flaws—it does allow for meaningful analysis.

The EEO-1 form is the only standardized accounting of workforce diversity that exists. It is imperfect: It is unable to capture the nuance and differentiation between companies or sectors in how employees are categorized. It is insufficient: It only represents a limited subset of immutable characteristics around which discrimination is known to exist. As examples, this data set provides us no insights into the sexual orientation, gender identity, age, or neurodiversity of a company's employees.

While the EEO-1 form allows us to identify diversity, it does not allow us to determine how diverse employees are included in the workplace. It is crucial to acknowledge that the relationship between diversity and financial performance is a complex one (Kochan et al., 2003). Evidence about inclusion is scanter. Significantly more data and research are needed to understand companies' hiring, promotion, and retention rates of diverse employees.

> **There are many ways to define what diversity means and looks like within organizations. The metrics tracked by the EEO-1 form are limited, simplistic, and insufficient to build a nuanced understanding a company's diverse workforce. However, it is the best available dataset at this point in time.**

> **Evidence about inclusion is scanter. Significantly more data and research are needed to understand companies' hiring, promotion, and retention rates of diverse employees.**

LIMITATIONS RELATED TO THE USE OF EEO-1 DATA

It is crucial to note that analyzing aggregated data like the EEO-1 data comes with specific limitations.[2]

Aggregation of data means loss of potentially important variation: Relationships may appear quite strong, given the aggregate nature of the data; this does not, however, substantiate a causal interpretation of the data and merely identifies relationships observed at an aggregate level that may warrant further research.

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2.   All analyses will have limitations, regardless of whether they are acknowledged. We highlight the limitations of this analysis here in an effort to promote transparency and appropriate interpretation of the results, as well as to encourage considerate analysis of the EEO-1 and similar datasets in others' future analytical endeavors.

Whenever data are analyzed in the aggregate, the measures utilized are a summarization of a more detailed state. For example, the EEO-1 report provides the number of employees identified by gender and race or ethnicity by job category (e.g., executives, senior officials, and managers; craft workers; etc.). This means that we obscure potentially important factors, such as team dynamics or segregation within job categories (e.g., do we see considerably differential representation of BIPOC individuals across teams or within business units?). As companies use different internal systems to identify which employees are placed in each category, particularly as it relates to leadership roles, corporate leadership for the purposes of this analysis combined two EEO-1 categories: "Executive/Sr. Officials & Mgrs" and "First/Mid Officials & Mgrs." This category allowed for an assessment of the diversity of those individuals tasked with developing and implementing strategic corporate decisions but did not allow a C-suite specific analysis.

Sample size & selection of available data: Diversity-data focused research organization DiverslQ identified and extracted the data available in 277 publicly posted EEO-1 reports. Because we have analyzed data only from companies that published their EEO-1 data, the analysis is unlikely to be representative of all companies. This is particularly true within the Consumer Staples; Materials, Energy, & Utilities; Communication; and Real Estate, all of which had fewer than 20 EEO-1 disclosures available for review. Investors have also focused their calls for EEO-1 data disclosure on the S&P 100, which means that the available data set is skewed toward larger companies. Additionally, the data on the EEO-1 form is self-reported by employees to their companies; the manner in which demographic data are collected has been shown to impact how individuals respond, and, therefore, an individual's self-reported race may not reflect precisely how they identify (López et al., 2018).

The current sample set of 277 companies, while far larger than was previously available, remains insufficient to truly understand diverse representation across corporate America. Figure 1 compares the percentage of all employees in the EEO-1 database who identify as White, Black, Latinx, Asian, Indigenous Peoples, and women against the most recent available data from the United States Census Bureau. Generally speaking, BIPOC are overrepresented in EEO-1 disclosing companies compared to the population as a whole, while women are underrepresented. As will be seen later in the report, while BIPOC employees seem to be overrepresented in this dataset, the diversity of non-White management-level employees significantly lags overall U.S. representation.

Why inclusion data matters

Similar to how an income statement pairs with a balance sheet, hiring, promotion, and retention rate data show how well a company manages its workforce diversity. Without this data, investors are unable to assess a company's human capital management program.

Research indicates that Black and Latino applicants face hiring challenges. Results of a meta-analysis of 24 field experiments showed that, with identical resumes, White applicants received an average of "36% more callbacks than Black applicants and 24% more callbacks than Latino applicants"(Quillian et al., 2021).

Promotion rates can be considered an indicator of how well diverse talent is nurtured at a company; however, for every 100 men who are promoted, only 86 women are. Women of color are particularly impacted, comprising 17% of the entry-level workforce and only four percent of executives (Krivkovich et al., 2022).

Initial research on retention rates indicates that these data link to financial performance. Morgan Stanley researchers found that employee retention above industry average can indicate a competitive advantage and higher levels of future profitability (Convergence, 2022). Companies with high employee satisfaction have also been linked to annualized outperformance of over two percent (McElhaney, 2021).

Companies are increasingly willing to share this data set. Between September 2020 and September 2022, S&P 100 companies increased their release of hiring rate data by gender, race, and ethnicity by 298%; retention rate data by 481%; and promotion rate data by 300% (Workplace Equity).

FIGURE 1: PERCENT OF EMPLOYEES IN EEO-1 DATABASE AND IN THE U.S. GENERAL POPULATION BY DIVERSITY CHARACTERISTIC
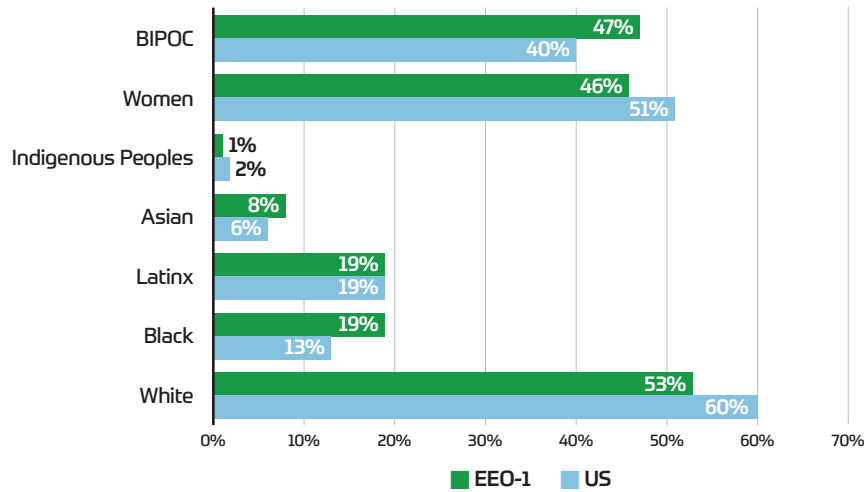
Source: EEO-1 and American Community Survey (2020).

The level of representation of each race or ethnicity may be too small to be able to impact a business' practices. This concern is particularly acute when we consider the presence of Indigenous Peoples, who comprise 1% of EEO-1 represented employees. The Indigenous Peoples category represents a combination of the Native Hawaiian or Pacific Islander and American Indian or Alaskan Native categorizations. The combination of these categories was done with the intention of increasing the identifiability of influence of these populations.

Additionally, these data are assumed to measure sex, rather than gender, and do not allow us the ability to measure diversity in regard to gender identity, among other aspects of identity.

Figure 2 shows that the research includes companies of a wide range of sizes, in terms of employee headcount. The majority of the data available at this point in time are focused on those companies with fewer than 25,000 employees. The findings thus skew toward a greater understanding of relatively smaller employers. As access to company EEO-1 data increases, we will be able to better differentiate findings by company size.

FIGURE 2: NUMBER OF COMPANIES BY BANDED HEADCOUNT
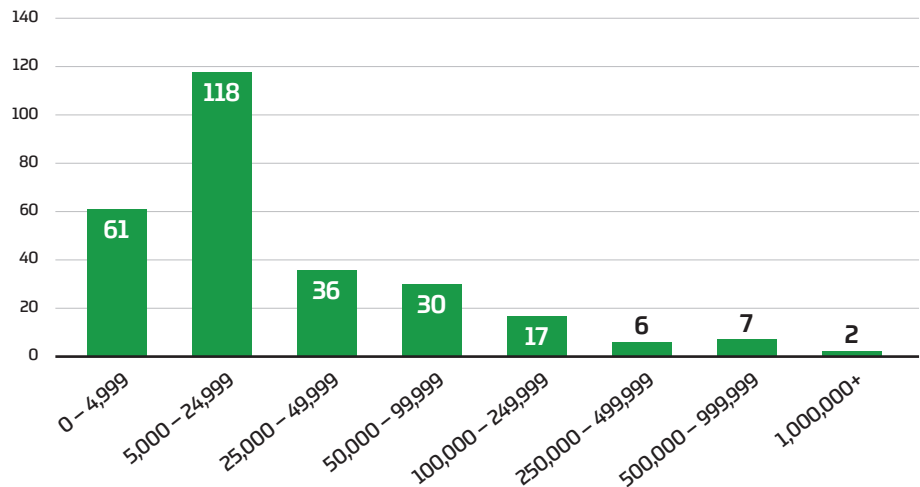
ANALYTICAL CONSIDERATIONS AND APPROACH

HYPOTHESES

While caveated, given the aforementioned literature and complicated relationship between diversity and performance, our hypotheses were as follows:

- Greater representation of BIPOC individuals and women (i.e., a greater percentage of employees who identify as BIPOC individuals and/or women by the EEO-1 data) within companies, particularly at the management and executive level, would be associated with greater performance on measures of financial performance.

- White males comprise 31% of the U.S. population but are 67% of investment bankers in large firms (Women's Congressional Policy Institute). Given this relatively limited diversity within the financial services sector, we expected that those metrics of financial performance that were objective, such as Cash Flow, would be more favorable to diverse companies than those metrics that integrate subjective assessments from brokerage firms and buy-side analysts, such as projected future growth.

PROCESS

We matched company demographic data from the available and complete EEO-1 reports to that same company's financial performance data. The financial metrics data were accessed on August 31, 2022, from Refinitiv, a financial markets research database provider partially owned by Thomson Reuters. The 14 metrics focused on in this report (listed in the box on page 13) are key performance indicators often relied on by securities analysts. We sought to include performance measures that were indicative of only management performance and others that were inclusive of the perception, and subjectivity, of the market and broker sentiment. Where possible, we sought data that looked at longer-term performance, recognizing that diversity is one of a variety of factors that impacts corporate performance and is not something that is likely to be reflected in a short-term performance gain. Multi-year data were also sought in recognition of the abnormal economic conditions and market volatility that the COVID-19 pandemic brought to the market.

For each cell, we conducted OLS regression (i.e., modeling the relationship between each pair of diversity metric and the financial performance outcomes). We ran two iterations of each model: one that controls for sector and one that does not. Controlling for sector means that we added variables to the

Diversity data used from EEO-1 reports

- **Percentage BIPOC**: The percentage of employees who identify as Indigenous, Asian, Latinx, or Black

- **Percentage Women**: The percentage of employees who identify as Women

- **Percentage Indigenous Peoples**: The percentage of employees who identify as Indigenous Peoples (i.e., American Indian/Alaska Native or Native Hawaiian/Pacific Islander)

- **Percentage Asian**: The percentage of employees who identify as Asian

- **Percentage Latinx**: The percentage of employees who identify as Latinx

- **Percentage Black**: The percentage of employees who identify as Black

- **Percentage White**: The percentage of employees who identify as White

- **Percentage BIPOC management**: The percentage of individuals in management (i.e., executive-level or first/middle management) who identify as BIPOC

- **Percentage BIPOC Women (of women in management)**: The percentage of Women in management (i.e., executive-level or first/middle management) who identify as BIPOC

- **Percentage Women management**: The percentage of individuals in management (i.e., executive-level or first/middle management) who identify as Women

- **Percentage Indigenous Peoples management**: The percentage of individuals in management (i.e., executive-level or first/middle management) who identify as Indigenous Peoples (i.e., American Indian/Alaska Native or Native Hawaiian/Pacific Islander)

- **Percentage Asian management**: The percentage of individuals in management (i.e., executive-level or first/middle management) who identify as Asian

- **Percentage Latinx management**: The percentage of individuals in management (i.e., executive-level or first/middle management) who identify as Latinx

- **Percentage Black management**: The percentage of individuals in management (i.e., executive-level or first/middle management) who identify as Black

- **Percentage White management**: The percentage of individuals in management (i.e., executive-level or first/middle management) who identify as White

- **Gap in Percentage BIPOC**: The absolute gap in percentage of BIPOC employees between other employee types (administrative, operative, labor, and service) and management (executive through first/middle management)

- **Gap in Percentage Women**: The absolute gap in percentage of Women employees between other employee types (administrative, operative, labor, and service) and management (executive through first/middle management)

model that accounted for sector-specific variation before summarizing the relationship between the diversity metric and financial performance indicator of interest. We utilized this method to allow us to summarize high level relationships between diversity and financial performance.

In the tables below, color scales were determined by the magnitude and direction of the relationship based on the results of these OLS regression models. For each coefficient (i.e., the number that summarizes the strength and direction of the relationship), we determined whether it is statistically significant (i.e., whether the relationship appears to be strong enough that it is unlikely to be due to chance alone). Statistical significance is traditionally dictated by a binary decision rule based on the probability that we would observe this absolute magnitude or larger of the model coefficient given chance alone: the p-value. Our p-value was set to a standard threshold of $\alpha=0.05$ to determine whether the relationship we observe was statistically significant or not (i.e., whether the p-value is less than 0.05).

In the tables below, model coefficients that have a p-value of less than 0.05 have a darker shade of orange (negative relationship) or blue (positive relationship). The darker the color is, the more strongly the association held. Where there is an asterisk, we saw an association regardless of any sector-level effects. We used OLS regression (i.e., our modeling) here as a tool for data summarization. Given that there are several outcomes we are comparing within the same metric, interpretation of the relative significance of each finding should be interpreted with caution (American Statistical Organization, 2016).

Financial indicators used

The following datasets were considered for this study, as accessed through the Refinitiv financial database. Refinitiv's descriptions of these terms are quoted below, followed by simplified explanations for readers less familiar with financial metrics:

- **Market Cap:** Market Capitalization: "Current market price multiplied by current common shares outstanding." This is the total market value of a company's shares.

- **DE Ratio:** Debt-to-Equity Ratio: "Total debt (long-term plus short-term) divided by common equity." This indicates how much borrowing a company has done, relative to its equity. Equity represents the company's assets less its liabilities.

- **BVPS:** Book Value per Share: "Total common stockholders' equity divided by common shares outstanding." This is the value of the company's net assets divided by the number of shares it has outstanding.

- **Cash Flow:** Cash Flow per Share: "Sum of the most recent four quarters of cash flow (defined as income before extraordinary and discontinued items plus accumulated depreciation and amortization) divided by the common shares used to calculate EPS – Trailing 12-Month." Cash flow is a company's after tax earnings plus its depreciation divided by the number of shares outstanding. Cash flow is considered less easily manipulated than Earnings Per Share (EPS), another popular financial indicator.

- **Net Profit:** Profit Margin (Net): "The ratio of net income to net sales." Net Profit Margin is calculated by subtracting expenses, including interest and taxes, from a company's revenue and then dividing by total revenue. It is an important indicator of operating effectiveness.

- **Rev 3 yr:** Revenue 3-year Historical Growth: "A measure of historical growth in revenue over 3 years." This is the annual growth over three years of the income of a company without consideration of expenses.

- **Rev 5 yr:** Revenue 5-year Historical Growth: "A measure of historical growth in revenue over 5 years." This is the annual growth over five years of the income of a company without consideration of expenses.

- **EPS 3 yr:** 3-year Annual Growth, Earnings per Share (EPS): "The percentage change in the current year's Earnings Per Share over the Earnings Per Share from three years ago, expressed at an annual rate." EPS is a popular indicator, allowing comparison of company profit growth over time.

- **ROE 5 yr:** Percent Return on Common Equity, 5-year average: "This ratio is calculated as the Average Income Available to Common Excluding Extraordinary Items for the 5 fiscal years divided by the average of Common Equity for the same period and is expressed as a percentage." This is the annual growth over five years of a company's net income divided by its shareholder equity. It is an important indicator how efficiently a company generates profits over the long term.

- **Price Chg:** "Stock Price Percentage Change over 3 years – A measure of the change in a company's stock price over 3 years." This indicates the benefit to the investor over three years of owning a company's stock.

- **LT Growth:** "LT Future Growth Rate: Long-term growth is an estimate of the compound average rate of earnings-per-share (EPS) growth an analyst expects over a period of three to five years. It is a consensus estimate reflecting the views of a number of analysts and is provided by IBES (Institutional Brokers' Estimate System)." Brokers provides investment advice and execute trades on behalf of clients. As they provide research and market intelligence, they exert significant influence over share prices.

- **PEG:** "PEG Ratio Forecast 12-month: Twelve month forward P/E divided by long-term EPS growth." PEG is often used as a valuation measure. A stock with a PEG ratio below 1.0 can indicate an undervalued stock.

- **Sharpe:** "Weekly Sharpe Ratio, 3-year: This is calculated using weekly Price Close change values with a minimum of 104 weekly Price Close change required within the three year trading period." The Sharpe Ratio is a risk indicator that compares the return on a company's stock against what might have been earned risk-free. The excess return is then divided by the volatility of the stock.

- **Beta:** "The slope coefficient from the regression of a stock's monthly excess return against the monthly excess return of the global market index (MSCI All World Index). Excess returns are calculated with respect to the 90-day US T-Bill return. Beta – Historical Global Market is calculated using the most recent 60 months of returns." A beta greater than 1.0 indicates that the stock is more volatile than the broader market; a beta lower than 1.0 indicates that the stock has lower volatility than the rest of the market.

FINDINGS

The tables below indicate the relationships between the diversity metrics listed in the row headings and the financial performance outcomes listed in the column headings. Looking across columns, we can see the relationship between a given diversity metric and various financial performance outcomes. Looking within columns, we can see how the relationship between a given financial performance metric varies by selected diversity metrics.

We detail our findings to focus on the direction of the relationship, signified by color—i.e., whether the coefficient from the model for each diversity metric and outcome was positive (blue) or negative (orange) and the importance of sector, as signified by the asterisk. This simplified view of the relationships between these indicators reflects the still-limited data we have access to. As such, these findings are most appropriately interpreted as summarizations of trends rather than determination of a causal relationship.

> **Higher representation of BIPOC employees in management has a positive relationship to higher cash flow, net profit, three- and five-year revenue, three year EPS, five year ROE and stock performance, and lower volatility.**

> **Greater BIPOC representation in management was shown to have a positive relationship with superior performance measures but is not always valued accordingly by brokers.**

As seen in Table 1 (*n*=277), there were a few outcomes that were statistically significant across various different diversity metrics. The data suggest that higher representation of BIPOC employees in management has a positive relationship to higher cash flow, net profit, three- and five-year revenue, three year EPS, five year ROE and stock performance, and lower volatility.

The two indicators most closely linked to analyst sentiment, Long-Term Future Growth Rate and PEG Ratio 12-month Forecast, had slight negative—albeit not statistically significant—associations with most of the diversity metrics, out of alignment with company performance. This implies that analyst-derived metrics may reflect a level of bias against diversity in management. In other words, greater BIPOC representation in management was shown to have a positive relationship with superior performance measures but is not always valued accordingly by brokers.

	Market Cap	DE Ratio	BVPS	Cash Flow	Net Profit	Rev 3 yr	Rev 5 yr	EPS 3 yr	ROE 5 yr	Price Chng	LT Growth	PEG	Sharpe3	Beta
Overall % BIPOC	+*	-	+	+	-	+	+	+	~	+	-	-	+	+
Overall % Women	-	~	+	~	-*	-	+	~	-	~	~	+	+	~
Overall % Indigenous Peoples	-	-	-	~	+*	+	+	-	+	+	~	-	+	+
Overall % Asian	+*	-	+	+	-	+*	+*	+	-	+	-	-	+	+
Overall % Latinx	+	+	+	+	+	-	-	-	+	-	+	-	-	+
Overall % Black	+	-	+	+	-	-	-	+	~	-	-	-	-	-*
Overall % White	-*	+	-	-	+	-	-	-	~	-	+	+	-	-
% Indigenous Peoples (Mgmt.)	-	-	-	+	+	+*	~	-	+	+	-*	-	+	+
% Asian (Mgmt.)	+*	-	+	+*	~	+*	+*	+	-	+	-	-	+	+
% Latinx (Mgmt.)	+	+	+	+	+	-	-	~	+	-	-	-	-	+
% Black (Mgmt.)	+	-	+	+	-	-	-	-	+	-	-	-	-	-*
% White (Mgmt.)	-*	+	-	-*	-	-	-	-	-	-	+	+	-	+
% BIPOC (Mgmt.)	+*	-	+	+*	+	+	+	+	+	+	-	-	+	-
% BIPOC Women (of Women Mgmt.)	+*	-	+	+*	+	+	+	+	+	+	-	-	+	+
% Women (Mgmt.)	-	+	+	~	-*	+	+*	~	~	~	~	+	~	-
Gap in % BIPOC	-	-	+	-	-	-	-	-	-	~	+	-	-	+
Gap in % Women	+	-	+	+	-	-	-	~	-	-	~	+	+	+

SECTOR SPECIFIC CORRELATIONS

We considered sector-specific correlations for all sectors represented in the EEO-1 data. Due to the low sample size, the correlation coefficients should be considered with caution. Darker shades of color indicate that the correlation coefficients are greater than |0.3|, and greyed cells indicate that the coefficient falls within |0.02|. Furthermore, all sector-specific correlations are applied to a cross-sectional dataset (2021). The sample sizes for each sector-specific correlation were as follows: Financial *n*=46, Consumer Discretionary *n*=31, Consumer Staples *n*=16, Health Care *n*=32, Industrials *n*=38, Information Technology *n*=43, Materials, Energy, & Utilities *n*=40, Other (Communication, Real Estate) *n*=30.

In initial data analysis, we considered overall diversity of staff as well as management level diversity. As managers and executives set and lead the implementation of corporate strategy, the associations diversity at the leadership level were higher, and the detailed analysis of these are included below.

BIPOC Employees

Figure 3 (*n*=277) shows the average percentage of BIPOC employees and BIPOC managers per company, which varies significantly across sectors. Much diversity is lost between the broader organizational representation and the management level, indicating that broad challenges exist in the cultivation, retention, and promotion of diverse talent regardless of sector. However, the challenge is most pronounced in the consumer discretionary sector, which holds an 18% gap between BIPOC representation within its overall staff and that of its leadership.

FIGURE 3: PERCENT OF BIPOC EMPLOYEES, BIPOC MANAGERS BY SECTOR
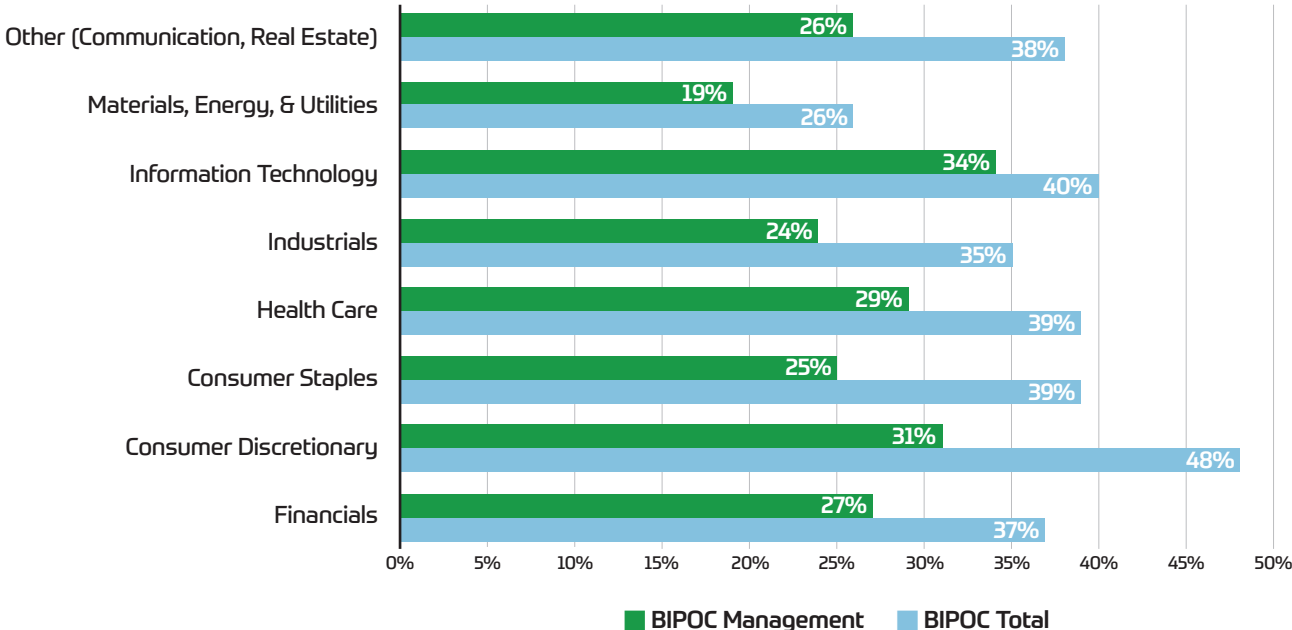
Legend: BIPOC Management, BIPOC Total

Sector	BIPOC Management	BIPOC Total
Other (Communication, Real Estate)	26%	38%
Materials, Energy, & Utilities	19%	26%
Information Technology	34%	40%
Industrials	24%	35%
Health Care	29%	39%
Consumer Staples	25%	39%
Consumer Discretionary	31%	48%
Financials	27%	37%

However, across most sectors, and particularly within financials, the pessimism of brokers' projections seems to increase with the higher the level of diverse representation in management. This sits out of alignment with the companies' past financial performance.

Table 2 shows sector-specific correlations for BIPOC employees in management against financial metrics. Market capitalization tends to have strong, positive correlations with BIPOC representation in management, specifically for the Financials, Consumer Staples, Information Technology, and Other (Communication, Real Estate) sectors. BIPOC representation at the management level appears to have generally more positive associations with financial performance across most sectors, except for Consumer Discretionary and Consumer Staples sectors where the largest gaps between broader employee representation and manager diversity are seen. BIPOC representation relative to market capitalization, cash flow, and ROE have positive associations with the majority of the sectors. The Financials and Industrials sectors also indicate positive associations with financial performance.

However, across most sectors, and particularly within financials, the pessimism of brokers' projections seems to increase with the higher the level of diverse representation in management. This sits out of alignment with the companies' past financial performance.

TABLE 2: SECTOR-SPECIFIC CORRELATIONS FOR PERCENTAGE OF BIPOC EMPLOYEES IN MANAGEMENT

	Market Cap	DE Ratio	BVPS	Cash Flow	Net Profit	Rev 3 yr	Rev 5 yr	EPS 3 yr	ROE 5 yr	Price Chng	LT Growth	PEG	Sharpe3	Beta
Financials (*n*=46)	+	+	+	+	+	+	+	-	+	+	-	+	+	+
Consumer Discretionary (*n*=31)	+	-	+	+	-	-	-	-	+	~0	-	+	-	+
Consumer Staples (*n*=16)	+	-	-	-	+	-	-	~0	+	+	-	+	-	-
Health Care (*n*=32)	+	+	~0	+	+	+	-	+	+	+	-	+	+	-
Industrials (*n*=38)	+	+	-	+	-	+	+	+	+	+	-	-	+	+
Information Technology (*n*=43)	+	-	-	+	+	+	~0	+	+	+	-	-	+	-
Materials, Energy, & Utilities (*n*=41)	+	~0	+	+	-	~0	~0	+	+	-	~0	-	-	~0
Other (Communication, Real Estate) (*n*=30)	+	-	+	+	-	+	+	+	+	-	+	-	-	-

Gap in Percentage of BIPOC Employees

Table 3 shows sector-specific correlations for the gap in percentage of BIPOC employees. Larger gaps between BIPOC representation in the broader employee base versus BIPOC representation in management have negative associations with financial performance. Those companies that excel in hiring, promoting, and retaining BIPOC managers seem to have an advantage over those that do not. Sectors that do not show this association—the Information Technology and Materials, Energy, and Utilities sectors—have the smallest gaps.

TABLE 3: SECTOR-SPECIFIC CORRELATIONS FOR GAP IN PERCENTAGE BIPOC EMPLOYEES

	Market Cap	DE Ratio	BVPS	Cash Flow	Net Profit	Rev 3 yr	Rev 5 yr	EPS 3 yr	ROE 5 yr	Price Chng	LT Growth	PEG	Sharpe3	Beta
Financials (n=46)	-	-	-	-	-	-	+	-	-	-	+	-	-	-
Consumer Discretionary (n=31)	+	~0	-	-	-	-	-	-	-	-	~0	-	-	-
Consumer Staples (n=16)	-	-	~0	-	-	-	~0	+	-	+	+	-	+	+
Health Care (n=32)	-	+	+	-	-	-	-	+	-	-	+	-	-	+
Industrials (n=38)	-	+	-	+	-	-	-	-	-	-	-	-	-	-
Information Technology (n=43)	+	+	+	-	~0	-	+	-	-	+	+	-	+	+
Materials, Energy, & Utilities (n=41)	+	-	+	+	+	+	-	~0	+	+	+	-	+	+
Other (Communication, Real Estate) (n=30)	-	-	+	-	+	-	-	-	+	-	-	+	-	-

Analysis by Sector and Race or Ethnicity

We reviewed each EEO-1 category's race and ethnicity data against each of the performance indicators. We sought to understand the connection between performance and overall company representation as well as identify any associations that might exist between the diversity of management and performance. Additional figures and tables that reflect the assessment detailed below are available in Appendix B.

Indigenous Peoples Employees

Indigenous Peoples comprise a fairly small percent of companies, with the highest percent in the Industrials sector (1.64%). Indications exist, however, that even at this low level of representation, promotion and retention challenges of Indigenous Peoples exist across sectors. No sector maintains its levels of broader employee representation at the leadership level.

Associations between Indigenous Peoples representation in management and financial performance was mixed. As Indigenous Peoples representation in leadership is, at the most, just over one percent across all sectors, this low level of representation may not allow for meaningful impact, positive or negative, on a company's performance.

Asian Employees

Asian employees are most highly represented in the Information Technology sector, comprising about one fourth (25%) of employees. Unlike other races and ethnicities, Asian employees have only slight, or negative, gaps in representation between broader sector employment and participation in leadership roles.

Relatively positive association was found between the representation of Asian employees in leadership roles across all sectors, with the exception of Consumer Discretionary. The positive association was most defined for the Information Technology, Financial and Other (Communication, Real Estate) sectors.

Latinx Employees

Latinx representation was highest in Consumer Discretionary and Consumer Staples. The gap in the percentage between broader employee representation and Latinx leadership is also largest in these sectors.

Within Consumer Staples, a slight negative association was seen with Latinx leadership in net profit, three- and five-year revenue, and three-year EPS. In direct contrast, however, a slight positive association was seen with Latinx management in the Consumer Staples sector across all these indicators except for Net profit, which was inconclusive. This illustrates the complexity in interpreting the data between diversity and financial performance. The current sample set of companies within each of these sectors—Consumer Discretionary (n=31) and Consumer Staples (n=16)—is too small to allow for more detailed analysis.

Black Employees

Similar to Latinx employees, Black representation is among the highest in the Consumer Discretionary and Consumer Staples sectors, though they are also most highly represented in the Industrials sector. The absolute difference in the percentage between broader employee representation and Black leadership is also largest in these sectors, with overall representation in Consumer Staples companies significantly decreasing at the management level. Black employee representation is also notably absent in Information Technology management, where only 4% of managers are Black. This sector also has the lowest percentage of overall Black employees.

In contrast to the indications within Consumer Discretionary (n=31) for Latinx managers, the associations for Black leadership are mostly positive, with strong positive associations found for three-year revenue, three-year EOS, five-year ROE, and share performance over three years. However, performance within Consumer Staples (n=16) only saw a positive association with Net Profit. Additional diversity and inclusion data are needed from Consumer Staples to understand why, and with what strength, these associations exist.

White Employees

Figure 4 shows the average White employee representation within companies. White employee representation is highest of all demographic groups, and there are no sectors in the analysis that consist of fewer than 52% White employees. Across all sectors, White employees have greater representation in leadership than in the general employee population. This is most true in the Consumer Staples and Consumer Discretionary sectors.

FIGURE 4: AVERAGE REPRESENTATION WITHIN COMPANIES OF WHITE EMPLOYEES BY SECTOR
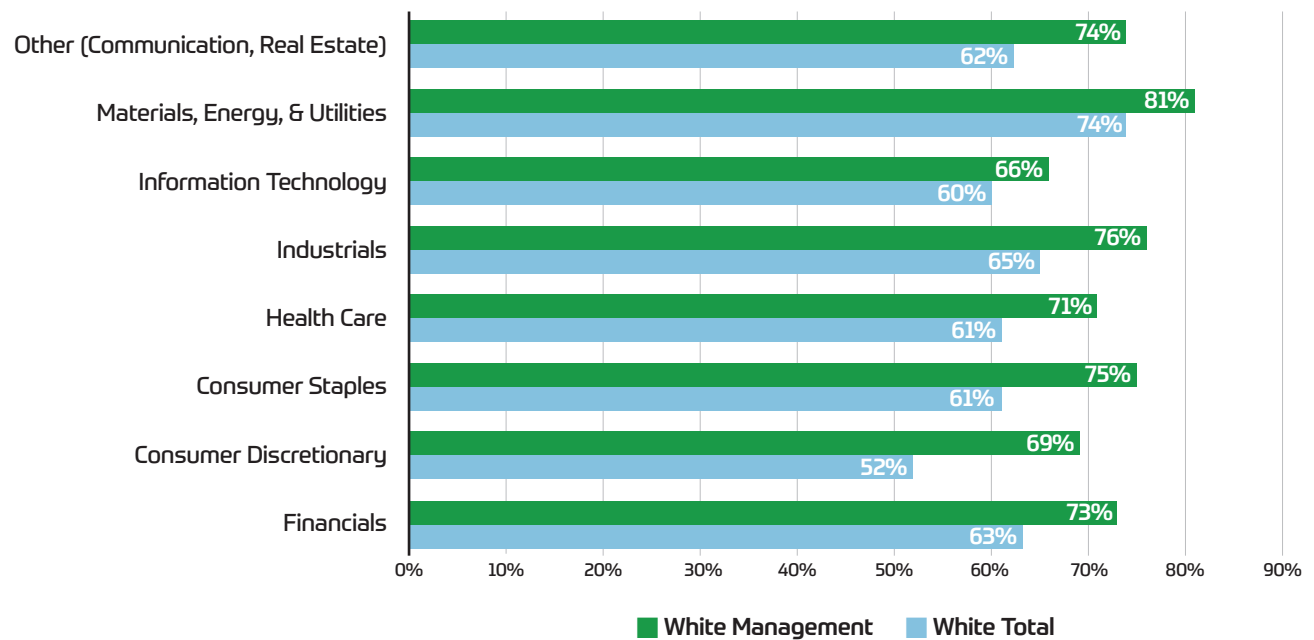
Table 4 shows sector-specific correlations relative to the percentage of White employees in management. Associations between White representation in leadership and financial performance is fairly mixed across sectors and financial metrics, with the most positive associations seen in the Consumer Discretionary sector and negative associations seen in Financial, Health Care, Industrials, Information Technology, and Other (Communication, Real Estate) Sectors. ROE has a slight negative association with White leadership representation across all sectors. Strikingly, although past financial performance does not seem to justify this, long-term broker estimates are generally bullish when higher percentages of White management participation are seen even though those companies have not outperformed.

> " Long-term broker estimates are generally bullish when higher percentages of White management participation are seen even though those companies have not outperformed. "

TABLE 4: SECTOR-SPECIFIC CORRELATIONS FOR PERCENTAGE WHITE EMPLOYEES IN MANAGEMENT

	Market Cap	DE Ratio	BVPS	Cash Flow	Net Profit	Rev 3 yr	Rev 5 yr	EPS 3 yr	ROE 5 yr	Price Chng	LT Growth	PEG	Sharpe3	Beta
Financials (n=46)	-	-	-	-	-	-	-	+	-	-	+	-	-	-
Consumer Discretionary (n=31)	-	+	-	-	+	+	+	+	-	~0	+	-	+	-
Consumer Staples (n=16)	-	+	+	+	-	+	+	~0	-	-	+	-	+	+
Health Care (n=32)	-	-	~0	-	-	-	+	-	-	-	+	-	-	+
Industrials (n=38)	-	-	+	-	+	-	-	-	-	-	+	+	-	-
Information Technology (n=43)	-	+	+	-	-	-	~0	-	-	-	+	+	-	+
Materials, Energy, & Utilities (n=41)	-	~0	-	-	+	~0	~0	-	-	+	~0	+	+	~0
Other (Communication, Real Estate) (n=30)	-	+	-	-	+	-	-	-	-	+	-	+	+	+

Female Employees

Women comprise the majority of employees in the Financials (52%) and Health Care (56%) sectors. They are least represented in the Materials, Energy, and Utilities sector; however, there is less likely to be a gap between overall representation and representation in management in those sectors where the percent of women is smaller. Figure 5 shows female employee representation across sectors.

FIGURE 5: PERCENT OF AVERAGE WOMEN EMPLOYEES BY COMPANY BY SECTOR

Legend: Women Management, Women Total

- Other (Communication, Real Estate): 38% (Management), 43% (Total)
- Materials, Energy, & Utilities: 24% (Management), 23% (Total)
- Information Technology: 31% (Management), 32% (Total)
- Industrials: 28% (Management), 28% (Total)
- Health Care: 49% (Management), 56% (Total)
- Consumer Staples: 40% (Management), 40% (Total)
- Consumer Discretionary: 43% (Management), 48% (Total)
- Financials: 42% (Management), 52% (Total)

Table 5 shows sector-specific correlations relative to the percentage of women employees in management. The indication is that there is a sector-by-sector association. In Health Care, a field that is almost at parity in gender representation within management, the majority of indications are positive, with the notable exception of Net Profit. For Industrials, where there is a relatively low level of female representation, but there is no indication of a promotion gap, again there are indications of a positive association. Across sectors and across indicators, however, the data are generally mixed.

TABLE 5: SECTOR-SPECIFIC CORRELATIONS FOR PERCENTAGE WOMEN IN MANAGEMENT

	Market Cap	DE Ratio	BVPS	Cash Flow	Net Profit	Rev 3 yr	Rev 5 yr	EPS 3 yr	ROE 5 yr	Price Chng	LT Growth	PEG	Sharpe3	Beta
Financials (n=46)	~0	-	~0	-	-	+	+	-	-	-	+	-	+	+
Consumer Discretionary (n=31)	-	-	-	-	+	-	+	~0	-	+	+	+	+	-
Consumer Staples (n=16)	+	-	+	+	-	+	-	+	-	-	-	+	-	-
Health Care (n=32)	~0	+	+	+	-	-	+	+	+	+	+	-	+	+
Industrials (n=38)	-	+	-	-	~0	+	+	+	+	-	-	+	-	+
Information Technology (n=43)	-	+	~0	-	-	-	-	-	-	-	+	+	-	-
Materials, Energy, & Utilities (n=41)	+	+	+	-	+	+	+	+	+	-	-	+	-	-
Other (Communication, Real Estate) (n=30)	-	-	~0	-	~0	+	+	~0	-	-	+	+	-	+

Gap in Percentage of Women Employees

Table 6 shows sector-specific correlations for the gap in the percentage of women employees relative to female managers. When the gap between overall female representation in the workforce and female representation in management is focused on, a clear negative association emerges for the Financial sector; the larger the gap between overall representation and women in management, the larger the underperformance. Across sectors, while the associations between the gap in women representation and financial performance is fairly mixed, it is generally negative.

> " When the gap between overall female representation in the workforce and female representation in management is focused on, a clear negative association emerges for the Financial sector; the larger the gap between overall representation and women in management, the larger the underperformance. "

TABLE 6: SECTOR-SPECIFIC CORRELATIONS FOR GAP IN PERCENTAGE WOMEN EMPLOYEES

	Market Cap	DE Ratio	BVPS	Cash Flow	Net Profit	Rev 3 yr	Rev 5 yr	EPS 3 yr	ROE 5 yr	Price Chng	LT Growth	PEG	Sharpe3	Beta
Financials (*n*=46)	-	+	+	+	-	-	-	+	-	-	-	-	-	+
Consumer Discretionary (*n*=31)	+	-	+	+	-	+	-	+	-	-	+	-	-	-
Consumer Staples (*n*=16)	-	-	+	+	-	+	+	-	-	+	+	~0	+	+
Health Care (*n*=32)	-	~0	+	-	-	-	+	-	-	-	+	-	~0	~0
Industrials (*n*=38)	-	+	-	-	-	-	+	~0	-	~0	-	-	+	+
Information Technology (*n*=43)	+	-	+	+	+	-	-	-	+	-	-	-	~0	+
Materials, Energy, & Utilities (*n*=41)	+	-	-	+	-	-	-	-	-	+	+	-	+	+
Other (Communication, Real Estate) (*n*=30)	-	-	-	-	+	+	~0	-	-	+	-	+	+	-

BIPOC Women (of Women Mgmt.) Employees

Figure 6 (*n*=277) shows the percentage of BIPOC women of women in management. BIPOC women are most represented in management in the Information Technology sector (35%).

FIGURE 6: PERCENT BIPOC WOMEN (OF WOMEN MGMT.) EMPLOYEES BY SECTOR
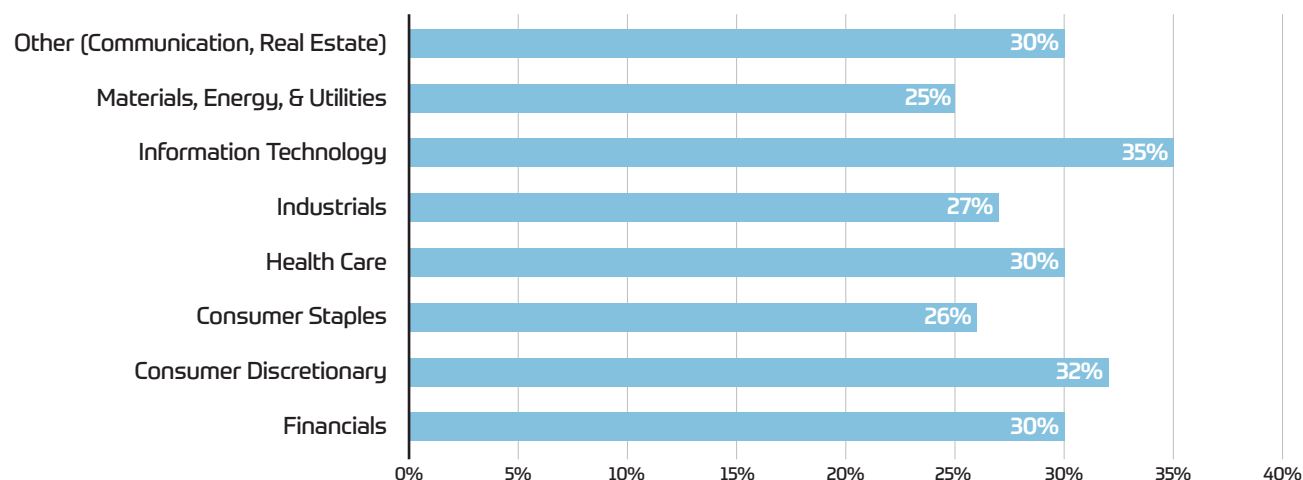
Table 7 shows sector-specific correlations for percentage of BIPOC women relative to those women in management. BIPOC women representation has fairly positive associations with financial performance in a number of financial metrics, including Market Capitalization, Cash Flow, and ROE. As seen in the analysis of BIPOC managers, brokers' estimates across six sectors are pessimistic, despite generally positive operating performance.

TABLE 7: SECTOR-SPECIFIC CORRELATIONS FOR PERCENTAGE OF BIPOC WOMEN IN MANAGEMENT

	Market Cap	DE Ratio	BVPS	Cash Flow	Net Profit	Rev 3 yr	Rev 5 yr	EPS 3 yr	ROE 5 yr	Price Chng	LT Growth	PEG	Sharpe3	Beta
Financials (*n*=46)	+	~0	+	+	+	+	+	~0	+	+	-	+	+	+
Consumer Discretionary (*n*=31)	+	-	+	+	-	-	-	-	+	~0	-	~0	-	+
Consumer Staples (*n*=16)	+	-	-	-	+	-	-	~0	+	+	-	+	-	-
Health Care (*n*=32)	~0	~0	-	~0	+	+	-	+	+	+	-	+	+	-
Industrials (*n*=38)	+	+	-	+	-	+	+	+	+	+	-	-	+	+
Information Technology (*n*=43)	+	-	-	+	+	+	+	+	+	+	-	-	+	+
Materials, Energy, & Utilities (*n*=41)	+	+	+	+	-	-	-	+	+	-	+	-	~0	~0
Other (Communication, Real Estate) (*n*=30)	+	-	+	+	-	+	+	+	-	-	+	-	-	-

INCREASE IN DIVERSITY, 2020 – 2021

The summer of 2020 was an exceptional time in the United States for corporate attention to race and justice issues. The murder of George Floyd and the subsequent demonstrations across America against racial injustice appear to have motivated many companies to review their workplace equity programs. A number of these companies are believed to have made changes in their diversity and inclusion practices during this window of time. As such, 2020 to 2021 hiring cannot be viewed as representative of longer-term human capital management practices. In addition, dependent on company size, differences in representation may be magnified. For example, the proportion of Black employees at one company increased by 220% between 2020 and 2021. This increase, however, only reflected an additional 83 employees.

Table 8 (*n*=210) shows the relationship between the change in diversity metrics from 2020 to 2021 and a company's financial performance. Generally speaking, the 210 companies that submitted EEO-1 reports in 2020 and 2021 experienced increases in diversity year-on-year. There was a 34% increase in the number of BIPOC employees working in EEO-1 companies and an increase in women employees of 1%. On average, the percentage point gap between management and non-management BIPOC employees decreased by 4%.

Notably, the percent change of Black employees in management had positive, statistically significant associations with revenue, share value, and PEG ratio, indicating that companies with higher revenue were able to shift their hiring practices more quickly and that these shifts were deemed as positive by the market during this window of time. Additionally, three-year revenue had positive, statistically significant associations with the increase in the percentage of Indigenous Peoples, BIPOC women (of women in management), and women in management.

> " Though data are very limited, particularly to make comments about time relationship, we see that brokers viewed favorably those companies that increased BIPOC hiring between 2020 and 2021. "

Table 8 indicates a shift in practices by brokers, in contrast to the data provided in Table 1, where long-term broker projections for stock performance were negatively associated with higher levels of diversity. Though data are very limited, particularly to make comments about time relationship, we see that brokers viewed favorably those companies that increased BIPOC hiring between 2020 and 2021.

TABLE 8: DIVERSITY GROWTH MODELS

	Market Cap	DE Ratio	BVPS	Cash Flow	Net Profit	Rev 3 yr	Rev 5 yr	EPS 3 yr	ROE 5 yr	Price Chng	LT Growth	PEG	Sharpe3	Beta
Overall % BIPOC	-	+	-*	-	-	-	-	+	-	-	~	+	+	+
Overall % Women	~	+	-	-	+	+	-	+	+	-	+	~	-	+
Overall % Indigenous Peoples	-	+	+	-	~	+*	+*	-	-	-	-	+	+	+
Overall % Asian	+	+*	~	+	-	+	-	+	+	~	+	~	+	+
Overall % Latinx	-	-	-	-	-	-	-	+	-	+	+	+	+	+
Overall % Black	~	-	-	-	-	~	+	+	-	+	~	+	+	+
Overall % White	-	-	+	+	+	+	+	-	~	+	+	-	+	-
% Indigenous Peoples (Mgmt.)	~	-	~	~	-	+	-	-	+	-*	-	+	~	+
% Asian (Mgmt.)	+	-	~	-	-	+*	-	-	+	-	-	+	-	+
% Latinx (Mgmt.)	-	+	-	-	+	+*	-	-	~	+	+	+	+	-
% Black (Mgmt.)	-	-	-	-	+	+	+	~	~	+	+	~	+	+
% White (Mgmt.)	-	-	-	-	-	-	-	-	-	-*	+	-	-	+
% BIPOC (Mgmt.)	-	-	-	-	-	+	-	+	-	~	-	-	+	+
% BIPOC Women (of Women Mgmt.)	+	-	+	+	-	+*	+	+	~	+*	+	+*	+*	+
% Women (Mgmt.)	-	+	~	~	+	-	-	-	-	+*	+	-	-	-
Gap in % BIPOC	~	+	~	-	+	-	-*	-	-	-	+	+	-	-
Gap in % Women	-	+	-	-	~	-	-	~	~	-	-	-	-	-

CONCLUSIONS AND NEXT STEPS:

This initial analysis of the currently available EEO-1 data indicates the importance of a diverse and inclusive workplace. EEO-1 data indicate that more diverse companies, particularly those at the management level and particularly those without promotion gaps, are associated with financial outperformance. The data also strongly indicate that brokers are mispricing stocks that have more diverse management teams, on average. This mispricing may provide an opportunity for outperformance to some enterprising investment managers.

Representation in the management level or smaller gaps in representation between management and other employee types tends to have more positive associations with financial performance, relative to overall representation; however, this seems to be somewhat sector-specific. This is indicative of a critical component of DEI programs—that diversity alone is insufficient to foster better outcomes. Inclusion matters, yet we do not yet have enough companies sharing their hiring, promotion, and retention rates by diverse characteristic. Investors cannot yet do the analysis they need.

> **EEO-1 data indicate that more diverse companies, particularly those at the management level and particularly those without promotion gaps, are associated with financial outperformance.**

These data most clearly show that the relationship between diversity and financial performance is complex and varies considerably by sector, with substantial opportunity for improvement within the Consumer Discretionary and Consumer Staples sectors. In order to understand the relationship between diversity in a company and its performance in the market, there must be more data, more detailed data, and an expanded array of metrics. Given the small sample sizes relied upon in sub-analyses, relationships should be interpreted with caution as small deviations in values can have somewhat considerable impacts. However, this report clearly shows that diversity data are material enough to warrant additional pressure from investors, legislators, and other stakeholders on companies to disclose quantitative diversity and inclusion data.

> **Diversity data are material enough to warrant additional pressure from investors, legislators, and other stakeholders on companies to disclose quantitative diversity and inclusion data.**

The number of available EEO-1 forms, while significantly larger than previously available, remained insufficient for deep analysis by sector. In addition, while a company's public release of its EEO-1 data is a good first step toward transparency, for investors it is only half of the story. It provides a snapshot of the company's current employees but does not show how the company is progressing over time or the inclusivity of the company's practices. As this analysis has shown, the gap between the diversity of a company's overall employees relative to the diversity of its leadership team is an important performance indicator. Key inclusion data— hiring, promotion, and retention rate data—also remain needed if we are to truly understand how a company's human capital management, and within this, its DEI practices, impact performance.

> **Key inclusion data—hiring, promotion, and retention rate data—also remain needed if we are to truly understand how a company's human capital management, and within this, its DEI practices, impact performance.**

APPENDIX A – SUMMARY STATISTICS OF FINANCIAL DATA

This report relied on 277 EEO-1 reports for year 2021 mapped against financial performance as of September 1, 2022. Of the 277 companies that published EEO-1 reports for 2021, 210 published EEO-1 reports for 2020. The following reflects the number of companies analyzed within each sector: Financials n=46, Consumer Discretionary n=31, Consumer Staples n=16, Health Care n=32, Industrials n=38, Information Technology n=43, Materials, Energy, & Utilities n=41, Other (Communication, Real Estate) n=30.

Table 9 shows the summary statistics for each of the outcomes reported within this analysis to help provide context to the data we were able to access and analyze. Financial metrics were not always available for a given company. Additionally, there was considerable variation in the financial performance across these metrics.

TABLE 9: SUMMARY STATISTICS OF FINANCIAL PERFORMANCE FROM REFINITIV DATABASE

VARIABLE	N	MEAN (STD. DEV.)	RANGE (MIN, MAX)
Market Capitalization	276	36.27 (131.72)	(-173.71, 500.00)
Debt-to-Equity Ratio	258	0.17 (0.37)	(0, 0.48)
Book Value per Share	275	38.33 (46.82)	(-25.47, 380.04)
Cash Flow per Share	275	11.78 (15.83)	(-2.22, 140.72)
Profit Margin (Net)	274	66316.40 (1097438)	(-25.59, 18200000)
Revenue 3-year Historical Growth	252	5.13 (11.88)	(-48.34, 72.52)
Revenue 5-year Historical Growth	268	8.95 (13.60)	(-20.67, 98.29)
3-year Annual Growth, Earnings Per Share	273	28.32 (109.55)	(-370.27, 1274.44)
Return on Equity (ROE), 5-year average	261	0.55 (3.63)	(-0.49, 55.99)
Stock Price Change over 3 years	274	0.36 (0.87)	(-0.70, 11.53)
LT Future Growth Rate	214	0.095 (0.17)	(-1.66, 0.68)
PEG Ratio Forecast 12-month	197	2.55 (4.87)	(-3.65, 57.73)
Weekly Sharpe Ratio, 3-year	275	-.0053 (0.056)	(-0.14, 0.21)
Beta	272	1.18 (0.58)	(-0.76, 4.73)

In terms of diversity metrics, the summary statistics of our sample for each metric are included in Table 10.

TABLE 10: SUMMARY STATISTICS OF DIVERSITY METRICS FROM EEO-1

VARIABLE	N	MEAN (STD. DEV.)	RANGE (MIN, MAX)
Total Number of Employees	277	72,612 (252,002)	(61, 3,148,811)
Proportion of Total Employees (BIPOC)	277	0.37 (0.14)	(0.05, 0.79)
Proportion of Total Employees (BIPOC Non-Asian)	277	0.25 (0.13)	(0.03, 0.69)
Proportion of Total Employees (Women)	277	0.40 (0.17)	(0.04, 0.80)
Proportion of Total Employees (Men)	277	0.60 (0.17)	(0.20, 0.96)
Proportion of Total Employees (Indigenous Peoples)	277	0.01 (0.01)	(0.00, 0.13)
Proportion of Total Employees (Asian)	277	0.12 (0.10)	(0.004, 0.62)
Proportion of Total Employees (Latinx)	277	0.13 (0.09)	(0.01, 0.51)
Proportion of Total Employees (Black)	277	0.12 (0.07)	(0.00, 0.41)
Proportion of Total Employees (White)	277	0.63 (0.14)	(0.21, 0.95)
Proportion of Management Employees (BIPOC)	277	0.27 (0.11)	(0.04, 0.62)
Proportion of Management Employees (BIPOC Non-Asian)	277	0.15 (0.08)	(0.00, 0.58)
Proportion of Management Women Employees (BIPOC Women)	277	0.29 (0.11)	(0.05, 0.65)
Proportion of Management Employees (Women)	277	0.36 (0.13)	(0.09, 0.74)
Proportion of Management Employees (Men)	277	0.64 (0.13)	(0.24, 0.91)
Proportion of Management Employees (Indigenous Peoples)	277	0.007 (0.008)	(0.00, 0.10)
Proportion of Management Employees (Asian)	277	0.12 (0.10)	(0.004, 0.52)
Proportion of Management Employees (Latinx)	277	0.08 (0.05)	(0.00, 0.45)
Proportion of Management Employees (Black)	277	0.06 (0.04)	(0.00, 0.24)
Proportion of Management Employees (White)	277	0.73 (0.11)	(0.38, 0.96)
Gap in Proportion BIPOC (Management-Other Employees)	277	0.12 (0.09)	(-0.15, 0.50)
Gap in Proportion Women (Management-Other Employees)	277	0.05 (0.09)	(-0.21, 0.42)

* Note: Averages and standard deviations are not weighted by number of employees.

APPENDIX B – RACE AND ETHNICITY FIGURES AND TABLES

Figure 7 shows average Indigenous Peoples employee representation within companies.

FIGURE 7: AVERAGE REPRESENTATION WITHIN COMPANIES OF INDIGENOUS PEOPLES EMPLOYEES BY SECTOR ($n=277$)
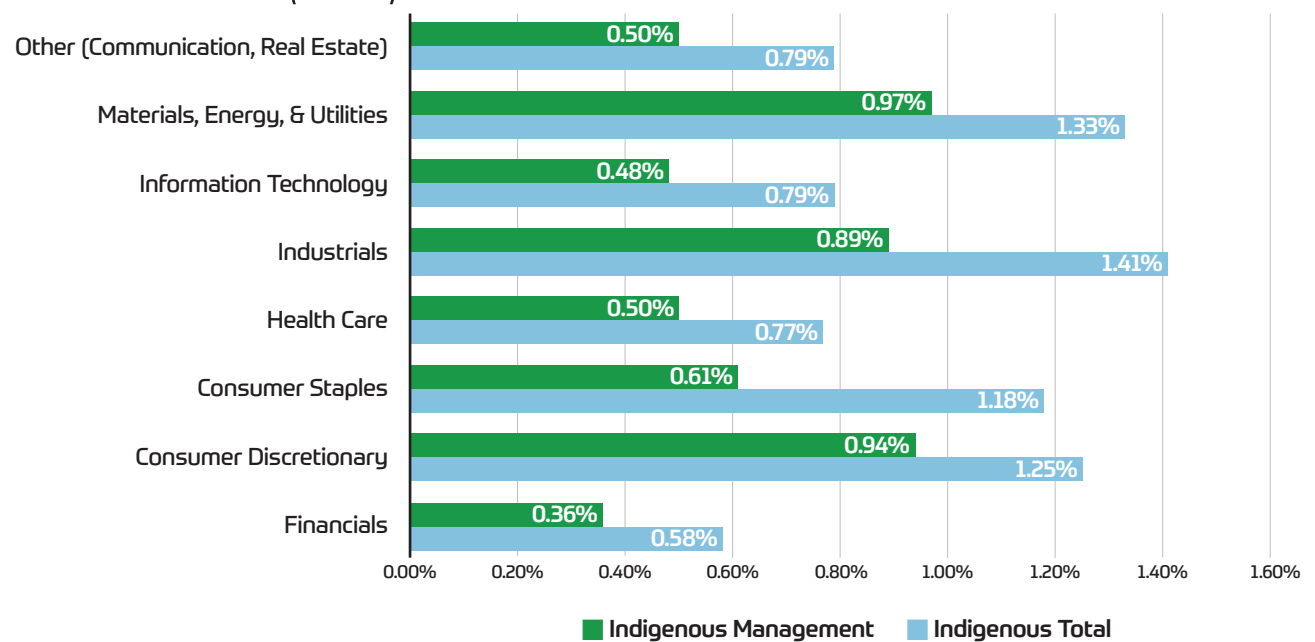

Table 11 shows sector-specific correlations for the percentage of Indigenous employees in management.

TABLE 11: SECTOR-SPECIFIC CORRELATIONS FOR PERCENTAGE INDIGENOUS EMPLOYEES IN MANAGEMENT

	Market Cap	DE Ratio	BVPS	Cash Flow	Net Profit	Rev 3 yr	Rev 5 yr	EPS 3 yr	ROE 5 yr	Price Chng	LT Growth	PEG	Sharpe3	Beta
Financials	~0	-	-	-	+	+	+	+	-	+	+	-	+	+
Consumer Discretionary	~0	-	-	-	-	-	-	-	+	+	-	+	+	+
Consumer Staples	+	-	+	+	-	+	+	-	-	+	+	+	+	-
Health Care	-	+	~0	-	-	+	-	+	-	+	+	-	+	+
Industrials	-	-	+	+	+	+	+	-	+	+	-	~0	+	-
Information Technology	~0	-	-	+	+	-	-	~0	-	-	+	-	-	-
Materials, Energy, & Utilities	~0	+	~0	-	~0	+	~0	+	-	-	-	-	-	+
Other (Communication, Real Estate)	-	-	+	+	-	+	+	+	-	+	-	~0	+	-

Figure 8 shows average Asian employee representation within companies.

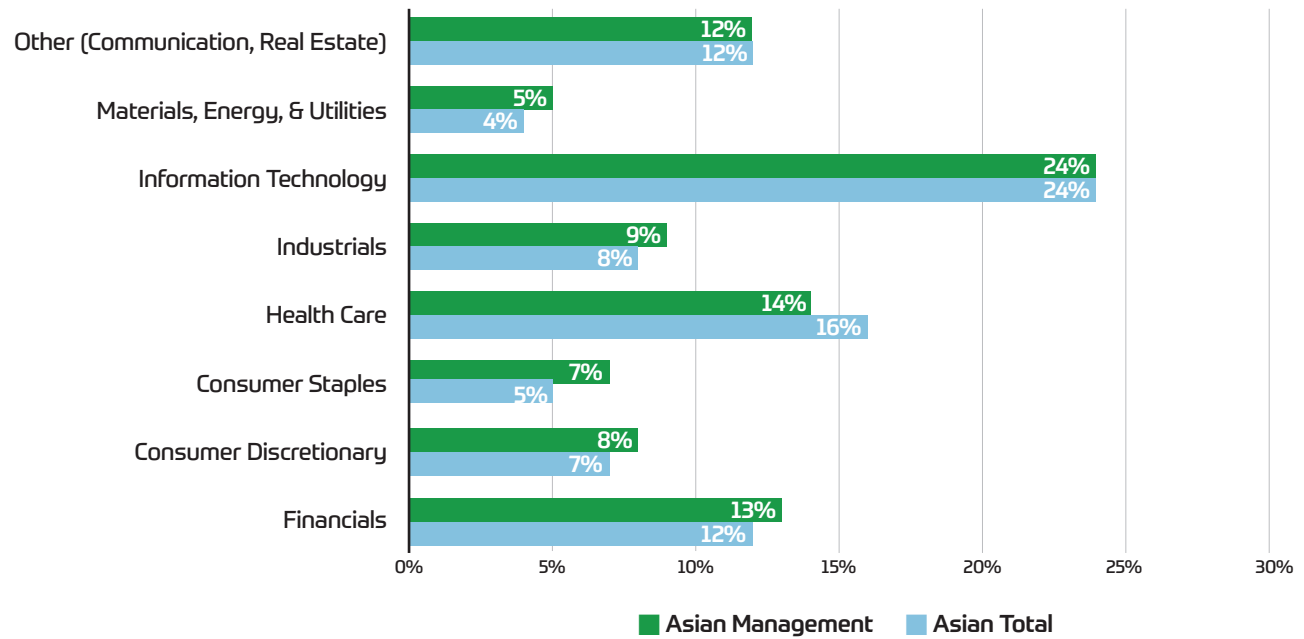## FIGURE 8: AVERAGE REPRESENTATION WITHIN COMPANIES OF ASIAN EMPLOYEES BY SECTOR

Table 12 shows sector-specific correlations for percentage Asian employees in management.

TABLE 12: SECTOR-SPECIFIC CORRELATIONS FOR PERCENTAGE OF ASIAN EMPLOYEES IN MANAGEMENT

	Market Cap	DE Ratio	BVPS	Cash Flow	Net Profit	Rev 3 yr	Rev 5 yr	EPS 3 yr	ROE 5 yr	Price Chng	LT Growth	PEG	Sharpe3	Beta
Financials	+	+	+	+	~0	+	+	+	+	+	-	+	+	+
Consumer Discretionary	+	+	+	+	-	-	-	-	-	-	-	-	-	+
Consumer Staples	+	+	-	-	+	-	-	+	+	-	-	+	-	-
Health Care	~0	-	-	~0	+	+	-	-	+	+	-	+	-	-
Industrials	-	-	-	-	~0	+	+	+	-	-	+	-	~0	+
Information Technology	+	-	-	+	+	+	+	+	+	+	~0	~0	+	+
Materials, Energy, & Utilities	+	-	+	+	-	-	+	+	+	-	+	-	-	+
Other (Communication, Real Estate)	+	-	+	+	-	+	+	+	~0	-	+	-	-	-

Figure 9 shows average Latinx employee representation within companies.

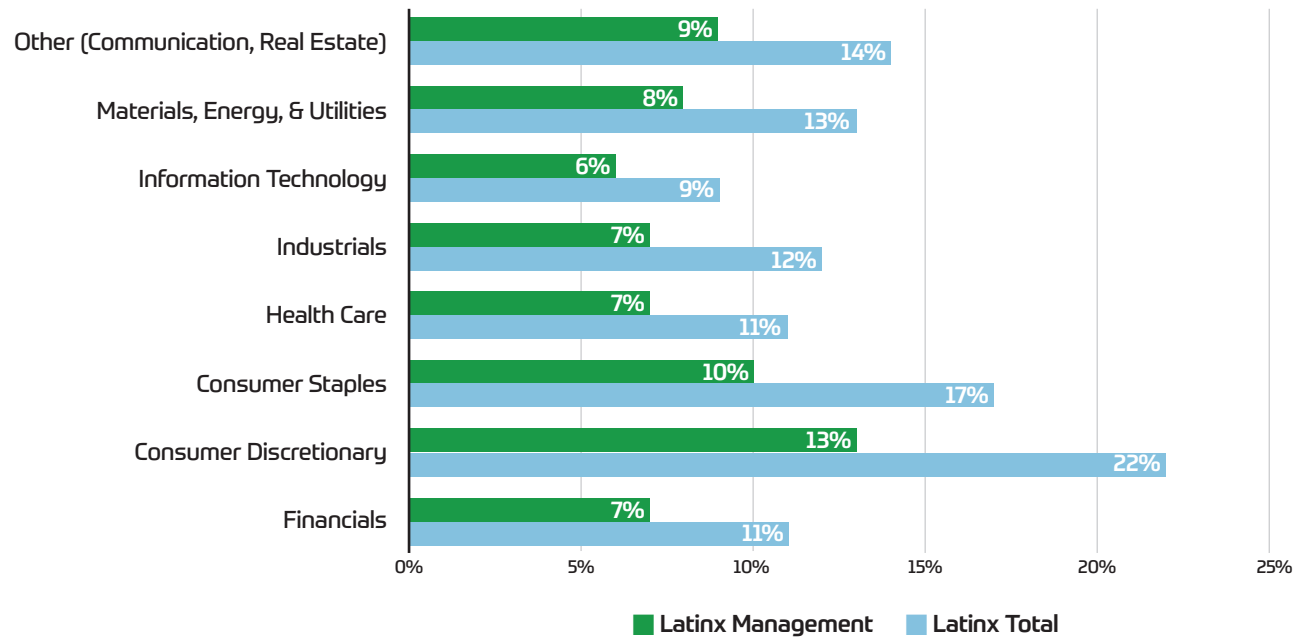## FIGURE 9: AVERAGE REPRESENTATION WITHIN COMPANIES OF LATINX EMPLOYEES BY SECTOR

Table 13 shows sector-specific correlations for percentage Latinx employees in management.

TABLE 13: SECTOR-SPECIFIC CORRELATIONS FOR PERCENTAGE OF LATINX EMPLOYEES IN MANAGEMENT

	Market Cap	DE Ratio	BVPS	Cash Flow	Net Profit	Rev 3 yr	Rev 5 yr	EPS 3 yr	ROE 5 yr	Price Chng	LT Growth	PEG	Sharpe3	Beta
Financials	+	+	-	-	+	+	~0	-	-	+	+	+	+	~0
Consumer Discretionary	~0	-	+	+	-	-	-	-	+	+	-	-	-	~0
Consumer Staples	+	-	+	+	~0	+	+	+	+	+	+	+	+	-
Health Care	+	+	+	-	-	-	-	+	-	-	+	+	+	-
Industrials	+	+	+	+	-	-	-	+	+	+	-	-	+	+
Information Technology	+	+	-	+	+	-	-	~0	+	-	-	-	-	-
Materials, Energy, & Utilities	+	-	+	+	-	+	+	+	+	~0	+	-	+	+
Other (Communication, Real Estate)	-	+	+	~0	+	-	-	-	+	-	~0	-	-	-

Figure 10 shows average Black employee representation within companies.

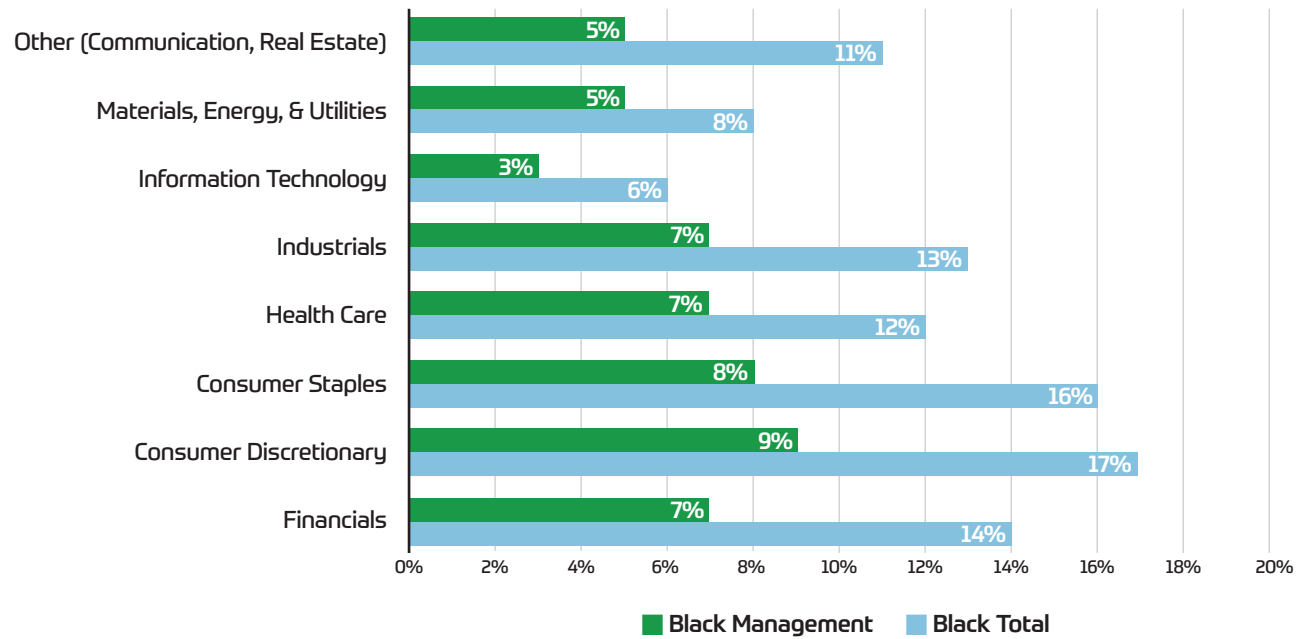## FIGURE 10: AVERAGE REPRESENTATION WITHIN COMPANIES OF BLACK EMPLOYEES BY SECTOR

Table 14 shows sector-specific correlations for the percentage of Black employees in management.

TABLE 14: SECTOR-SPECIFIC CORRELATIONS FOR PERCENTAGE OF BLACK EMPLOYEES IN MANAGEMENT

	Market Cap	DE Ratio	BVPS	Cash Flow	Net Profit	Rev 3 yr	Rev 5 yr	EPS 3 yr	ROE 5 yr	Price Chng	LT Growth	PEG	Sharpe3	Beta
Financials	-	-	-	-	-	+	+	-	-	-	-	+	-	-
Consumer Discretionary	+	-	~0	+	-	+	~0	+	+	+	+	+	+	-
Consumer Staples	+	-	-	-	+	-	-	-	-	-	-	+	-	-
Health Care	+	+	+	+	-	-	+	+	-	-	+	-	+	-
Industrials	+	+	+	+	~0	-	~0	+	+	+	-	-	+	+
Information Technology	+	+	+	+	~0	-	-	-	+	-	-	+	-	-
Materials, Energy, & Utilities	+	+	+	+	+	-	-	-	+	-	-	+	-	-
Other (Communication, Real Estate)	+	~0	-	+	-	-	-	~0	+	-	-	-	-	-

APPENDIX C – SUMMARY STATISTICS OF 2020-2021 CHANGE IN DIVERSE EMPLOYEE REPRESENTATION

TABLE 15: SUMMARY STATISTICS OF DIVERSITY METRICS (1-YEAR GROWTH) FROM EEO-1

VARIABLE	N	MEAN (STD. DEV.)	RANGE (MIN, MAX)
Proportion of Total Employees (BIPOC)	210	0.34 (0.06)	(-0.22, 0.36)
Proportion of Total Employees (BIPOC Non-Asian)	210	0.06 (0.13)	(-0.25, 1.29)
Proportion of Total Employees (Women)	210	0.01 (0.05)	(-0.19, 0.42)
Proportion of Total Employees (Indigenous Peoples)	209	0.29 (2.56)	(-0.54, 26.66)
Proportion of Total Employees (Asian)	210	0.01 (0.10)	(-0.35, 0.50)
Proportion of Total Employees (Latinx)	210	0.06 (0.14)	(-0.55, 0.95)
Proportion of Total Employees (Black)	210	0.08 (0.29)	(-0.33, 2.21)
Proportion of Total Employees (White)	210	-0.02 (0.04)	(-0.14, 0.19)
Proportion of Management Employees (BIPOC)	210	0.05 (0.10)	(-0.53, 0.40)
Proportion of Management Employees (BIPOC Non-Asian)	209	0.06 (0.15)	(-1.00, 0.75)
Proportion of Management Women Employees (BIPOC Women)	210	0.04 (0.13)	(-0.66, 0.94)
Proportion of Management Employees (Women)	210	0.03 (0.06)	(-0.37, 0.29)
Proportion of Management Employees (Indigenous Peoples)	195	0.06 (0.39)	(-1.00, 2.47)
Proportion of Management Employees (Asian)	210	0.07 (0.23)	(-0.57, 2.43)
Proportion of Management Employees (Latinx)	209	0.07 (0.21)	(-1.00, 1.45)
Proportion of Management Employees (Black)	207	0.08 (0.20)	(-1.00, 1.29)
Proportion of Management Employees (White)	210	-0.01 (0.03)	(-0.17, 0.18)
Gap in Proportion BIPOC (Management-Other Employees)	210	-0.04 (0.84)	(-9.55, 3.66)
Gap in Proportion Women (Management-Other Employees)	210	0.65 (9.93)	(-13.81, 142.11)

*Note: Averages and standard deviations are not weighted by number of employees.

REFERENCES CITED

American Statistical Association. (2016). American Statistical Association releases statement on statistical significance and p-values. *ASA News*. **https://www.amstat.org/asa/files/pdfs/p-valuestatement.pdf**

Andrevski, G., Richard, O. C., Shaw, J. D., & Ferrier, W. J. (2014). Racial diversity and firm performance: The mediating role of competitive intensity. *Journal of Management, 40*(3), 820-844.

Arenge, A, & Perry, S. (2018, May 29). Poll: 64 percent of Americans say racism remains a major problem. NBCUniversal News Group. **https://www.nbcnews.com/politics/politics-news/poll-64-percent-americans-say-racism-remains-major-problem-n877536**

Convergence. (2022). *Culture quant framework*. Counterpoint Global Insights, Morgan Stanley. **https://www.morganstanley.com/im/publication/insights/articles/article_culturequantframework_us.pdf**

Fuhrmans, V. (2018, October 23). What #MeToo has to do with the workplace gender gap. *The Wall Street Journal*. **https://www.wsj.com/articles/what-metoo-has-to-do-with-the-workplace-gender-gap-1540267680?mod=article_inline**

Hoogendorn, S., Oosterbeek, H., & van Praag, M. (2013). The impact of gender diversity on performance of business teams: Evidence from a field experiment. *Management Science, 59*(7), 1514-1528.

Hunt, V., Layton, D., & Prince, S. (2015). Diversity matters. *McKinsey & Company, 1*(1), 15-29.

Krivkovich, A., Liu, W. W., Rambachan, I., Robinson, N., Williams, M., & Yee, L. (2022). *Women in the Workplace 2022*. McKinsey & Company. **https://www.mckinsey.com/featured-insights/diversity-and-inclusion/women-in-the-workplace**

Kochan, T., Bezrukova, K., Ely, R., Jackson, S., Joshi, A., Jehn, K. Leonard, J., Levine, D., & Thomas, D. (2003). The effects of diversity on business performance: Report of the diversity research network. *Human Resources Management, 42*(1), 3-21.

López, N., Erwin, C., Binder, M., Chavez, M. J. (2018). Making the invisible visible: Advancing quantitative methods in higher education using critical race theory and intersectionality. *Race Ethnicity and Education, 21*(2), 180-207.

McElhaney, A. (2021, October 6). Want to Pick the Best Stocks? Pick the Happiest Companies. *Institutional Investor*. **https://www.institutionalinvestor.com/article/b1tx0zzdhhnf5x/Want-to-Pick-the-Best-Stocks-Pick-the-Happiest-Companies**

Moreno-Gómez, J., Lafuente, E., & Vaillant, Y. (2018). Gender diversity in the board, women's leadership and business performance. *Gender in Management: An International Journal, 33*(2), 104-122. **https://doi.org/10.1108/GM-05-2017-0058**

Quillian, L., Pager, D., Mitdbøen, A.H., & Hexel, O. (2017, October 11). Hiring Discrimination against Black Americans hasn't declined in 25 years. *Harvard Business Review*. **https://hbr.org/2017/10/hiring-discrimination-against-black-americans-hasnt-declined-in-25-years**

Sharma, A., Moses, A. C, Borah, S. B., Adhikary, A. (2020). Investigating the impact of workforce racial diversity on the organizational corporate social responsibility performance: An institutional logics perspective. *Journal of Business Research, 107*, 138-152.

Women's Congressional Policy Institute. (n.d.). Diversity in the financial services industry focus of hearing. **https://www.wcpinst.org/source/diversity-in-the-financial-services-industry-focus-of-hearing/**

Workplace Diversity, Equity and Inclusion Data Visualization. (2022, June 30). *As You Sow*. **https://www.asyousow.org/our-work/social-justice/workplace-equity/data-visualization**

U.S. Equal Opportunity Employment Commission. (n.d.) EEO-1 data collection. **https://www.eeoc.gov/employers/eeo-1-data-collection**