How Does Firm Size and Sector Impact Female and Minority Representation

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Gender and racial differences exist in many sectors of employment. Although diversity in gender and ethnic representation is low at the managerial level, the proportion of women in senior executive positions is significantly lower with 6% of all CEOs in 2019 being women. Additionally, 5% of Fortune 500 CEOs are Hispanic, Black, or Asian. There is limited research on the effect a firm's sector, size, and performance have on female and minority representation. This paper analyzes the decisionmakers of Fortune 500 firms to determine what relationship exists between diversity and firm characteristics. We find evidence that the proportion of female decisionmakers can be partially explained by firm characteristics. We find evidence that the percentage of female decisionmakers increases with the size of the firm. We do not find similar results when measuring diversity as the percentage of minority decisionmakers or the probability that the firm has non-white female decisionmakers. Further, we find strong evidence that the diversity of firms in the energy sector is statistically significantly below average.

Keywords: representation, diversity

INTRODUCTION

Gender and racial differences exist in many sectors of employment. This is an issue that many firms have recently begun to rectify but have made little headway. While the diversity in gender and ethnicity representation is underwhelmingly low at the executive level, the proportion of women in the top senior executive positions, such as CEOs, CFOs, CIOs, CMOs, CHROs, (collectively known as the C-suite) is significantly lower. A Korn Ferry study conducted in 2019 reported that of Fortune 500 firms, only 25 percent of the C-suite titles were held by women and only 6% of all CEOs were female. Statistics showed that the retail sector had the highest percentage of female CEOs while the financial sector had the highest overall proportion of females in the C-suite. (Styche, 2019) Along with the lack of female diversity, there is also an absence of minority representation. Hispanic, Black, and Asian CEOs made up 5% of CEOs of Fortune 500 companies (The CEO Pipeline Project) Although the Korn Ferry study reported data on the percentage of female C-suite executives in relation to the different firm sectors, there is a lack of research regarding the relationship between the sector of a firm and the proportion of minority executives. While the sector of a firm may influence the number of women in executive positions, there are many other considerable factors, such as the size or performance of a firm, that may have weight in this outcome. There

are a few statistics regarding minority CEOs; however, research on minority representation in the C-suite is scarce, along with the factors that may affect this disparity.

The main purpose of this research is to investigate the lack of diversity in the C-suites of the top companies in America and discover if there is a significant correlation linking the performance and industry of a firm to their male-to-female ratio. Being that there is a historical lack of female and minority executives, this paper could potentially help explain the causes of these imbalances. In this research thesis, the issue at hand will be the effect of the size and sector of a firm (independent variable) on the proportion of females and minorities in the C-suite (dependent variable). The size of the firms can be measured in many ways such as physically by the number of employees or financially by the firm's performance using market capitalization, which is the total value of all a firm's outstanding shares. This research is essentially a correlational study using the empirical method to determine whether a relationship exists between the variables (Fawcett & Downs, 1986). The basis of this paper begins with the inquiry of whether this imbalance exists and what factors can affect it (Greenberg, 2016). Being that it will be the most recent research on this issue, it will add new insight on the topic. This paper will be like that of the Korn Ferry studies in that it will summarize the date but will be different in that it will also contribute to the current literature by providing factors that may be causing these discrepancies in gender and minority diversity.

REVIEW OF THE LITERATURE

This literature review examines the relationship between the size and sector of a firm and diversity of gender and ethnicity in the C-Suite. This is an important issue in today's business climate because gender equality and diversity inclusion are beneficial to productivity. A study by Washington State University found that when companies make efforts to increase leadership diversity, they are more successful in customer orientation, employee satisfaction, and decision making (University, 2018). Diversity and inclusion ultimately allow firms to be perceived as progressive by customers and potential employees. Offices that are diverse perform better financially than ones that are not. Herring (Herring, 2009) found that companies with greater diversity saw increased sales revenues, more customers, increase in relative profits, and higher market share. With only a quarter of the C-Suite being women and around 90% being Caucasian, it is crucial for firms to better understand the factors that affect the gender and diversity gap in executive positions. Doing so can help firms integrate diversity into their own C-Suites. The sections that follow describe the variables in the research design seen in Figure 1. The independent variables being observed are size of firm and sector of firm, and the dependent variable is the proportion of females and minorities in the C-Suite.

Key Variables

Size of Firm

Sindhuja (Sindhuja, 2019) defines the size of a firm as the varying degrees of firm's success and growth relative to other firms in the market. The size of a firm is an important identifier of how successful a firm is or how well it is performing in the market. A recent study conducted by the Boston Consulting Group found that companies that have higher diversity achieve higher returns (Lorenzo, Voigt, Tsusaka, Krentz, & Abouzahr, 2018). The size of a firm can be measured in numerous ways, each indicative of the relative magnitude of a company. One common way of measuring size is using the market capitalization, also referred to as "market cap." According to Dang (Dang, 2013), market cap is an empirical market-oriented measurement that shows the total value of a firm's stock shares. Another form of measuring firm size is the number of employees; a greater number of employees indicates a larger firm. Using these two different measures of size together will provide more conclusive, well-rounded data.

Sector of Firm

The sector of a firm is defined as the various categories that all firms are divided and placed into by shared characteristics. There are 11 different stock market sectors, according to the Global Industry Classification Standard (GICS). These are energy, materials, industrials, utilities, healthcare, financials,

consumer discretionary, consumer staples, information technology, communication services, and real estate. However, for the purpose of consolidation, this paper will focus on the consumer, industrial, financial, energy, healthcare, retail, services and technology sectors. Depending on the sector, some employ less females and minorities than others. Previous research by Korn Ferry (The CEO Pipeline Project) has found that the financials and retail sectors employ the most women. While this is not directly correlated to minorities in the C-Suite, Fowler (Fowler, 2020) has found that the accommodation and food sector and retail sectors have the most minority-owned startup businesses.

Proportion of Females and Minorities

The proportion of females and minorities is defined as the ratio of male to female and Caucasians to minorities in the C-Suite. Diversity in the business environment promotes innovation and can ultimately affect productivity in a positive manner. Additionally, it attracts talent who also value and prioritize diversity in their place of work. Although a more inclusive work environment doesn't necessarily mean higher returns and profits, Turban, Wu and Zhang (Turban, Wu, & Zhang, 2019) find that it can mean higher levels of collaboration and participation, which can lead to increased company performance.

Key Questions

To more thoroughly explore the diversity issues in C-Suites, a set of existing literature has been chosen based on its relevance to the following questions:

1. Is there currently a gender and minority disparity in C-Suites?
2. Why is it beneficial to have diversity in boardrooms?
3. Are there certain sectors in which gender and minority inequality is more prevalent?

Gender and Minority Disparity in C-Suites

Despite a large influx of women into the workforce in the past 40 years, Iversen, Rosenbluth and Skorge (Iversen, Rosenbluth, & Skorge, 2020) find that women are still underrepresented in the labor market, let alone in upper management. Trautman (Trautman, 2015) states "*Diversity encompasses gender and race*." These two groups have an adequate proportion of representation among consumers but not among directors. In 2004, women held 202 of the 1,195 director seats and minorities held 178 at the Fortune 100 companies. In 2010, women held 218 and minorities held 153. In six years, there was only a 1.2% increase in female representation and a 2.2% decrease in minority representation. This lack of director diversity is considerable when considering that of new employee hires, women comprise 53%. Butler (Butler, 2011) finds that generally only 14% of the executive committee is represented by females.

Benefit of Diversity in Boardrooms

Many scholars believe that having diversity in boardrooms can only benefit firms through increased innovation and productivity, which essentially will have a positive impact on profits. Herring (Herring, 2009) found that companies with greater diversity saw increased sales revenues, more customers, increase in relative profits, and higher market share. A recent Peterson Institute and Ernst & Young study concluded that increasing female executives from 0% to 30% led to a 15% growth in profits. This study attributed the growth in profits to gender unique skills such as "long-term strategy, risk, and compliance" that were implemented as a result of the influx of female executives. Grant Thornton researchers (Fernando, Jain, & Tripathy, 2020) concluded that boards that were diverse performed better as a whole than non-diverse boards. The main quantifiable methods to measure a firm's performance are either through accounting measures using return on assets (ROA) or through market-based measures such as stock prices. Fernando, Jain, and Tripathy argue that although these measures can depict explicitly measurable performance, they fail to fully capture the impact diversity has on a firm. The Credit Suisse Research Institute (Johnson, 2017) concluded that companies with at least one female on board would have done better than their competitors when observing share prices and net income growth.

Female leadership and feminine traits positively affect managerial capabilities, which are further enhanced during times of crisis. Most companies will typically encounter obstacles during which crisis-

preparedness is necessary. Fernando, Jain, and Tripathy found that "women's transformational management style" along with their "stereotypically feminine traits" are found to be particularly relevant in crisis. A study by Ghemawat and Vantrappen (Ghemawat & Vantrappen, 2015) on gender and national diversity found that for companies' senior teams raking "in the top quartile of executive-board diversity, ROEs were 53% higher, on average, then they were for those in the bottom quartile."

During an age of globalization where a majority of many companies' assets are located and business is conducted outside its home country, by employing executives who are native of the home country, it sends a message that there is an evident lack of diversity and that rectifying this issue is not the company's priority. This also discourages potential hires within and outside the home country from becoming involved in these companies if they don't see representation in the top executive positions. This implies there is limited room for promotion. By increasing boardroom diversity, Ghemawat and Vantrappen (Ghemawat & Vantrappen, 2015) argue that there are "enormous benefits from career development and promotion policies that boost retention of the right kind of talent." Herring (Herring, 2009) concludes that diversity and inclusion ultimately allows firms to be perceived as progressive by customers and potential employees.

Sector Prevalence of Gender and Minority Inequality

Companies that initially began as venture capitalist funded are ow some of the largest firms today. Technology companies focused on artificial intelligence, e-commerce, social media and big data such as Google and Facebook have an overwhelming majority of men at every level. There is an immense absence of females at almost every stage of high technology private companies. "Seven out of 10 workers at major tech companies are men" and women only comprise 20% or less of these companies' technical staff. Very few women make it to the senior executive level, or the C-Suite. Unicorn companies are privately held startup companies valued at over $1 billion. United States based unicorn companies are male-dominated and have 90% of board seats held by men. Fan (Fan, 2019) finds that the United States' 55 unicorn companies have 345 total board seats and of those, only 22 are held by women.

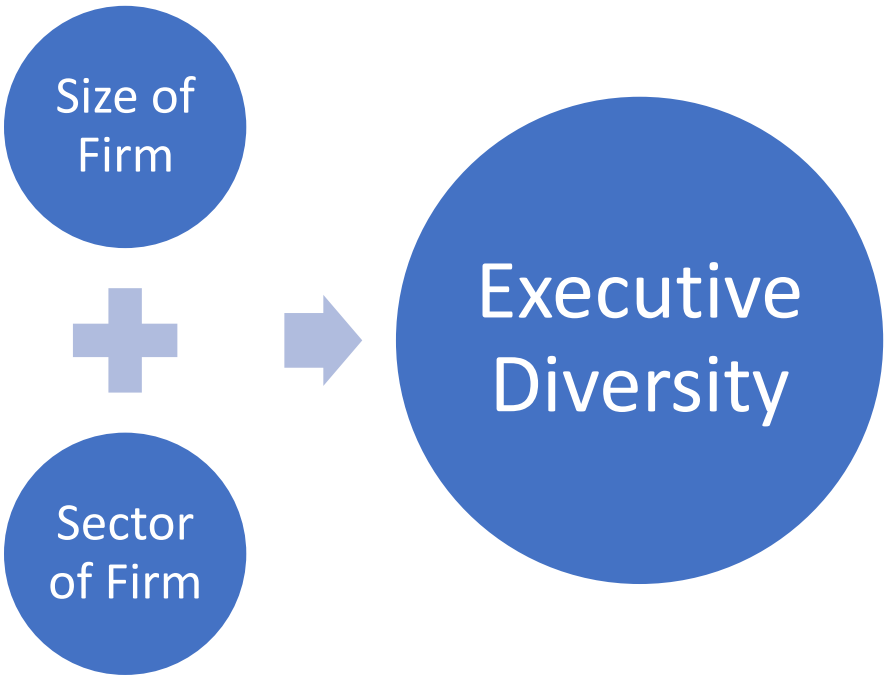
Another sector where women are severely underrepresented in senior executive positions is the finance sector. This sector comprises investment banking firms, traditional depository banks, bank holding companies, insurance companies, and hedge fund services, to name a few. Although there seems to be an increase in women in general leadership positions in politics, economics and other areas, there is still a disparity of women in financial firms' boardrooms as senior executives. As more women graduate college and complete graduate school, there is an increase of females in the workforce, but where this progress is stalled is at the executive level. Unfortunately, Johnson (Johnson, 2017) finds that the number of women in top management positions is not reflect of the number of women in politics and economics.

In the healthcare industry, women make up almost 50% of the workforce. It is one of the best female-represented industries. But the caveat is that these women experience a limited lag in promotions compared to their male counterparts. Women in the healthcare industry have more opportunities to move upward than in financial services, automotive, and industrial manufacturing. While the number of women declines in senior leadership roles, 30% of C-Suite positions are women. This is outstanding compared to other industries in relation to females in C-Suite positions in other industries. The percentage of women from manager to senior manager drops 10 points. Healthcare is a token example that is used frequently to explain the gender disparity in executive roles. Employing many women unfortunately still does not translate into senior leadership. The lack of parallelism is evident in healthcare and McKinsey & Company (2020) finds that comparison to other industries is for more dissatisfactory.

DATA AND METHODOLOGY

Conceptual Framework

FIGURE 1



Depicted in this diagram are the independent and dependent variables observed in this study. On the left side, the two independent variables are the size of a firm and the sector of a firm. These variables are further divided into subsections. Size of the firm will be measured through revenue, market cap, number of employees, and net income. Sector of the firm will be divided into subsections of the Standardized Industry Classifications (SIC). On the right side is the dependent variable, diversity in the C-Suite as measured by the proportion of females and minorities in the C-Suite. The arrows show how the independent variables are being observed to see if they influence the dependent variable.

Hypothesis

In the first relationship in the framework, the size of a firm is compared to the proportion of females and minorities in the C-Suite. The relationship is hypothesized as positive because previous literature suggests that diversity and size of a firm measured by performance are positively related (Lorenzo, Voigt, Tsusaka, Krentz, & Abouzahr, 2018).

H1.0: *The size of a firm has a positive effect on the proportion of females and minorities in the C-Suite.*

H1.1*: The number of employees a firm employs has a positive effect on the proportion of females and minorities in the C-Suite.*

H1.2*: The market capitalization of a firm has a positive effect on the proportion of females and minorities in the C-Suite.*

In the second relationship in the framework, the sector of a firm is compared to the proportion of females and minorities in the C-Suite. In this case, there are multiple categories of sectors, so a directional

relationship cannot be hypothesized. Instead, this paper will look at if a relationship exists between certain sectors of firms and the proportion of females and minorities.

H2.0: *The sector of a firm influences the proportion of females and minorities in the C-Suite.*

Research Methods

Data

We collect data on Fortune 500 firms from Compustat including total assets, book value per share, total revenue, market value, number of employees, and net income to represent various measures of the "size" variable. From Balance Now we record each company's female and minority percentage of decisionmakers. Decisionmakers are defined as those in any of the following roles: director, founder, president, senior vice president, and CXO. Because race and gender can be considered independent events, we also calculate the probability of a firm having a decisionmaker who is non-white AND female. That is, we calculate $P(A\ and\ B) = P(A) \times P(B)$ where A indicates non-white, and B indicates female. This data represents the "diversity" variable. We record each company's sector and split into categories according to Global Industry Classification Standard (GICS) sector. This data represents the "sector" variable. After removing firms with incomplete data, we are left with a sample of 414 firms. We summarize our data in Table 1 below.

TABLE 1
DESCRIPTIVE STATISTICS

This table presents summary statistics for our sample.

Panel A: Size Variables						
	N	Min	Median	Mean	Max	Std. Dev.
# Employees	460	0	63.60	27.03	2,300	144.70
Total Assets	461	758.04	88,070.51	24,434	3,386,071	274,126.11
Total Revenue	461	4,400.80	27,605.41	11,946	556,933	49,025.23
Panel B: Diversity Variables						
% Non-White	414	0	19	20.75	100	15.06
% Female	414	0	25	24.23	71	11.63
Prob NWF	414	0	4.27	5.17	25	4.68
Panel C: Value Variables						
Market Value	453	9.379	62,041.10	21,893.34	1,966,078.92	160,459.37
MVPS	453	0.09	73.5	141.07	4,079.86	323.74
BVPS	458	-46.76	23.42	44.30	3,287.68	167.53
Market-to-Book	450	-21,212.50	2.54	-43.29	229.50	1,002.81
Panel D: Performance Variables						
Net Income	461	-22,440	1,710.60	696.43	57,411	5,651.27
EPS	461	-32.63	3.03	4.67	243.91	17.94

As a comparison, we note that according to 2021 U.S. Census data 39.9% of the US population is non-white, and 50.8% is female leading to a 20.2% probability that an individual in the U.S. is non-white and female. We then test for significant differences in diversity across sectors. Table 2 reports our data by sector. We find evidence that firms in the energy sector are statistically significantly less diverse than the overall sample by every measure of diversity. We also find that firms in the information technology sector are more diverse than the overall sample when measuring diversity as the percentage of non-White decisionmakers or the probability that a decisionmaker will be non-white and female. We find the most variation in the percentage of female decisionmakers and the probability that a decisionmaker will be a non-white female. Female representation is below the full sample average in both the energy and materials sector but above

average in the utilities sector. Non-white female representation is below average in the energy and materials sectors and above average in information technology.

TABLE 2
t-TESTS BY SECTOR

Sector	N	% Non-White	% Female	Probability NWF
Energy	27	12.19***	17.70***	2.42***
Materials	30	20.97	22.70	3.88*
Industrials	64	21.19	21.86*	4.55
Consumer Discretionary	65	19.98	23.42	4.70
Consumer Staples	41	21.20	25.78	6.03
Healthcare	41	22.24	27.10	6.61
Financials	57	19.26	25.95	5.02
Information Technology	42	25.19**	24.88	6.69*
Communication Services	16	24.88	26.50	6.22
Utilities	25	21.52	28.20*	6.25
Real Estate	6	17.33	21.50	3.96
Full Sample	414	20.75	24.23	5.17

This table breaks out the three diversity variables by market sector. We test for differences between the mean values for each sector and the mean value for the full sample. * indicates that the difference is significant at the 10% level. ** indicates the difference is significant at the 5% level. *** indicates the difference is significant at the 1% level.

Methodology

We estimate the extent to which decisionmaker diversity can be explained by the size and sector of a firm. Thus, we estimate the following regression equation for the full sample after creating binary variables for each of the GICS sectors:

$$Diversity = a_0 + b_1 Size + b_2 Sector + \varepsilon \quad (1)$$

Next, we analyze the impact of diversity on firm value. To do so, we estimate the following regression equation for the full sample:

$$Value = a_0 + b_1 Diversity + b_2 Performance + b_3 Sector + \varepsilon \quad (2)$$

Finally, we separate the sample into high- and low-diversity groups. We then test for performance differences between the two groups.

RESULTS

After estimating the extent to which size and sector explain differences in diversity, we find little evidence of a relationship between the factors as reported in Table 3. However, Panel B provides evidence that the percentage of female decisionmakers tends to increase with the size of the firm.

TABLE 3
FACTORS THAT EXPLAIN CHANGES IN DIVERSITY

Panel A: Dependent variable = % Non-White			
	# Employees	*Total Assets*	*Total Revenue*
Intercept	17.39***	17.3695***	17.5877***
Size	-0.0017	-0.0000	-0.0000
Energy	-5.5623	-5.1011	-4.7616
Materials	3.6139	3.6294	3.6454
Industrials	3.9030	3.8673	4.0278
Cons. Discretionary	2.7775	2.6589	3.0133
Consumer Staples	4.0092	3.8823	4.6073
Healthcare	4.9666	4.9659	5.9021
Financials	1.9440	2.5356	2.3377
Information Tech.	7.9081	7.9043	8.3018
Communication Svcs.	7.5985	7.6937	8.3356
Utilities	4.1489	4.2476	4.2147
Adjusted R^2	0.0117	0.0111	0.0160
N	413	414	414
F	1.44	1.42	1.61*

Panel B: Dependent variable = % Female			
	# Employees	*Total Assets*	*Total Revenue*
Intercept	21.1770***	21.3636***	21.2304***
Size	0.0088**	0.0000***	0.0000**
Energy	-3.3439	-3.9735	-4.2060
Materials	1.3031	1.2150	1.1872
Industrials	0.0991	0.3097	0.1754
Cons. Discretionary	1.2449	1.8868	1.5316
Consumer Staples	3.4935	4.2033	3.4902
Healthcare	5.2999	5.3892	4.5465
Financials	4.3720	2.1649	4.0150
Information Tech.	3.1105	3.2032	2.9096
Communication Svcs.	4.6981	4.4270	4.1584
Utilities	6.9006	6.4704	6.6703
Adjusted R^2	0.0340	0.0402	0.0341
N	413	414	414
F	2.32***	2.57***	2.32***

Panel C: Dependent variable = Probability Non-White and Female			
	# Employees	*Total Assets*	*Total Revenue*
Intercept	3.9268**	3.9485**	3.9843**
Size	0.0009	0.0000	0.0000
Energy	-1.5232	-1.5548	-1.5023
Materials	-0.0723	-0.0813	-0.0811
Industrials	0.5652	0.5870	0.6083
Cons. Discretionary	0.6718	0.7353	0.7743
Consumer Staples	1.9904	2.0617	2.1433
Healthcare	2.6189	2.6330	2.7491
Financials	1.0548	0.8975	1.1038
Information Tech.	2.7057	2.7193	2.7775
Communication Svcs.	2.2303	2.2184	2.3407
Utilities	2.3109	2.2747	2.2941
Adjusted R^2	0.0365	0.0371	0.0372
N	413	414	414
F	2.42***	2.45***	2.45***

This table presents multivariate regression estimates of the equation: $Diversity = a_0 + b_1 Size + b_2 Sector + \varepsilon$ Using different measures of diversity and size. * indicates significance at the 10% level. ** indicates significance at the 5% level. *** indicates significance at the 1% level.

When testing for the impact of diversity on value, we find no evidence that differences in diversity explain differences in firm value. These results are reported in Table 4.

TABLE 4
THE IMPACT OF DIVERSITY ON VALUE

Panel A: Dependent variable = Market Value per Share			
	% Non-White	*% Female*	*Prob. NWF*
Intercept	69.2353	51.4114	68.6430
Diversity	0.2205	0.9980	1.0980
Earnings per Share	14.1787***	14.2585***	14.2075***
Energy	28.5017	31.7276	29.2660
Materials	-16.8651	-17.3031	-15.9884
Industrials	5.8452	6.2793	6.0261
Cons. Discretionary	76.0757	74.2631	75.6756
Consumer Staples	-44.1972	-48.1322	-45.8011
Healthcare	0.6607	-4.1214	-1.2644
Financials	-54.0397	-58.4083	-54.9321
Information Tech.	0.8608	-0.8884	-0.4453
Communication Svcs.	8.8221	5.4304	7.9806
Utilities	-52.9285	-58.7346	-54.5365
Adjusted R^2	0.6547	0.6558	0.6549
N	408	408	408
F	65.32***	65.62***	65.35***

Panel B: Dependent variable = Book Value per Share			
	% Non-White	*% Female*	*Prob. NWF*
Intercept	19.4654	17.2306	15.7253
Diversity	-0.3453	-0.1720	-0.5547
Earnings per Share	7.4274***	7.4052***	7.4064***
Energy	48.8408	47.9469	47.7106
Materials	-7.1232	-8.1599	-8.4126
Industrials	-7.7564	-8.9714	-8.7262
Cons. Discretionary	-34.3942	-34.8449	-34.7726
Consumer Staples	23.0899	22.6360	23.0388
Healthcare	-18.1129	-18.7682	-18.2663
Financials	32.8022	32.9890	32.8085
Information Tech.	-18.2178	-20.3196	-19.3872
Communication Svcs.	-11.3800	-13.1063	-12.7138
Utilities	-2.1654	-2.4468	-2.3289
Adjusted R^2	0.6224	0.6217	0.6217
N	411	411	411
F	57.32***	57.14***	57.16***
Panel C: Dependent variable = Market-to-Book			
	% Non-White	*% Female*	*Prob. NWF*
Intercept	4.2098	6.7353	3.9836
Diversity	0.0910	-0.0440	0.4485
Earnings per Share	0.3470*	0.3464*	0.3588*
Energy	-5.3217	-5.9644	-5.0531
Materials	-3.2226	-2.8388	-2.8612
Industrials	1.7543	2.1427	1.8045
Cons. Discretionary	-1.0586	-0.7291	-1.2198
Consumer Staples	0.6699	1.2139	0.0181
Healthcare	-33.1429	-32.4474	-33.9250
Financials	-6.5839	-6.1286	-6.9460
Information Tech.	0.9531	1.8179	0.4267
Communication Svcs.	-4.7869	-3.8799	-5.1238
Utilities	-4.8740	-4.1976	-5.5270
Adjusted R^2	-0.0050	-0.0053	-0.0046
N	405	405	405
F	0.83	0.82	0.85

This table presents multivariate regression estimates of the equation

$$Value = a_0 + b_1 Diversity + b_2 Performance + b_3 Sector + \varepsilon$$

Using different measures of diversity and size. * indicates significance at the 10% level. ** indicates significance at the 5% level. *** indicates significance at the 1% level.

When testing for performance differences between high-diversity and low-diversity firms, we find significant differences in revenues. However, the difference that we find is contrary to our expectations based on the literature. We find evidence that low-diversity firms have higher revenues than high-diversity firms and that this difference is statistically significant. We do not find any statistically significant differences in performance as measured by earnings, market value, or market-to-book ratio. These results are presented in Table 5.

TABLE 5
PERFORMANCE DIFFERENCES BETWEEN FIRMS WITH HIGH- AND LOW-DIVERSITY

Panel A: Minority Representation			
	High Diversity	Low Diversity	Difference
Earnings per Share	4.4738	4.8875	0.4137
Market-to-Book	-78.6236	-2.1807	76.4429
Market Value per Share	141.9869	139.9999	-1.9870
Revenues per Share	83.3890	154.5338	71.1448**
Panel B: Female Representation			
	High Diversity	Low Diversity	Difference
Earnings per Share	3.9816	5.3590	1.3774
Market-to-Book	-89.5018	3.7507	93.2525
Market Value per Share	136.0558	146.098	10.0422
Revenues per Share	90.5665	142.6021	52.0356
Panel C: Non-White Female Representation			
	High Diversity	Low Diversity	Difference
Earnings per Share	3.5705	6.0099	2.4395
Market-to-Book	-82.0572	4.7351	86.7922
Market Value per Share	133.7977	149.9371	16.1394
Revenues per Share	76.6091	161.5777	81.9686**

This table presents the results of a statistical comparison of the performance of low-diversity firms to high-diversity firms. * indicates that the difference is significant at the 10% level. ** indicates the difference is significant at the 5% level. *** indicates the difference is significant at the 1% level.

CONCLUSION

We analyze female and minority representation in publicly traded Fortune 500 firms. We find evidence of statistically significant differences in diversity across market sectors. This result is most prevalent in the energy sector where minority and female representation is below average by all measures of diversity. Conversely, in the information technology sector, minority and female representation is above average as measured by the percentage of non-White decisionmakers and the probability that a given decisionmaker is a non-White female.

We find little evidence that diversity "matters." That is, we find that female representation increases with size but no evidence that diversity explains differences in value across firms. We do find limited evidence that more diverse firms have higher revenues than less diverse firms.

Taken together, we arrive at two key results. First, Fortune 500 firms are generally half as diverse as the U.S. As a result, the probability of a given decisionmaker at a publicly traded Fortune 500 firm being non-White and female is approximately 5%. Second, this lack of diversity in publicly traded Fortune 500 firms appears to diminish with size but there is little overall impact on value or performance. The one exception is revenue where less diverse firms have higher revenues.

The implications of these results are that firms have little incentive to diversify their board rooms. In fact, these results may possibly serve as a disincentive. Future research should expand the sample beyond these largest U.S. firms to determine if there is a "too big to fail" issue at play. That is, are these firms so big that diversity is irrelevant?

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