

Sexism, Culture, and Firm Value: Evidence from the Harvey Weinstein Scandal and the #MeToo Movement

Finance Working Paper N° 679/2020

August 2021

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Abstract

During the Harvey Weinstein and #MeToo events, firms with a non-sexist corporate culture, proxied by having women among the five highest paid executives, earn excess returns of 1.6%. Returns for firms with female executives are substantially higher in industries with few women in executive positions, and for firms headquartered in states with a high level of sexism or gender pay gap. Firms in industries with many female executives or headquartered in less sexist states also earn positive abnormal returns, irrespective of whether they have female leaders themselves. Firms without female top executives exhibit improvements in gender diversity after the Weinstein/#MeToo events. Our evidence attests to the value of having a non-sexist culture.

Keywords: Sexism, culture, female leadership, firm value

JEL Classifications: M14, G32, G34

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Abstract

During the Harvey Weinstein and #MeToo events, firms with a non-sexist corporate culture, proxied by having women among the five highest paid executives, earn excess returns of 1.6%. Returns for firms with female executives are substantially higher in industries with few women in executive positions, and for firms headquartered in states with a high level of sexism or gender pay gap. Firms in industries with many female executives or headquartered in less sexist states also earn positive abnormal returns, irrespective of whether they have female leaders themselves. Firms without female top executives exhibit improvements in gender diversity after the Weinstein/#MeToo events. Our evidence attests to the value of having a non-sexist culture.

1. Introduction

In this paper, we assess the valuation effects of an important aspect of corporate culture: gender equality. Gender equality is at the forefront of sustainable economic development (see, e.g., the United Nation’s Sustainable Development Goal #5: “*To achieve gender equality and empower all women and girls*”), yet the extent to which a gender-equal, non-sexist corporate culture is valued by the market remains largely unexplored. The goal of our paper is to shed light on this matter and, in particular, to determine whether investors respond to changes in societal attitudes towards women.

Gender equality (or the absence of sex-based discrimination) is arguably a key aspect of a “good” corporate culture. An overall “good” corporate culture is, in turn, believed to be a valuable asset. For example, 92% of the executives surveyed by Graham, Grennan, Harvey, and Rajgopal (2021) state that improving culture would increase firm value. Consistent with this finding, most companies’ web pages and/or corporate reports have at least one section dedicated to corporate culture (Guiso, Sapienza, and Zingales (2015a)), often featuring the firms’ achievements and aspirations regarding gender diversity and inclusiveness.¹

While practitioners praise the benefits of a “good” corporate culture, academic evidence on its value is inconclusive, largely due to difficulties in defining and measuring culture and in attributing causality. Arguably, the biggest challenge is measuring corporate culture, given the elusiveness and multidimensional nature of culture as a concept itself. For example, Kreps (1990) refers to culture as an intangible asset that can be used to meet unforeseen contingencies, while O’Reilly and Chatman (1996) define culture as “*a set of norms and values that are widely shared*

¹ For example, in his letter to the shareholders and other stakeholders, under the heading of “Culture”, the CEO of Microsoft states: “We strive to make our workplace more diverse and inclusive to serve our diverse customers around the world and create a workplace where everyone can do their best work. *Since fiscal 2016, we have increased the number of women corporate vice presidents by 152 percent (...)* Diversity and inclusion continue to be a *core priority* for every employee and leader at Microsoft (...).” Microsoft 2019 Annual Report, page 6 (emphasis added).

and strongly held throughout the organization,” a definition also adopted by Guiso, Sapienza, and Zingales (2015a) and Graham et al. (2021). Given the broad nature of culture, empirical studies invariably focus on a specific aspect of corporate culture, often workplace culture (Edmans (2011) and Guiso, Sapienza, and Zingales (2015a)). While these studies document a positive relation between employee satisfaction and firm value, the relation is not necessarily causal.²

Our focus is on a related, yet unexplored (in the context of valuation), aspect of corporate culture: gender (in)equality, commonly referred to as sex-based discrimination or sexism. Despite constituting a violation of civil rights, sex-based discrimination in the workplace is prevalent and its eradication continues to be on the agenda of governmental and non-governmental bodies.³ We posit that the way in which female employees are treated in an organization reflects norms and values that can be widely shared and strongly held, consistent with the definition of culture discussed above. Crucially, this aspect of corporate culture provides two elements necessary to investigate its valuation impact empirically: (i) it experienced an *unequivocal shock* to its importance, allowing for identification and causal inference; and (ii) it has a *measurable dimension*.

With regards to identification, we exploit an unequivocal shock to the importance of having a non-sexist corporate culture: the public revelation of the egregious and numerous sexual harassment allegations against Harvey Weinstein and the subsequent resurgence of the #MeToo movement.⁴ The latter gained prominence in the weeks after the Weinstein scandal emerged and

² For example, Green, Huang, Wen, and Zhou (2019) argue that changes in employee satisfaction may signal value-relevant information about the firm’s economic environment, which is distinct from the intangible value inherent in satisfied employees. As such, it is not the firm’s culture that drives future returns but the revelation of fundamental information. See also Guiso, Sapienza, and Zingales (2015a).

³ <https://www.eeoc.gov/sex-based-discrimination> details the various facets of illegal workplace sex discrimination.

⁴ Ideally, we would like to observe an exogenous shock that changes (an aspect of) corporate culture. However, such a shock is difficult to observe because a firm’s culture is slow to form and change. Hence, our focus is on an exogenous shock that changes the *importance of corporate culture*, which should impact stock prices if corporate culture is value relevant.

rapidly brought to light the true extent to which sexual harassment and gender discrimination were prevalent in business, while elucidating that such behavior would no longer be condoned. Our premise is that as a result of this shock, shareholders and society as a whole re-evaluated the importance of having a non-sexist/non-misogynistic culture (which does not tolerate sexual discrimination in the workplace).

With regards to measurability, we focus on the extent to which women have leadership positions in the firm, as captured by the presence of women among the top-five-compensated executives. We argue that a firm that has women among its highest paid executives is less likely to have a culture that tolerates sexual discrimination and harassment; if such a culture were present, it is improbable that a woman would have risen to the top in the first place given the well-documented “glass ceiling”. Consistent with this view, survey evidence by the Rockefeller Foundation and GlobalStrategyGroup (2017) shows that one of the main hurdles to women achieving top leadership positions is the culture of the corporation itself, particularly the attitude of men in the workplace or the so-called “boys club” attitude/behavior. Moreover, having a woman in the firm’s C-suite increases equality in the organization by reducing the gender pay gap (Tate and Yang (2015) and Kunze and Miller (2017)), thereby benefiting lower-ranked female workers. Indeed, the pivotal role of female leadership in building a culture of gender equality and inclusion has been highlighted in a study by the World Economic Forum (2017) on attitudes towards women in the workplace. The title of the press release accompanying the study succinctly summarizes its conclusion: “The key to closing the gender gap? Putting more women in charge.”

To study the valuation impact of a non-sexist corporate culture, we examine the stock price response of US firms covered by the Execucomp database over various time periods surrounding the Weinstein allegations and the subsequent rise of the #MeToo movement. We find that companies with at least one woman among their five highest paid executives earned positive

excess returns of 0.3% on October 5 and 6, 2017, when the Weinstein allegations hit the media, and a further 1.3% over the two weeks from October 16, 2017, when the #MeToo movement was relaunched.

Next, we turn to the interaction of corporate culture with the broader culture in which the firm operates, both at the industry and the state level. In particular, we examine whether investors value the presence of female leadership more when the importance of a non-sexist culture increases *and* the broader culture in which the firm operates is more sexist. In addition, we also explore spillover effects from the culture in which the firm operates to the firms themselves.

At the industry level, we find that the female leadership effect is particularly strong in male-dominated industries. In such industries, firms with female leadership exhibit 3.2% higher abnormal returns during the Weinstein and #MeToo event windows than firms without female leadership. In addition, firms operating in industries with a high fraction of women in executive positions also outperform around these events, irrespective of whether the firm itself has a highly-paid female executive, suggesting an industry spillover effect. In other words, when industry-level culture is less sexist such that women achieve leadership positions more frequently, the entire industry enjoys (relatively) higher stock returns when the importance of having a non-sexist corporate culture increases.

At the state level, we also document interaction and spillover effects. We find that the value of female leadership within a firm around the Weinstein and #MeToo event windows is higher when the firm is headquartered in a more sexist state or a state with a greater gender pay gap—the excess returns for firms with a top-five female executive are 2.1% and 2.7%, respectively, in these states. This result, again, indicates that female leadership matters most in settings in which sex discrimination is more likely. We also report that firms headquartered in states with low levels of sexism or a low gender pay gap experienced higher abnormal returns during our event windows

relative to other firms, independent of whether they themselves had women in top leadership positions, which attests to the value of culture measured at the societal level (Guiso, Sapienza, and Zingales (2006)).

We also investigate whether the positive valuation effects persist when we employ two alternative proxies for female leadership and sexism. First, we measure female leadership below the C-suite, based on women in senior management positions below the top five. Using this alternative way of quantifying a culture that promotes gender equality, we again find a strong positive valuation effect. Second, we employ textual analysis based on individual comments left by employees on the Glassdoor website to construct a measure of sexism. Firms classified as sexist using this algorithm earned significant negative returns around the Weinstein and #MeToo events.

In addition to bringing to the forefront the importance of having a non-sexist culture, the Weinstein scandal and the #MeToo movement may have led investors to reassess the value of a firm's culture more broadly. To investigate this possibility, we use a measure compiled by Glassdoor that assesses employees' views on a firm's overall corporate culture and values. Our findings hold using this metric as well.

Motivated by the literature on gender diversity at the board level, we explore whether female leadership is required for this valuation effect to obtain or whether the presence of women on the board suffices. While we do find a positive (yet economically modest) relation between the fraction of female directors and stock returns around the revelation of the Weinstein scandal, the effect is fully subsumed by the presence of female leadership. Thus, when the importance of having a non-sexist corporate culture increases, the market values the presence of women in top corporate leadership roles more than their presence on the board of directors. This finding is indeed consistent with the premise that corporate culture is largely driven by C-suite executives (e.g., Deloitte (2016), World Economic Forum (2017), and Graham et al. (2021)).

We conclude the paper by investigating potential mechanisms behind the stock return evidence that we document. According to recent asset pricing models, investor ESG preferences can affect the pricing of stocks (e.g., Pastor, Stambaugh, and Taylor (2021) and Pedersen, Fitzgibbons, and Pomorski (2021)). In our context, the higher returns of firms with a non-sexist culture during the Weinstein and #MeToo events could be the result of changes in investor preferences as the importance of having a non-sexist culture became more salient. Because investor preferences are unobservable, we investigate an implication of the models: firms with fewer female leaders make changes to their policies and increase gender diversity over time to cater to investor tastes for non-sexist stocks (see Pastor, Stambaugh, and Taylor (2021)). Using a variety of metrics that capture gender diversity, we find larger improvements in diversity for firms with fewer female leaders after the Weinstein and #MeToo events, which is consistent with changes in investor preferences driving the superior returns of firms with a non-sexist culture during our events.

The return evidence and the changes in diversity metrics, however, are also consistent with two additional explanations: (i) firms with a non-sexist corporate culture were undervalued prior to the Weinstein and #MeToo events because the latent costs stemming from sexism were not fully understood by investors (see Pedersen, Fitzgibbons, and Pomorski (2021)); aware of this undervaluation, firms with fewer female top executives refrained from investing resources to improve gender diversity; and (ii) the events we study altered the importance that stakeholders attached to a non-sexist corporate culture, leading to improved (relative) operating performance for firms with such a culture.

To investigate the undervaluation explanation, we study whether investors underreact to earnings news for firms with top female executives prior to the Weinstein event, and whether this underreaction gets corrected after the events. We find no evidence in support of this conjecture.

To study the second explanation, we examine operating performance around our event windows. We find no evidence of changes in operating performance for firms with female leadership relative to other firms, although we recognize that actual improvements in operating performance may take longer to materialize (Grennan (2019)). We also investigate whether our findings are (solely) due to increased litigation risk for firms with a more sexist corporate culture and find this not to be the case. Altogether, our findings are most consistent with changes in investor preferences driving the revaluation of firms with a non-sexist culture around the events we study.

Our paper makes several contributions. First, it adds to the literature on the value of corporate culture (e.g., Guiso, Sapienza, and Zingales (2015a), Graham et al. (2021), and Grennan (2019)) by attributing valuation effects to an increasingly relevant aspect of culture: the extent to which sexism exists in organizations and society. By focusing on an unequivocal shock to sexism, we move closer to the identification of the causal effects of corporate culture. Moreover, we document the joint effect on valuation of sexism at the corporate and industry/societal levels, providing additional evidence on the ways in which societal culture can add value (Guiso, Sapienza, and Zingales (2006, 2015b)).

Second, our work adds to the literature assessing the impact of female leadership in corporations by documenting its valuation effect. Prior studies show that women in leadership positions: (i) create corporate cultures with greater gender equality (e.g., as captured by reductions in the wage gap, see Tate and Yang (2015) and Kunze and Miller (2017)); (ii) display more conservative investing and financing policies (Huang and Kisgen (2013), and Faccio, Marchica, and Mura (2016)); and (iii) experience fewer operations-related lawsuits (Adhikari, Agrawal, and Malm (2019)). Huang and Kisgen (2013) also show that the announcement returns for both acquisitions and debt issuances of firms with female CEOs or CFOs are slightly positive, suggesting a positive valuation effect. Conversely, the reduced form equations in Adhikari,

Agrawal, and Malm (2019) suggest that the net effect of female leadership on firm value is negative. We contribute to this literature by showing that female leadership has a positive impact on shareholder value when investors reassess the salience of having a non-sexist corporate culture.⁵

Third, we extend the literature that assesses the impact of having women on the board (see, e.g., Adams and Ferreira (2009), Adams and Funk (2012), Ahern and Dittmar (2012), and Kim and Starks (2016)). Our empirical evidence suggests that female executive presence is perceived as being more effective in achieving a non-sexist corporate culture than increasing the number of women on the board. In this regard, our findings are also consistent with the World Economic Forum’s claim that “the key to closing the gender gap is to put more women in charge.”

Finally, we provide evidence that supports the models of Pastor, Stambaugh, and Taylor (2021) and Pedersen, Fitzgibbons, and Pomorski (2021), in which investor tastes for ESG stocks can impact valuation.

2. Data

Under SEC regulations, companies are required to disclose detailed information regarding the remuneration of the CEO, the CFO, and the three other most highly paid officers. We gather these data for the most recent fiscal year prior to October 1, 2017 from the Execucomp database, which covers the S&P 1500 firms. We drop executives for whom Execucomp’s ‘rank’ variable is missing. We also drop firms for which Execucomp reports fewer than five top-compensated executives per firm. To capture the extent of non-sexism within a firm, we compute the fraction of these executives that are women (*Fraction Top-5 Women*) and also create a dummy variable set equal to one if at least one woman is among the highest paid executives (*Indicator Top-5 Women*),

⁵ Recent evidence also indicates that policies aimed at attracting more women to the workplace in general either through maternity benefits (Liu, Makridis, Ouimet, and Simintzi (2021)) or state-level Paid Family Leave Acts (Bennett, Erel, Stern, and Wang (2021)) can be value enhancing.

and zero otherwise. Finally, we combine these data with daily stock returns from the CRSP database for the three-month period starting in September 2017, more than one month before the first allegations against Harvey Weinstein were made. After dropping firms with missing return data (due to delisting as a result of mergers, going private transactions, etc.), we obtain a sample of 1,436 firms.⁶

Table 1 contains summary statistics on the firms in our sample. Roughly three quarters of the firms have no women among the highest paid executives, and only 6% of the top-five executives in our sample are women. In firms with at least one female executive, women comprise just 23.4% of the top-five executives, indicating that most of these firms have just one woman among its leaders. Compared to the year-2009 figures reported by Matsa and Miller (2011) in which 22.6% of firms have a woman among the top-five-paid executives, little progress has been made in promoting women to the executive suite. We also report that only 4.3% of the sample firms have a female CEO.

Table 1 also contains summary statistics on our sample firms' financial characteristics, measured at the end of the most recent fiscal year prior to October 1, 2017. Firms with at least one female executive are broadly similar to those with no female executives in terms of size, cash holdings, Tobin's q , and investment (capital expenditures). However, they have lower levels of leverage (consistent with Huang and Kisgen (2013) and Graham, Harvey, and Puri (2013)) and higher profitability.

For our sample firms, we also gather data on board composition from BoardEx, based on the most recent proxy statements filed before October 1, 2017. As we do for the highest paid executives, we compute the fraction of board members that are women (*Fraction Board Women*). Across our sample, 17% of all board members are women and 87% of all firms have at least one

⁶ Including delisted firms until the delisting date has no effect on our results.

woman on the board (untabulated). Compared to the statistics for top female executives, these figures show that a woman is three times more likely to be on a corporate board than in the top-five executive team. Firms with female executives have a higher fraction of women on the board (22%) than firms without female executives (15.4%). This difference becomes smaller but remains significant when we focus on the fraction of non-executive directors that are female (23.1% vs. 18.5%).

3. Main Results

3.1. Female Leadership: Firm-Level Results

We start by studying whether firms with female leadership, our proxy for having a non-sexist corporate culture, earned higher stock returns during the two days in which the public announcement of the Harvey Weinstein sexual assaults were first widely reported in the media, on October 5 and 6, 2017.⁷ To this end, we estimate the following panel regression of raw daily stock returns over the three-month period from September 1, 2017 through November 30, 2017:

$$R_{i,t} = \alpha_i + \beta_t + \gamma Female_i \times Event_t + \varepsilon_{i,t}, \quad (1)$$

where $Female_i$ is one of our two female leadership variables (*Fraction Top-5 Women* or *Indicator Top-5 Women*); and $Event_t$ is a time dummy set equal to one on October 5 and 6, 2017, and zero otherwise. The model is estimated with both firm (α_i) and time (daily) (β_t) fixed effects, and the standard errors are double clustered by firm and time. The firm fixed effects control for all time invariant firm characteristics. Thus, by keeping the estimation period relatively short, we alleviate the need to include controls for factor loadings, firm financials, and the female leadership proxies

⁷ Using Factiva, we verify that there are no news stories in any of the major media outlets covering the terms “Harvey Weinstein” and either “harassment” or “assault” over the period from September 1, 2017 through October 4, 2017. On October 5, 2017, there were 72 stories and on October 6, 2017, there were 144, indicating that these two trading days are key to identifying the stock price response to the Weinstein announcement.

themselves. Our coefficient of interest is the interaction term of the female leadership proxies and the Weinstein scandal event dummies (γ), which measures the change in the stock market's assessment of the importance of having a non-sexist culture.

Models 1 and 2 of Table 2 contain the results of this estimation. In model 1, we use the interaction of the Weinstein event with *Fraction Top-5 Women* as the explanatory variable, while in model 2, we use the interaction with *Indicator Top-5 Women*. The coefficient estimates are positive and highly statistically significant for both interactions, indicating that, when the Weinstein scandal unfolded, firms with female top executives earned excess returns, relative to firms without women among their highest paid executives. The coefficient in model 1 implies that a firm with one additional top-five-compensated female executive earned an excess return of 0.22% on October 5 and 6 (calculated as: $0.551 \times 20\%$ more female executives $\times 2$ days). The economic magnitude of the indicator variable in model 2 is similar: having a female executive yields a 0.19% additional excess return over two days.

The second shock to the importance of having a non-sexist corporate culture occurred with the start of the #MeToo movement. While further allegations were made against Harvey Weinstein in the weeks after October 6, the notion that harassment in the workplace could be a more pervasive and systematic problem gained strong momentum on October 15, 2017, when actress Alyssa Milano encouraged spreading the hashtag #MeToo in an attempt to draw attention to the widespread occurrence of sexual assault and harassment.⁸ In the subsequent days, Google searches for the terms “#MeToo” and “sexual harassment in the workplace” hit an all-time high, and several

⁸ The term “Me Too” was originally used by Tarana Burke, a social activist and community organizer in 2006, on the Myspace social network, but was only used sporadically.

other prominent leaders in business and society were accused of sexual misconduct in the workplace.^{9,10}

To assess whether firms with female leadership also earned excess returns during the onset of the #MeToo movement, we augment Eq. 1 with an additional event dummy covering the two-week event window starting on October 16 (the first trading day after the #MeToo tweet) and ending on October 27, and interact this event dummy with the female leadership proxies. As shown in Figure 1, the number of news stories on Factiva mentioning variations of the term “#MeToo” drops markedly after this date; hence, we assume that investors would have incorporated the information on the severity of the problem by then.¹¹

We report the results of this estimation in models 3 and 4 of Table 2. During the first two weeks of the #MeToo movement, firms with female leadership earned excess returns that are statistically significant and economically important. The coefficient estimate in model 3 shows that relative to other firms, a firm with one additional top-five-compensated female executive earned excess returns of 0.95% during the ten trading days starting on October 16 (calculated as: $0.477 \times 20\%$ more female executives $\times 10$ days). The results in model 4 confirm this finding: firms with at least one woman among the top-five-paid executives earned excess returns of almost 1% over the 10 days.

To assess whether the female leadership effect on returns persists or is temporary in nature (and reverses in subsequent weeks), we further augment Eq. 1 by interacting the female leadership proxies with a dummy variable for the period in between the Weinstein scandal announcement

⁹ For a website keeping track of these allegations, see <https://www.vox.com/a/sexual-harassment-assault-allegations-list>. Unfortunately, this website has not been updated since early 2019.

¹⁰ Cheng and Hsiaw (2021) present a model in which increased public awareness and stronger reporting incentives associated with the #MeToo movement ameliorate the coordination problem among agents subject to misconduct, leading to increases in the number of reported cases.

¹¹ When we split this two-week event window into two separate one-week windows, we find positive and significant stock price effects in both weeks.

window and the beginning of the #MeToo movement (October 9 to 13, 2017), and the one-month period after the #MeToo event window (October 30 to November 30, 2017). Models 5 and 6 of Table 2 display these results. We find no evidence of return reversals in the week after the Weinstein announcement or for the month after the #MeToo movement event window.

The regressions reported in Table 2 employ the firms' raw returns as the dependent variable and include firm and time fixed effects. Thus, we are comparing the firms' returns during the various event windows to the firms' returns outside of the event windows, after adjusting for market movements, thereby implicitly assuming that returns outside of the event window are 'normal.' To ensure that our findings are robust to alternative methods of computing abnormal returns, we employ two variations to the above methodology. First, we replace the raw returns by market-model-adjusted returns, where the market model is estimated using daily returns over the period September 1, 2016 through August 31, 2017, with the CRSP value-weighted index as the market proxy. This approach ensures that our findings are not due to firms with (without) female leadership possibly experiencing abnormally low (high) returns outside the event windows. Second, in our base-case model, we include an interaction term between the firm fixed effect and the market return. This approach accounts for differences across firms' sensitivities to market movements during the estimation period. Both alternative approaches yield results that are economically and statistically very similar to our base-case specifications.¹² Finally, we also verify that our findings are not due to extreme observations—winsorizing returns at the 1st and 99th percentiles does not impact the magnitude or significance of our results.¹³

We next investigate whether the benefits of having a woman in a top-five leadership position are further enhanced when the CEO is a woman. A woman holding the highest position

¹² Additionally, we calculate cumulative abnormal returns around the event windows and find similar results.

¹³ The results from all these robustness tests are not tabulated for sake of brevity.

in a firm is arguably one of the strongest indicators of a non-sexist culture. However, since only 4% of firms have a female CEO, a female CEO effect may be hard to detect empirically. To test for a CEO effect, we re-estimate our base case regression models, but include a stand-alone female CEO indicator and either a variable capturing the fraction of women holding any of the remaining top four named executive positions or an indicator if there is at least one woman among the remaining top-4 executives. The results of these tests are presented in Table 3. Firms with a female CEO exhibit relative higher returns during the two-day Weinstein event window (the excess returns are also positive albeit insignificant during the #MeToo window). Moreover, firms in which women hold one or more of the other top four positions also exhibit statistically and economically significant excess returns in both the Weinstein and #MeToo windows. These results suggest that the valuation benefits of having a woman in the top management team stem from all top-5 positions, and not just the CEO position.¹⁴

Overall, the evidence reported in Tables 2 and 3 provides strong support for our conjecture that a non-sexist corporate culture is valuable; firms with women in top leadership positions earned positive excess returns relative to other firms when the importance of having a non-sexist culture increased around the Weinstein scandal and the emergence of the #MeToo movement.

3.2. Is Female Leadership More Valuable in More Sexist Settings? Industry- and State-level Results

In this section we analyze whether the valuation impact of female leadership around the Weinstein and #MeToo events is more pronounced when the broader cultural environment in which the firm operates is more sexist. The underlying premise is that in such settings, female

¹⁴ We have also estimated these models without the top-four female interaction variables (i.e., using only the stand-alone female CEO interactions). Consistent with the results in Table 3, returns are positive for firms with female CEOs during both the Weinstein and #MeToo windows, and statistically significant during the Weinstein event.

leadership is likely a stronger indication of a non-sexist corporate culture. Conversely, when the broader cultural environment in which the firm operates is less sexist, the presence of women at the top is likely to be less important to attain a non-sexist corporate culture. We examine two distinct settings: industry-level sexism and state-level sexism. These settings also allow us to study whether the overall level of sexism in the industry or state in which the firm operates affects the stock price response associated with our events.

3.2.1. Industry-level Sexism

Gender discrimination or sexism at the firm level is more prevalent in more sexist settings, such as majority-male workplaces (Parker (2018)). Thus, in our first set of conditional tests, we focus on industry-level sexism, measured by the extent to which women have attained top leadership positions in an industry. We argue that having a larger fraction of women in an industry's executive ranks is prima facie evidence that the industry is less sexist; otherwise women would not have attained such top leadership positions. By conditioning on the overall level of women in executive positions in the industry, we also alleviate the concern that our firm-level sexism proxy may be a reflection of supply constraints in the industry (since we are holding supply constant).

To examine the impact of industry-level sexism, we obtain data on the job patterns of minorities and women collected annually by the US Equal Employment Opportunity Commission (EEOC) from private employers with 100 or more employees or federal contractors with 50 or more employees.¹⁵ We use the nationally-aggregated data at the 6-digit NAICS code for 2015.¹⁶ For each NAICS code, the EEOC reports the number of female and male employees in executive

¹⁵ <https://www.eeoc.gov/eeoc/statistics/employment/jobpat-eeo1>.

¹⁶ We use 2015 data because starting with 2016, the EEOC only offers data aggregated at the 3-digit NAICS code or lower.

and senior officer positions, which we use to measure the share of women in executive positions (WEP). Because our sample firms are identified by SIC codes, we match the NAICS codes to 4-digit SIC codes and compute the average share of women in executive positions for each SIC code (*Fraction WEP*). Firms for which there is no match are dropped from this analysis.¹⁷ We also use the fraction of WEP in each industry to construct a dummy variable that equals one for industries with an above-median share of women in executive positions, and zero otherwise (*Above-Median WEP*).

To estimate the valuation implications of firm and industry level sexism, we augment our baseline regression models with our measures of industry sexism (*Above-Median WEP* and *Fraction WEP*) and the interaction of female leadership at the firm level with the level of industry sexism. For ease of interpretation, we combine the first three event windows into a single period, which runs from October 5 to 27, 2017, and captures the effect of the Weinstein scandal revelation, its aftermath, and the first two weeks of the #MeToo movement. The October 30 to November 30, 2017 window remains unchanged. Thus, we estimate the following regression model:

$$R_{i,t} = \alpha_i + \beta_t + \gamma_1 Female_i \times Event_t + \gamma_2 WEP_i \times Event_t + \gamma_3 Female_i \times WEP_i \times Event_t + \lambda_1 Female_i \times Post_t + \lambda_2 WEP_i \times Post_t + \lambda_3 Female_i \times WEP_i \times Post_t + \varepsilon_{i,t}, \quad (2)$$

where, as before, $Female_i$ is one of our two female leadership variables (*Fraction Top-5 Women* or *Indicator Top-5 Women*); WEP_i is one of our two measures of industry level sexism (*Above-Median WEP* and *Fraction WEP*); $Event_t$ is a time dummy set equal to one over the event period (October 5-27, 2017), and zero otherwise; and $Post_t$ is a time dummy set equal to one after the event period, and zero otherwise.

¹⁷ Alternatively, to avoid dropping firms that cannot be matched at the 4-digit SIC code level, we match NAICS codes to 3-digit, 2-digit, and 1-digit SIC codes respectively, and repeat our analysis. Our findings are similar.

The results of this estimation are presented in Table 4. In models 1 and 2, we study the effect of female leadership for industries with above- and below-median WEP. The coefficient on the female variable, γ_1 , captures the effect in male-dominated industries over the event period. The valuation effects of female leadership are particularly important in male-dominated industries: in such industries, a firm with one additional top-five-compensated female executive earned excess returns of 2.79% over the 17 trading days from October 5 to 27 (calculated as: coefficient of 0.822 \times 20% more female executives \times 17 days). In model 2, the effect of having at least one woman among the top-five-paid executives is even larger, yielding an excess return of 3.28% over the 17 days (calculated as: 0.193 \times 17). These results support the notion that female executives are particularly valuable in male-dominated industries when the importance of having a non-sexist corporate culture increases.

The coefficients on WEP (γ_2) illustrate the value implications, for industries that have greater female representation in executive positions as the Weinstein scandal and #MeToo movement unfolded. The results show that a less sexist culture measured at the industry level itself is also valuable; firms from industries that have an above-median share of female executives exhibit higher stock returns (around 3.3%; computed as: 0.197 (or 0.193) \times 17) during the October 5 to 27 period, regardless of whether the firm itself had a female executive.

Finally, the coefficient on the triple interaction term (γ_3) assesses whether having a female top-five executive is incrementally beneficial for firms in industries that already have a large proportion of female executives. This interaction term is significantly negative, essentially offsetting the positive effect of female leadership (γ_1). Thus, for firms in industries with more women at the top, having one or more top-five female executives does not add additional value during the Weinstein scandal and #MeToo movement. This is consistent with the notion that when

a non-sexist culture is perceived to be the norm in an industry, individual firms in the industry do not necessarily need senior female leaders to instill such a culture.

In models 3 and 4 of Table 4, we replace the *Above-median WEP* dummy with the continuous measure of women in executive positions (*Fraction WEP*) and our findings are similar.

3.2.2. *State-level Sexism*

In this section, we investigate whether the effect of female leadership on value is particularly strong if the culture of the state in which the firm is headquartered is generally more sexist. As with our industry tests, the culture of the state itself could also affect the revaluation of firms around the events we study if there are spillover effects from regional/societal culture to corporate culture.

We employ two relevant state-level measures of culture: state-level sexism and state-level gender pay gap. Data on state-level sexism are obtained from Charles, Guryan, and Pan (2018). They employ questions from the General Social Survey to determine whether an individual is sexist and then average survey responses across individuals in a specific state and across surveys to obtain a state-level measure.¹⁸ To calculate the state-level gender wage gap, we obtain data from the Current Population Survey for the years 2015 and 2016. This survey contains state-by-state data on wages and a large number of demographic characteristics. We estimate for each state a regression of weekly pay on a female indicator variable, while controlling for various other variables that explain wages (age, education, occupation, manager position, race, metropolitan area, central city, suburbs, rural, industry, county, year, and month). The coefficient estimate on

¹⁸ Charles, Guryan, and Pan (2018) combine responses on eight questions. For example, one of the questions is whether respondents agree with the following statement: “Women should take care of running their home and leave running the country up to men.”

the female indicator captures the difference in pay after controlling for observables; that is, it serves as an estimate of the gender pay gap.

For both the sexism and gender pay gap measures, we divide states into two groups based on the overall median. We estimate regression models similar to the one in Eq. 2, but in this case we allow the effect of female leadership to depend on whether the state has a high or low level of sexism or gender pay gap. As in Table 4, for ease of interpretation, we combine the Weinstein and #MeToo events into one event window. Thus, the augmented regression model is as follows:

$$R_{i,t} = \alpha_i + \beta_t + \gamma_1 Female_i \times Event_t + \gamma_2 State_i \times Event_t + \gamma_3 Female_i \times State_i \times Event_t + \lambda_1 Female_i \times Post_t + \lambda_2 State_i \times Post_t + \lambda_3 Female_i \times State_i \times Post_t + \varepsilon_{i,t}, \quad (3)$$

where $State_i$ is one of our two measures of state level sexism (*Low Sexism State* or *Low Gender Pay Gap State*) and the remaining variables are as defined previously. In these estimations, we double cluster the standard errors by time and state, since we measure sexism at the state level.

The results based on state-level sexism splits are reported in Panel A of Table 5. The first row (γ_1) shows that in states with high levels of sexism, firms with female leadership earned higher returns during our event window compared to other firms. Based on the coefficient estimate in model 2, firms that are headquartered in such states and that have at least one woman among their top five executives earned excess returns of 2.1% over the 17 trading days from October 5 to 27 (calculated as: 0.124×17). The coefficient on *Low Sexism State* \times *Event* (γ_2) shows that firms headquartered in states with low levels of sexism also earned excess returns during this period, suggesting that the culture of the state where the firm is located is also important. In fact, based on model 2, the magnitude of this effect is similar to that of female leadership itself. Finally, the coefficient on the interaction between the female leadership variable and the low-sexism-state indicator (γ_3) suggests that the effect of female leadership is mostly undone in states with low

levels of sexism. The net effect that accrues by adding the female leadership coefficient and the female \times low sexism interaction coefficient (i.e., $\gamma_1 + \gamma_3$) is not significantly different from zero.

The results using the state split based on the gender pay gap reported in Panel B of Table 5 echo those of Panel A and again illustrate both a firm-level and a regional-level culture effect: during our event window, female leadership is particularly valuable in states with a high pay gap, while firms in states with a low pay gap earned excess returns relative to other firms regardless of their female leadership.

Overall, these results indicate that there is an important interaction between societal culture and firm culture and that both can add to firm value.

4. Additional Analyses

In this section, we present a series of additional tests to further establish the value of having a non-sexist corporate culture around the Weinstein scandal and the emergence of the #MeToo movement.

4.1. Alternative Firm-level Proxies for a Non-sexist Culture

One potential concern with our firm-level proxy of sexism is that some sexist firms may hire women in executive positions as a token in order to be perceived as being non-sexist. While there could indeed be a few cases of tokenism, we believe that it is highly unlikely that most firms would hire women as highly-paid top executives, with associated decision-making authority, if they did not believe that these women were competent. In addition, our results at the industry level and at the societal (state) level cannot be explained by tokenism: even if there are no female top

executives in the firm, we still find abnormal returns for firms in industries and states that are less sexist.

To further alleviate this concern, and, more generally, the concern that the lack of women among the top-5 executives does not capture firm-level sexism, we investigate whether our results continue to hold using two alternative proxies for firm-level sexism.

4.1.1. Measuring Female Leadership Below the C-Suite

We first examine whether our results persist when female leadership is measured at the level below the C-suite. To construct this alternative proxy, we obtain from the BoardEx database the profiles of the senior management of the organization for the most recent fiscal year prior to October 1, 2017. Compared to the Execucomp database, BoardEx does not rank senior managers in the organization or provide comprehensive salary information. Therefore, to capture who is part of a firm's senior management team, we first identify all senior managers that have 'Vice President' or 'VP' in their job title. Next, because additional job title words such as Executive, Senior, Associate, or Assistant are sometimes also listed, we remove from this senior leadership group Vice Presidents (or VPs) who also have Associate or Assistant in their title.¹⁹ This allows us to focus on managers that rank below a firm's C-suite but nonetheless are likely to have senior leadership responsibilities. As we do for our primary female leadership variables, we compute the fraction of women among a firm's senior management (*Fraction Senior Management*) and also construct an indicator variable that equals one if a firm has at least one woman in a senior management position, and zero otherwise (*Indicator Senior Management*).

We calculate these measures for all firms covered on BoardEx for which stock return data are available on the CRSP database for the three-month period starting on September 1, 2017. This

¹⁹ Our findings remain unchanged when we do not remove these executives.

yields a sample of 3,372 firms. On average, 21.5% of the senior managers are women and 75.9% of firms have at least one woman in a senior management position. Given these fractions, it is difficult to argue that a sexist firm would hire this many women at the VP level as a token. Interestingly, firms that have a woman among the top-five-compensated executives almost always also have women in their lower ranks of senior management (only 3% of firms with a top-five female executive do not have any women in senior management positions). This supports the notion that firms with women among their highest paid executives are more likely to empower women and have a gender-equal culture.

Using these measures of female leadership further down in the organization, we re-estimate the base case regression models. Panel A of Table 6 reports the results. The coefficients on both measures are positive and strongly significant during the Weinstein and #MeToo event windows, indicating that when the importance of having a non-sexist culture increased, market participants also placed a higher value on firms with greater female leadership below the top-executive level. In terms of economic significance, a one standard deviation increase in the fraction of women in senior leadership positions (19.1%) is associated with excess returns during the Weinstein and #MeToo event windows of 0.7% (based on model 5). Model 6 assesses the impact of having at least one woman in the second layer of senior management. Here the economic effect is more substantial, with excess returns of 2.4% for firms that have at least one woman in a senior management position compared to firms that have none.

4.1.2. Textual Analysis

Hitherto, the proxies employed to capture the lack of sexism in a firm rely on the presence of female leaders in the top levels of management. In this section, we employ a measure of sexism based on employee comments listed on the Glassdoor website.

Glassdoor is an employer review and recruiting website that contains company reviews from current and former employees for 600,000 companies worldwide. We analyze individual reviewers' comments made under the Glassdoor 'negative feedback' field for the years 2015 to 2016 for all US companies with stock returns data available on the CRSP database over the three-month period starting on September 1, 2017. Firms with less than 10 feedback reviews are removed from the analysis, yielding a sample of 1,920 companies. We flag each negative feedback if it contains keywords that are related to a sexist corporate culture, such as sexist, sexism, sexual harassment, misogyny, boys' club, etc. We create a dummy variable, *Glassdoor Negative Feedback*, that equals one if more than 10% of the negative feedback comments refer to these keywords, and zero otherwise.²⁰ We then re-estimate our models, but we employ this dummy variable to capture whether the firm's culture is sexist or not.

These findings, which are reported in Panel B of Table 6 of the paper, confirm our prior results that non-sexist firms outperformed during both the Weinstein and #MeToo event windows. Based on model 3 which captures all events, non-sexist firms outperformed sexist firms by 2.12% when these events unfolded.

4.2. *A Broader Measure of Corporate Culture*

In addition to increasing awareness of the extent of sexism in corporations, the Weinstein and #MeToo events may have led investors to reassess the value of corporate culture more broadly. In this section, we investigate whether this is indeed the case by focusing on a broader measure of corporate culture. To do so, we rely on the culture ratings provided by Glassdoor. Reviewers rate companies on a scale from one to five for overall employer quality as well as for five distinct areas:

²⁰ For robustness, we also create a *relative* negative feedback dummy variable, which equals one if the fraction of flagged negative employee feedback is in the top quintile of the sample, and zero otherwise. Our results are very similar using this variable.

career opportunities, compensation and benefits, work/life balance, senior management, and culture and values. Our focus is on the culture and values category, which captures the firm's culture more broadly from the perspective of the company's employees and likely covers more than just whether a workplace environment is sexist or not. As in Section 4.1.2., we gather information for this rating for all US companies with stock returns data available on the CRSP database over the three-month period starting on September 1, 2017. The culture rating is averaged across all reviews for the years 2015 and 2016, and firms with less than 10 reviews are removed from the analysis, yielding a sample of 1,870 companies. Both the mean and median of the *Glassdoor Culture* variable are equal to 3.16 with a standard deviation of 0.57.²¹

Table 7 presents the results when we replace the female leadership measure with the *Glassdoor Culture* variable. Model 1 shows a positive and significant coefficient on the Glassdoor culture and value measure for the Weinstein event days while model 2 shows that the coefficient on overall culture is positive but not statistically significant in the #MeToo event window. Model 3 includes all event windows. In this more comprehensive model, *Glassdoor Culture* is significantly related to returns during both the Weinstein and #MeToo event windows. Based on the coefficients of this model, a one-standard deviation change in *Glassdoor Culture* is associated with excess returns during the Weinstein and #MeToo event windows of 0.9%. These results are consistent with broader corporate culture also being valued more highly during this period.²²

²¹ A concern with Glassdoor ratings as a measure of corporate culture is that they may reflect private/insider information about future cash flows of the firm (see Green et al. (2019)). As such, it is difficult to disentangle the effect of culture on valuation. In our setting, however, this is less of a concern, because it is unlikely that this private information is revealed exactly during the events we study.

²² We also find that firms with more negative feedback comments related to sexism as discussed in Section 4.1.2. have a lower overall culture and values rating.

4.3. *Women on the Board*

Much of the literature on gender diversity in corporate leadership has focused on the board of directors, and outside directors in particular, rather than on the executive team (see, e.g., Adams and Ferreira (2009), Adams and Funk (2012), and Ahern and Dittmar (2012)). Prior work documents that female board members enhance a board's skill sets, which may increase board efficiency (see, e.g., Kim and Starks (2016)). Moreover, Matsa and Miller (2001) find that firms with female directors are more likely to recruit female executives and Table 1 shows that female leadership is positively related to female board membership. Thus, it is possible that the benefits from having a non-sexist culture originate at the board level.

To examine this conjecture, we investigate whether top female leadership is needed for the positive valuation effects of a non-sexist culture to materialize or whether the presence of women on the board suffices. We augment our baseline models with additional interactions between the relevant event windows and the fraction of female board members.²³ The findings are reported in Table 8. We continue to find that our measures of female executives (*Fraction Top-5 Women* and *Indicator Top-5 Women*) have a positive and significant effect on stock returns during the Weinstein and #MeToo event periods. However, the fraction of female board members has no incremental effect on returns over these periods. These results suggest that when the importance of having a non-sexist corporate culture increases, value creation stems from having women in top executive positions rather than having additional female board members. Given that there are far more female directors than female top executives (see Table 1), the presence of female executives is likely a stronger indicator of a non-sexist culture than the presence of one or more female board members.

²³ Since 87% of our sample firms have at least one woman on the board, our tests concentrate solely on the fraction of female board members and not the presence of a woman on the board.

Since female leadership is positively related to female board membership, we have also re-estimated these models without the female leadership variables to assess the standalone valuation effect of female board membership during our event windows. We find positive excess returns during the Weinstein event when we consider both executive and non-executive female directors, but no significant effect when we focus on non-executive directors only (not tabulated for sake of brevity). Thus, having more non-executive female directors on the board does not create additional value in our setting.²⁴

4.4. *Additional Robustness Tests*

While it is unlikely that firms with female top executives would be announcing higher earnings or dividends exactly during the Weinstein and #MeToo event windows, we nevertheless investigate whether our findings persist after including unexpected earnings and dividends as additional explanatory variables in our models on the day they are announced and the following day.²⁵ Our findings hold after including these concurrent events.

We also verify that our results are unaffected when we exclude firms from each of the Fama-French 49 industries one at a time. We also exclude three industries simultaneously—healthcare, medical equipment, and pharmaceuticals—which may be affected by the removal of certain Obamacare subsidies and/or the opioid crisis being declared a public health emergency during our sample period. Our results persist.

A final concern is that our main measures of female leadership may reflect supply constraints in certain industries. As discussed earlier, this interpretation is inconsistent with the

²⁴ Giannetti and Wang (2021) report that firms attract more female directors after increases in public attention to gender equality, in particular if these firms had a more favorable attitude towards women in the first place. They do not study the valuation effects of these appointments.

²⁵ Unexpected earnings is equal to (Actual Earnings – Consensus Forecast) / Share Price at the end of the IBES statistical period prior to the earnings announcement. Unexpected dividend is equal to (Declared Dividend – Prior Dividend) / Share Price on the day prior to the dividend announcement day.

industry level results reported in Table 4, where we find that the abnormal returns associated with female leadership are highest in industries with fewer women in executive positions. If supply constraints were preventing firms from hiring women as top executives, we would not expect those firms with women at the top to be considered less sexist, and, hence, to be rewarded by the market. Conversely, in industries where female talent is abundant, not having a woman at the top would be considered sexist, and, hence, those companies should be penalized by the market. Our results are exactly the opposite.

Nonetheless, to further address supply constraints, we have also re-estimated our baseline models, but instead of including an indicator variable equal to one if at least one of the top-5 executives is female, we set it equal to one if the firm has more female top-5 executives than firms in its two-digit SIC code industry. Our findings persist for this alternative variable.

5. Mechanisms

In this section, we study the potential mechanism(s) behind the revaluation of firms with female leadership during the Weinstein and #MeToo events.

Pastor, Stambaugh, and Taylor (2021) and Pedersen, Fitzgibbons, and Pomorski (2021) present models in which changes in investor preferences for ESG performance can lead to positive abnormal returns for high ESG stocks. In our context, the Weinstein and #MeToo events increased the salience of gender equality, which is an important component of ESG, leading to potential changes in investor preferences for gender diverse companies. Since investor preferences are not observable, we investigate an implication of these models: firms with fewer female leaders increase gender diversity over time to cater to these preferences.

We employ three metrics of gender diversity obtained from the Refinitiv ESG database for the 2013 to 2020 period: (a) the Refinitiv *Diversity Score*, which measures a firm's commitment

and effectiveness towards maintaining a gender diverse workforce and board member cultural diversity; it ranges from 0 to 100 with higher values indicating greater gender diversity; (b) *Executive Member Gender Diversity*, which measures the fraction of women among a firm's executives; and (c) *Policy Diversity and Opportunity*, which is a dummy variable equal to one if the firm has a policy to drive diversity and equal opportunity, and zero otherwise.

To examine changes in gender diversity post-Weinstein/#MeToo, we estimate regressions of these diversity measures on an interaction term between our female measures and a *Post* dummy that is zero for the years 2013 to 2016 and one for the years 2018 to 2020, including firm and time (year) fixed effects (2017 is removed because it is the event year). Table 9 displays the results. Overall, for all diversity measures, firms with fewer female top executives improve gender diversity after the Weinstein and #MeToo events more than other firms. The results are also economically significant. For example, the estimates in model 2 of Panel A of Table 9 suggest that firms without female top executives improve their average *Diversity Score* by 8.2% relative to firms with female top executives (coefficient estimate of 1.480 / average *Diversity Score* of 18.15 for firms with no female top executive before the Weinstein/#MeToo events).

One concern with this analysis is that these changes would have taken place irrespective of the Weinstein/#MeToo events. In particular, firms with fewer female top executives may have started changing their policies well before these events. To address this concern, we conduct a parallel trends analysis by replacing the post dummy with dummies for the periods before and after the events. We restrict this analysis to the *Executive Member Gender Diversity* and *Policy Diversity and Opportunity* measures because the *Diversity Score* measure is only available for two years prior to the event. Our findings, which are reported in Panel B of Table 9, indicate that there are no differences in pre-event trends, while all the post-event changes are significant. Thus, firms with fewer female executives start catching up only in the post-event period.

While these findings are consistent with changes in investor preferences driving the superior returns of firms with top female executives during our events, they could also be driven by two other (non-mutually exclusive) mechanisms. First, firms with top female executives were undervalued prior to the events because the latent costs stemming from sexism were not fully understood by investors (see Pedersen, Fitzgibbons, and Pomorski (2021)); given this undervaluation, firms with fewer female top executives did not spend resources improving gender diversity prior to the shock. Second, the events may have increased the importance that stakeholders attached to a non-sexist corporate culture, leading to relatively stronger operating performance for firms with top female executives.

To investigate the undervaluation explanation, we study whether investors underreact to earnings news for firms with top female executives prior to the Weinstein event, and whether this underreaction gets corrected after the events. If these firms are systematically undervalued by the market, we would expect investors to underreact to positive earnings news insofar as they believe that these earnings are not going to persist in the future. Furthermore, this underreaction should be (at least partially) corrected after the events. Using analyst consensus forecasts from IBES, we compute earnings surprises from January 2016 to December 2020 (dropping announcements made during October 2017) as $(\text{actual earnings} - \text{forecasted earnings}) / \text{stock price}$ measured at the most recent IBES statistical period before the earnings announcement. Cumulative abnormal returns around the earnings announcements are computed using the market model for the period $t = -1$ to $t = +1$, where $t = 0$ is the earnings announcement date.²⁶ We then estimate a regression of the announcement return as a function of the earnings surprise, a post-Weinstein event dummy, and the various interactions of the earnings surprise, the post-Weinstein dummy, and the female

²⁶ The market model is estimated over 120 trading days ending 20 trading days before the earnings announcement date, using the CRSP value-weighted index as the market proxy. The results are the same when we calculate CARs over the $[0; +1]$ and $[-2; +2]$ windows.

leadership measure. Firm fixed effects and time (year-quarter) \times industry fixed effects are also included.

We are particularly interested in the coefficients on: (i) the interaction between the earnings surprise and the female leadership measure, which indicates whether the earnings response is different for firms with female leaders; and (ii) the triple interaction between the earnings surprise, female leadership, and the post-event dummy, which shows whether the earnings response for firms with female leaders changes after the Weinstein/#MeToo events. The results are displayed in Table 10. In model 1 we employ *Fraction Top-5 Women* and in model 2 we employ *Indicator Top-5 Women* as measures of female leadership. Not surprisingly, both models indicate that announcement returns are higher for larger earnings surprises. However, none of the interactions terms of interest are significant, which implies that the stock price reaction to earnings surprises is not related to the presence of female top executives either in the pre- or post-event periods. These findings therefore do not support the undervaluation hypothesis.²⁷

To examine improvements in relative operating performance, we compute four metrics: operating income to sales, gross margin (defined as sales less cost of goods sold divided by sales), growth in sales relative to the same quarter in the previous year, and sales per employee (calculated as quarterly sales divided by the number of employees measured at the end of the fiscal year).²⁸ These measures are computed using quarterly Compustat data over two periods surrounding our event window. The pre-period includes quarters ending between January 2016 and September 2017, and the post-period comprises quarters ending between January 2018 and December

²⁷ We also note that the results at the industry and firm level documented in Tables 4 and 5 are difficult to reconcile with the undervaluation argument as they would imply undervaluation in a large number of industries and states.

²⁸ We use the number of employees at the end of the fiscal year because data on number of employees are not available on Compustat at the quarterly level.

2020.^{29,30} We estimate a regression of each performance metric on the interaction of our measure of female leadership with a post-event dummy, which is zero for quarters before October 2017, and one for quarters starting in January 2018. The model also includes the log of total assets to control for size, firm fixed effects to control for unobservable time-invariant firm characteristics, and time (year-quarter) \times industry fixed effects to control for any time-varying industry performance. The results are presented in Table 11. Panel A reports results using *Fraction Top-5 Women* and Panel B using *Indicator Top-5 Women*. Both panels yield similar insights: there is no change in the operating performance surrounding the events we study for firms with women in top executive positions relative to other firms. We recognize, however, that the real effects may take longer to materialize or that the changes in diversity documented previously may have had a positive effect on the relative performance of firms with fewer female executives, thereby offsetting any enhanced operating performance of firms with more female executives.

We also investigate whether our findings could be explained by increased litigation risk in firms with a potentially more sexist corporate culture. While it may take a long time for the outcomes of lawsuits to be known and reflected in operating performance, they could nevertheless be severe enough to affect valuation. To study this possibility, we use Audit Analytics which tracks firms' filings with the SEC of lawsuits that have a potential material financial impact. We focus on lawsuits filed in the Civil Rights–Jobs category as these will contain EEOC violation allegations. For all the firms in our sample, there are only 11 potentially material lawsuits disclosed over the period January 2018 to December 2020 (three in firms with a top-5 female, eight in firms without one), which indicates that increased litigation risk is not likely to have caused the valuation

²⁹ We do not include the quarter ending December 2017 because it likely takes some time for increased stakeholder engagement to translate into better operating performance, but our results are very similar if we do include that quarter's performance.

³⁰ Because our pre-period starts in January 2016, we measure female leadership as of the last fiscal year-end before that date for this test.

differentials we document.³¹ We also note that the change in value for the average firm without female top executives (compared to firms with female top executives) around the Weinstein and #MeToo events is \$264 million (1.6% return differential multiplied by the average firm market capitalization of \$16.5 billion); this seems very high for it to be a reflection of the expected increase in legal costs, fines, and possible private settlements.³²

Taken together, the results suggest that the relative higher returns of firms with a non-sexist culture around the Weinstein and #MeToo movement events are driven by changes in investor tastes, which, in turn, lead to improvements in gender equality.

6. Conclusion

This paper assesses the extent to which a gender-equal, non-sexist corporate culture is valued by investors based on key events that brought to the forefront the extent to which sexism was prevalent in organizations. We show that firms that have women in their top leadership team—in which a corporate culture that tolerates misogyny and sexual harassment is unlikely to be present—earn substantial excess returns relative to other firms during the days immediately following the revelation of the Harvey Weinstein scandal and the resurgence of the #MeToo movement. This increase in value does not reverse in subsequent weeks, suggesting that the change in relative valuations persists.

The increase in the value of firms with highly paid female executives is particularly pronounced in industries with few women in executive positions, and in states with high levels of sexism and a large gender pay gap. Thus, having a non-sexist culture at the firm level is particularly

³¹ We find similar results when we compile lawsuits in the Civil Rights–Jobs category using the Federal Judicial Center Civil Integrated Database that covers all lawsuits filed in Federal courts.

³² It is possible that we find little evidence of increased litigation because firms with fewer female top executives improve gender diversity after the Weinstein/#MeToo events as documented in Table 9. However, the lawsuits filed shortly after the Weinstein/#MeToo events likely reflect misdeeds that occurred prior to the event. As such, the small number of material lawsuits filed is unlikely to be due to improvements in diversity after these events.

important when the firm's industry or state are more prone to sex discrimination. Additionally, firms in industries with a relatively high share of women in executive positions, and firms headquartered in states with low levels of sexism and a low gender pay gap also experience an increase in value, regardless of whether they have women in top positions.

We also document relative improvements in gender diversity in firms with fewer female executives after the Weinstein/#MeToo events as these firms cater to investor tastes for firms with a non-sexist culture. This suggests that changes in investor awareness of, and attitudes toward, sexism acted as a catalyst in advancing the United Nation's Sustainable Development Goal of achieving gender equality.

Finally, the fact that the effects we uncover stem mainly from female leadership inside the firm, and not from female board membership, suggests that in order to improve the culture of the corporation, additional focus should be placed on factors that facilitate women obtaining top executive positions and not just positions at the board level.

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Figure 1
#MeToo Press Frequency

This figure shows the number of daily press articles mentioning the terms: Me Too, MeToo, #Me Too, and #MeToo in the Factiva database over our sample period. We read each article or heading to verify that it is indeed related to the #MeToo movement. The shaded area contains the dates we include in our #MeToo event window.

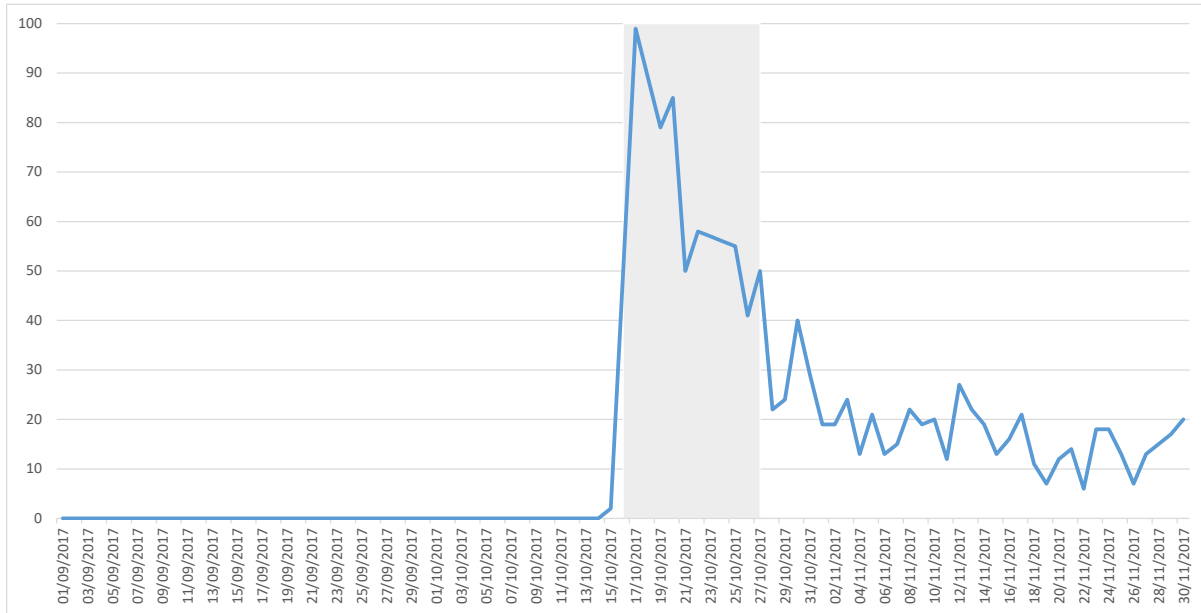


Table 1
Summary Statistics

Fraction Top-5 Women is the fraction of female executives among the five highest paid executives of the company. *Indicator Top-5 Women* is a dummy variable that equals one if a firm has at least one female executive among the five highest paid executives, and zero otherwise. *Female CEO* is a dummy variable that equals one if the CEO is a woman, and zero otherwise. These data are from Execucomp. We drop executives for which Execucomp's 'rank' variable is missing. We also drop firms for which Execucomp reports fewer than five top executives per firm. *Fraction Board Women* is the fraction of female directors on the firm's board. *Fraction Non-exec Board Women* is the number of non-executive female directors divided by the total number of non-executive directors on the firm's board. The data are from BoardEx. *Log (Total Assets)* is the logarithm of total assets. *Cash* is cash and cash equivalent divided by total assets. *Leverage* is the sum of short and long-term debt divided by total assets. *Tobin's q* is calculated as (total assets – book value of equity + market value of equity) / total assets. *Investment* is capital expenditures divided by total assets. *Profitability* is profit from operations divided by total assets. These data are from Compustat and the variables are measured at the end of the most recent fiscal year prior to October 1, 2017. The last two columns show *p*-values of mean comparison tests (using a *t*-test) and median comparison tests (using a Wilcoxon rank-sum test) between the two subsamples.

	Full Sample (N=1,436)			At Least One Female Executive (N=376)			No Female Executives (N=1,060)			Test of Differences (<i>p</i> -values)	
	Mean (1)	Median (2)	SD (3)	Mean (4)	Median (5)	SD (6)	Mean (7)	Median (8)	SD (9)	Mean (10)	Median (11)
Fraction Top-5 Women	0.061	0.000	0.112	0.234	0.200	0.086	0.000	0.000	0.000		
Indicator Top-5 Women	0.262	0.000	0.440	1.000	1.000	0.000	0.000	0.000	0.000		
Female CEO	0.043	0.000	0.203	0.165	0.000	0.372	0.000	0.000	0.000		
Fraction Board Women	0.172	0.167	0.110	0.220	0.200	0.127	0.154	0.142	0.098	(0.00)	(0.00)
Fraction Non-exec Board Women	0.197	0.200	0.121	0.231	0.222	0.128	0.185	0.182	0.115	(0.00)	(0.00)
Log (Total Assets)	8.402	8.310	1.705	8.438	8.311	1.744	8.389	8.309	1.691	(0.63)	(0.88)
Cash	0.127	0.076	0.144	0.133	0.079	0.144	0.125	0.075	0.144	(0.33)	(0.33)
Leverage	0.291	0.271	0.236	0.263	0.252	0.195	0.302	0.278	0.249	(0.01)	(0.02)
Tobin's <i>q</i>	1.972	1.599	1.271	1.958	1.602	1.232	1.977	1.598	1.286	(0.80)	(0.98)
Investment	0.036	0.025	0.044	0.037	0.028	0.033	0.036	0.023	0.047	(0.69)	(0.01)
Profitability	0.116	0.110	0.113	0.128	0.113	0.087	0.111	0.109	0.121	(0.01)	(0.04)

Table 2
Shareholder Value and Female Leadership

This table shows regression estimates of daily stock returns on interaction terms of female \times event and firm and time fixed effects. The female variables are: *Fraction Top-5 Women*, which is the fraction of female executives among the five highest paid executives of the company; and *Indicator Top-5 Women*, which is a dummy variable that equals one if a firm has at least one female executive among the five highest paid executives, and zero otherwise. The event variables (e.g., Oct 5-6) are dummy variables that equal one for all trading days during a specific event window, and zero otherwise. The female variables are measured at the end of the most recent fiscal year prior to October 1, 2017. The sample period is September 1, 2017 to November 30, 2017. The data are from CRSP and Execucomp. Firms with missing returns during the sample period are dropped. Standard errors are double clustered by firm and time (trading day) and *p*-values are reported in parentheses.

Female Variable =	Daily Stock Returns					
	Fraction	Indicator	Fraction	Indicator	Fraction	Indicator
	Top-5 Women	Top-5 Women	Top-5 Women	Top-5 Women	Top-5 Women	Top-5 Women
	(1)	(2)	(3)	(4)	(5)	(6)
Female Variable \times						
Oct 5-6	0.551 (0.00)	0.094 (0.00)	0.629 (0.00)	0.110 (0.00)	0.717 (0.00)	0.146 (0.00)
Oct 9-13					-0.297 (0.36)	-0.011 (0.87)
Oct 16-27			0.477 (0.00)	0.099 (0.01)	0.565 (0.00)	0.135 (0.00)
Oct 30-Nov 30					0.260 (0.19)	0.082 (0.08)
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
N	90,468	90,468	90,468	90,468	90,468	90,468
Adjusted R^2	0.052	0.052	0.052	0.052	0.052	0.052

Table 3
Shareholder Value, Female CEOs, and Other Female Executives

This table shows regression estimates of daily stock returns on interaction terms of *Female CEO* × event, female × event, and firm and time fixed effects. *Female CEO* is a dummy variable that equals one if the CEO is a woman, and zero otherwise. The female variables are: *Fraction Top-4 Women*, which is the fraction of female executives among the four highest paid executives of the company, excluding the CEO; and *Indicator Top-4 Women*, which is a dummy variable that equals one if a firm has at least one female executive among the four highest paid executives, excluding the CEO, and zero otherwise. The event variables (e.g., Oct 5-6) are dummy variables that equal one for all trading days during a specific event window, and zero otherwise. The female variables are measured at the end of the most recent fiscal year prior to October 1, 2017. The sample period is September 1, 2017 to November 30, 2017. The data are from CRSP and Execucomp. Firms with missing returns during the sample period are dropped. Standard errors are double clustered by firm and time (trading day) and *p*-values are reported in parentheses.

Female Variable =	Daily Stock Returns					
	Fraction	Indicator	Fraction	Indicator	Fraction	Indicator
	Top-4 Women	Top-4 Women	Top-4 Women	Top-4 Women	Top-4 Women	Top-4 Women
	(1)	(2)	(3)	(4)	(5)	(6)
Female CEO ×						
Oct 5-6	0.195 (0.04)	0.220 (0.01)	0.195 (0.04)	0.226 (0.01)	0.225 (0.01)	0.266 (0.00)
Oct 9-13					-0.102 (0.44)	-0.105 (0.46)
Oct 16-27			0.000 (1.00)	0.036 (0.55)	0.030 (0.64)	0.076 (0.26)
Oct 30-Nov 30					0.089 (0.26)	0.111 (0.19)
Female Variable ×						
Oct 5-6	0.383 (0.00)	0.069 (0.03)	0.457 (0.00)	0.088 (0.01)	0.518 (0.00)	0.123 (0.01)
Oct 9-13					-0.209 (0.40)	0.008 (0.90)
Oct 16-27			0.446 (0.00)	0.111 (0.01)	0.508 (0.00)	0.146 (0.00)
Oct 30-Nov 30					0.183 (0.24)	0.077 (0.11)
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
N	90,468	90,468	90,468	90,468	90,468	90,468
Adjusted <i>R</i> ²	0.052	0.052	0.052	0.052	0.052	0.052

Table 4

Shareholder Value and Female Leadership: Splits Based on Industry-Level Women in Executive Positions

This table shows regression estimates of daily stock returns on various interaction terms (and firm and time fixed effects) estimating the effect of female leadership for firms in industries with different shares of women in executive positions. The female variables are: *Fraction Top-5 Women*, which is the fraction of female executives among the five highest paid executives of the company; and *Indicator Top-5 Women*, which is a dummy variable that equals one if a firm has at least one female executive among the five highest paid executives, and zero otherwise. The industry-level measures of women in executive positions (WEP) are calculated using data from the US Equal Employment Opportunity Commission for all private employers with more than 100 employees at the 4-digit SIC industry level. WEP is computed two ways: first, as above-median share of women in executive positions (*Above-median WEP*), which is a dummy variable that equals one for industries with an above-median fraction of women that hold executive positions; and second, as fraction of women in executive positions (*Fraction WEP*) which is the fraction of women that hold executive positions in a given industry. The event variables (e.g., Oct 5-27) are dummy variables that equal one for all trading days during a specific event window, and zero otherwise. The female variables are measured at the end of the most recent fiscal year prior to October 1, 2017. The sample period is September 1, 2017 to November 30, 2017. The data are from CRSP, Execucomp, and the Bureau of Labor Statistics. Firms with missing returns during the sample period are dropped. Standard errors are double clustered by firm and time (trading day) and *p*-values are reported in parentheses.

Female Variable =	Daily Stock Returns			
	Fraction Top-5 Women	Indicator Top-5 Women	Fraction Top-5 Women	Indicator Top-5 Women
WEP (Women in Executive Positions) =	Above-median WEP	Above-median WEP	Fraction WEP	Fraction WEP
	(1)	(2)	(3)	(4)
Female Variable × Oct 5-27	0.822 (0.00)	0.193 (0.01)	1.477 (0.00)	0.314 (0.01)
WEP × Oct 5-27	0.197 (0.03)	0.193 (0.04)	0.754 (0.05)	0.727 (0.05)
Female Variable × WEP × Oct 5-27	-0.855 (0.05)	-0.180 (0.08)	-2.911 (0.02)	-0.589 (0.05)
Female Variable × Oct 30-Nov 30	0.400 (0.12)	0.109 (0.09)	0.409 (0.36)	0.086 (0.44)
WEP × Oct 30-Nov 30	0.171 (0.14)	0.171 (0.14)	0.543 (0.23)	0.522 (0.25)
Female Variable × WEP × Oct 30-Nov 30	-0.272 (0.41)	-0.060 (0.47)	-0.494 (0.66)	-0.044 (0.88)
Firm Fixed Effects	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes
N	74,151	74,151	74,151	74,151
Adjusted R ²	0.047	0.047	0.047	0.047

Table 5
Shareholder Value and Female Leadership: Splits Based on State-level Sexism and Gender Pay Gap

This table shows regression estimates of daily stock returns on various interaction terms (and firm and time fixed effects) estimating the effect of female leadership for firms headquartered in state states with high and low levels of sexism and gender pay gap. The female variables are: *Fraction Top-5 Women*, which is the fraction of female executives among the five highest paid executives of the company; and *Indicator Top-5 Women*, which is a dummy variable that equals one if a firm has at least one female executive among the five highest paid executives, and zero otherwise. State level sexism (Panel A) is obtained from Charles, Guryan, and Pan (2018) based on questions from the General Social Survey. The state-level gender pay gap (Panel B) is computed using data from the Current Population Survey, based on regressions of weekly pay on a female indicator variable (capturing the gender pay gap) while controlling for race, occupation, manager, age, industry, education, location within state, and time. States are divided into two groups based on the median state-level sexism and pay gap measures. The event variables (e.g., Oct 5-27) are dummy variables that equal one for all trading days during a specific event window, and zero otherwise. The female variables are measured at the end of the most recent fiscal year prior to October 1, 2017. The sample period is September 1, 2017 to November 30, 2017. The data are from CRSP, Execucomp, and the Bureau of Labor Statistics. Firms with missing returns during the sample period are dropped. Standard errors are double clustered by state and time (trading day) and *p*-values are reported in parentheses.

Panel A: Splits Based on State-level Sexism

Female Variable =	Daily Stock Returns	
	Fraction Top-5 Women	Indicator Top-5 Women
	(1)	(2)
Female Variable × Oct 5-27	0.432 (0.10)	0.124 (0.04)
Low Sexism State × Oct 5-27	0.129 (0.03)	0.136 (0.02)
Female Variable × Low Sexism State × Oct 5-27	-0.316 (0.31)	-0.099 (0.19)
Female Variable × Oct 30-Nov 30	0.255 (0.34)	0.069 (0.26)
Low Sexism State × Oct 30-Nov 30	-0.012 (0.89)	-0.019 (0.82)
Female Variable × Low Sexism State × Oct 30-Nov 30	-0.035 (0.90)	0.021 (0.75)
Firm Fixed Effects	Yes	Yes
Time Fixed Effects	Yes	Yes
N	85,176	85,176
Adjusted <i>R</i> ²	0.053	0.053

Table 5 (continued)

Panel B: Splits Based on State-level Gender Pay Gap

Female Variable =	Daily Stock Returns	
	Fraction	Indicator
	Top-5 Women	Top-5 Women
	(1)	(2)
Female Variable \times Oct 5-27	0.677 (0.01)	0.161 (0.01)
Low Gender Pay Gap State \times Oct 5-27	0.194 (0.00)	0.191 (0.00)
Female Variable \times Low Gender Pay Gap State \times Oct 5-27	-0.799 (0.03)	-0.177 (0.03)
Female Variable \times Oct 30-Nov 30	0.195 (0.45)	0.052 (0.41)
Low Gender Pay Gap State \times Oct 30-Nov 30	0.079 (0.26)	0.069 (0.33)
Female Variable \times Low Gender Pay Gap State \times Oct 30-Nov 30	0.067 (0.80)	0.052 (0.44)
Firm Fixed Effects	Yes	Yes
Time Fixed Effects	Yes	Yes
N	87,444	87,444
Adjusted R^2	0.053	0.053

Table 6
Shareholder Value and Alternative Proxies for Sexism

This table shows regression estimates of daily stock returns on interaction terms of alternative measures \times event and firm and time fixed effects. In Panel A, the measures of female leadership are *Fraction Senior Management*, which is the fraction of women among a company's senior management; and *Indicator Senior Management*, which is a dummy variable that equals one if a firm has at least one woman in a senior management position, and zero otherwise. We use data from the BoardEx database on senior management profiles and measure a company's senior management team with managers that have 'Vice President' or 'VP' in their job title (removing Vice Presidents (or VPs) who also have 'Associate' or 'Assistant' in their title). Panel B uses textual analysis of the negative feedback fields of the Glassdoor.com website for the years 2015 and 2016. We flag each negative feedback if it contains keywords (and their variants) that are related to a sexist corporate culture (such as sexist, sexism, sexual, harassment, misogyny, boys' club, etc). *Glassdoor Negative Feedback* is a dummy variable that equals one if the fraction of flagged negative feedback is greater than 10% (e.g., out of 100 employee comments, 10 contain negative keywords), and zero otherwise. The event variables (e.g., Oct 5-6) are dummy variables that equal one for all trading days during a specific event window, and zero otherwise. The female variables are measured at the end of the most recent fiscal year prior to October 1, 2017. The sample period is September 1, 2017 to November 30, 2017. The data are from CRSP, Execucomp, BoardEx, and Glassdoor. Firms with missing returns during the sample period are dropped. Standard errors are double clustered by firm and time (trading day) and *p*-values are reported in parentheses.

Panel A: Female Representation in Senior Management

Female Variable =	Daily Stock Returns					
	Fraction Senior Management	Indicator Senior Management	Fraction Senior Management	Indicator Senior Management	Fraction Senior Management	Indicator Senior Management
	(1)	(2)	(3)	(4)	(5)	(6)
Female Variable \times						
Oct 5-6	0.619 (0.00)	0.200 (0.00)	0.655 (0.00)	0.227 (0.00)	0.688 (0.00)	0.250 (0.00)
Oct 9-13					-0.163 (0.18)	0.030 (0.79)
Oct 16-27			0.218 (0.07)	0.167 (0.01)	0.251 (0.05)	0.190 (0.01)
Oct 30-Nov 30					0.110 (0.51)	0.044 (0.56)
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
N	212,436	212,436	212,436	212,436	212,436	212,436
Adjusted R^2	0.021	0.021	0.021	0.021	0.021	0.021

Table 6 (continued)

Panel B: Textual Analysis of Glassdoor Data

	Daily Stock Returns		
	(1)	(2)	(3)
Glassdoor Negative Feedback ×			
Oct 5-6	-0.197 (0.00)	-0.224 (0.00)	-0.229 (0.00)
Oct 9-13			-0.131 (0.11)
Oct 16-27		-0.161 (0.08)	-0.166 (0.07)
Oct 30-Nov 30			0.017 (0.75)
Firm Fixed Effects	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes
N	120,960	120,960	120,960
Adjusted R^2	0.04	0.04	0.04

Table 7
Shareholder Value and Glassdoor Culture and Values Measure

This table shows regression estimates of daily stock returns on the interaction terms of the Glassdoor culture and values measure \times event, and firm and time fixed effects. *Glassdoor Culture* measures a firm's corporate culture and values and is calculated as the average of all culture and values ratings submitted for a given firm on the Glassdoor.com website for the years 2015 and 2016. The event variables (e.g., Oct 5-6) are dummy variables that equal one for all trading days during a specific event window, and zero otherwise. The female variables are measured at the end of the most recent fiscal year prior to October 1, 2017. The sample period is September 1, 2017 to November 30, 2017. The data are from CRSP, Execucomp, BoardEx, and Glassdoor. Firms with missing returns during the sample period are dropped. Standard errors are double clustered by firm and time (trading day) and p -values are reported in parentheses.

	Daily Stock Returns		
	(1)	(2)	(3)
Glassdoor Culture \times			
Oct 5-6	0.093 (0.08)	0.106 (0.05)	0.150 (0.01)
Oct 9-13			0.131 (0.02)
Oct 16-27		0.078 (0.14)	0.122 (0.03)
Oct 30-Nov 30			0.069 (0.13)
Firm Fixed Effects	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes
N	117,810	117,810	117,810
Adjusted R^2	0.04	0.04	0.04

Table 8
Shareholder Value and Female Directors

This table shows regression estimates of daily stock returns on interaction terms of *Fraction Board Women* × event, female × event and firm and time fixed effects. *Fraction Board Women* is calculated as the fraction of directors on the firms' board that are female. The female variables are: *Fraction Top-5 Women*, which is the fraction of female executives among the five highest paid executives of the company; and *Indicator Top-5 Women*, which is a dummy variable that equals one if a firm has at least one female executive among the five highest paid executives, and zero otherwise. The event variables (e.g., Oct 5-6) are dummy variables that equal one for all trading days during a specific event window, and zero otherwise. The female variables are measured at the end of the most recent fiscal year prior to October 1, 2017. The sample period is September 1, 2017 to November 30, 2017. The data are from CRSP, Execucomp, and BoardEx. Firms with missing returns during the sample period are dropped. Standard errors are double clustered by firm and time (trading day) and *p*-values are reported in parentheses.

Female Variable =	Daily Stock Returns					
	Fraction	Indicator	Fraction	Indicator	Fraction	Indicator
	Top-5 Women	Top-5 Women	Top-5 Women	Top-5 Women	Top-5 Women	Top-5 Women
	(1)	(2)	(3)	(4)	(5)	(6)
Fraction Board Women ×						
Oct 5-6	-0.080 (0.46)	-0.022 (0.84)	-0.077 (0.54)	-0.016 (0.90)	0.129 (0.40)	0.174 (0.27)
Oct 9-13					0.207 (0.53)	0.124 (0.72)
Oct 16-27			0.013 (0.97)	0.042 (0.91)	0.220 (0.55)	0.231 (0.54)
Oct 30-Nov 30					0.414 (0.14)	0.393 (0.17)
Female Variable ×						
Oct 5-6	0.588 (0.00)	0.098 (0.00)	0.672 (0.00)	0.115 (0.00)	0.725 (0.00)	0.146 (0.00)
Oct 9-13					-0.311 (0.27)	-0.001 (0.99)
Oct 16-27			0.508 (0.00)	0.105 (0.04)	0.562 (0.00)	0.135 (0.01)
Oct 30-Nov 30					0.186 (0.24)	0.068 (0.09)
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
N	85,743	85,743	85,743	85,743	85,743	85,743
Adjusted R ²	0.053	0.053	0.053	0.053	0.054	0.053

Table 9
Changes in Gender Diversity Measures Surrounding the Weinstein and #MeToo Events

This table presents regression results of gender diversity measures around the Weinstein and #MeToo events. Panel A shows regression estimates of diversity measures on female \times *Post*, firm fixed effects, and time (year) fixed effects. *Post* is a dummy variable equal to zero for the years 2013 to 2016, and equal to one for the years 2018 to 2020. Panel B displays regression results of diversity measures on time dummies interacted with the female variables for the years 2013 to 2020, and firm and time (year) fixed effects. Each time dummy is equal to one for a particular year, and zero otherwise. The time dummy interaction for the year before the Weinstein/#MeToo events (i.e., 2016 or $t = -1$) is excluded from the regressions. The gender diversity measures are obtained from the Refinitiv ESG database over the period 2013 to 2020. *Diversity Score* measures a company's commitment and effectiveness towards maintaining a gender diverse workforce and board member cultural diversity. The score is compiled by Refinitiv and ranges from 0 to 100 with higher values indicating greater diversity and is available from 2016 to 2020. *Executive Members Gender Diversity* is the fraction of females among a firm's executives. *Policy Diversity and Opportunity* is a dummy variable equal to one if the firm has a policy to drive diversity and equal opportunity, and zero otherwise. The female variables are: *Fraction Top-5 Women*, which is the fraction of female executives among the five highest paid executives of the company; and *Indicator Top-5 Women*, which is a dummy variable that equals one if a firm has at least one female executive among the five highest paid executives, and zero otherwise. The data are from Execucomp and Refinitiv. Standard errors are double clustered by firm and time and *p*-values are reported in parentheses.

Panel A: Relative Changes in Gender Diversity

Female Variable =	Diversity Score		Executive Member Gender Diversity		Policy Diversity and Opportunity	
	Fraction Top-5 Women	Indicator Top-5 Women	Fraction Top-5 Women	Indicator Top-5 Women	Fraction Top-5 Women	Indicator Top-5 Women
	(1)	(2)	(3)	(4)	(5)	(6)
Female Variable \times Post	-6.945 (0.03)	-1.480 (0.03)	-10.660 (0.03)	-2.508 (0.02)	-0.145 (0.07)	-0.033 (0.09)
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
N	3,713	3,713	6,815	6,815	6,823	6,823
Adjusted R^2	0.758	0.757	0.686	0.685	0.613	0.613

Table 9 (continued)

Panel B: Parallel Trend Regressions

Female Variable =	Executive Member Gender Diversity		Policy Diversity and Opportunity	
	Fraction Top-5 Women	Indicator Top-5 Women	Fraction Top-5 Women	Indicator Top-5 Women
	(1)	(2)	(3)	(4)
Event Time Dummy Interactions				
Female Variable \times D ₂₀₁₃	-5.137 (0.17)	-0.816 (0.35)	-0.024 (0.82)	-0.002 (0.95)
Female Variable \times D ₂₀₁₄	-4.197 (0.19)	-0.437 (0.57)	0.060 (0.43)	0.017 (0.44)
Female Variable \times D ₂₀₁₅	1.274 (0.61)	0.643 (0.21)	-0.051 (0.44)	-0.006 (0.75)
Female Variable \times D ₂₀₁₇	-2.316 (0.25)	-0.878 (0.04)	-0.027 (0.54)	0.004 (0.68)
Female Variable \times D ₂₀₁₈	-7.703 (0.00)	-1.699 (0.01)	-0.099 (0.09)	-0.021 (0.02)
Female Variable \times D ₂₀₁₉	-14.139 (0.00)	-2.968 (0.00)	-0.165 (0.02)	-0.033 (0.03)
Female Variable \times D ₂₀₂₀	-16.323 (0.00)	-3.725 (0.00)	-0.257 (0.01)	-0.054 (0.04)
Firm Fixed Effects	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes
N	8,083	8,083	8,092	8,092
Adjusted R ²	0.708	0.708	0.653	0.653

Table 10
Earnings Response Coefficients Surrounding the Weinstein and #MeToo Events

This table presents regression results of cumulative abnormal returns around annual earnings announcements on *Earnings Surprise*, female, *Post*, and their interaction terms. Cumulative Abnormal Returns around the earnings announcement are computed based on the market model for the period $t = -1$ to $t = +1$, where $t = 0$ is the earnings announcement date. The market model is estimated over 120 trading days ending 20 trading days before the earnings announcement date, using the CRSP value-weighted index as the market proxy. *Earnings Surprise* is calculated as (actual earnings – analyst consensus earnings forecast) / stock price measured at the most recent IBES statistical period before the earnings announcement for earnings announcements during the January 2016 to December 2020 period. The female variables are: *Fraction Top-5 Women*, which is the fraction of female executives among the five highest paid executives of the company; and *Indicator Top-5 Women*, which is a dummy variable that equals one if a firm has at least one female executive among the five highest paid executives, and zero otherwise. *Post* is a dummy variable equal to zero for earnings announcement made during January 2016 to September 2017 period, and equal to one for earnings announcements made during the November 2017 to December 2020 period. All models include firm fixed effects and time (year-quarter) by industry fixed effects. The data are from CRSP, IBES, and Execucomp. All continuous variables are winsorized at the 1st and 99th percentiles (except for *Fraction Top-5 Women*). Standard errors are double clustered by firm and time and *p*-values are reported in parentheses.

Female Variable =	Cumulative Abnormal Returns [-1; +1]	
	Fraction Top-5 Women	Indicator Top-5 Women
	(1)	(2)
Earnings Surprise	0.802 (0.00)	0.704 (0.00)
Earnings Surprise × Post	0.112 (0.65)	0.101 (0.71)
Female Variable × Earnings Surprise	-0.360 (0.85)	0.336 (0.56)
Female Variable × Post	0.003 (0.85)	0.000 (0.87)
Female Variable × Earnings Surprise × Post	-2.124 (0.30)	-0.579 (0.47)
Firm Fixed Effects	Yes	Yes
Time × Industry Fixed Effects	Yes	Yes
N	6,599	6,599
Adjusted <i>R</i> ²	0.041	0.038

Table 11
Operating Performance Surrounding the Weinstein and #MeToo Events

This table presents regressions of quarterly operating performance measures on interaction terms of female \times *Post* and control variables. The female variables are: *Fraction Top-5 Women*, which is the fraction of female executives among the five highest paid executives of the company (in Panel A); and *Indicator Top-5 Women*, which is a dummy variable that equals one if a firm has at least one female executive among the five highest paid executives, and zero otherwise (in Panel B). *Post* is a dummy variable equal to zero for quarters ending between January 2016 and September 2017, and equal to one for quarters ending between January 2018 and December 2020. All operating performance measures are computed using quarterly Compustat data. *Operating Income to Sales* is quarterly operating income before depreciation divided by quarterly sales; *Gross Margin* is quarterly sales less cost of goods sold divided by quarterly sales; *Sales Growth* is growth in quarterly sales compared to the same quarter (q) of the prior year (y-1) calculated as $(sales_{q,y} / sales_{q,y-1}) - 1$; and *Sales per Employee* is quarterly sales divided by number of employees measured at the end of the fiscal year. The female variables are measured at the end of the most recent fiscal year prior to January 1, 2016. The model also includes *Log(Total Assets)* to control for size, firm fixed effects to control for unobservable time-invariant firm characteristics, and time (year-quarter) by industry fixed effects to control for any time varying industry performance. The data are from Execucomp and Compustat. All continuous variables are winsorized at the 1st and 99th percentiles (except for *Fraction Top-5 Women*). Standard errors are double clustered by firm and time (fiscal-year-quarter) and *p*-values are reported in parentheses.

Panel A: Fraction Top-5 Women

	Operating Income to Sales	Gross Margin	Sales Growth	Sales per Employee
	(1)	(2)	(3)	(4)
Fraction Top-5 Women \times Post	-0.021 (0.18)	-0.006 (0.69)	0.023 (0.53)	-0.006 (0.67)
Log (Total Assets)	0.044 (0.00)	0.023 (0.01)	0.182 (0.00)	0.037 (0.00)
Firm Fixed Effects	Yes	Yes	Yes	Yes
Time \times Industry Fixed Effects	Yes	Yes	Yes	Yes
N	25,309	27,065	27,057	26,292
Adjusted R^2	0.718	0.871	0.313	0.944

Panel B: Indicator Top-5 Women

	Operating Income to Sales	Gross Margin	Sales Growth	Sales per Employee
	(1)	(2)	(3)	(4)
Indicator Top-5 Women \times Post	-0.006 (0.18)	-0.001 (0.84)	0.009 (0.39)	-0.002 (0.62)
Log (Total Assets)	0.044 (0.00)	0.023 (0.01)	0.182 (0.00)	0.037 (0.00)
Firm Fixed Effects	Yes	Yes	Yes	Yes
Time \times Industry Fixed Effects	Yes	Yes	Yes	Yes
N	25,309	27,065	27,057	26,292
Adjusted R^2	0.718	0.871	0.313	0.944

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