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

Karl V. Lins
University of Utah

Lukas Roth
University of Alberta

Henri Servaes
London Business School, CEPR, ECGI

Ane Tamayo
London School of Economics

December 1, 2020

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%. These returns are followed by positive revisions in analyst earnings forecasts. Returns for female-led firms increase to 3.2% in industries with few women executives, and 2.1% and 2.7% if headquartered in states with a high level of sexism or gender pay gap, respectively. Firms in industries with more women executives or headquartered in less sexist states also earn positive abnormal returns. Our evidence attests to the value of having a non-sexist culture.

Contact information: Lins (karl.lins@eccles.utah.edu), Roth (lukas1@ualberta.ca), Servaes (hservaes@london.edu), Tamayo (a.m.tamayo@lse.ac.uk). We thank Andrew Chamberlain (Chief Economist at Glassdoor) for providing access to their employee review survey data, Ing-Haw Cheng, Paul Coombes, James Dow, Luigi Guiso, David Matsa, Jean-Marie Meier, Charlotte Ostergaard, Zacharias Sautner, Vikrant Vig, and seminar participants at the Joint Research Seminar (Universities of Bonn, Cologne, Dortmund, WHU), London Business School, Rice University, the University of Auckland, University of Bern, University of Edinburgh, University of Mannheim, University of Neuchatel, the 2019 BI Conference on Corporate Governance, the 2019 Swiss Economists Abroad meeting, and the 2020 Swedish House of Finance and ECGI Conference on Sustainable Finance and Corporate Governance for helpful comments and discussions, and Beril Unal and Arkodipta Sarkar for excellent research assistance.

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 (2019) 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. (2019). Given the broad nature of culture, empirical studies invariably focus on a specific aspect of corporate culture, often workplace culture as captured by metrics of employee satisfaction (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. More generally, a culture that does not discriminate on the basis of sex (henceforth, a non-sexist culture) could potentially spill over into and/or be a reflection of the firm's broader overall culture.

Crucially, this aspect of corporate culture provides two elements necessary to investigate its valuation impact empirically: (i) it recently 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

[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.

movement.[4] The latter gained prominence in the weeks after the Weinstein scandal emerged and rapidly brought to light the true extent to which sexual harassment and gender discrimination were prevalent in business organizations, 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 unlikely 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" hurdle that women face. 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

[4] Ideally, we would like to observe an exogenous shock that suddenly 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.

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, motivated by the literature on board diversity, we explore whether female leadership is required for this valuation effect to obtain or whether the presence of women on the board suffices. Arguably, the latter can also be considered an indication of a non-sexist corporate culture. 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. (2019)).

We also investigate whether the positive valuation effects persist when we capture female leadership below the C-suite, based on women in senior management positions below the top five. Consistent with the notion that firms with women among their highest paid executives are more likely to empower women and have a gender-equal culture, virtually all firms that have a woman among the top-five-compensated executives also have more gender diversity at the lower ranks of

senior management. Using this alternative way of quantifying a culture that promotes gender equality, we again find a strong positive valuation effect.

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, although they are less significant economically.

Having established the valuation effects of a non-sexist corporate culture, we next turn to its interaction 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 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, defined as industries with a low fraction of women in executive positions. 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 use survey-based measures of a state's sexism and gender pay gap to proxy for state-level cultural attitudes regarding gender equality. 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. 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 (see also Guiso, Sapienza, and Zingales (2006)).

There are two non-mutually-exclusive potential explanations for the stock return evidence that we document: (i) a non-sexist corporate culture has always been important for valuation, but it became (more) salient around the Weinstein and #MeToo events as investors gained a better understanding of the latent costs stemming from a sexist corporate culture; 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 first explanation, we study revisions in analyst earnings forecasts after the Weinstein and #MeToo events. We find that after our event window analysts revise their earnings forecasts upwards for firms with women in leadership positions relative to other firms by 4% to 9%, which is consistent with analysts underestimating the relative profitability of these firms. 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 in the short-run, although we recognize that actual improvements

in operating performance may take longer to materialize (Grennan (2019)). Overall, these findings suggest that the market was undervaluing (overvaluing) firms with a potentially non-sexist (sexist) culture before the allegations against Harvey Weinstein were revealed.

We conclude the paper by investigating whether our findings are (solely) due to increased litigation risk for firms with a more sexist corporate culture. The magnitude of the returns that we document is itself an indication that this is unlikely given that they would imply an expected lawsuit payoff of $264 million for the average firm without female leadership. Nonetheless, we examine whether the number of lawsuits in the Civil Rights–Jobs category disclosed to the SEC as having a potential material financial impact increases for firms without female leadership after the Weinstein scandal and find this not to be the case.

Our paper makes several contributions. First, it adds to the nascent literature on the value of corporate culture (e.g., Guiso, Sapienza, and Zingales (2015a), Graham et al. (2019), 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]

Finally, we also 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), Kim and Starks (2016), and Adams (2017)). 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."

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

[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 (2019)) or state-level Paid Family Leave Acts (Bennett, Erel, Stern, and Wang (2020)) can be value enhancing.

equal to one if at least one woman is among the highest paid executives (*Indicator Top-5 Women*), 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, we obtain a sample of 1,436 firms.

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 woman on the board. 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. Results

3.1. Female Leadership: Baseline 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.[6] 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 themselves. Our coefficient of interest is the interaction term of the female leadership proxies and

[6] 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.

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 × 20% more female executives × 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.[7] In the subsequent days, Google searches for the terms "#MeToo" and "sexual harassment in the workplace" hit an all-time high, and several

[7] 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.[8,9]

To assess whether firms with female leadership also earned excess returns during the onset of the #MeToo movement, we augment Equation (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.[10] 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 × 20% more female executives × 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 Equation (1) by interacting the female leadership proxies with a dummy variable for the period in between the Weinstein scandal announcement 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

[8] For a website keeping track of these allegations, see https://www.vox.com/a/sexual-harassment-assault-allegations-list, last accessed November 26, 2020. Unfortunately, this website has not been updated since early 2019.
[9] Cheng and Hsiaw (2020) 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.
[10] All event windows are based on trading days.

window (in fact, for the *Indicator Top-5 Woman* there is some evidence of additional excess returns during the month of November).

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 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.[11] 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.[12]

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. Since the CEO has more power in the firm than other executives, it could be that the impact stems mainly or only from this position. In Table 3, we re-estimate our base case regression models, but also include interactions between the

[11] Additionally, we calculate cumulative abnormal returns around the event windows and find similar results.
[12] The results from all these robustness tests are not tabulated for sake of brevity.

relevant event dummies and a dummy set equal to one if the CEO of the firm is a woman, and zero otherwise. The female CEO interaction coefficients are not significant, while the female executive interaction coefficients remain statistically and economically significant. These results suggest that the valuation benefits of having a woman in the top management team are not further enhanced when the chief executive is a woman.[13]

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 emergence of the Weinstein scandal and #MeToo movement.

3.2. 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, suggesting that the benefits from having a non-sexist culture may originate at the board level. If this is indeed the case, having women directors may also be an indication of a non-sexist corporate culture.[14] Thus, in our next set of analyses, we investigate whether female leadership is needed for the positive valuation

[13] We have also estimated these models without the top-five interaction variables (i.e., using only the female CEO interactions). Returns are positive for firms with female CEOs during both the Weinstein and #MeToo windows, and statistically significant during the Weinstein event.

[14] Consistent with this view, the CEO of Microsoft in his letter to the shareholders and other stakeholders, under the heading of "Culture", also highlights: "*At the board level,* the slate of directors nominated for election at the 2019 annual shareholders meeting *includes five women (accounting for 38 percent of our directors) and two of our four board committees will be chaired by women*." Microsoft 2019 Annual Report, page 6 (emphasis added).

effects of a non-sexist culture to materialize or whether the presence of women on the board suffices.

To do so, we augment our baseline models with additional interactions between the relevant event windows and the fraction of female board members.[15] The findings are reported in Table 4. 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.[16]

Because female leadership is positively related to female board membership (see Table 1), 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.[17]

[15] 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.

[16] In unreported models, we verify that the lack of any significant results for female representation on the board also obtains when we focus on non-executive board members only, such that there is no overlap between the female director and female executive measures.

[17] Giannetti and Wang (2020) 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. However, our results suggest that if these appointments are accompanied by increases in female leadership, they could enhance firm value.

3.3. Measuring Female Leadership Below the C-Suite

In this section, we assess whether the valuation effects of female leadership continue to hold when leadership is measured at the level below the C-suite. To construct this alternative measure of female leadership, 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.[18] 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 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. 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

[18] Our findings remain unchanged when we do not remove these executives.

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 5 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-discriminatory 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 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.

3.4. 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. We rely on culture ratings provided by Glassdoor, an employer review and recruiting website that contains company reviews from current and former employees for 600,000 companies worldwide. Reviewers rate companies on a scale from one to five for overall employer quality as well as for five distinct areas: 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. 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.[19]

Panel B of Table 5 shows 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.[20]

3.5. Industry-level Evidence

Our results thus far indicate that firms with women in leadership positions earned excess returns when the Weinstein scandal and the #MeToo movement brought the importance of having

[19] 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.

[20] We have also analyzed individual reviewers' comments made in the Glassdoor 'negative feedback' field, and find that firms with large numbers of comments related to harassment and sexism earned significant negative returns during the Weinstein and #MeToo events relative to other firms. We also find that such firms have a lower overall culture and values rating.

a non-sexist corporate culture to the forefront. In this section, we examine whether this finding depends on 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 top leadership positions in the first place. Thus, if sexism is less of a concern within an industry, having a female leader in a given firm operating in that industry may add less value. In contrast, if the gender composition of executives in an industry is overwhelmingly male, having a female top executive could be particularly valuable when investors reassess the importance of having a non-sexist corporate culture (Parker (2018)).

To examine this conjecture, we obtain data on the job patterns for 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.[21] We use the nationally-aggregated data at the 6-digit NAICS code for 2015.[22] For each NAICS code, the EEOC reports the number of female and male employees in executive 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.[23] We also construct a dummy variable, which equals one for industries with an above-median share of women in executive positions (33.5%), and zero otherwise (*Above-Median WEP*).

[21] https://www.eeoc.gov/eeoc/statistics/employment/jobpat-eeo1.
[22] We use 2015 data because starting with 2016, the EEOC only offers data aggregated at the 3-digit NAICS code or lower.
[23] 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.

To estimate the valuation implications of firm and industry level sexism, we augment our baseline regression models with our measures of (lack of) industry sexism (*Fraction WEP* and *Above-Median 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 (*Fraction WEP* or *Above-Median 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.

The results of this estimation are presented in Table 6. 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 results indicate that 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 × 20% more female executives × 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 × 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, as the Weinstein scandal and #MeToo movement unfolded, for industries that have greater female representation in executive positions. 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) × 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 our conjecture 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 6, we replace the *Above-median WEP* dummy with the continuous measure of women in executive positions (*Fraction WEP*) and our findings are similar.

3.6. State-level Evidence

In this section, we investigate whether a less sexist culture measured at the state level affects the valuation consequences of the Weinstein and #MeToo events. The argument is similar to the one in the prior section: if the culture of the state in which the firm is headquartered is generally not sexist, then having top female leaders may be less valuable than if this is not the case.

In addition, the culture of the state itself could affect the revaluation of firms around the events we study if there are spillover effects from regional/societal 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 average survey responses across individuals in a specific state and across surveys to obtain a state-level measure.[24] 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 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 Equation (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 6, for ease of interpretation, we combine the Weinstein and #MeToo events into one event window. Thus, the augmented regression model is as follows:

[24] 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."

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

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 7. 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* × *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. While the coefficient on the female × low sexism interaction is insignificant, the net effect that accrues by adding the female leadership coefficient and the female × 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 7 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. Furthermore, our findings suggest that societal and firm culture can act as substitutes.

4. Mechanism

In this section, we study the potential mechanism(s) behind the revaluation of firms with female leadership during the Weinstein and #MeToo events. As pointed out previously, there are two non-mutually exclusive explanations for these results. First, firms with female leadership were undervalued by the market prior to the events we study. As such, the revaluation is not accompanied by any real effects; rather it is the result of the market's reassessment of the relative value of non-sexist corporate cultures. Second, as a result of the events we study, the firm's stakeholders attached more importance to corporate culture and increased their subsequent commitment to firms with a non-sexist culture. This could be, for example, in the form of greater loyalty from customers, leading to increased sales and profits, or higher productivity from employees, reducing costs and increasing net cash flows.

We start our investigation of these channels by studying revisions of analysts' annual earnings forecasts surrounding our event window. Analysts are an important information intermediary whose forecasts have a significant influence on market participants (see Kothari, So, and Verdi (2016) for a review of the literature). To study analyst forecast revisions, we gather from I/B/E/S the most recent forecast made prior to October 1, 2017 and the first forecast after October 31, 2017 for each analyst covering the firms in our sample. We focus on the closest upcoming annual earnings forecast, specifically the forecast for a firm's first fiscal year-end after October

31, 2017. Forecasts made outside a 100-day window prior to and after our event window are removed, as well as cases where a given analyst does not provide a forecast both before and after the event window. Forecasts are scaled by the firm's stock price at the time the first analyst makes a forecast during the fiscal year and are expressed as a percentage; they are winsorized at the 1st and 99th percentiles. We then estimate a regression of analyst earnings forecasts on a post-event dummy interacted with our measures of female leadership. We also include firm, analyst, and forecast announcement day fixed effects, and cluster standard errors at the firm level.

The results are reported in Table 8. The first three models measure female leadership using the fraction of women among top-five executives, while models 4 through 6 use an indicator variable. Models 1 and 4 are limited to firms with a December 31, 2017 fiscal year-end, while the other models also include firms with fiscal year-ends beyond December 31, 2017. All specifications yield the same insight: firms with a higher fraction of women or at least one woman in the top leadership team experience significant positive revisions in analyst forecasts after our event window. In term of economic significance, based on model 3, adding one woman to the top-five executive team (i.e., increasing the fraction by 0.20) increases the analyst earnings forecast relative to its average by 3.3% (calculated as: coefficient of 0.812 × 0.20, divided by the average analyst earnings forecast measure of 4.99%). These results suggest that analysts deemed their earlier, pre-Weinstein event earnings forecasts for firms with female leadership to be too low. Since actual improvements in operating performance are less likely to materialize in such a short period, these findings are consistent with the view that analysts were underestimating the relative profitability of firms with female leadership before the allegations against Harvey Weinstein were announced.

Next, we study whether these changes in earnings forecasts are accompanied by actual improvements in operating performance. We employ four performance 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).[25] 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 June 2019.[26,27] 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 (quarter) × industry fixed effects to control for any time-varying industry performance. The results are presented in Table 9. Panel A reports results using *Fraction Top-5 Female* and Panel B using *Indicator Top-5 Female*. 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 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

[25] 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.
[26] We do not include the quarter ending December 2017 because it will likely take 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.
[27] 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.

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 eight lawsuits disclosed over the period January 2018 to June 2020, which indicates that increased litigation risk is not causing the valuation differentials we document.[28] 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 and fines.

The combined results of Tables 8 and 9 indicate that the revaluation of firms with female leadership during our event windows is accompanied by increases in *expected* cash flows, but no increases in *actual* cash flows. This evidence supports the view that firms with a non-sexist corporate culture were undervalued by the market before the Weinstein and #MeToo events, and that the revaluation corrects for this prior mispricing. We recognize, however, that the real effects may take longer to materialize.[29] Furthermore, the Weinstein and #MeToo events may have led to internal changes in firms without female leadership precisely to address potential problems with sexism, such that the post-event operating performance of firms with and without female leadership diverges less.[30]

5. 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

[28] 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.
[29] Grennan (2019) measures culture via textual analysis of employee reviews and finds that tighter corporate governance can reduce firm value in the long run because of its negative impact on corporate culture.
[30] Stubben and Welch (2020) show that the active use of an internal whistleblowing system is associated with lower fines and fewer lawsuits.

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 is permanent.

The increase in the value of firms with highly paid women 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 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. These results suggest that corporate culture and industry/societal culture may serve as substitutes.

Much of the extant research on gender diversity at the corporate level tends to focus on the board of directors. However, we do not find that an increased female presence on the board affects value during the shock to the importance of having a non-sexist culture. Instead, the effects we uncover stem mainly from female leadership inside the firm. This suggests that, for investors, regulators, and others who seek to improve the culture of corporations, additional focus should be placed on factors that facilitate women obtaining top executive positions and not just positions at the board level.

References

Adams, R.B., 2017, Boards, and the directors who sit on them, in B.E. Hermalin and M.S. Weisbach, eds, The Handbook of the Economics of Corporate Governance, Volume 1, North Holland.

Adams, R.B., and D. Ferreira, 2009, Women in the boardroom and their impact on governance and performance, Journal of Financial Economics 94, 291-309.

Adams, R.B., and P. Funk, 2012, Beyond the glass ceiling: Does gender matter, Management Science 58, 219-235.

Adhikari, B.K., A. Agrawal, and J. Malm, 2019, Do women managers keep firms out of trouble? Evidence from corporate litigation and policies, Journal of Accounting and Economics 67, 202-225.

Ahern, K.R., and A.K. Dittmar, 2012, The changing of the boards: The impact on firm valuation of mandated female board representation, Quarterly Journal of Economics 127, 137-197.

Bennett, B., I. Erel, L. Stern, and Z. Wang, 2020, (Forced) feminist firms, Working paper, Tulane University.

Charles, K.K., J. Guryan, and J. Pan, 2018, The effects of sexism on American women: The role of norms vs. discrimination, Working paper, Yale University.

Cheng, I., and A. Hsiaw, 2020, Reporting sexual misconduct in the #MeToo Era, American Economic Journal: Microeconomics, forthcoming.

Deloitte, 2016, Global human capital trends 2016, The new organization: Different by design, Deloitte University Press.

Edmans, A., 2011, Does the stock market fully value intangibles? Employee satisfaction and equity prices, Journal of Financial Economics 101, 621-640.

Faccio, M., M. Marchica, and R. Mura, 2016, CEO gender, corporate risk-taking, and the efficiency of capital allocation, Journal of Corporate Finance 39, 193-209.

Giannetti, M., and T.Y. Wang, 2020, Public attention to gender equality and board gender diversity, Working paper, Stockholm School of Economics.

Graham, J.R., J. Grennan, C.R. Harvey, and S. Rajgopal, 2019, Corporate culture: Evidence from the field, Working paper, Duke University.

Graham, J.R., C.R. Harvey, and M. Puri, 2013, Managerial attitudes and corporate actions, Journal of Financial Economics 109, 103-121.

Green, T.C., R. Huang, Q. Wen, and D. Zhou, 2019, Crowdsourced employee reviews and stock returns, Journal of Financial Economics 134, 236-251.

Grennan, J., 2019, A corporate culture channel: How increased shareholder governance reduces firm value, Working paper, Duke University.

Guiso, L., P. Sapienza, and L. Zingales, 2006, Does culture affect economic outcomes?, Journal of Economic Perspectives 20, 23-48.

Guiso, L., P. Sapienza, and L. Zingales, 2015a, The value of corporate culture, Journal of Financial Economics 117, 60-76.

Guiso, L., P. Sapienza, and L. Zingales, 2015b, Corporate culture, societal culture, and institutions, American Economic Review: Papers & Proceedings 105, 336-339.

Huang, J., and D.J. Kisgen, 2013, Gender and corporate finance: Are male executives overconfident relative to female executives, Journal of Financial Economics 108, 822-839.

Kim, D., and L. Starks, 2016, Gender diversity on corporate boards: Do women contribute unique skills? American Economic Review, Papers & Proceedings 106, 267-271.

Kothari, S.P., E. So, and R. Verdi, 2016, Analysts' forecasts and asset pricing: A survey, Annual Review of Financial Economics 8, 197-219.

Kreps, D.M., 1990, Corporate culture and economic theory, in J.E Alt and K.A. Shepsle, eds, Perspectives on positive political economy, Cambridge University Press.

Kunze, A., and A. Miller, 2017, Women helping women? Evidence from private sector data on workplace hierarchies, Review of Economics and Statistics 99, 769-755.

Liu, T., C. Makridis, P. Ouimet, and E. Simintzi, 2019, The distribution of non-wage benefits: Maternity benefits and gender diversity, Working paper, University of North Carolina.

Matsa, D.A., and A.R. Miller, 2011, Chipping away at the glass ceiling: Gender spillovers in corporate leadership, American Economic Review, Papers & Proceedings 101, 635-639.

Parker, K., 2018, Women in majority-male workplaces report higher rates of gender discrimination, March 7, 2018, Pew Research Center, http://pewrsr.ch/2G5booM.

O'Reilly, C.A., and J.A. Chatman, 1996, Culture as social control: Corporations, cults, and commitment, in B.M. Staw, and L.L. Cummings, eds, Research in organizational behavior: An annual series of analytical essays and critical reviews 18, 157-200, Elsevier Science/JAI Press.

Rockefeller Foundation, and GlobalStrategyGroup, 2017, Women in leadership: Tackling corporate culture from the top.

Stubben, S.R., and K.T. Welch, 2020, Evidence on the use and efficacy of internal whistleblowing systems, Journal of Accounting Research 58, 473-518.

Tate, G., and L. Yang, 2015, Female leadership and gender equity: Evidence from plant closure, Journal of Financial Economics 117, 77-97.

World Economic Forum, 2017, The global gender gap report.

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 (*p*-values)	
	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD	Mean	Median
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(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 *q*	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 × 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.

	Daily Stock Returns					
Female Variable =	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 ×						
Oct 5-6	0.551	0.094	0.629	0.110	0.717	0.146
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Oct 9-13					-0.297	-0.011
					(0.36)	(0.87)
Oct 16-27			0.477	0.099	0.565	0.135
			(0.00)	(0.01)	(0.00)	(0.00)
Oct 30-Nov 30					0.260	0.082
					(0.19)	(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 and Female CEOs

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-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.

	Daily Stock Returns					
Female Variable =	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 CEO ×						
Oct 5-6	0.099	0.151	0.081	0.138	0.096	0.143
	(0.34)	(0.17)	(0.43)	(0.21)	(0.35)	(0.19)
Oct 9-13					-0.050	-0.113
					(0.65)	(0.37)
Oct 16-27			-0.111	-0.075	-0.096	-0.070
			(0.07)	(0.28)	(0.17)	(0.35)
Oct 30-Nov 30					0.043	0.034
					(0.55)	(0.68)
Female Variable ×						
Oct 5-6	0.479	0.069	0.571	0.088	0.648	0.123
	(0.00)	(0.03)	(0.00)	(0.01)	(0.00)	(0.01)
Oct 9-13					-0.261	0.008
					(0.40)	(0.90)
Oct 16-27			0.557	0.111	0.635	0.146
			(0.00)	(0.01)	(0.00)	(0.00)
Oct 30-Nov 30					0.228	0.077
					(0.24)	(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 R^2	0.052	0.052	0.052	0.052	0.052	0.052

Table 4
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 female directors on the firms' board of directors. 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.

	Daily Stock Returns					
Female Variable =	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)
Fraction Board Women ×						
Oct 5-6	-0.080	-0.022	-0.077	-0.016	0.129	0.174
	(0.46)	(0.84)	(0.54)	(0.90)	(0.40)	(0.27)
Oct 9-13					0.207	0.124
					(0.53)	(0.72)
Oct 16-27			0.013	0.042	0.220	0.231
			(0.97)	(0.91)	(0.55)	(0.54)
Oct 30-Nov 30					0.414	0.393
					(0.14)	(0.17)
Female Variable ×						
Oct 5-6	0.588	0.098	0.672	0.115	0.725	0.146
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Oct 9-13					-0.311	-0.001
					(0.27)	(0.99)
Oct 16-27			0.508	0.105	0.562	0.135
			(0.00)	(0.04)	(0.00)	(0.01)
Oct 30-Nov 30					0.186	0.068
					(0.24)	(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 5
Shareholder Value and Alternative Measures of Female Leadership and Corporate Culture

This table shows regression estimates of daily stock returns on interaction terms of alternative measure × 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 a broader measure of corporate culture obtained from Glassdoor. *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.

Panel A: 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 ×						
Oct 5-6	0.619	0.200	0.655	0.227	0.688	0.250
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Oct 9-13					-0.163	0.030
					(0.18)	(0.79)
Oct 16-27			0.218	0.167	0.251	0.190
			(0.07)	(0.01)	(0.05)	(0.01)
Oct 30-Nov 30					0.110	0.044
					(0.51)	(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

Panel B: Glassdoor Culture

	Daily Stock Returns		
	(1)	(2)	(3)
Glassdoor Culture ×			
Oct 5-6	0.093	0.106	0.150
	(0.08)	(0.05)	(0.01)
Oct 9-13			0.131
			(0.02)
Oct 16-27		0.078	0.122
		(0.14)	(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 6
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. Fraction of women in executive positions (*Fraction WEP*) is the fraction of women that hold executive positions for a given SIC code industry. Above-median share of women in executive positions (*Above-median WEP*) is a dummy variable that equals one for industries with an above-median fraction of women that hold executive positions in a given SIC code 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.

	Daily stock returns			
Female variable =	Fraction Top-5 Women	Indicator Top-5 Women	Fraction Top-5 Women	Indicator Top-5 Women
Industry-level measures of women in executive positions (WEP) =	Above-median WEP	Above-median WEP	Fraction WEP	Fraction WEP
	(1)	(2)	(3)	(4)
Female variable × Oct 5-27	0.822	0.193	1.477	0.314
	(0.00)	(0.01)	(0.00)	(0.01)
WEP × Oct 5-27	0.197	0.193	0.754	0.727
	(0.03)	(0.04)	(0.05)	(0.05)
Female variable × WEP × Oct 5-27	-0.855	-0.180	-2.911	-0.589
	(0.05)	(0.08)	(0.02)	(0.05)
Female variable × Oct 30-Nov 30	0.400	0.109	0.409	0.086
	(0.12)	(0.09)	(0.36)	(0.44)
WEP× Oct 30-Nov 30	0.171	0.171	0.543	0.522
	(0.14)	(0.14)	(0.23)	(0.25)
Female variable × WEP × Oct 30-Nov 30	-0.272	-0.060	-0.494	-0.044
	(0.41)	(0.47)	(0.66)	(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 7
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

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

Table 7 (continued)

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

Female variable =	Daily Stock Returns	
	Fraction Top-5 Women	Indicator Top-5 Women
	(1)	(2)
Female Variable × Oct 5-27	0.677	0.161
	(0.01)	(0.01)
Low Gender Pay Gap State × Oct 5-27	0.194	0.191
	(0.00)	(0.00)
Female Variable × Low Gender Pay Gap State × Oct 5-27	-0.799	-0.177
	(0.03)	(0.03)
Female Variable × Oct 30-Nov 30	0.195	0.052
	(0.45)	(0.41)
Low Gender Pay Gap State × Oct 30-Nov 30	0.079	0.069
	(0.26)	(0.33)
Female Variable × Low Gender Pay Gap State × Oct 30-Nov 30	0.067	0.052
	(0.80)	(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 8
Analyst Earnings Forecasts Surrounding the Weinstein and #MeToo Event Windows

This table shows regression results of analyst earnings forecasts on interaction terms of female × *Post* and firm, analyst, and forecast announcement day fixed effects. *Analyst Earnings Forecast* is the analyst forecast for a firm's annual earnings. Forecasts are scaled by the firm's stock price at the time the first analyst makes a forecast during the fiscal year and are expressed as a percentage. Forecasts made outside a 100-day window prior to October 1, 2017 and after October 31, 2017 are removed, as well as cases where a given analyst does not provide a forecast both before and after the event window. Models 1 and 4 include firms that have December 31, 2017 fiscal year-end only; models 2 and 5 include firms with fiscal year-end up to June 30, 2018; and models 3 and 6 include the full sample. 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 one for days after October 31, 2017, and zero for days before October 1, 2017. The data are from Execucomp, I/B/E/S, and CRSP. *Analyst Earnings Forecast* is winsorized at the 1st and 99th percentiles. Standard errors are clustered by firm and *p*-values are reported in parentheses.

	Analyst Earnings Forecast					
Female Variable =	Fraction Top-5 Women			Indicator Top-5 Women		
Earnings Forecast Fiscal Year End =	Dec 31, 2017	Dec 31, 2017 to Jun 30, 2018	Dec 31, 2017 to Nov 30, 2018	Dec 31, 2017	Dec 31, 2017 to Jun 30, 2018	Dec 31, 2017 to Nov 30, 2018
	(1)	(2)	(3)	(4)	(5)	(6)
Female Variable × Post	1.671	1.039	0.812	0.442	0.302	0.235
	(0.03)	(0.03)	(0.06)	(0.02)	(0.03)	(0.05)
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Analyst Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Announcement Day FE	Yes	Yes	Yes	Yes	Yes	Yes
N	14,406	18,766	21,514	14,406	18,766	21,514
Adjusted R^2	0.930	0.925	0.927	0.930	0.925	0.927

Table 9
Operating Performance Surrounding the Weinstein and #MeToo Events

This table presents regressions of quarterly operating performance measures on interaction terms of female × *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 June 2019. 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 (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 × Post	-0.016	-0.008	0.028	0.003
	(0.21)	(0.51)	(0.47)	(0.81)
Log (Total Assets)	0.031	0.017	0.230	0.049
	(0.01)	(0.09)	(0.00)	(0.00)
Firm Fixed Effects	Yes	Yes	Yes	Yes
Time × Industry Fixed Effects	Yes	Yes	Yes	Yes
N	17,912	19,160	19,163	15,610
Adjusted R^2	0.805	0.916	0.326	0.955

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 × Post	-0.005	-0.002	0.010	-0.001
	(0.20)	(0.52)	(0.34)	(0.88)
Log (Total Assets)	0.031	0.017	0.230	0.049
	(0.01)	(0.09)	(0.00)	(0.00)
Firm Fixed Effects	Yes	Yes	Yes	Yes
Time × Industry Fixed Effects	Yes	Yes	Yes	Yes
N	17,912	19,160	19,163	15,610
Adjusted R^2	0.805	0.916	0.327	0.955