

Investors' Response to the #MeToo Movement: Does Corporate Culture Matter?

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Abstract

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Keywords: Board of directors; gender; diversity; corporate culture; ESG

JEL Classifications: M14, G34

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ABSTRACT

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1. INTRODUCTION

Good corporate governance is a bedrock of corporate America, with a central tenet being the board of directors' role in effectively overseeing and monitoring the firm. Recently, institutional investors have focused on changing board composition. Beginning in 2017, two of the "Big 3" institutional investors, State Street and BlackRock, began an ESG activist campaign for their portfolio firms to include women on their board of directors, voting consistently against directors on the nominating committee if the firm presented a ballot of directors with zero women (Baer 2017, Hunnicutt 2017).\(^1\) In 2020, Goldman Sachs joined this campaign by announcing it would not underwrite IPOs in the U.S for firms with all-male boards of directors (Elsesser 2020). Generally, their reason for promoting board gender diversity is that it leads to higher quality decision-making, which, in turn improves shareholder value (Krouse 2018, Elsesser 2020). Studies supporting this view for seasoned firms include Dezsö and Ross (2012), Chen, Leung and Evans (2018) and Coles, Daniel and Naveen (2020).\(^2\)

Given the voting and financial clout of these institutions, it is not surprising that their activism wielded significant influence in this governance area.³ Between 2017 and 2020, the number of S&P 1500 firms having all-male boards dropped from 179 to 30, with no S&P 500 board retaining a board without at least one woman director. In 2020, of the top 25 U.S. IPOs, just one company, Dun & Bradstreet, went public with an all-male board, compared to 12 IPOs in 2018

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¹ Prominent proxy advisors, including ISS and Glass Lewis, also have advanced voting policy guidelines that reflect commitments to board gender diversity (see https://www.issgovernance.com/file/policy/latest/americas/US-Voting-Guidelines.pdf). Voting Guidelines.pdf).

² Rau, Sandvik and Vermaelen (2021) find that IPOs with gender diverse boards between 2010 and 2018 earn higher initial returns than those with less diverse boards. Yet, they find no evidence that IPOs with diverse boards are more profitable or earn abnormal stock market returns in the period following the IPO. Thus, their paper supports Goldman Sachs CEO David Solomon's assertion that IPOs of more diverse companies perform better, but also other papers showing no cross-sectional relation between gender diversity and firm performance (e.g., Adams and Ferreira, 2009). ³ In 2017, State Street and BlackRock had combined assets under management of about \$9 trillion in 2017. Similarly, Goldman Sachs was the lead U.S. underwriter in 2019, capturing 24% of total U.S. deals worth over \$55.9 billion.

(Green 2021). Government and regulators also have responded. In 2018, California passed legislation mandating most publicly traded companies based there to have at least three women on their boards by the end of 2021 (California Senate Bill No. 826), and in 2020, the NASDAQ proposed a change to its corporate governance listing requirements by requiring the inclusion (or explanation of non-inclusion) of at least one woman board member.

These events suggest that board gender, and in particular the lack of women on the board, should be a concern to shareholders. Some papers address this conjecture by demonstrating that women directors possess special skills (Kim and Starks 2016) or are more risk-averse (Chen et al. 2019), thus bringing new ideas and backgrounds to board decision making. Other papers examine how a change in gender composition, via a mandated shock to gender representation (e.g., Ahern and Dittmar 2012, Greene, Intintoli, and Kahle 2020) or through an instrumented addition of a woman to the board (e.g., Adams and Ferreira 2009), affects firm value. These papers, however, produce mixed results. With regard to the California law, Allen and Wahid (2021) document significantly positive stock price reactions around the law's passage for firms with boards currently excluding women; however, other papers (Greene et al. 2020, Hwang, Shivdasani, and Simintzi 2000, and von Meyerinck, et al. 2020) find the opposite when examining additional event dates.

In this paper, we take a different approach. Specifically, we use the history of board gender diversity as a measure of the corporate culture within the firm with respect to its inclusivity or exclusivity of women. Several studies support the view that it is the board that influences the cultural norms or the firm. Matsa and Miller (2011) demonstrate that the presence of women on the board is causally related to the presence of women in the C-suite, but that this causality does not go in the opposite direction. Graham et al. (2019a, 2019b) present results of surveys of

corporate directors, who affirm that they set the "tone at the top," and that this tone is expected to be reflected throughout the firm.

We then identify an economic shock in which gender itself may matter to investors. The shock we exploit is the modern #MeToo Movement, which we propose shifted investors' views of the economic risks associated with sexual misconduct in the workplace. If firms with all-male boards are associated with an internal culture that is "exclusive" to women and more vulnerable to allegations of sexual misconduct, then these firms should earn significantly negative abnormal returns as the revelations of this movement became more apparent. On the other hand, if firms with gender-diverse boards are indicative of an internal culture that is "inclusive" of women, then these firms should be less affected by the shock, thus producing less negative or even positive abnormal stock returns.

The #MeToo movement began in October 2017 when actress Alyssa Milano responded to developing scandals with the inclusion of the #MeToo hashtag in a tweet describing her personal experiences of sexual harassment in the workplace.⁴ Within 48 hours of Milano's initial tweet, nearly a million responses used the #MeToo hashtag, thus creating newfound attention to the issue of sexual harassment in the workplace. As illustrated in Figure 1, both Dow Jones/Factiva counts of new items discussing "sexual harassment" (Panel A) and Google searches on the phrase #MeToo (Panel B) spiked dramatically after Milano's initial tweet.

As the movement gained momentum, the potential revelation of sexual misconduct in the workplace injected gender-related risk into some publicly listed firms — as borne out by the responses of firms and Wall Street. Over 200 male executives were dismissed or demoted following allegations of sexual misconduct, with many of these men being replaced by women

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⁴ The phrase "Me Too" was originally coined by activist Tarana Burke in an effort reach out to sexual abuse survivors in 2006.

(Bach 2018, Carlsen et al. 2018). Attorneys added "Weinstein Clauses" (named after Harvey Weinstein, the former CEO of Miramax and the Weinstein Company) and "#MeToo representations" into merger documents, providing economic recourse to bidders via clawback provisions if sexual misconduct is discovered after the deal is closed (Ahmed 2018, Reints 2018). Thus, the #MeToo movement engendered a shock in investor attention to sexual harassment charges, which provided an increase in investors' expectations of potentially new gender-related misconduct revelations.

Our main predictions and tests rely on how we define firms with inclusive and exclusive gender cultures. Following "critical mass" theory of group dynamics (Kanter 1977), we identify firms with inclusive cultures as those firms that enter the #MeToo time frame with three or more women in the board room over 2012-2016, the five-year period immediately preceding the first #MeToo tweet. We compare these "inclusive" firms to "exclusive" firms that had historically kept women completely out of the board room prior to the advent of the #MeToo movement, as evidenced by having all-male boards over the same time period. Because this time period precedes the gender activist campaigns of BlackRock, State Street and others (as well as regulation requiring the inclusion of women in the board room), firms were not under pressure to tailor their board representations along gender lines. Further, by using a continuous five-year period, we ensure that the firms had a history of board gender inclusion or exclusion, providing a more valid representation of corporate culture. Using these criteria produces 481 gender exclusive and 122 gender inclusive firms, respectively.

We then document systematic differences in culture between the exclusive and inclusive subsamples. Focusing on executive characteristics, we find that firms that leave women out of the board room also neglect to hire (or promote) female executives, a finding consistent with other studies using samples from earlier periods, (e.g., Matsa and Miller 2011, Carter, Franco and Gine 2017). Moreover, examining external evaluations of firm culture (as maintained by Glassdoor, Fortune and two proprietary databases), we document that differences in gender diversity and inclusion span broadly throughout all levels of the workforce, with exclusive (inclusive) boards being a reflection of their respective firms' cultures.

Having shown that the #MeToo Movement provides a shock to the likelihood of potential revelations of misconduct and having corroborated our use of board gender representation as a signal of the firm's overall corporate culture, we turn to our main question: Did the #MeToo movement revise investors' beliefs about the value of having women in the board room shaping the culture of the firm?

To test this prediction, we conduct an event study that allows us to isolate changes in investors' beliefs as the #MeToo movement gained momentum during the autumn of 2017 and continuing into the first 6 months of 2018. Specifically, using various approaches to cumulating abnormal returns, we assess the overall market reaction to 37 event dates occurring during the first 9 months of the #MeToo movement. Accordingly, we measure the ramifications of the #MeToo movement as it gained momentum on a large sample of publicly traded firms, not just those firms named in complaints or directly affected by a scandal.

Our findings consistently support the view that exclusive firms experienced negative abnormal market returns as momentum for the cause increased, while inclusive firms enjoyed abnormal positive returns as #MeToo events unfolded. The discrepancy in cumulative returns between groups grew over time, reflecting the increased momentum of the #MeToo movement as more allegations of sexual harassment surfaced. These findings hold regardless of our approach to benchmarking abnormal performance and after taking various approaches to controlling for

covariates between firm types. In contrast, placebo tests conducted over the same time period (replacing #MeToo dates with randomly generated "pseudo" dates) produce insignificant differences in market price movements between the two groups, suggesting that the return patterns we document stem from the #MeToo movement itself and not to other firm characteristics.

Exploring the dynamics surrounding our general findings, we document important variation in market reactions depending upon the presence of a "critical mass" as compared to a "token presence" in the board room (Farrell and Hersch 2005, Adams and Ferreira 2009). Consistent with the notion that investors do not reward firms for "tokenism," when we lower the threshold for inclusiveness (to capture firms with just one or two women directors), we no longer detect a positive market response to #MeToo events. This finding supports critical mass theory and provides insights into when gender representation at the board level has meaningful board policy implications (Erkut, Kramer and Konrad 2008, Konrad, Kramer and Erkut 2008, Torchia, Calabrò and Huse 2011). It also supports the California law's premise that gender diversity should include at least three women directors.

Finally, we examine if investors feared that the #MeToo movement would result in firms with all-male boards altering their boards in a suboptimal way by adding a woman director. In theory, firms and boards use cost-benefit analyses to structure their boards (Hermalin and Weisbach 1998), a phenomenon borne out by empirical evidence (Klein 1998, Coles, Daniel and Naveen 2008). Because our designation of exclusive and inclusive boards encompasses gender diversity prior to the advent of the #MeToo movement, as well as the ESG engagements by BlackRock and State Street and the California law, it could be argued that these firms used criteria other than gender to optimally create their slates of board members. Thus, if firms with all-male boards felt pressured to nominate or to appoint a woman to their boards in response to the #MeToo

movement, we should observe negative stock market reactions around the appointments of these women. We find no evidence that investors believe these appointments harmed firm value.

Collectively, our paper is consistent with the #MeToo movement revising investors' beliefs about the costs of fostering a culture that excludes women, as reflected by the tone at the top set by the absence or presence of women in the board room. Overall, investors appear to have changed their beliefs about the risks associated with future revelations of misconduct and also about the value of having women in the board room shaping the culture of the firm.

Our paper contributes to several lines of literature. First, it adds to studies examining how board gender diversity relates to firm value. Because board composition and firm value are intricately related, most studies seek to find an exogenous shock to gender composition (Ahern and Dittmar 2012) or use an instrumented addition of woman to the board (Adams and Ferreira 2009) to examine this link. In contrast, we treat the board's gender composition as endogenously determined and exploit a shock to investors' beliefs about the costs of fostering a culture that excludes women to see its effects on shareholder value. Our findings support the view that firms with all-male boards are deemed by the market to be more exposed to risk of sexual misconduct revelations than firms with boards containing a critical mass of women.

Second, our paper contributes to the literature demonstrating the futility associated with firms taking a "tokenism" approach to board diversity (e.g., Farrell and Hersch 2005, Erkut et al. 2008, Adams and Ferreira 2009). Our findings of no significant association between excess stock returns and boards with just one woman is consistent with these prior studies. Thus, we caution the reader not to interpret our findings to indicate that a firm can remedy its negative impression simply by adding a woman to its board. Nor do we take the position that the California law, the NASDAQ proposal, or even the ESG activism by BlackRock and State Street necessarily will

foster a better culture within the firm. Instead, we interpret our findings as being consistent with the view that boards that *endogenously* exclude (or include) women provide a "tone at the top" reflective of the board's gender composition that filters down to the rest of the firm. That is, corporate culture arises organically within firms. Consequently, our findings inform advisors, regulators and other stakeholders as they consider approaches to fostering diversity and inclusion in ways that have a meaningful impact on firm value.

Third, we contribute to the literature on the association between board and firm culture. We document results similar to Matsa and Miller (2011) and Carter et al. (2017), who show that firms with gender-diversified boards are more likely to have women in the C-suite.⁵ This finding is unsurprising, given that one of the main board oversight roles is the hiring and firing of upper management. We further show that the presence (absence) of women on the board is associated with the culture of the firm further down the line.

2. INSTITUTIONAL BACKGROUND AND TIMELINE OF #METOO EVENTS

Sexual Harassment

In 1964, the U.S. Congress passed the Civil Rights Act of 1964. This legislation covers a large swath of discrimination by restricting inequities in voting, employment, public accommodations, facilities, and education. Its Title VII prohibits employment discrimination based on race, sex, religion, or national origin; the Act also created the Equal Employment Opportunity Commission (EEOC) with enforcement powers to "prevent any person from engaging in any unlawful employment practices" (Section 706). However, the text of Title VII itself does not mention sexual harassment as a form of employment discrimination. In fact, it wasn't until

⁵ Consistent with a link between board gender diversity and overall firm culture, Lins et al. (2020) document a positive market response at the start of the #MeToo movement for firms with women in the C-suite.

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1980 that the EEOC said that sexual harassment fell under actions prohibited by Title VII. In 1986, the 9-0 U.S. Supreme Court decision of *Meritor Savings Bank v. Vinson* recognized sexual harassment as a violation of Title VII.

According to the current EEOC website (www.eeoc.gov), sexual harassment includes "unwelcome sexual advances, requests for sexual favors, and other verbal or physical harassment of a sexual nature." Although the #MeToo timeline, as disclosed in the Chicago Tribune, deals exclusively with complaints of harassment of a sexual nature, the EEOC website states that sexual harassment need not be of a sexual nature only. For example, frequent or severe teasing or offhand comments can be construed as creating a "hostile or offensive" work environment, which also falls under the EEOC's sexual harassment umbrella.

Both a firm and its employees can be punished for sexual harassment within the workplace. In 1998, the U.S. Supreme Court, in a 7-2 decision, *Faragher v. City of Boca Raton*, held that employers might be found vicariously liable for sexual harassment committed by one of its supervisory employees. Specifically, employers "bear the burden of foreseeable social behavior" within the context of sexual harassment." In addition, there are state laws prohibiting sexual harassment, for example, the New Jersey Laws Against Discrimination and the Pennsylvania Humans Relations Act. Monetary damages against employers found liable for sexual harassment under Federal or State statutes include lost wages, compensatory and punitive damages, and victims' court and legal fees. Moreover, there can be substantive indirect costs to the employer, including poor employee morale, bad publicity, and hits to the firm's reputation. Employers also

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⁶ Although *Faragher* allows firms to raise "affirmative defenses" to liability or damages, the decision also states that "no affirmative defense is available ...when the supervisor's harassment culminates in a tangible employment action, such as discharge, demotion, or undesirable reassignment. These affirmative defenses comprise of employers having "exercised reasonable care to prevent and promptly correct any sexually harassing behavior <u>and</u> [that] victimized employees unreasonably failed to take advantage of any preventive or corrective opportunities provided by the employer."

are required to assess punishments against the harassing employee(s), which can vary from a reprimand or warning to termination of employment.

#MeToo Timeline of Event Dates

As in any event study, our inferences depend critically on the proper identification of events. To avoid subjectivity in our selection of dates and the potential for bias, we use the #MeToo event timeline maintained by the Chicago Tribune for our analyses.⁷ This timeline remains the top search result from Google and Bing search engines (using the search terms of "#MeToo" and "timeline"), underscoring the awareness and influence of this source.

Appendix A shows the dates and headlines of each event on the #MeToo timeline. The #MeToo movement begins on October 5, 2017 and October 12, 2017, when allegations of sexual harassment by Ashley Judd against Harvey Weinstein of Miramax and Isa Hackett against Roy Price of Amazon Studios were reported in the news (Koblin 2017). In response to these allegations, on October 15th, actress Alyssa Milano initiated the hashtag #MeToo on Twitter, writing "If you've been sexually harassed or assaulted write 'me too' as a reply to this tweet" (France 2017). Within 48 hours of Milano's initial tweet, nearly a million responses used the #MeToo hashtag (CBSnews.com), thus creating a newfound awareness of the prevalence of sexual harassment in the workplace and a slogan of the anti-sexual harassment movement. Our analyses focus on the events in the first nine months of the #MeToo timeline (i.e., 37 event dates from October 2017 through May 2018) because the consequences of this social movement became relatively clear nine months after its initiation, thus allowing the market to reasonably price in its anticipative future shocks.

⁷ See https://www.chicagotribune.com/lifestyles/ct-me-too-timeline-20171208-htmlstory.html.

3. DATA AND SAMPLE SELECTION

We assemble a sample of U.S. public companies with available stock return data from CRSP, financial statement data from Compustat, and board composition data from BoardEx. As shown in Table 1, we begin with the 5,385 firms listed in the Compustat-CRSP merged database as of 2016, which represents the last full year of available data prior to the start of the #MeToo movement in 2017. Removing foreign firms and those firms with missing daily return data, we arrive at 3,404 firms with available data for our market reaction tests. Although BoardEx coverage expanded considerably in the past decade, we still lose 525 of these firms due to a lack of BoardEx data. After removing another 276 firms with either inconsistent BoardEx data (20 firms) or missing Compustat data (256 firms), we have a sample of 2,603 firms with all available data at the end of 2016. We further add the restriction that each firm has available data over the years 2012 through 2016 inclusive, thus allowing us to create subsamples of firms with multi-year inclusions and exclusions. After excluding the 578 firms with missing years, we arrive at our final sample of 2,025 firms available for our tests.

Table 2 provides descriptive statistics for the sample. The typical (based on mean or median) firm in our sample has 9 directors on its board, which includes 1 woman. As shown in Figure 2, women's board representation steadily increased in the years leading up to the #MeToo movement. While nearly 40% of firms in our sample excluded women from the board room in 2012, only 27% did so as of 2016. Nevertheless, the percentage of firms welcoming just one woman into the board room each year held steady over this same time period, as approximately one third of boards included only one woman from 2012 through 2016.

Our upcoming tests focus on the differential reaction to the #MeToo movement based on firms' inclusive versus exclusive cultures. Accordingly, we identify subsamples of firms based on

the presence versus absence of women in their board room. Specifically, we narrow our focus to firms that as of the start of the #MeToo movement had traditionally excluded women from their board. To contrast, we also identify firms that had already embraced the inclusion of women on their board, as evidenced by the presence of three or more women.

We select three women as our threshold for three main reasons. This avoids tokenism documented by prior work (Farrell and Hersch 2005, Adams and Ferreira 2009). Indeed, the steady trend of the percentage of firms with just one woman on the board (as shown in Figure 2) is indicative of tokenism. Second, a threshold of three women follows critical mass theory of group dynamics. Kanter (1977) argues that a minority subgroup's degree of influence within any full group is felt only when the size of that group reaches a certain dimension; Kanter refers to this as a "critical mass" theory. Erkut et al. (2008), Konrad et al. (2008) and Torchia et al. (2011) examine this theory on gender representation within a firm's board of directors. Using survey data of women directors, they present evidence that achieving a critical mass of having at least three women on the board enhances its working dynamics in general and also the board's outlook on firm innovation. As Erkut et al. (2008) note: "One woman is the invisibility phase; two women is the conspiracy phase; three women is mainstream." (p. 227) Finally, a threshold of three women is also consistent with the new California law requiring all California-based firms with boards of at least six directors to have a minimum of three women directors by the end of the 2021 calendar year.8

Because we are interested in measuring the culture of the firm leading up to the advent of the #MeToo Movement, we use the gender composition of the firm's board over the five-year window 2012-2016 to categorize a firm as being exclusive or inclusive of women. Specifically,

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⁸ When enacting the law, lawmakers cited research supporting critical mass theory as guiding their choice of three women as the threshold. See https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?billid=201720180SB826.

we categorize a firm as being exclusive if over the full five years, its board was comprised exclusively of men; symmetrically, we categorize a firm as being inclusive if over the same time period, its board had at least three women directors. Our approach reflects a more stable, long-term board environment.

Over the five-year period, we find that 481 firms enter the #MeToo time frame without ever having included a woman on their board, while 122 firms enter 2017 with a critical mass of at least 3 women directors. As shown in the latter columns of Table 2, comparing firm characteristics between the subsamples of "exclusive" (#WOMEN DIRECTORS = 0) and "inclusive" (#WOMEN DIRECTORS => 3) firms produces a number of significant differences. Inclusive firms tend to be larger (ASSETS and SALES), better performing (ROA), less volatile (RETURN VOLATILITY) and have larger, more independent boards (#DIRECTORS and %INDEP DIR). Consistent with other papers (Ahern and Dittmar 2012, Kim and Starks 2016, Matsa and Miller 2011), we control for a number of these factors in our upcoming multivariate tests. In addition, our tests consider various approaches to benchmarking firm performance, all of which aim to control for differences across subsamples. Moreover, to explore whether unobserved (and, thus, uncontrolled) differences between these two subsamples – unattributable to the unfolding #MeToo movement – explain our findings, we calculate pseudo returns based on random event dates.

4. FINDINGS

Does Gender Representation on the Board of Directors Provide a Signal about Firm Culture?

We combine three research strands to connect board composition to our aspect of a firm's corporate culture. Kreps (1990) defines corporate culture as an intangible asset designed to meet

unforeseen contingencies as they arise (see also Camerer and Vepsalainen 1988). Basically, because a firm cannot contract on unforeseen circumstances, it can create a culture consonant with shared beliefs, assumptions, and values that help employees understand which behaviors are and are not appropriate (Schein 1990, Grennan 2019). Importantly, corporate culture evolves over time (Schein 1990), suggesting both a stickiness in change and a historical perspective on what that culture is. In our setting, the unforeseen circumstances to investors are the revelations of previously unknown or expected future sexual harassment charges within a firm. The corporate culture we examine is the implicit attitude toward the value of women within the firm's workplace.

The role of the board of directors in shaping a firm's corporate culture is to "set the framework of values" (FRC 2018). According to two surveys by Graham et al. (2019a, 2019b), boards do not directly choose a firm's culture. Instead, they embody the firm culture and, accordingly, influence it through their actions – for example, via their choice of CEO (see also Sandford 2014). In recognition of this important role, law firms (e.g., Akin Gump 2019) and accounting consulting groups (e.g., Klemash and Dettman 2019) increasingly have counseled boards to consider the oversight of its firm's corporate culture as an important priority. We refer to their actions as the board setting a "tone at the top."

Our assumption that investors use board composition as a partitioning variable in assessing a firm's corporate culture hails from Camerer and Vepsalainen (1988), who define a *visible* firm culture as one that can be seen from outside the firm. Since board composition is visible to outside investors, we propose that the market uses this composition in assessing the tone set by the board with respect to the firm's overall attitudes towards women in general, and sexual harassment specifically. Further, consistent with Schein (1990), who states that corporate cultures evolve over

time, we expect the market to consider long-term trends in gender composition as better indicators of the firm's corporate culture vis-à-vis the most recent year.

In Table 3, we present univariate evidence to corroborate our approach to identifying exclusive versus inclusive firm culture. Panel A tests for differences in executive characteristics among firms, while Panel B tests for differences in external evaluations of firm culture, as measured by a number of scores developed with the aim of contrasting culture and board committee characteristics across firms. In both panels, sample sizes vary depending on data availability for each measure. Nevertheless, the evidence in Table 3 consistently supports the notion that sorting firms based on the presence or absence of women in the board room is effective in identifying firms with exclusive versus inclusive cultures.

In particular, focusing on executive characteristics in Panel A, we find that firms that leave women out of the board room also neglect to hire and promote female executives. None of the exclusive firms have a woman CEO in 2016; this contrasts with 18% of the inclusive firms. When comparing the incidence of having any woman executive reported by ExecuComp, we find that 76% of the exclusive firms also had zero women executives in 2016, while only 41% of inclusive firms had no women executives. Equally striking, when looking across 2012-2016, 67% of exclusive firms had no women executives over the entire 5-year period; in contrast, only 31% of inclusive firms had the same paucity of women in their executive suites.

In Panel B, we turn from the executive suite to external evaluations of firm culture and committee characteristics. Again, in support of the premise that gender representation on the board provides a signal about the culture of the firm, we detect significant differences in the likelihood that the firm is recognized by Glassdoor or Fortune on their lists of "Best Places to Work" at any point during 2012 through 2016, with inclusive firms appearing more frequently. These findings are

consistent with Au, Dong, and Tremblay (2021), who employ a textual analysis on online job reviews from Glassdoor.com and Indeed.com to determine a measure of sexual harassment within a firm's workplace. Using these data, they find a negative association between seven-year (2011-2017) stock returns and the prevalence of sexual harassment within a firm.

In Panel B, we also document superior diversity and inclusion scores, as measured by composite scores compiled by TruValue Labs and Arabesque. Both companies maintain proprietary databases with the aim of uncovering ESG data that offer insights into various dimensions of diversity and inclusion at the firm level. Additional (untabulated) analyses contrasting specific datapoints collected by Arabesque indicate that the inclusive firms differ from the exclusive firms in a number of key aspects that collectively suggest broad cultural differences. For example, as compared to the exclusive firms, the inclusive firms are more likely to (1) offer more flexible work schedules, (2) provide child daycare services, (3) favor internal promotion, (4) set performance targets/objectives based on diversity and equal opportunity, (5) have formal policies to drive diversity and equal opportunities, and (6) have formal policies against forced or child labor.

These findings indicating that gender exclusive and inclusive boards correlate strongly with different percentages of women in the C-suite, firm-wide diversity measures, and employee satisfaction are consistent with the view that board gender composition plays a role in determining a firm's corporate culture. As such, they are consistent with several survey papers (e.g., Graham et al., 2019a; 2019b) documenting that directors believe they can influence their firm's corporate culture through their actions and behavior.

Consequently, the evidence presented in Table 3 corroborates our use of board gender representation as a signal of firm culture. Next, we turn our attention to assessing investors' reactions to the #MeToo movement.

Do Investors Respond to the #MeToo Movement?

To assess the market reaction to the #MeToo movement, we begin with an initial examination of cumulative abnormal returns (#MeToo CAR) associated with the 37 #MeToo movement events listed in Appendix A. To do so, we use seven alternative models as our benchmark for returns, including the Fama-French five-factor model (CAR_FF5), the Fama-French Carhart four-factor model (CAR_FFC4), the Fama-French three-factor model (CAR_FF3), the CAPM model using both equally-weighted and value-weighted market returns (CAR_CAPM_EW and CAR_CAPM_VW), and the Daniel et al. (1997) model using both equally-weighted and value-weighted market returns (CAR_DGTW_EW and CAR_DGTW_VW). We describe each approach in detail in Appendix B.

As shown in the first column of Table 4, depending on the model used to cumulate abnormal returns, we detect a significantly negative overall market reaction to the event dates of the #MeToo movement. In particular, we document negative overall market reactions ranging from an -0.32% for the $DGTW_{VW}$ model (insignificant, t=-0.97) to =1.98% for the CAPM_EW model (significant, t=-5.11). Recall, however, that our prediction focuses on the *relative* market reaction to the #MeToo movement depending upon the existing culture of the firm.

Does the Market Reaction to the #MeToo Movement Vary Depending Upon Firm Culture?

To test whether investor reactions to #MeToo movement vary based on gender representation on the board, the latter columns of Table 4 contrast the #MeToo CAR for the subsample of exclusive firms with the #MeToo CAR for the subsample of inclusive firms. In so doing, we find that regardless of the model used to calculate abnormal returns, the evidence suggests that exclusive firms experience negative returns as compared to the positive returns enjoyed by inclusive firms. Thus,

on a univariate basis, we find distinct differences in market reactions to the #MeToo movement based on whether a firm's board excludes or includes women, with firms with zero board gender diversity, on average, shouldering the lion's share of the negative abnormal stock return reaction.

Next, we test whether this differing reaction for the exclusive versus inclusive subsamples remains in a multivariate setting. As we noted in our discussion of Table 2, there are fundamental differences in firm characteristics for firms with boards with zero women vis-à-vis those with three or more women. To some extent, our seven alternative approaches to benchmarking abnormal returns control for differences in firm characteristics (e.g., firm size and book-to-market ratios). In Table 5, however, we estimate cross-sectional regressions that control for additional covariates, including log(BOARD SIZE), LEVERAGE, ROA, % INDEP_ DIR RETURN_VOLATILITY and ASSETS. In these regressions we also include industry fixed effects. The dependent variable is the #MeToo CAR multiplied by 100 and our variables of interest are EXCLUSIVE and INCLUSIVE indicator variables set equal to 1 for the #WOMEN DIRECTORS=0 and the #WOMEN DIRECTORS >=3 subsamples. Consistent with our univariate results, we observe contrasting coefficients for our EXCLUSIVE and INCLUSIVE indicators. That is, we observe significantly negative (positive) coefficients for the exclusive (inclusive) firms, suggesting the differing reaction we documented in Table 4 remains when we include additional controls for firm and industry characteristics.

We view our main research design innovation to be our focus on an event that allows us to isolate a *change* in investors' beliefs about firm value. Thus, the analysis in Table 5 indicates that the change in investors' beliefs about the risk injected by the #MeToo movement varies predictably

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⁹ Results are robust to various alternative approaches to controlling for firm characteristics, including using log (ASSETS) or log(SALES), using coarsened exact matching to obtain benchmark returns, or using propensity matching to obtain benchmark returns.

in the cross-section based on the signal that gender diversity on the board sends about the likelihood of the future misconduct revelations after controlling for other factors.

As shown in Panel A of Figure 3, plotting the cumulative market reaction over the 37 #MeToo event dates illustrates the striking contrast in market reaction between the exclusive and inclusive subsamples as the #MeToo movement gained momentum. We observe a steady increase in returns for the inclusive firms through the first 9 event dates that continues to grow throughout the movement. More important, considering the return pattern for the exclusive firms, we note the symmetric, negative response for the exclusive firms. Collectively, this picture suggests that the #MeToo movement revised investors beliefs about the value of gender inclusivity and also the cost of fostering a culture that leaves women out entirely.

Nevertheless, despite our efforts to appropriately benchmark return performance and to control for observed differences between the two subsamples, a natural question remains as to whether *unobserved* differences between the two subsamples – unattributable to the unfolding #MeToo movement – drive these documented differences.

Does the Same Cross-Sectional Variation Emerge Using Pseudo Event Dates?

To address this question, we next test whether the same return pattern emerges when we replace the #MeToo event dates with 37 randomly generated "pseudo" event dates from the same time period. In particular, we re-estimate the analysis provided in Table 5, replacing the dependent variable with the cumulative abnormal returns associated with 37 machine-generated pseudo-events randomly drawn using the seed of "123" in Stata, computed using our 7 alternative models to compute the benchmark returns.

As shown in Table 6, using these randomly generated pseudo-events, we no longer detect differences in the market response when comparing the exclusive and inclusive cultures. In

particular, the coefficients on our *EXCLUSIVE* and *INCLUSIVE* indicator variables no longer exhibit significance and are no longer contrasting in sign. Further, in contrast to the results shown in Table 5, the F-tests for differences between the coefficients for *EXCLUSIVE* and *INCLUSIVE* no longer detect differences across the two subsamples. Moreover, as shown in Panel B of Figure 3, plotting the cumulative market reaction over the 37 pseudo-event dates no longer produces the striking pattern shown in Panel A.

In untabulated analyses, we repeat the placebo test using 10 alternative seeds to randomly draw the 37 pseudo-events. In each of these 10 additional rounds of placebo testing, we do not detect significant differences in cumulative returns across the *EXCLUSIVE* and *INCLUSIVE* subsamples. As such, the return patterns documented in Panel A of Figure 3 do not manifest for these alternative pseudo-event dates. This offers further evidence in support of the conclusion that the documented return patterns for the #MeToo event timeline stem from the growing momentum of the cause.

Thus far, our tests have compared the absence of women to the presence of at least three women. Yet, a question remains as to whether the market reaction differs depending upon the presence of a "critical mass" of women as opposed to a "token" presence.

Does the Reaction Differ Depending Upon the Presence of a Critical Mass as Opposed to a Token Presence?

According to Kanter (1977), a minority group cannot exert influence over a larger body of people unless its numerical size reaches a "critical mass." Our choice of designating three to be the minimum critical mass is based on evidence provided by Erkut et al. (2008), Konrad et al. (2008) and Torchia et al. (2011), who conclude that having this number of women serving on corporate boards exacts changes within their firms. These papers use survey data to determine

their critical points. In this section, we take the question to the data and see whether our results hold for critical masses of at least one or two women directors, instead.

Specifically, we create two *TOKENISM* variables: #WOMEN DIRECTORS>= 1 is an indicator for boards with at least one woman from 2012-2016 inclusive, and #WOMEN DIRECTORS>= 2 is an indicator for boards with two or more women over 2012-2016. Using these two variables, we re-run the regressions shown in Table 5 with each variable (in lieu of using #WOMEN DIRECTORS>=3). Specification [1] in Table 7 mirrors our analysis in Table 5, documenting contrasting negative and positive coefficients for EXCLUSIVE and INCLUSIVE firms, respectively. Yet, the inclusion of our TOKENISM variables in the remaining four specifications does not produce the same pattern. That is, these alternative approaches to measuring the inclusion of women on the board do not detect significant reactions by investors.

Combined, these findings in Table 7, along with those reported earlier in Tables 5 and 6, are consistent with several views about the role of women on the board. First, the market does not reward firms for having a "token" woman on its board, as evidenced by the insignificant coefficient on *TOKENISM* (as measured by #WOMEN DIRECTORS>=2 and #WOMEN DIRECTORS>=1, respectively). Second, our findings are consistent with the survey papers cited above. That is, having three or more women directors constitutes a critical mass of women as it relates to creating a corporate culture that values women within the workplace. Finally, these findings corroborate lawmakers' choice of three women as the threshold guiding the inclusion of women on the boards of California-based firms.

How Does the Market Respond to the Appointment of a Woman to an "Exclusive" Board?

Collectively, the evidence suggests that investors respond negatively to the events tracking the timeline of the #MeToo movement. An alternative view of the evidence would suggest that

the negative response potentially reflects investors' fear that this movement will force women into the board room and, in so doing, push the firm out of its optimal board composition. To explore this notion, we examine the market reactions to the appointment of women to boards that have historically excluded women. Our time period is from October 2017 (the beginning of the #MeToo movement) through December 2018.

Table 8 documents the cumulative abnormal returns for three windows surrounding the announcement dates (day 0): day 0 only, days [-1,0], and days [-1,+1]. We use two methods to determine the event dates. In Panel A, we hand-collect new board announcements by filtering through the firms' 8-Ks (39 announcements), 10-K (1 announcement), and 10-Q (1 announcement). We supplement the search by using Lexis-Nexis to find press releases (5 announcements). We note that of the 46 announcements contained in our sample, 42 encompassed the appointment of one woman only, and 4 firms announced the appointment of 2 women. In Panel B, we use the announcement dates from the BoardEx database. Panel B has 45 of the 46 firms only.

As both panels indicate, there are little to no positive or negative stock market reactions to the appointment of a woman to a previously all-male board of directors. Thus, we find no evidence that investors believe these appointments harm firm value. In fact, we find some marginal evidence that investors respond positively to the addition of women to these boards. This admittedly small sample evidence contradicts the notion that the earlier #MeToo CARs reflect investors' worry that firms would be pushed out of their optimal board structure in an effort to include women.

5. CONCLUSION

In this study, we identify a novel setting in which gender itself may matter to investors. That is, we use gender to measure culture — as opposed to using gender to identify specific skills brought to the table, which has been the focus of prior studies. In so doing, we take board composition as a given and, instead, focus on changes in investors' beliefs about gender-related firm risk — as signaled by the existing composition of the board. This contrasts with prior work, which largely focuses on the addition of women to boards.

To do so, we exploit a shock in investor attention to the issue of sexual misconduct in the workplace to provide evidence that the #MeToo movement revised investors' beliefs about the cost of fostering a culture that excludes women, as reflected by the absence of women directors in the board room. In particular, tracking the timeline of events associated with the #MeToo movement, beginning with the Harvey Weinstein exposé in October of 2017 in the New York Times, we document contrasting market reactions to the movement depending on the existing culture of the firm. While firms that have traditionally excluded women from their board experienced a negative market response as momentum for the cause increased, firms that embraced the inclusion of women on their board enjoyed positive returns as #MeToo events unfolded.

In the context of increased regulatory attention to board gender diversity, as well as the ESG activist campaigns by large institutional investors, our study documents a shift in investors' beliefs about the risks associated with future revelations of misconduct and also about the value of having women in the board room shaping the culture of the firm. In so doing, our findings inform advisors, regulators and other stakeholders as they consider approaches to fostering diversity and inclusion in ways that have a meaningful impact on firm value.

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APPENDIX A ■ #MeToo Event Timeline

In 2006, Tarana Burke coined the phrase "Me Too" in an effort to reach out to sexual abuse survivors. In October of 2017, the phrase (and its hashtag of "#MeToo" on Twitter) became the slogan of the anti-sexual harassment movement. Below is the event timeline for the #MeToo Movement, as chronicled by the Chicago Tribune. This timeline [source: https://www.chicagotribune.com/lifestyles/ct-me-too-timeline-20171208-htmlstory.html] remains the top search result from Google and Bing search engines (using the search terms of "#MeToo" and "timeline"), underscoring the awareness and influence of this source. In the last two columns of this Appendix, we present the average daily abnormal returns and the t-statistics associated with each of the 37 #MeToo movement events, using the Fama-French five-factor model as the benchmark for returns. If an event falls on a weekend, we use the first trading day (Monday) following the event.

No.	Date	Event Description		
E1	5-Oct-17	Actress Ashley Judd accuses media mogul Harvey Weinstein in a breaking story by The NYT.		
E2	12-Oct-17	interview with The Hollywood Reporter of lewd behavior and propositions in 2015.		
Е3	15-Oct-17	Actress Alyssa Milano reignites "Me Too" with the tweet "If you've been sexually harassed or assaulted write 'me too' as a reply to this tweet," and it quickly turned into a movement.		
E4	18-Oct-17	Olympic gymnast McKayla Maroney tweets that she was sexually assaulted by former team doctor Lawrence G. Nassar, who recently has been sentenced to 60 years in federal prison on child pornography charges.		
E5	29-Oct-17	The first accusation against Kevin Spacey lands, with Anthony Rapp claiming that Spacey made sexual advances toward him when he was 14.		
E6	9-Nov-17	Washington Post first publishes investigative piece about Republican Senate nominee Roy Moore's alleged history of preying upon underage girls.		
E7	10-Nov-17	Louis C.K. confirms Nov. 9 NYT report about several women who accused him of sexual misconduct: "These stories are true."		
E8	29-Nov-17	The "Today" show opens with a stunning revelation that co-host Matt Lauer had been fired after NBC received detailed allegations about the anchorman's sexual misconduct.		
E9	30-Nov-17	Garrison Keillor is fired from Minnesota Public Radio after accusations of sexual misconduct. Russell Simmons steps down from his companies after writer Jenny Lumet accuses him of sexual assault in The Hollywood Reporter.		
E10	6-Dec-17	Time magazine names the "Silence Breakers" its 2017 Person of the Year, citing individuals like Tarana Burke and Terry Crews as forces behind this watershed moment.		
E11	7-Dec-17	At the urging his party, U.S. Sen. Al Franken, D-Minn., says he'll resign from Congress amid sexual misconduct allegations. Dylan Farrow pens op-ed about Woody Allen and asks, again, why the slew of sexual misconduct allegations against her adoptive father haven't made more of an impact on his career.		
E12	11-Dec-17	Mario Batali goes on leave from his show and restaurants after four women allege sexual harassment. He offers an apology and says the behavior described in the accusations does "match up" with his actions.		
E13	20-Dec-17	The Los Angeles Times breaks the story of seven men accusing successful theater prodigy		
E14	1-Jan-18	More than 300 women of Hollywood form an anti-harassment coalition called Times Up.		
E15 7-Jan-18		The 75th Golden Globes Awards was held in Beverly Hills, Calif. Many stars wore all black in solidarity with the Time's Up movement and some donned a Time's Up pin designed by stylist and costume designer Arianne Phillips.* On the same day, Oprah Winfrey accepted the Cecil B. DeMille Award for lifetime achievement at the Golden Globes. In her acceptance speech, she mentioned being "inspired by all the women who have felt strong enough and empowered enough to speak up and share their personal stories." She continued, "But it's not just a story affecting the entertainment industry. It's one that transcends any culture, geography, race, religion, politics or workplace."		

No.	Date	Event Description		
E16	11-Jan-18	In interviews with The Los Angeles Times, five women accused Franco, 39, of behavior they found to be inappropriate or sexually exploitative. Four were his students, and another said he was her mentor.		
E17	18-Jan-18	After several prominent figures in the restaurant industry, including celebrity chef Mario Batali, were accused of sexual misconduct, Chicago chefs and restaurateurs spoke out against rampant sexual harassment in kitchens. When asked about the challenges, Beverly Kim, chef/co-owner at Parachute restaurant in Avondale, spoke about "the acceptance of "This is how it is, this is how restaurants are, and you've got to deal with it or you're out.'"		
E18	20-Jan-18	More than a million people took to the streets around the nation for the second annual Women's March. This year's event, held on the anniversary of President Donald Trump's oath of office, focused on disapproval of his administration and policies, as well as encouraging people to vote.		
E19	28-Jan-18	Actor Jeremy Piven was first accused of sexual assault by three women in early November 2017. On Jan. 28, three more women came forward to make allegations against the "Entourage" star. He has denied all allegations.		
E20	3-Feb-18	In a NYT article, actress Uma Thurman accused disgraced movie mogul Harvey Weinstein of forcing himself on her sexually years ago in a London hotel room. Thurman also said that during filming, "Kill Bill" director Quentin Tarantino coerced her into driving a car she believed was faulty, and spitted in her face and choked her in scenes where other people are seen doing it on screen.		
E21	6-Feb-18	Country music star Vince Gill showcased a personal song about sexual abuse at Nashville's Country Radio Seminar. "We're living in a time right now when finally people are having the courage to speak out about being abused," Gill said, sharing his own experience with sexual assault in the seventh grade.		
E22	12-Feb-18	A key staffer in Illinois House Speaker Michael Madigan's political operation made unwanted advances to a female campaign worker and sent her inappropriate phone texts, Madigan acknowledged in cutting the longtime aide loose. Madigan praised Alaina Hampton, below, as a "courageous woman" for coming forward to complain. But in an interview with the Tribune, she said the action took far too long.		
E23	20-Feb-18	Lawyers for Harvey Weinstein said in federal court in New York that a proposed class- action lawsuit filed by six women should be rejected because the alleged assaults took place too long ago and they failed to offer facts to support claims of racketeering. The lawyers cited comments made by Streep, pictured here in 2012, who had said Weinstein had always been respectful in their working relationship. Streep slapped back, saying Weinstein's use of her statement "as evidence that he was not abusive with many OTHER women is pathetic and exploitive."		
E24	25-Feb-18	In a pointed Vanity Fair essay, Monica Lewinsky writes about how she had come to view her affair with Clinton as "a consensual relationship" - and how all the women (and men) now speaking out about sexual misconduct have given her a "new lens" through which to see her own story.		
E25	4-Mar-18	The #MeToo and Time's Up movements were ever present at this year's Oscars ceremony. Host Jimmy Kimmel ribbed Harvey Weinstein and others sullied by harassment scandals in his opening monologue. Three Weinstein accusers Ashley Judd, Annabella Sciorra and Salma Hayek spoke to the effects ushered in by the producer's downfall. "The changes we're witnessing are being driven by the powerful sound of new voices, of different voices, of our voices joining together in a mighty chorus that is finally saying time's up," Judd added.		
E26	12-Mar-18	James Levine, whose 46-year career at the Metropolitan Opera established him as a towering figure in classical music, was fired by the company after an investigation found evidence of sexual abuse and harassment.		
E27	19-Mar-18	Fortune magazine publishes an article detailing the accounts of two women who say Tronc chairman and investor Michael Ferro made unwanted sexual advances toward them in 2013 and 2016 during separate business meetings. Ferro retired from the board of Tronc the same day.		

No.	Date	Event Description			
E28	27-Mar-18	The sexual abuse scandal at Michigan State University widened when authorities charged a former dean with failing to protect patients from sports doctor Larry Nassar, along with sexually harassing female students and pressuring them for nude selfies.			
E29	2-Apr-18	Prosecutors and the defense began picking a jury for Bill Cosby's sexual assault retrial Monday in a #MeToo era that could make the task more difficult. Experts say the movement could cut both ways for the comedian, making some potential jurors more hostile toward him and others more likely to think men are being unfairly accused.			
E30	6-Apr-18	NowThis News released a video of author and motivational speaker Tony Robbins denouncing the #MeToo movement, saying it amounts to little more than women trying to gain "significance" by claiming "victimhood." The comments were made during an event in March.			
E31	16-Apr-18	The NYT and The New Yorker won the Pulitzer Prize for public service Monday for breaking the Harvey Weinstein scandal with reporting that galvanized the #MeToo movement and set off a worldwide reckoning over sexual misconduct in the workplace.			
E32	23-Apr-18	A massage therapist says Stan Lee of Marvel Comics fondled himself and inappropriately grabbed her during arranged massages at a Chicago hotel in 2017, according to a lawsuit filed in Cook County circuit court.			
E33	26-Apr-18	Bill Cosby was convicted of drugging and molesting a woman in the first big celebrity trial of the #MeToo era, completing the spectacular late-life downfall of a comedian who broke racial barriers in Hollywood on his way to TV superstardom as America's Dad.			
E34	10-May-18	Spotify announces it will no longer include the troubled R&B artist R. Kelly on its playlists. His music will still be available, but Spotify will not actively promote it. For months now, the #MuteRKelly campaign has called for an end to Kelly's career amid longstanding allegations of sexual abuse.			
E35	20-May-18	The NYPD confirms their investigation of allegations made against celebrity chef Mario Batali. The following day, Eataly announces that the company is in the process of a full separation from the chef.			
E36	24-May-18	Morgan Freeman has issued an apology for making women feel "uneasy," following a CNN report in which eight women alleged that he sexually harassed them or made inappropriate remarks.			
E37	25-May-18	Harvey Weinstein turned himself in to New York authorities after being charged with rape in the first and third degrees, as well as criminal sexual act in the first degree for forcible sexual acts against two women in 2013 and 2004.			

APPENDIX B ■ Variable Definitions and Sources

Variables	Source	Definition
CAR	CRSP, Fama- French Portfolios and Factors Database, and Kenneth R. French's website	Cumulative abnormal returns over the #MeToo events line. We use different models to compute the cumulative abnormal returns, obtaining daily stock return data from the CRSP database. Cumulative abnormal returns are computed by adding up the daily abnormal returns from the first event to last event day.
CAR_FF5	CRSP and Kenneth R. French's website	Cumulative abnormal returns over the #MeToo events using the Fama-French five-factor model. All daily five factors come from Kenneth French's website. The model is estimated in the following fashion: $r_{it} - r_{ft} = \beta_{i0} + \beta_{i1}(r_{Mt} - r_{ft}) + \beta_{i2} \text{SMB}_t + \beta_{i3} \text{HML}_t + \beta_{i4} \text{RMW}_t + \beta_{i5} \text{CMA}_t + \sum_{k=1}^{37} \delta_{ik} * E_k + \epsilon_{it}.$ E_k indicates the k^{th} #MeToo event date. CAR_FF5= $\sum_{k=1}^{37} \delta_k$. In our main analyses, we estimate the model using stock return data during $10/1/2017$ to $6/30/2017$, inclusively. In our dynamic analyses (i.e., Figure 3), to keep the parameters constant over time, we first estimate the following parameters: $r_{it} - r_{ft} = \beta_{i0} + \beta i_1(r_{Mt} - r_{ft}) + \beta_{i2} \text{SMB}_t + \beta_{i3} \text{HML}_t + \beta_{i4} \text{RMW}_t + \beta_{i5} \text{CMA}_t + \epsilon_{it}$ for the period from $8/5/2016$ through $8/4/2017$. We then compute the benchmark return using the estimated parameters to generate the daily abnormal return.
CAR_FFC4	CRSP, Fama- French Portfolios and Factors Database, and Kenneth R. French's website	Cumulative abnormal returns over the #MeToo events using the Fama-French Carhart four-factor model. The first three factors come from Kenneth French's website and the momentum factor comes from Fama-French Portfolios and Factors Database maintained by WRDS. The model is estimated in the following fashion: $r_{it} - r_{ft} = \beta_{i0} + \beta_{i1}(r_{Mt} - r_{ft}) + \beta_{i2} \text{SMB}_t + \beta_{i3} \text{HML}_t + \beta_{i4} \text{UMD}_t + \sum_{k=1}^{37} \delta_{ik} * E_k + \epsilon_{it}$. E_k indicates the k^{th} #MeToo event date. CAR_FF5= $\sum_{k=1}^{37} \widehat{\delta_k}$.
CAR_FF3	CRSP and Kenneth R. French's website	Cumulative abnormal returns over the #MeToo events using the Fama-French three-factor model. All daily three factors come from Kenneth French's website. The model is estimated in the following fashion: $r_{it} - r_{ft} = \beta_{i0} + \beta_{i1}(r_{Mt} - r_{ft}) + \beta_{i2} \text{SMB}_t + \beta_{i3} \text{HML}_t + \sum_{k=1}^{37} \delta_{ik} * E_k + \epsilon_{it}.$ E_k indicates the k^{th} #MeToo event date. CAR_FF5= $\sum_{k=1}^{37} \widehat{\delta_k}$.
CAR_CAPM_EW	CRSP and Kenneth R. French's website	Cumulative abnormal returns over the #MeToo events using the CAPM model. Data of the first factor, risk-adjusted equal-weighted market return, as well as firm-level stock returns, and risk-free return data, are obtained from CRSP. The model is estimated in the following fashion: $r_{it} - r_{ft} = \beta_0 + \beta_1 (r_{Mt} - r_{ft}) + \sum_{k=1}^{37} \delta_k * E_k + \epsilon_{it}$. E_k indicates the k^{th} #MeToo event date. CAR_FF3= $\sum_{k=1}^{37} \widehat{\delta_k}$.
CAR_CAPM_VW	CRSP and Kenneth R. French's website	Cumulative abnormal returns over the #MeToo events using the CAPM model. Data of the first factor, risk-adjusted value-weighted market return, comes from Kenneth French's website. The model is estimated in the following fashion: $r_{it} - r_{ft} = \beta_0 + \beta_1 (r_{Mt} - r_{ft}) + \sum_{k=1}^{37} \delta_k * E_k + \epsilon_{it}$. E_k indicates the k^{th} #MeToo event date. CAR_FF3= $\sum_{k=1}^{37} \widehat{\delta_k}$.

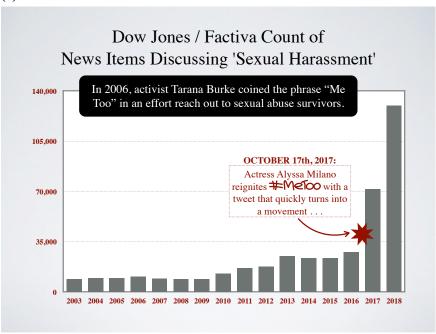
Variables	Source	Definition
CAR_DGTW_EW	CRSP and Compustat	Cumulative abnormal returns over the #MeToo events using the Daniel et al. (1997) model. We divide all CRSP firms with non-missing variables into 5X5X5 portfolios based on market cap, book-to-market, and quarterly stock return quintiles in the preceding quarter. Overall, 125 portfolios are formed for each quarter. For each sample firm on each event day, we compute the event-day abnormal return by subtracting the focus firm's stock return from the equal-weighted stock return of all firms in the benchmark portfolio. We rebalance each portfolio quarterly. CAR_DGTW_EW is computed by summing up all the daily abnormal return for each firm.
CAR_DGTW_VW	CRSP and Compustat	Cumulative abnormal returns over the #MeToo events using the Daniel et al. (1997) model. We divide all CRSP firms with non-missing variables into 5X5X5 portfolios based on market cap, book-to-market, and quarterly stock return quintiles in the preceding quarter. For each sample firm on each event day, we compute the event-day abnormal return by subtracting the focus firm's stock return from the value-weighted stock return of all firms in the benchmark portfolio. We rebalance each portfolio quarterly. The market cap of each firm on 9/30/2017, the last quarter-end before the first #MeToo event determines the weight. CAR_DGTW_VW is computed by summing up all the daily abnormal return for each firm.
INCLUSIVE CULTURE	BoardEx	Indicator equal to 1 if the firm has three or more women directors in every year between 2012 and 2016.
EXCLUSIVE CULTURE	BoardEx	Indicator equal to 1 if the firm does not have any women director in each year between 2012 and 2016.
#WOMEN DIRECTORS=0	BoardEx	Indicator equal to 1 if the firm does not have a women director in the respective period.
#WOMEN DIRECTORS=1	BoardEx	Indicator equal to 1 if the firm has exactly one women director in the respective period.
#WOMEN DIRECTORS=2	BoardEx	Indicator equal to 1 if the firm has exactly two women directors in the respective period.
#WOMEN DIRECTORS>=3	BoardEx	Indicator equal to 1 if the firm has three or more women directors in the respective period.
#WOMEN DIRECTORS>=1	BoardEx	Indicator equal to 1 if the firm has one or more women directors in the respective period.
#WOMEN DIRECTORS>=2	BoardEx	Indicator equal to 1 if the firm has two or more women directors in the respective period.
% WOMEN DIRECTORS	BoardEx	Total number of women directors divided by total number of directors in that year.
% WOMEN EXECUTIVES	ExecuComp	Total number of reported women executives divided by total number of reported executives in that year.
# WOMEN EXECUTIVES	ExecuComp	Total number of reported women executives in that year.
WOMEN CEO	ExecuComp	Indicator equal to 1 if the firm has a women CEO in that year.
NO WOMEN EXEC	ExecuComp	Indicator equal to 1 if the firm has zero reported women executive in that year.
NO WOMEN EXEC _5 YEARS	ExecuComp	Indicator equal to 1 if the firm has zero reported women executive over five years from 2012 to 2016.
WOMEN LEGAL OFF	ExecuComp	Indicator equal to 1 if the firm's legal officer is a woman.
WOMEN HR OFF	ExecuComp	Indicator equal to 1 if the firm's HR officer is a woman.

Variables	Source	Definition
GLASSDOOR LIST	Glassdoor	An indicator equal to 1 if a company has been included in Glassdoor
		List of its "50 Best Places to Work" during any year from 2012
		through 2016, inclusively.
FORTUNE LIST	Fortune	An indicator equal to 1 if a firm appeared on the Fortune list of "100
		Best Companies to Work For" during any year from 2012 through
		2016, inclusively.
TRUVALUE D&I	TruValue Labs	TruValue Labs' long-term Diversity and Inclusion score on the
INSIGHT SCORE	Insight 360	respective date.
TRUVALUE D&I	TruValue Labs	TruValue Labs' short-term Diversity and Inclusion score on the
INPULSE SCORE	Insight 360	respective date.
ARABESQUE	Arabesque	Arabesque's diversity score in the respective quarter.
DIVERSITY SCORE		
BOARD SIZE (ln)	BoardEx	The natural logarithm of number of directors.
# of DIRECTORS	BoardEx	Number of directors.
% INDEP DIR	BoardEx	Total number of independent directors divided by total number of
		directors in that year.
SALES	Compustat	Sales.
SIZE	Compustat	Total assets.
BOOK-TO-MARKET	Compustat	Book value of assets divided by market value of equity plus the book value of liabilities.
LEVERAGE	Compustat	Total liabilities divided by total assets.
ROA	Compustat	Earnings before interest and taxes divided by total assets.
CAPEX	Compustat	Capital expenditures divided by total asset.
RETURN	Compustat	Standard deviation of monthly stock returns.
VOLATILITY	_	·
SALES GROWTH	Compustat	Sales in the current year divided by lagged sales from the prior year less 1.

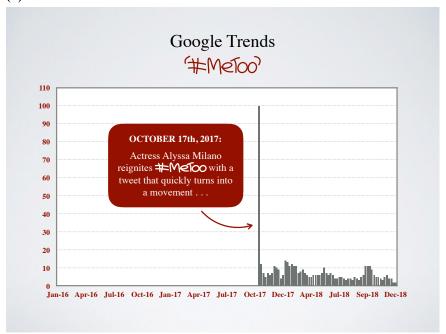
FIGURE 1: Sexual Harassment in the News

In 2006, Tarana Burke coined the phrase "Me Too" in an effort to reach out to sexual abuse survivors. In October of 2017, the phrase (and its hashtag of "#MeToo" on Twitter) became the slogan of the anti-sexual harassment movement. Figure 1a documents the spike in news media mentions of sexual harassment seen in 2017 and 2018, which is consistent with a shock to attention to the issue. Figure 1b documents the spike in the popularity of "#MeToo" on Google Trends. [Sources: Dow Jones / Factiva and Google Trends.]

(a)







[•] Numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means there was not enough data for this term.

Figure 2: Women's Board Representation Over Time

This figure divides the sample firms into subsamples based on the gender composition of their boards within a given year. The graph shows percentages for the full sample of 2,025 firms with available data from 2012 through 2016. Please refer to Appendix B for the variable definitions and data sources.

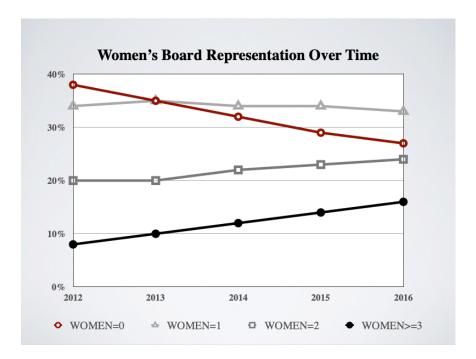
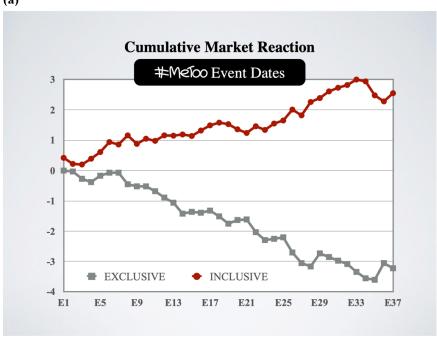


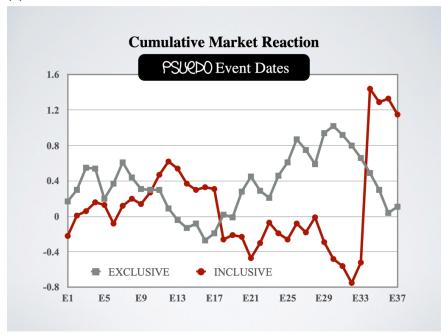
FIGURE 3: Cumulative Market Reaction to the #MeToo Movement

This figure plots the cumulative market reaction to the #MeToo events, comparing the exclusive versus inclusive culture subsamples. The output variable is the Fama-French five-factor model where we estimate the benchmark model using CRSP return data between 8/5/2016 and 8/4/2017, including controls for *ln*(BOARD), LEVERAGE, ROA, % INDEP_DIR, RETVOL, and SIZE. Figure 3A uses the 37 #MeToo events described in Appendix A; Figure 3B uses 37 machine-generated pseudo-events randomly drawn using the seed of "123" in Stata. ¹¹





(b)



-

¹¹ Specifically, Stata generated the following pseudo-event dates: 10/10/2017, 10/23/2017, 10/25/2017, 11/13/2017, 11/14/2017, 11/24/2017, 11/28/2017, 12/5/2017, 12/15/2017, 12/15/2017, 12/18/2017, 12/19/2017, 12/22/2017, 12/29/2017, 1/25/2018, 1/26/2018, 1/31/2018, 2/13/2018, 2/13/2018, 2/13/2018, 2/23/2018, 3/6/2018, 3/9/2018, 3/14/2018, 3/15/2018, 3/28/2018, 3/29/2018, 4/5/2018, 4/12/2018, 4/20/2018, 4/30/2018, 5/7/2018, 5/9/2018, 5/11/2018, 5/14/2018, 5/17/2018, and 5/22/2018.

TABLE 1: Sample Selection

The sample consists of firm-level observations for U.S. public companies with available stock return data, financial statement data and board composition data over the years 2012 through 2016 (inclusive), five years prior to the start of the #MeToo movement in 2017.

	Number of Firms
Compustat CRSP Merged Database in 2016	5,385
Less: non-US incorporated firms	-884
Less: Observations with missing returns data	-1,097
Less: Observations with missing BoardEx coverage	-525
Less: Observations with inconsistent BoardEx data*	-20
Less: Observations with missing control variables	-256
Less: Firms that do not exist in every year between 2012 and 2016	-578
Firms included in cross-sectional tests	2,025

Firms included in cross-sectional tests

* Specifically, we remove instances where hand-collection and review of SEC filings indicate inconsistencies in the BoardEx data.

TABLE 2: Descriptive Statistics

This table presents descriptive statistics for the full sample of 2,025 firms as well as the exclusive and inclusive culture subsamples, testing for differences across the two subsamples. Firm characteristics variables are presented as of 2016. ***, **, * denote significance at the 1%, 5%, and 10% level, respectively, for two-tailed tests comparing the exclusive (i.e., #WOMEN DIRECTORS=0) firms to inclusive (i.e., #WOMEN DIRECTORS >=3) firms as of 2016. Please refer to Appendix B for variable definitions and data sources.

	Full Sa (n=2,	- 2	Exclusive #WO! DIRECT (n=4	MEN ORS=0	Inclusive #WO! DIRECTO (n=1	MEN $ORS >= 3$	Tests of Differences: Exclusive versus Inclusive				
	Mean	Med.	Mean	Med.	Mean	Med.	Mean	Diff.	Med.	Med. Diff.	
ASSETS (\$ Million)	10,868	1,491	1,460	391	39,865	7,706	38,404	***	7,315	***	
SALES (\$ Million)	4,475	764	723	168	15,568	3,218	14,845	***	3,051	***	
ASSET GROWTH	0.08	0.04	0.07	0.02	0.05	0.04	-0.02		0.02		
SALES GROWTH	0.04	0.03	0.01	0.02	0.03	0.02	0.02		0.00		
BOOK-TO-MARKET	0.51	0.45	0.63	0.56	0.42	0.40	-0.21	***	-0.16	***	
LEVERAGE	0.60	0.60	0.50	0.46	0.74	0.78	0.24	***	0.32	***	
ROA	0.06	0.08	0.02	0.06	0.12	0.11	0.10	***	0.05	***	
CAPEX	0.03	0.02	0.03	0.02	0.03	0.03	0.00		0.01		
RETURN VOLATILITY	0.11	0.09	0.13	0.11	0.08	0.07	-0.05	***	-0.04	***	
# of DIRECTORS	8.86	9.00	6.85	7.00	11.77	11.00	4.92	***	4.00	***	
% INDEP DIR	0.79	0.82	0.73	0.75	0.85	0.89	0.12	***	0.14	***	
% WOMEN DIRECTORS	0.14	0.14	0.00	0.00	0.32	0.30	0.32	***	0.30	***	

TABLE 3: Does Gender Representation on the Board of Directors Provide a Signal about the Culture of the Firm?

This table compares executive characteristics (Panel A) and external evaluations of firm culture (Panel B) based upon the absence/presence of women directors on the board (our proxies for exclusive and inclusive cultures). Firm characteristics variables are presented as of 2016. ***, **, * denote significance at the 1%, 5%, and 10% level, respectively, for two-tailed tests comparing the exclusive (i.e., #WOMEN DIRECTORS=0) firms to inclusive (i.e., #WOMEN DIRECTORS >=3) firms as of 2016. Please refer to Appendix B for variable definitions and data sources.

Panel A: Executive Characteristics

	Full Sample	Exclusive Sample:	Inclusive Sample:	Tests of Dif	24
	$(n=1,173)^{\bullet}$	#WOMEN DIRECTORS=0	⟨ #WOMEN DIRECTORS>=3 ?	Exclusive Sa	ample v.
	(n=1,173)	(n=160)	(n=98)	Inclusive S	Sample
	Mean	Mean	Mean	Diff	
# of WOMEN EXECUTIVES	0.55	0.26	0.95	0.69	***
% of WOMEN EXECUTIVES	10%	5%	16%	11%	***
WOMEN CEO	6%	0%	18%	18%	***
NO WOMEN EXEC	58%	76%	41%	-35%	***
NO WOMEN EXEC_5 YEARS	45%	67%	31%	-36%	***
WOMEN LEGAL OFF	10%	7%	12%	5%	
WOMEN HR OFF	5%	1%	5%	4%	**

[◆] Reduced sample size because of ExecuComp data limitations.

Panel B: Culture and Board Committee Characteristics

	Ful	Full Sample		e Sample: DMEN TORS=0	\$ #WO	e Sample: MEN CORS>=3	Tests of Differences: Exclusive versus Inclusive		
	n			Mean	n	Mean	Dif	f.	
GLASSDOOR LIST (any year in 2012-2016)	2,025	3.56%	481	0.21%	122	9.84%	9.63%	***	
FORTUNE LIST (any year in 2012-2016)	2,025	1.23%	481	0.21%	122	1.64%	1.43%	***	
TRUVALUE D&I INSIGHT SCORE 10/1/17	1,139	60.52	146	58.48	98	62.58	4.10	*	
TRUVALUE D&I INSIGHT SCORE 12/31/16	1,091	60.74	134	58.83	96	62.16	3.33	*	
TRUVALUE D&I PULSE SCORE 10/1/17	1,189	60.57	159	57.53	101	62.35	4.83	**	
TRUVALUE D&I PULSE SCORE 12/31/16	1,142	62.05	148	58.95	99	64.21	5.27	**	
ARABESQUE DIVERSITY SCORE 2017Q3	625	57.82	26	43.87	71	66.55	22.67	***	
ARABESQUE DIVERSITY SCORE 2016Q4	612	56.31	24	36.05	70	65.64	29.59	***	

TABLE 4: Do Investors Respond to the #MeToo Movement?

This table examines the average cumulated abnormal returns associated with the full timeline of 37 events detailed in Appendix A. We use 7 alternative models to compute the cumulative abnormal return over the #MeToo events on full sample, as well as the exclusive and inclusive culture subsamples. Please refer to Appendix B for variable definitions and data sources. ***, **, * denote significance at the 1%, 5%, and 10% level, respectively, for two-tailed tests.

	Full Sample (n=2,025)		#WOMEN DIRECTORS=0 (n=481)			Inclusiv #WOMEN DI (n=	Tests of Differences: Exclusive versus Inclusive					
	#MeToo	CAR	t	#МеТоо С	AR	t	#MeToo CA	4R	t	Mean D	iff.	t
FF5	-0.60%		-1.53	-3.25%	***	-3.17	2.33%	***	2.62	5.58%	***	2.66
FFC4	-0.76%	**	-1.96	-3.76%	***	-3.71	2.56%	**	2.43	6.32%	***	3.07
FF3	-0.48%		-1.25	-3.60%	***	-3.55	3.37%	***	3.19	6.96%	***	3.34
CAPM_EW	-1.98%	***	-5.11	-5.53%	***	-5.44	2.53%	***	2.57	8.06%	***	3.87
CAPM_VW	-1.77%	***	-4.55	-5.34%	***	-5.25	2.73%	**	2.30	8.07%	***	3.87
DGTW_EW	-0.44%		-1.33	-2.22%	***	-2.60	2.08%	**	2.24	4.30%	**	2.45
DGTW_VW	-0.32%		-0.97	-2.06%	**	-2.39	2.52%	***	2.64	4.58%	**	2.58

TABLE 5: Does the Market Reaction to the #MeToo Movement Vary Depending Upon the Culture of the Firm?

This table examines whether the market reaction to the #MeToo movement varies based on the exclusive versus inclusive culture of the firm. The dependent variable is the cumulated abnormal returns associated with the full timeline of 37 events detailed in Appendix A, computed using alternative models to compute the benchmark returns: [1] Fama-French 5-factor model; [2] Fama-French Carhart 4-factor model; [3] Fama-French 3-factor model; [4] CAPM model (equal-weighted market return); [5] CAPM model (value-weighted market return); [6] DGTW model (equal-weighted return); [7] DGTW (value-weighted return). We included industry fixed effects based on the Fama-French 48 industry classifications. We measure all control variables based on their five-year averages ending in 2016. ****, ***, ** denote significance at the 1%, 5%, and 10% level, respectively, for two-tailed tests. Please refer to Appendix B for the variable definitions and data sources.

	Dependent Variable = #MeToo CAR													
	FF5	5	FFC	FFC4		FF3		CAPM_EW		CAPM_VW		DGTW_EW		_ VW
	[1]		[2]		[3]		[4]		[5]		[6	[]	[7]
EXCLUSIVE	-3.25	***	-2.95	**	-3.21	***	-3.19	***	-3.22	***	-2.82	**	-2.84	**
	[-2.65]		[-2.39]		[-2.62]		[-2.60]		[-2.62]		[-2.57]		[-2.57]	
INCLUSIVE	2.19	*	2.08	*	2.54	**	2.42	**	2.39	**	2.54	**	2.85	***
	[1.91]		[1.83]		[2.17]		[2.09]		[2.06]		[2.50]		[2.73]	
Log(BOARD SIZE)	-0.08		0.13		0.03		0.50		0.57		-3.60	**	-4.07	**
	[-0.04]		[0.07]		[0.02]		[0.26]		[0.29]		[-2.20]		[-2.42]	
LEVERAGE	6.18	***	5.63	**	6.75	***	7.32	***	7.35	***	4.70	**	4.40	**
	[2.61]		[2.39]		[2.85]		[3.12]		[3.13]		[2.35]		[2.15]	
ROA	0.36		2.06		2.65		3.33		3.39		0.92		-0.11	
	[0.06]		[0.35]		[0.45]		[0.56]		[0.57]		[0.18]		[-0.02]	
% INDEP DIR	1.04		2.17		1.41		0.99		1.05		0.90		1.01	
	[0.31]		[0.64]		[0.42]		[0.29]		[0.31]		[0.28]		[0.32]	
RETURN VOLATILITY	-4.33		-11.07		-6.61		-15.37		-15.08		-6.29		-2.62	
	[-0.33]		[-0.83]		[-0.52]		[-1.14]		[-1.12]		[-0.44]		[-0.18]	
SIZE (ASSETS)	0.00		0.00		0.00		0.00		0.00		0.00		0.00	
	[-0.78]		[-0.93]		[-1.14]		[0.59]		[0.63]		[-1.19]		[0.15]	
п	2	2,025	2.	,025	2	2,025	2	2,025	2	2,025		2,025	_	2,025
F-test: Pr[EXCLUSIVE=INCLUSIVE]	(0.001	0.	.003	(0.001	(0.001		0.001		0.001		0.000
Adjusted R ²		0.03		0.03		0.04		0.05		0.05		0.04		0.03

TABLE 6: Does the Same Cross-Sectional Variation Emerge Using Pseudo Event Dates?

This table re-estimates the analysis provided in Table 5 using randomly assigned pseudo-event dates occurring during the same time period as the #MeToo Movement. The dependent variable is the cumulated abnormal returns associated with 37 machine-generated pseudo-events randomly drawn using the seed of "123" in Stata, computed using alternative models to compute the benchmark returns: [1] Fama-French 5-factor model; [2] Fama-French Carhart 4-factor model; [3] Fama-French 3-factor model; [4] CAPM model (equal-weighted market return); [5] CAPM model (value-weighted market return); [6] DGTW model (equal-weighted return); [7] DGTW (value-weighted return). ¹² We included industry fixed effects based on the Fama-French 48 industry classifications. We measure all control variables based on their five-year averages ending in 2016. ***, ***, * denote significance at the 1%, 5%, and 10% level, respectively, for two-tailed tests. Please refer to Appendix B for the variable definitions and data sources.

	Dependent Variable = #MeToo CAR												
	FF5		FFC4		FF3		CAPM_EW	CAPM	_VW	DGTW_	EW	DGTW_V	vw
	[1]		[2]		[3]		[4]	[5]		[6]		[7]	
EXCLUSIVE	1.08		0.82		1.08		1.08	1.11		0.56		0.39	
	[0.84]		[0.64]		[0.83]		[0.84]	[0.86]		[0.48]		[0.39]	
INCLUSIVE	0.00		0.47		0.04		0.15	0.16		1.14		0.81	
	[0.00]		[0.22]		[0.02]		[0.06]	[0.07]		[0.61]		[0.43]	
CONTROLS?	Y	es	Ye	es	Ye	s	Yes		Yes		Yes	,	Yes
n	2,0	25	2,02	25	2,02	5	2,025	2	2,025	2,	,025	2,	025
F-test: Pr[EXCLUSIVE=INCLUSIVE]	0.2	33	0.22	25	0.20	8	0.226	().233	0.	.664	0.	616
Adjusted R ²	0.	03	0.0)3	0.0	4	0.05		0.05		0.05	C	0.03

 $^{^{12} \} Specifically, \ Stata \ generated \ the following \ pseudo-event \ dates: 10/10/2017, 10/23/2017, 10/25/2017, 11/13/2017, 11/14/2017, 11/24/2017, 11/28/2017, 12/5/2017, 12/15/2017, 12/18/2017, 12/19/2017, 12/19/2017, 12/29/2017, 1/25/2018, 1/26/2018, 1/31/2018, 2/13/2018, 2/13/2018, 2/14/2018, 2/23/2018, 3/6/2018, 3/9/2018, 3/14/2018, 3/15/2018, 3/28/2018, 3/29/2018, 4/5/2018, 4/5/2018, 4/20/2018, 4/30/2018, 5/7/2018, 5/9/2018, 5/11/2018, 5/11/2018, 5/17/2018, and 5/22/2018.$

TABLE 7: Does the Reaction Differ Depending Upon the Presence of a Critical Mass as Opposed to a Token Presence?

This table repeats our earlier analysis (provided in Table 5, Column [1]), but refines our measurement of gender representation to consider whether results hold for critical masses of at least 1 woman or 2 women directors (as opposed to the threshold of 3 used in prior analyses). Specification [1] mirrors our analysis in Table 5 [1]. Specification [2] and [3] provide results using #WOMEN DIRECTORS>=2 during every year between 2012 and 2016 as the threshold. Specification [4] and [5] decrease the critical mass threshold to >=1. ***, **, * denote significance at the 1%, 5%, and 10% level, respectively, for two-tailed tests.

	FF	5	FF	5	FF	F5	FF:	5	FF	5
	[1]		[2]		[3]	[4]		[5]
EXCLUSIVE (0 WOMEN)	-3.25	***	-3.30	***	-3.24	***	-3.62	**	-3.53	**
	[-2.65]		[-2.68]		[-2.63]		[-2.51]		[-2.45]	
INCLUSIVE (>=3 WOMEN)	2.19	*	2.51	**			2.27	**		
	[1.91]		[2.03]				[1.98]			
TOKENISM? (>=2 WOMEN)			-0.56		0.01					
			[-0.61]		[0.02]					
TOKENISM? (>=1 WOMAN)							-0.62		-0.50	
							[-0.57]		[-0.46]	
CONTROLS?		Yes								
n		2,025		2,025		2,025	2	2,025		2,025
Adjusted R ²		0.06		0.06		0.06		0.06		0.06

TABLE 8: How Does the Market Respond to the Appointment of a Woman to an "Exclusive" Board?

This table addresses the question of whether the market reaction to #MeToo movement reflect investors' fears that the movement will force women into the board room, pushing the firm out of its optimal board composition. In particular, we calculate the market reaction to the appointment of women to boards that have historically excluded women. Panel A examines the cumulative abnormal returns surrounding 46 hand-collected appointment dates identified via firms' SEC filings and supplemented with searches of Lexis-Nexis. Panel B uses the 45 announcement dates available in the BoardEx database.

Panel A: Appointment dates obtained from press releases

Cumulative Abnormal Returns Surrounding the Appointment Dates										
Window	[0]	[0,1]	[-1,1]							
Average CAR	0.05%	0.85%*	0.85%							
t-value	0.15	1.70	1.63							
p> t	0.88	0.10	0.11							
n	46	46	46							

Panel B: Effective dates obtained from BoardEx

Cumulative Abnormal Returns Surrounding the Announcement Dates										
Window	[0]	[0,1]	[-1,1]							
Average CAR	0.31%	0.43%	0.54%							
t-value	1.20	1.26	1.28							
<i>p</i> > <i>t</i>	0.24	0.21	0.21							
n	45	45	45							

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