**Article:**
Al-Shaer, H and Harakeh, M orcid.org/0000-0003-3294-4391 (2020) Gender Differences in Executive Compensation on British Corporate Boards: the Role of Conditional Conservatism. The International Journal of Accounting, 55 (01). 2050002. ISSN 1094-4060

https://doi.org/10.1142/s109440602050002x

# Gender Differences in Executive Compensation on British Corporate Boards: The Role of Conditional Conservatism

**Habiba Al-Shaer**
*Newcastle University*

Email: habiba.al-shaer@newcastle.ac.uk

**Mostafa Harakeh**

*Lebanese American University*

Email: mostafa.harakeh@lau.edu.lb

***(Date accepted: 2 July 2019)***

**ABSTRACT:** We exploit the effectiveness of the Davies Report (2011), which urged FTSE 350 companies to increase female representation on corporate boards to examine the potential effect that this may have on the gender pay differential at the executive level. To this end, we employ a multivariate regression and a difference-in-differences approach that compare executive compensation between all-male executive boards and boards with at least one female executive. Using a sample of FTSE 350 companies that spans the period 2008-2015, we find that the differential executive compensation exists in bonus and equity compensation following the Davies Report (2011). Given that the differential compensation exists in the components that are primarily determined by the firm's reported earnings and that female directors are prone to exhibit higher conditional conservatism in their financial reporting, we examine whether the firm's financial reporting practice plays a role in determining the differential executive compensation. Our investigation reveals that the presence of female executive directors on board makes the effect of conditional conservatism more prominent, resulting in lower bonus and equity-based compensation.

**Keywords:** Executive compensation; female executives; conditional conservatism; Davies Report.

## 1. Introduction

Gender differences in compensation for executive directors and other employees have been an important subject that attracts the attention of regulators, social media campaigners, and academics. The gender pay gap in the UK has decreased in recent years. According to the Office for National Statistics, the average hourly pay for full-time employees was 8.6% less for women than for men in April 2018, which is the lowest since the survey began in 1997 when the gap was 17.4% (Office for National Statistics, 2018). The UK Prime Minister suggested that in addition to gender pay gap reporting, public companies must move toward corporate disclosure for gender pay gap and provide an action plan for closing the gap.[1] Moreover, regulators are discussing reforms to mandate equal pay reviews (Carter, Franco, & Gine, 2017). In fact, some European countries, including Norway, Spain, and France, have maintained a mandatory gender quota of 40% (Bugeja, Matolcsy, & Spiropoulos, 2016).

In the UK, the British government has applied a softer law by introducing non-binding gender quotas in their corporate governance code under the 'comply or explain' principle (Terjesen, Aguilera, & Lorenz, 2015). Specifically, the introduction of the Davies Report (2011) emphasizes gender diversity in boardrooms and recommends publicly listed companies to establish an internal policy concerning boardroom gender diversity by setting measurable objectives for its implementation. As such, the Davies Report (2011) creates an exogenous variation in the board structure, where the board composition normally is endogenous to the firm (Benjamin Hermalin & Weisbach, 1998), by urging firms to increase the presence of female directors on their boards. In the current study, we exploit this exogenous change in the structure of the British corporate boards to study gender differences in executive compensation and the channels through which these differences articulate.

[1] The 2nd Annual Gender Pay Gap Conference took place on October 12, 2017 to help employees benchmark their work against the best in the UK.

A number of studies examine gender differences on corporate boards as a potential determinant for differences in executive compensation (Adams & Ferreira, 2009; Carter et al., 2017). However, the literature on the channels through which gender differences lead to differential executive compensation is limited (Birnberg, 2011). In this context, our study identifies the difference in financial reporting practice between female and male executives as a determinant of the gender differences in the compensation paid to executive directors on the board. Gender diversity is a main dimension of the board structure that is documented to have a significant effect on risk taking (Carter et al., 2017), earnings management (Carter, Lynch, & Zechman, 2009; Cheng & Warfield, 2005; Gull, Nekhili, Nagati, & Chtioui, 2018), and accounting conservatism (Francis, Hasan, Park, & Wu, 2015), among other financial reporting attributes (see the survey of Post & Byron, 2015). We focus on accounting conservatism, specifically conditional conservatism, as prior studies identify conditional conservatism as an efficient tool for contracting between managers and investors (Ball, 2001; Iwasaki, Otomasa, Shiiba, & Shuto, 2018; Watts, 2003), where the executive compensation structure is a focal point in contracting between both parties (Khan & Watts, 2009). To the extent female executives are expected to be more conservative in their financial reporting practice (Francis et al., 2015), we investigate how conditional conservatism contributes to the differential executive compensation.

In principle, conditional conservatism measures the asymmetric timeliness of incurring losses and asset impairments in contemporaneous earnings (Basu, 1997). In the absence of conditional conservatism, managers are more likely to bias their future cash flow estimates positively and inflate their earnings to receive greater compensation (Watts, 2003). To the extent that executive compensation partially depends on reported earnings (i.e., incentive-based compensation), the level of conditional conservatism exhibited in financial reporting is more likely to affect executive pay. In relation to gender differences in the

financial reporting practice, Francis et al. (2015) find that female executives report more conservatively than their male counterparts and that females are more risk averse in nature. We establish a link between conditional conservatism and the gender of executive directors to investigate the argument that firms with female executive directors on board pay lower executive compensation due to more conservative financial reporting.

Using a sample of the FTSE 350 index spanning the period 2008-2015, we first demonstrate graphically the increased presence of female executive directors on boards, indicating that UK companies are increasingly following the recommendation of the Davies Report (2011). We then examine the impact of the increased presence of female executives on the sum of executive compensation paid to all executive directors on the board. In doing so, we partition total executive compensation into salary, bonus, and equity-based compensation. We also introduce a fourth component, which is the sum of bonuses and equity compensation since both components are a function of reported earnings, i.e., incentive-based compensation. We run our analyses using a multivariate regression approach and a difference-in-differences approach in attempt to move one step forward from association to causality.

We find that prior to the Davies Report (2011), boards with at least one female executive director (with-female boards hereafter) pay lower salaries, bonuses, and equity compensation to their executive directors compared to boards with only male executive directors (all-male boards hereafter). However, following the Davies Report (2011), this difference in executive pay has diminished in salaries paid but not in bonus and equity compensation. To the extent incentive-based compensation is mainly determined by the firm's reported earnings and given that female executive directors report more conservatively than their male counterparts (Francis et al., 2015), we examine the potential role for conditional conservatism in the negative association between female executive directors and executive compensation. Our results suggest that the financial reporting practices of female executive

directors make the effect of conditional conservatism more significant, resulting in relatively lower reported earnings and accordingly in lower incentive-based compensation. We argue that female executives play a moderating role on incentive-based compensation through the higher conditional conservatism exhibited in their financial reporting practices. Our findings hold for a matched sample analysis using propensity score matching (PSM), for 2SLS instrumental variable approach, and for a set of sensitivity checks that we include in an online appendix.

This analysis extends prior research and informs the debate on the existence of gender differences in executive compensation. We provide evidence on the effects of two channels contributing to the differential executive compensation: (1) the lack of gender diversity at the executive level in the boardroom and (2) the differential conditional conservatism exhibited in financial reporting practices of all-male boards versus with-female boards. Our study makes the following contributions. First, most of the work in this area employs US data. However, the UK has a different institutional context with a 'comply or explain' corporate governance code (FRC, 2016). Prior literature recommends future research to examine the effects of softer efforts, such as 'comply or explain' policies (Adams, De Haan, Terjesen, & Van Ees, 2015), and suggests that scholars need to consider the evolving nature of gender and diversity issues more generally as corporate governance codes become revised and updated (Terjesen et al., 2015). Second, we investigate the factors related to financial reporting practices that might underlie the observed gender differences in executive compensation. Specifically, we examine whether the fact that female executive directors are more conditionally conservative in their financial reporting than their male peers results in a different level of discretion over reported earnings and accordingly in a different compensation structure. Third, our study uses a more recent sample of executive firm-years compared to the samples examined in prior research as well as a variety of tests and methods.

The reminder of the paper is structured as follows. Section 2 summarizes the related literature and develops our hypothesis. Section 3 describes our methodology, including variable measurement, model specification, and sample selection. Section 4 discusses our findings along with the robustness tests. Section 5 presents the study's conclusion.

## 2. Background Literature and Hypothesis Development

We start this section by discussing the UK institutional context to note the importance of the Davies Report (2011) as an empirical setting. We then survey the most relevant studies that examine gender differences in executive compensation among publicly listed firms and discuss corporate board gender diversity matters in the context of executive pay differential. Finally, we review the literature on gender differences in financial reporting practices since we hypothesize that the attitude of female executives toward conservative accounting practices is a potential determinant of gender differences in executive compensation. Several theories from various fields provide insight into the gender diversity topic. We adopt an interdisciplinary approach and draw from institutional theory, socio-economic theory, and social psychology theory to provide the theoretical basis for the hypothesis tested.

### 2.1. The UK institutional context

Institutional theory suggests that institutional contexts shape people's actions and decisions. The theory describes how organizational practices are driven by 'fit' to the environment such as actors' actions, decisions, and behaviors are constrained by their contexts' technical pressures and societal expectations (Grosvold, Rayton, & Brammer, 2016; Meyer & Rowan, 1977; Terjesen et al., 2015; Thams, Bendell, & Terjesen, 2018). In the UK, national discourse is centered on individual business efficacy with the 'comply or explain' approach to governance and cooperative approach to board diversity (FRC, 2016). FTSE 350 companies have been encouraged to promote greater female representation on boards after the publication of the Davies Report, "*Women on Boards*," in Feb 2011. The Davies Report states that diversifying the

board with the best people from a range of perspectives and backgrounds should help improve business performance and promote equal opportunities for women (Davies Report, 2011).[2] Although the code is non-binding, firms have the legal obligation and normative pressure to comply with the code and internalize its recommendations given industry standards and stakeholder expectations (Terjesen et al., 2015). The UK approach is in accordance with institutional theory where institutions adopt established structures for legitimacy and survival in the institutional environment (Meyer & Rowan, 1977). Once a norm is endorsed by all parties, the social peer pressure is sufficient to enforce it (Terjesen et al., 2015).[3] Companies have become increasingly involved in the challenge to increase the number of women on British boards using techniques such as mentoring, business led targets and talent identification schemes (Vinnicombe, Doldor, & Turner, 2014). The latest Davies Report (2015) reviews board gender diversity and checks the implementation of policy concerning boardroom diversity. The report states, *'There are more women on FTSE 350 boards than ever before, with representation of women more than doubling since 2011 - now at 26.1% on FTSE 100 boards and 19.6% on FTSE 250 boards. We have also seen a dramatic reduction in the number of all-male boards. There were 152 in 2011. Today, there are no all-male boards in the FTSE 100 and only 15 in the FTSE 250'.* This evidence strongly supports the effectiveness of the Davies Report (2011) in increasing the number of female directors on British boards.

**2.2. Board gender diversity and differential executive compensation**

Theoretically, gender differences in executive compensation can be explained under the taste-based discrimination theory developed by (Becker, 1971), which suggests that employers with distaste of hiring certain groups will pay these employees lower wages than equally qualified

[2] The recently amended corporate governance code by the Financial Reporting Council (FRC) was heavily influenced by the Davies Report, showing recommendations vis-à-vis board diversity (FRC, 2016).

[3] Terjesen et al. (2015) argue there are path-dependent policy initiatives for gender equality in the corporate governance codes. Once a certain path has been chosen, future decisions are significantly influenced by the previous ones, and it is difficult to reverse course to the initial path due to high costs.

employees in the more preferred group. Thus, at the corporate level, if companies' owners and top managers have a taste of discrimination against female executives, females will receive lower pay than their male peers with similar qualifications (Aigner & Cain, 1977; Altonji & Blank, 1999; Becker, 1971; Bergmann, 1974). Differences in pay can also be explained under the social identity theory (Tajfel & Turner, 1979) and the similarity-attraction theory (Berscheid & Walster, 1969), which propose that people create social categories based on individual differences (i.e., gender) and behave in favor of their category against other categories. Moreover, the critical mass theory of Kanter (1977) predicts that when the number of female directors is small relative to their male peers, female directors are treated as "tokens" that represent their group. These "tokens" will follow the majority and obey their consensus in an attempt to seek acceptance (Eagly & Carli, 2003). Female executives are more likely to fight discrimination when they have more presence and support. Thus, more female representation in the boardroom is expected to reduce the gender pay differential since female directors are less likely to be biased against other female members (Carter et al., 2017; Elkinawy & Stater, 2011).

Prior literature on gender pay differential among executives presents mixed findings. Bertrand & Hallock (2001) examine the gender compensation gap among high-level executives and report significant executive gender pay gaps using a sample of US firms during 1992-1997. The study argues that a larger proportion of the gap can be explained by the fact that women managed smaller companies and were less likely to become a CEO, a chair, or a president of a company. Muñoz–Bullón (2010) revisits the findings of Bertrand & Hallock (2001) over a longer period (1992-2006) and finds that female executives earn lower total pay after controlling for tenure, job title, firm size, and performance. Also in the US context, Adams, Gupta, Haughton, & Leeth (2007) find that the gender gap in compensation exists for top-level boardroom executives for 1500 large US firms from 1992-2004. However, their study shows no evidence of a gender pay gap for people holding the CEO position. Similarly,

Perryman, Fernando, & Tripathy (2016) find that female executives get paid less than their male colleagues for a sample of US companies during 1992-2012. However, increasing the proportion of females in the top management team decreases wage disparity between genders at the executive level. Bugeja, Matolcsy, & Spiropoulos (2012) examine whether a gender pay gap exists at the CEO level based on 291 US firms for the period 1998-2010. They find no association between CEO pay and gender for both the total sample and a matched-sample, after controlling for CEO characteristics, board characteristics, and economic characteristics. However, Mohan & Ruggiero (2003, 2007) find that female CEOs receive lower compensation than male CEOs do in publicly traded US companies.

One common feature of the reviewed studies thus far is that they all focus on one specific institutional context, the US context. The US regulations on corporate governance are relatively rigid, therefore, their findings cannot be generalized to other institutional contexts such as the UK. We identified one study that focuses on the UK institutional context, that is Kulich, Trojanowski, Ryan, Haslam, & Renneboog (2011). Their study uses a sample of UK-listed firms during a seven-year period, 1998-2004, and investigates the gender pay gap in leadership positions by examining the structure of executive compensation packages and the mitigating effect that financial performance may have on these packages. Their findings show that managerial compensation for male executives is more performance-sensitive and that male executives are paid larger bonuses than female executives. The study argues that risk taking and confidence are behind the inequalities in pay between male and female directors. In our paper, we use a more recent period than Kulich et al. (2011), that is 2008-2015, and investigate the association between the increased presence of female executive directors on the board and executive compensation.

The studies reviewed thus far focus on the gender pay differential *per se*; however, in what follows, we review the studies that examine the association between board gender diversity and executive pay differential. Few corporate governance studies examine the

aforementioned association, which is directly related to our study. Adams & Ferreira (2009) find evidence of greater CEO performance-related turnover in more diverse boards, but they find no evidence of gender pay differentials in CEO compensation for a sample of US companies during the period 1996-2003. Elkinawy & Stater (2011) investigate gender differences in executive compensation of US firms during the period 1996-2004 and the extent to which these differences vary with firm-specific and board characteristics. The authors find that there exists a 5% pay gap in salaries between male and female executives and attribute this gap to the male-dominated governance structure. Carter et al. (2017) use a sample of US firms and document a significant gap in salary and total compensation between female and male executives during the period 1996-2010. The study concludes that female risk aversion contributes to the gender pay gap in the US and that greater gender diversity on boards tends to diminish the pay gap.

Corporate governance literature on board gender diversity matters argues that the increased presence of female directors might affect executive compensation through better quality governance. The presence of female directors in the boardroom contributes to effective corporate governance structure (Garcia Lara, Garcia Osma, Mora, & Scapin, 2017; Terjesen, Sealy, & Singh, 2009). Board gender diversity could be seen as a better monitor of managers because such diversity increases board independence (Adams et al., 2015; Al-Shaer & Zaman, 2016) and promotes greater board attendance and greater accountability for managers (Adams & Ferreira, 2009). Evidence from the literature shows the impact of board gender diversity on organizational outcomes. Board gender diversity enhances the transparency of financial reports and reduces information asymmetry (Gul, Hutchinson, & Lai, 2013). Gender-diverse boards are associated with less earnings management activities (Abbott, Parker, & Presley, 2012; Barua, Davidson, Rama, & Thiruvadi, 2010; Gull et al., 2018; Krishnan & Parsons, 2008), higher quality of reported earnings (Srinidhi, Gul, & Tsui, 2011), improved informativeness of stock prices due to increased public disclosure (Gul, Srinidhi, & Ng, 2011),

and a higher analyst earnings forecast accuracy (Gul et al., 2013). To the extent better corporate governance diminishes the gap in executive pay (Adams & Ferreira, 2009), we expect more female presence on the board to be associated with lower difference in executive compensation between all-male and with-female boards. The overall evidence from aforementioned studies paves the way for the discussion of the interplay between the gender of executive directors and the firm's financial reporting practice, which triggers further investigation of whether the financial reporting practice of female executives contributes to the differential executive pay.

**2.3. Gender differences in financial reporting practices**

Several theoretical models address the gender differences in personality traits (Costa, Terracciano, & McCrae, 2001; Feingold, 1994), in which these traits are found to determine gender differences in financial reporting practices (Carter et al., 2017; Francis et al., 2015; Gull et al., 2018; Srinidhi et al., 2011). The sociocultural model of gender differences posits that social and cultural factors such as social roles and gender stereotypes directly produce gender differences in personality traits (Feingold, 1994). Gender stereotypes are the foundations of gender bias in work settings, which limit women's upward mobility due to more conservative behavior and higher risk aversion (Heilman, 2001; Maccoby & Jacklin, 1974). Ely (1995) shows that women's social identities in their workplaces reflect prevailing gender stereotypes, particularly in organizations with low proportions of women in senior positions, where men exhibit higher levels of assertion and dominance. In the same vein, the biological model posits that there is a strong biological basis underlying individual differences in personality traits. It relates personality differences to innate temperamental differences between sexes. For example, males' aggression is attributed to androgenic hormones, while females' high levels of depression and anxiety are due to the additional X chromosome (Costa et al., 2001; Feingold, 1994).

Evidence from the literature suggests differential financial reporting practices due to the gender of the executive. In the general population, females are likely to behave differently from their male counterparts given their different traits, such as less aggressiveness, less overconfidence, higher conservatism, higher risk aversion, and more ethical behavior (e.g., Levin, Snyder, & Chapman, 1988; Sapienza, Zingales, & Maestripieri, 2009). Women are less overconfident than males in various domain-specific tasks (e.g., Barber & Odean, 2001; Niederle & Vesterlund, 2007). Such traits determine the differential gender behavior in the boardroom and enhance the monitoring role of female directors (Garcia Lara et al., 2017; Ho, Li, Tam, & Zhang, 2015; Peni & Vähämaa, 2010; Srinidhi et al., 2011). Levi, Li, & Zhang (2014) suggest that firms with females at top executive levels engage in less aggressive acquisitions, as measured by their lower propensity to initiate acquisition bids. Similarly, Huang & Kisgen (2013) find that male CEOs undertake more acquisitions and issue more debt than female CEOs, concluding that male CEOs exhibit higher overconfidence in corporate decision-making than their female peers. Faccio, Marchica, & Mura (2016) find that firms managed by female CEOs have less volatile earnings and lower leverage and engage less in corporate risk-taking. The studies reviewed thus far indicate significant differences in financial reporting practices between female and male directors.

In direct relation to our study, Francis et al. (2015) investigate the effect of CFO gender on accounting conservatism and find that female CFOs are more conservative in their financial reporting practices, which is associated with less equity-based compensation.[4] Our paper relates conditional conservatism to the gender of executive directors and extends the recent work by Francis et al. (2015) by investigating whether the interaction between gender differences in the accounting practice and board gender diversity determines differential

[4] This association would not necessarily imply causality as it could be the results of firms with larger percentage of female directors also having other governance provisions that improve the financial reporting process (Francis et al., 2015).

executive compensation. However, different from Francis et al. (2015), who focus on CFO gender effects on accounting conservatism, we include the entire executive corporate suite, which allows us to examine the gender effect of a much larger sample of individuals and to estimate its impact on executive compensation by utilizing higher cross-sectional variation in the board and firm characteristics that are expected to affect executive pay.

In this study, we focus on accounting conservatism because it is one of the most influential accounting principles (Sterling, 1976), which reflects risk taking behavior in firms (Iwasaki et al., 2018; Watts, 2003). More specifically, we examine conditional conservatism which has increased in the last 40 years (Collins, Chen, & Sam, 2019; Penalva & Wagenhofer, 2019), implying an increasing importance for this accounting attribute. In principle, conditional conservatism is the differential verifiability required for recognition of profits versus losses (Watts, 2003). It is also referred to as "the accountant's tendency to require a higher degree of verification to recognize good news (positive returns) as gains than to recognize bad news (negative returns) as losses" (Basu, 1997). Under conditional conservatism, the manager recognizes profits only when having solid verification and *anticipates* losses and expenses before being verified. As such, more conservative reporting is associated with more loss recognition and, accordingly, lower reported earnings.[5]

The UK executive compensation structure relies to a large extent on performance-based pay, whether it is in the form of long-term incentive plan or cash bonuses (Garcia Lara et al., 2017; Kulich et al., 2011).[6] As mentioned earlier, conditional conservatism requires higher verification standards for recognizing gains compared to those required for recognizing losses. Accordingly, conditional conservatism has an impact on the effectiveness

[5] As an elaborative example, consider a high-tech firm that decides to write-down outdated inventories due to a technological breakthrough in the market (i.e., bad news). This decision will cause a decline in the reported earnings.
[6] Please visit: https://www.verdict.co.uk/heres-executive-pay-changed-uk-two-decades/

of how shareholders monitor firm management by preventing managers from inflating their earnings and obtaining excess compensation (Ball, 2001; Iwasaki et al., 2018; Ruch & Taylor, 2015; Watts, 2003). In the absence of conditional conservatism, managers can use their superior information and adopt opportunistic accounting policies that inflate their net assets and earnings to receive greater payments under incentive-based compensation plans (Ball, 2001; Iwasaki et al., 2018; Watts, 2003).[7] Accordingly, if higher levels of accounting conservatism result in lower contemporaneous earnings through increasing the likelihood of incurring losses in a timelier manner, then the incentive-based compensation should be lower when the degree of accounting conservatism is higher.[8] As a result, if female executives are more conservative in their financial reporting practice, we would expect that they are likely to receive lower incentive-based compensation than their male peers (with-female board is expected to receive lower executive compensation than all-male board). In light of the aforementioned discussion, we propose the following hypothesis:

*H1: The negative association between executive compensation and the presence of female executive directors increases in magnitude when conditional conservatism in financial reporting is higher.*

**3. Methodology and Sample**

Our empirical strategy comprises two main approaches, a multivariate analysis and a difference-in-differences analysis. We apply both approaches on all our main tests since the multivariate analysis identifies associations while the difference-in-differences analysis helps us get closer to establishing causality. Before testing our hypothesis we first examine the change in the association between executive compensation and female presence on boards

[7] In this context, Watts (2003) theorizes that accounting conservatism is an efficient tool that reduces the likelihood that managers will expropriate the firm's net assets rather than invest in profitable projects, which creates a greater demand by investors for accounting conservatism.

[8] Despite that conditional conservatism is expected to affect only bonuses and equity compensation, which are mainly determined by reported earnings, we run all our analyses, however, using all the components of executive compensation (including salary compensation) for the sake of completeness.

following the introduction of the Davies Report (2011). In what follows, we first explain our dependent, independent, and control variables. We then discuss our empirical approaches to examine (i) the differential executive compensation between with-female boards and all-male boards and (ii) the role of conditional conservatism in the context of differential executive compensation.

### 3.1. Dependent variables

To test the differential in executive compensation between all-male boards and with-female boards,[9] we construct the empirical model where the dependent variable represents executive compensation. Specifically, to examine the gender differences in executive compensation, we consider the three financial components of executive compensation: (i) salaries and bonuses paid, which capture the short-term compensation; (ii) equity-based compensation, which includes the value of restricted stock, stock options, and other elements of long-term incentives plans (LTIPs) as reported in the BoardEx database to capture long-term compensation; and (iii) total compensation, measured as the sum of executive salaries, bonuses, the value of equity-based compensation and other compensation.[10] We also compose another pay structure that comprises incentive-based compensation, which is the sum of bonuses and equity compensation. The inclusion of incentive-based compensation stems from the fact that executives are incentivized to inflate their reported earnings to maximize their performance-based compensation. As such, we expect the effect of the conditional conservatism to exist significantly in the incentive-based component (Iwasaki et al., 2018; Watts, 2003).

[9] In the United Kingdom, executives make up a larger proportion of the board than is the case in the United States. The term 'executive director' refers to individuals who are inside directors performing the role of executive officers and who are members of the board of directors (Kulich et al., 2011).

[10] Other compensation such as pension paid, insurance and other benefits.

### 3.2. Independent and control variables

The independent variables of interest are a measure of gender diversity on the board at the executive level and a measure of conditional conservatism. We follow prior studies (e.g., Carter et al., 2017) in measuring gender diversity on the board and use an indicator variable that is equal to 1 if at least one of the executive directors on the board is a female, and zero otherwise (*FEMDUM*).[11] For measuring conditional conservatism, we follow Khan & Watts (2009) in constructing the C_Score measure, which is a well-known proxy of conditional conservatism in the literature (see the survey of Wang, Hógartaigh, & Zijl, 2009). Essentially, Khan & Watts (2009) base their estimation of the C_Score measure on the Basu (1997) approach. Specifically, Basu (1997) measures conditional conservatism at the sample level using the piece-wise linear regression below:

$$NI_{it} = \beta_0 + \beta_1 RD_{it} + \beta_2 RET_{it} + \beta_3 RD_{it} \times RET_{it} + \varepsilon_{it} \quad (1)$$

where for firm $i$ in year $t$, $NI$ is current year earnings deflated by the firm's market value at the end of previous year, $RD$ is a dummy variable that equals 1 if $RET$ is negative and 0 otherwise, and $RET$ is the abnormal stock return over the fiscal year. The coefficient on the interaction term ($\beta_3$) captures the incremental timeliness in which reported earnings reflect bad news relative to good news, i.e., the sample-level measure of conditional conservatism. To facilitate the implementation of the Basu (1997) approach on a firm-year basis, Khan & Watts (2009) develop the C_Score measure based on the following two-step process:

$$\begin{aligned} NI_{it} = {} & \beta_0 + \beta_1 RD_{it} + \beta_2 RET_{it} + \beta_3 RD_{it} \times RET_{it} \\ & + \beta_4 MTB_{it} + \beta_5 MTB_{it} \times RD_{it} + \beta_6 MTB_{it} \times RET_{it} + \beta_7 MTB_{it} \times RD_{it} \times RET_{it} \end{aligned}$$

[11] In their main analysis, Carter et al. (2017) use executive-year observations, while in their additional analysis, the authors use firm-year observations (Carter et al., 2017, p. 1258). In our study, we follow prior studies that examine board structure, gender pay differential, and financial reporting at the firm level (e.g., Garcia Lara et al., 2017; Kulich et al., 2011), and use firm-year observations since we examine the interaction between board gender diversity and conditional conservatism (i.e., a firm-level variable). It is worth mentioning that we also use the proportion of female executives on the board as an alternative measure of gender diversity and report our findings in an online appendix. The results remain unchanged.

$$+ \beta_8 SIZE_{it} + \beta_9 SIZE_{it} \times RD_{it} + \beta_{10} SIZE_{it} \times RET_{it} + \beta_{11} SIZE_{it} \times RD_{it} \times RET_{it}$$
$$+ \beta_{12} LEV_{it} + \beta_{13} LEV_{it} \times RD_{it} + \beta_{14} LEV_{it} \times RET_{it} + \beta_{15} LEV_{it} \times RD_{it} \times RET_{it}$$
$$+ \varepsilon_{it} \quad (2)$$

$$CSCORE_{it} = \hat{\beta}_3 + \hat{\beta}_7 \times MTB_{it} + \hat{\beta}_{11} \times SIZE_{it} + \hat{\beta}_{15} \times LEV_{it} \quad (3)$$

where for firm *i* in year *t*, $MTB_{it}$ is the market-to-book value of equity, $SIZE_{it}$ is the natural logarithm of market capitalization, and $LEV_{it}$ is the total debt to market value of equity. When the first step regression is estimated annually throughout the sample period, coefficients $\hat{\beta}_3$, $\hat{\beta}_7$, $\hat{\beta}_{11}$, and $\hat{\beta}_{15}$ would be constant across firms but vary over time. $CSCORE_{it}$ essentially captures the degree of conditional conservatism at the firm-year level.

The remaining variables included in our model are identified from prior literature and serve as proxies for executive, board, and firm-specific economic characteristics that are associated with executive compensation. We control for executive tenure (i.e., the number of years directors served in the firm) and executive age; both may be used as indicators of professional experience (Kulich et al., 2011). The prior literature shows a link between governance variables and executive compensation, arguing that firms respond to the increase in monitoring provided by corporate governance by increasing executive compensation (see, e.g., Coles, Daniel, & Naveen, 2008; Core, Holthausen, & Larcker, 1999; Daily, Dalton, & Rajagopalan, 2003; Denis, 2001; Hermalin, 2005; Murphy, 1999); therefore, we include several board variables, i.e., board size, board independence, duality role, board meeting, board expertise,[12] and board diversity.[13] The final governance variable is compensation committee

[12] Financial expertise is assessed based on (i) educational background and (ii) career history following the criteria contained in the Blue Ribbon Committee (1999) report and the Smith Committee (2003) report to assess directors' financial expertise (see also Jeanjean & Stolowy, 2009).

[13] We expect the board diversity variable to be correlated with *FEMDUM* since it is more likely that firms with at least one female executive have higher proportions of female board members. Excluding *BODDIV* from the regression analysis does not affect the results.

independence measured by the proportion of independent directors on the compensation committee (Bugeja et al., 2012).[14]

Consistent with the prior literature, we control for the economic characteristics of the firm, which may affect executive compensation. Controls are measured one year prior to the year compensation is awarded since compensation is used as an incentive to improve performance (Bugeja et al., 2012; Kulich et al., 2011). We include a proxy for firm size, measured as the natural logarithm of market capitalization (*SIZE*). Core et al. (1999) argue that executive pay is a function of firm performance. Therefore, we control for firm performance using two categories of performance metrics: an accounting-based performance measure using return on equity (*ROE*), and a market-based performance measure using both company's annual stock return and Tobin's q (Bugeja et al., 2012; Kulich et al., 2011; Tosi, Misangyi, Fanelli, Waldman, & Yammarino, 2004). Tobin's q is calculated by dividing the sum of firm equity value, book value of long-term debt, and current liabilities by total assets (Chung & Pruitt, 1994). We also control for firm risk, measured as the annual stock price volatility (Kulich et al., 2011; Murphy, 1999), and firm leverage measured as total debt divided by total assets (Carter et al., 2017).[15]

### 3.3. Multivariate analysis

In light of the previous explanation of our dependent, independent and control variables, we construct the multivariate regression model below to examine the association between the presence of female executives on executive compensation and how this association has changed following the introduction of the Davies Report (2011).

[14] We also use an indicator variable equal to 1 if the compensation committee comprise wholly independent directors as an alternative measure. Additionally, we consider the gender of the CEO, i.e., whether the CEO is a female director takes a value of 1; otherwise 0. We had to drop this variable due to lack of variation (only 1.9% of the sample have female CEOs).

[15] We also include the R&D expenses ratio measured as R&D expenses divided by total assets. This variable was dropped from the model due to a large amount of missing values.

$$COMP_{it} = \beta_1 FEMDUM_{it} + \beta_2 FEMDUM \times DAVIES$$

$$+ \sum \beta_i Controls_{it-1} + \sum \beta_j Year\ FE_j + \sum \beta_k Industry\ FE_k + \varepsilon \quad (4)$$

where *COMP* is either *lnSALARY*, *lnBONUS*, *lnEQUITY*, *lnINCENT*, or *lnTOTAL*. The interaction term *FEMDUM*×*DAVIES* examines the impact of the presence of female executives on compensation structure following the Davies Report (2011), where the dummy variable *DAVIES* takes the value 1 if the year is 2011 or beyond.[16] All variables are defined in Appendix 1. All our regressions include year and industry fixed effects, where industry dummies are created based on the SIC one-digit industry classification.[17] We expect a negative coefficient on *FEMDUM*.

We then move on to examine the role of conditional conservatism in the association between female executives and executive compensation. In doing so, we estimate the following equation:

$$COMP_{it} = \beta_0 + \beta_1 FEMDUM_{it} + \beta_2 CSCORE_{it} + \beta_3 FEMDUM_{it} \times CSCORE_{it}$$

$$+ \sum \beta_i Controls_{it-1} + \sum \beta_j Year\ FE_j + \sum \beta_k Industry\ FE_k + \varepsilon \quad (5)$$

where all variables are defined previously and in Appendix 1. The interaction term *FEMDUM*×*CSCORE* captures the role of conditional conservatism in the association between female executives and executive compensation. The effect of female executives on executive compensation is manifested in the negative impact of conditional conservatism on executive compensation. The coefficient of interest is $\beta_3$ that is expected to have a negative sign, which indicates that female executives have a negative impact on executive compensation through

[16] We exclude the main effect of *DAVIES* from all regression equations that require interactions with *DAVIES* since the year fixed effects encompass the variation in *DAVIES* (Blankspoor, 2019). We also follow Ball, Li, & Shivakumar (2015) and supress the constant term because it is arbitrarily determined by any fixed effect included in the empirical models. The coefficients on the variables of interest are highly similar when including the main effect of *DAVIES* and/or the constant term in the regressions. The results are available upon request.

[17] We also created industry dummies based on 2-digit SIC codes to check the sensitivity of our results. Our results remain unchanged.

increasing the prominence of conditional conservatism. In other words, the interaction term *FEMDUM×CSCORE* captures the incremental effect of conditional conservatism exhibited by the female-driven conservatism that is less likely to be captured by *CSCORE*.

### 3.4. Difference-in-differences analysis

Thus far, our empirical strategy has established associations between the variables of interest. In an attempt to establish causality rather than association, we utilize a difference-in-differences approach (Roberts & Whited, 2013). In a similar setting to ours, Huang & Kisgen (2013) test the impact of replacing a male executive with a female executive (treatment group) on corporate financial decisions, compared to that when replacing a male executive with another male executive (control group). Similarly, our treatment sample comprises firms that have no female executives pre-Davies and hired at least one executive post-Davies (Matsa & Miller, 2013). The control sample comprises firms that had only male executives and did not hire any female executive post-Davies in addition to firms that had female executives pre- and post-Davies.[18] In other words, the control sample comprises firms that witnessed no change in their board gender diversity. None of the firms in our sample had female executives pre-Davies and became an all-male firm post-Davies.[19]

In light of the preceding discussion, we introduce a new dummy variable *TREAT* that takes the value of 1 if the firm had no female executive on board pre-Davies and hired a female executive following the Davies Report (2011). At a more fundamental level, *TREAT* captures

[18] Of the 158 observations that take the value 1 in *FEMDUM*, 86 observations belong to the treatment group. The remaining 72 observations belong to the control group, i.e., belong to firms that had female executives pre-Davies and post-Davies.

[19] One limitation of the difference-in-differences design we employ is that the Davies Report (2011) was introduced to all FTSE350 firms. As such, the assignment of firms to the treatment and control groups is not perfectly random and might be confounded with unobserved factors such as managerial intentions to hire a female executive director. We endeavor to address this concern in section 4.4 where we control for potential self-selection bias arising from voluntary compliance with the policy (Garcia Lara et al., 2017; Harakeh, Lee, & Walker, 2019a).

the transition from an all-male board to a with-female board. As such, the difference-in-differences regression equation is the following:

$$COMP_{it} = \beta_1 TREAT_{it} + \beta_2 TREAT \times DAVIES + \sum \beta_i Controls_{it-1} + \sum \beta_j Year\ FE_j + \sum \beta_k Industry\ FE_k + \varepsilon \quad (6)$$

where all variables are defined previously and in Appendix 1. The difference-in-differences estimator is the interaction term where we expect a negative sign for its coefficient ($\beta_2$), which indicates a reduction in the executive compensation after hiring a female executive compared to the change in executive compensation among the control group.

We finally examine the role of conditional conservatism using the difference-in-differences approach. To this end, we add *CSCORE* to Equation (6) in addition to its interactions with *FEMDUM* and *DAVIES* as shown below.

$$COMP_{it} = \beta_1 TREAT + \beta_2 CSCORE_{it} + \beta_3 TREAT \times DAVIES + \beta_4 TREAT \times CSCORE_{it} + \beta_5 DAVIES \times CSCORE_{it} + \beta_6 TREAT \times DAVIES \times CSCORE_{it} + \sum \beta_i Controls_{it-1} + \sum \beta_j Year\ FE_j + \sum \beta_k Industry\ FE_k + \varepsilon \quad (7)$$

where all variables are defined previously and in Appendix 1. The coefficient of interest is $\beta_6$ which captures the change in the role of conditional conservatism among the treatment sample relative to the control sample following the introduction of the Davies Report (2011). We expect a negative coefficient on the triple interaction $TREAT \times DAVIES \times CSCORE_{it}$, which suggests that firms that hired at least one female executive following the Davies Report (2011) reported more conservatively, and accordingly, paid a lower executive compensation compared to firms that did not witness such a transition in their board gender diversity.

### 3.5. Sample selection

Our study is based on an initial sample of companies listed in the UK FTSE 350 index over an eight-year period, 2008-2015. The chosen time period is appropriate for our study as it allows us to test the impact of the presence of female executives on compensation structure before and after the introduction of the Davies Report (2011). We use two databases to collect our variables: the BoardEx database to collect compensation data, executive characteristics, and board variables and DataStream to collect financial variables and industry affiliations. We exclude firms operating in the financial industry because such firms have unique financial reporting standards (DeFond & Jiambalvo, 1994). We lose some observations due to missing data on some financial variables obtained from DataStream. Finally, we drop non-continuously listed companies (i.e., appears pre- and post-Davies) to satisfy the requirements of the difference-in-differences analysis (Harakeh, Lee, & Walker, 2019b; Roberts & Whited, 2013). Table 1 Panel A explains how we construct our sample in which we begin with 2816 firm-years (352 companies × 8 years) and end up with a final sample of 1502 firm-years. Table 1 Panel B reports the distribution of the sample by industry and year.

[Insert Table 1 Here]

## 4. Results

### 4.1. Descriptive statistics

We start the descriptive statistics section with depicting the change in the average of *FEMDUM* during the years of our sample period as shown in Figure 1. The figure shows that on average, the percentage of boards with female executives was approximately 7% pre-Davies and has approached the 15% level post-Davies. This increase was accompanied with a similar increase in the percentage of board gender diversity as measured using *BODDIV*. The average of *BODDIV* was slightly below 10% pre-Davies and had become slightly above 20%

by 2015, suggesting a remarkable increase in board gender diversity following the Davies Report (2011).

[Insert Figure 1 Here]

We graph the change in the frequency of companies that have one or more female executive as shown in Figure 2. The figure shows that the number of companies with one female executive increased from 11 companies to 28 companies following the Davies Report (2011). Similarly, the number of companies with more than one female executive was almost zero before 2011, and it increased to 8 companies in 2015. Taken together, Figures 1 and 2 confirm that our sample is consistent with the findings documented in the Davies Report (2015), which promotes the effectiveness of the Davies Report (2011) in increasing the presence of female executives on corporate boards in the UK.

[Insert Figure 2 Here]

Table 2 provides the summary statistics of the variables used in our analyses, reported for all-male boards and with-female boards separately. We begin with the raw values of the components of the executive compensation. Table 2 reports a relatively similar value for the mean of *SALARY* among both groups, with an insignificant difference. Note that we test the difference in the compensation components based on the natural logarithm transformed variables, which are the dependent variables in our regression analyses. For *BONUS*, the mean value of the all-male group is higher than that of the with-female group, yet the difference is insignificant between both averages. Regarding equity compensation and the incentive-based compensation, which is the sum of bonuses and equity compensation, all-male boards pay significantly higher equity and incentive-based compensation to their executives compared to with-female boards. This differential pay is also reflected in the total compensation, which shows higher levels among all-male boards compared to with-female boards with a significant difference at the 5% level.

In regards to the rest of the variables, the variable *TREAT* that is used in the difference-in-differences approach has an average of 0.058 for the all-male group, which is equivalent to 78 firm-years, and an average of 0.544 for the with-female group that is equal to 86 firm-years. The former and latter firm-years comprise the treatment group, i.e., firms with no female executives pre-Davies and with female executives post-Davies. In regards to the measure of conditional conservatism, the mean value of *CSCORE* for the with-female boards is double that of the all-male boards, with a significant difference at the 1% level, which is consistent with prior literature (e.g., Francis et al., 2015). This significant difference in the level of conditional conservatism between both groups is crucial in formulating our hypothesis which predicts that with-female boards pay lower executive compensation compared to all-male boards due to more conservative financial reporting. As far as the board characteristics are concerned, with-female boards are significantly more gender diverse than all-male boards (*BODDIV*), have higher CEO tenure (*TENURE*), have lower CEO duality (*BODDUAL*), and have less board meetings (*BODMEET*). Finally, the economic characteristics of both groups show that companies are of a similar size in both groups (*SIZE*) and with-female boards are more profitable (*ROE*), have more investment opportunities (*TOBINQ*), are less risky (*VOLATIL*), and are less financially leveraged (*LEV*).

[Insert Table 2 Here]

Finally, we report in Table 3 the Pearson correlation between all variables used in our study. Notably, *FEMDUM* and *TREAT* are negatively associated with *lnBONUS*, *lnEQUITY*, *lnINCENT*, and *lnTOTAL*. All correlation coefficients are significant at the 5% level apart from that between *FEMDUM* and *BONUS*, which is insignificant. These coefficients suggest a negative correlation between the presence of female executives on boards and compensation components apart from *SALARY* (the correlation coefficient is positive and insignificant). Moreover, *FEMDUM* and *TREAT* are positively associated with *CSCORE*, suggesting a higher

level of conditional conservatism exhibited in the financial reporting practice of with-female boards. Finally, the rest of the correlation coefficients are largely in the expected direction and consistent with Table 2 and with prior literature. For example, the negative correlation coefficients between *FEMDUM* and *TREAT*, on the one hand, and *VOLATIL* and *LEV* ,on the other hand, show a negative association between the presence of female executives on boards and risk taking (Adams & Ferreira, 2009).

[Insert Table 3 Here]

**4.2. Multivariate analysis**

We begin our multivariate analysis with testing the impact of female executives on the components of executive compensation around the introduction of the Davies Report (2011). Table 4 reports five regressions of the components of executive compensation on *FEMDUM*, *FEMDUM×DAVIES*, and a vector of control variables as shown in Equation (4). Models 4.1, 4.2, 4.3, 4.4, and 4.5 use *lnSALARY*, *lnBONUS*, *lnEQUITY*, *lnINCENT*, and *lnTOTAL* as dependent variables, respectively. As documented in prior studies (Carter et al., 2017; Kulich et al., 2011), our results show that with-female boards paid on average lower salaries, bonuses, equity, and total compensation prior to the Davies Report (2011) as indicated by the coefficient of *FEMDUM* in Models 4.1, 4.2, 4.3, 4.4, and 4.5. The interaction term *FEMDUM×DAVIES* captures the change of the impact of with-female boards compared to all-male boards post-Davies. The coefficient on *FEMDUM×DAVIES* in Model 4.1 is 0.3014, which offsets the coefficient on *FEMDUM*, which is −0.3101, both coefficients being significant at the 1% level. This suggests that the Davies Report (2011) has been successful in diminishing the gap in salaries paid to executive directors between with-female boards and all-male boards. However, the coefficient on *FEMDUM×DAVIES* in Models 4.2, 4.3, 4.4, and 4.5 is insignificant while the coefficient on *FEMDUM* remains negative and significant, which suggests that the gap between both groups in the allocated bonus, equity, incentive-based, and total

compensation persists following the Davies Report (2011).[20] The fact that the differential compensation persists particularly in the incentive-based compensation, which is a function of reported earnings, motivates us to investigate the role that conditional conservatism plays in the negative association between with-female boards and executive compensation.

The results for control variables are generally consistent with previous studies (see, e.g., Bertrand & Hallock, 2001; Bugeja et al., 2012; Carter et al., 2017; Elkinawy & Stater, 2011; Kulich et al., 2011; Tosi et al., 2004). Age has the expected positive coefficient across all regression models in Table 4. The significant results on corporate governance variables are positive for *BODSIZE* and negative for *BODDUAL* on all compensation components, suggesting a monitoring or a signal-extraction problem (Bugeja et al., 2012; Elkinawy & Stater, 2011). Moreover, we find that independent boards pay their executives lower salaries and total compensation, suggesting that the monitoring role exercised by independent directors may constrain executive compensation. However, board independence shows a positive and significant impact on equity compensation, which is in line with the argument that independent directors do not always seek to maximize returns for shareholders (Bugeja et al., 2012). Among firm-specific variables, we find larger firms with higher *ROE* and stock returns remunerate their executives more (Core et al., 1999; Kulich et al., 2011; Tosi et al., 2004). Moreover, firms that are highly valued by the market, for which *TOBINQ* serves as a proxy, pay lower compensation to their executives since such firms are growth firms that invest heavily. Finally, the impact of firm risk, as measured by annual stock price volatility, on

[20] To directly test whether the gap in bonus, equity, incentive, and total compensation persists following the Davies Report (2011), we regress the dependent variables on the female dummy variable (*FEMDUM*) and the control variables using the post-Davies observations. Unreported results show that the coefficient on *FEMDUM* is negative and significant in the regressions that have bonus, equity, incentive, and total compensation. These results confirm our inference that the gap between both groups persists in the aforementioned compensation components following the Davies Report (2011).

compensation components is insignificant while financial leverage seems to affect bonuses and total compensation negatively.

[Insert Table 4 Here]

Thus far, we have established the differential executive compensation between all-male boards and with-female boards and showed that the introduction of the Davies Report (2011) did not contribute to minimizing the differential compensation paid to executives in the form of bonus, equity, incentive-based and, accordingly, in total compensation. We now test our hypothesis that the negative association between executive compensation and the presence of female executives on board increases in magnitude when conditional conservatism is higher. In each of Models 5.1, 5.3, 5.5, 5.7, and 5.9 of Table 5, we regress one of the compensation components on *FEMDUM* and *CSCORE*. Then, in Models 5.2, 5.4, 5.6, 5.8, and 5.10, we regress the same compensation components on *FEMDUM*, *CSCORE*, and the interaction term *FEMDUM*×*CSCORE*, which captures the role of female directors in determining executive compensation by making the effect of conditional conservatism more salient.[21] For a better exposition, we do not report the coefficients on the control variables in Table 5 since their inferences are consistent with those reported in Table 4. Model 5.1 shows an insignificant difference in executive salaries between both groups, and Model 5.2 shows no effect for conditional conservatism on the association between female executive directors and executive salaries. As a matter of fact, executive salaries are not determined by reported earnings and, thus, should not be affected by conditional conservatism. Models 5.3, 5.5, 5.7, and 5.9 show negative associations between female executive directors and conditional conservatism, on the one hand, and bonus, equity, incentive-based, and total compensation, on the other hand. Specifically, with-female boards pay lower executive compensation

[21] Despite the expected multicollinearity between *FEMDUM* and *FEMDUM*×*CSCORE*, the highest variance inflation factor (VIF) in all regressions throughout the paper is lower than 7.17, which mitigates potential multicollinearity concerns (Wooldridge, 2013, p. 98).

(excluding the salary component) than all-male boards by 18-28%, as indicated by the significant and negative coefficient on *FEMDUM* in Models 5.3, 5.5, 5.7, and 5.9. Similarly, the significant and negative coefficient on *CSCORE* in the aforementioned regressions suggest a negative impact for the level of conditional conservatism exhibited in earnings on the bonus, equity, incentive-pay, and total compensation.[22] More importantly, Models 5.4, 5.6, 5.8, and 5.10 show a significant and negative coefficient on the interaction term *FEMDUM*×*CSCORE,* which indicates that with-female boards pay lower executive compensation compared to all-male boards due to more conservative financial reporting. The results are also economically significant, where economic significance is computed following Huang, Kerstein, & Wang (2018). For example, Model 5.8 shows that the effect of *CSCORE* on incentive compensation for all-male boards (i.e., *FEMDUM* = 0) is −0.2184 while that for with-female boards (*FEMDUM* = 1) is −0.7268 (i.e., the sum of −0.2184 and −0.5084). These coefficients suggest that, when moving from the first quartile (−0.012) to the third quartile (0.133) of *CSCORE* for all-male boards, the reduction in incentive compensation is 3.16%.[23] On the other hand, when moving from the first quartile (−0.010) to the third quartile (0.203) of *CSCORE* for the with-female boards, the reduction in incentive compensation is 15.48%.[24] The greater reduction in executive compensation for with-female boards relative to that for all-male boards confirms our hypothesis that the negative association between executive compensation and the presence of female executives on board is greater in magnitude when conditional conservatism is higher.

[22] At a more fundamental level, the C_Score measure of conditional conservatism reflects the degree to which adverse news that is incorporated into stock returns is also reflected in contemporaneous earnings; thus, one may argue that including stock returns in the set of explanatory variables should render *CSCORE* insignificant. However, the C_Score measure is a composite measure that incorporates three variables (*MTB*, *SIZE*, and *LEV*) that proxy for contracting (including debt and compensation contracts), litigation, taxation, and regulation (Khan & Watts, 2009), where these factors are not captured explicitly in stock returns. Thus, we expect the C_Score measure to maintain its relevance and have a significant coefficient in a (incentive-based) compensation regression despite controlling for stock returns.

[23] The percentage is calculated as [(0.133) − (−0.012)] × [−0.2184].

[24] The percentage is calculated as [(0.203) − (−0.010)] × [−0.7268].

[Insert Table 5 Here]

**4.3. Difference-in-differences analysis**

In the preceding section, we showed the impact of gender differences on executive compensation and how this impact articulates through making the role of conditional conservatism more prominent. However, the multivariate analysis performed in the preceding section does not infer causality. As such, we move forward to running a difference-in-differences analysis to examine (i) the change in executive compensation and (ii) the change in the role of conditional conservatism upon the transition from an all-male board to a with-female board. As such, we examine the aforementioned changes in companies that had no female executives pre-Davies and hired female executives post-Davies (i.e., treatment group) compared to companies that have no change in their board gender diversity at the executive level (i.e., control group). Table 6 reports regression results of the components of executive compensation on *TREAT* and the difference-in-differences estimator *TREAT*×*DAVIES*. Models 6.1–6.5 in Table 6 are analogous to Models 4.1-4.5 in Table 4 in terms of their dependent variables. The insignificant coefficient on *TREAT* in all regressions of Table 6 suggests no remarkable difference in executive compensation between the treatment and control groups pre-Davies, which is an important assumption in the difference-in-differences research design (i.e., both groups have a common trend before the policy). The coefficient on the interaction term *TREAT*×*DAVIES* is negative and significant across all regressions of Table 6 apart from Model 6.1, which has the salary component as the dependent variable. This result suggests that the transition from all-male boards to with-female boards leads to a reduction in bonus, equity, incentive-based, and, accordingly, total compensation. The results of Table 6 lend support to the results of Table 4 and suggest a negative impact for the presence of female executives on executive compensation.

[Insert Table 6 Here]

We now turn to testing our main hypothesis using the difference-in-differences approach. Table 7 reports five regressions analogous to the regressions of Table 6 while adding *CSCORE* and interacting it with *TREAT*, *DAVIES*, and *TREAT*×*DAVIES*. Our variable of interest is the triple interaction, *TREAT*×*DAVIES*×*CSCORE*, which captures the change in the incremental *CSCORE* effect following the introduction of the Davies Report (2011) among with-female boards compared to all-male boards. Model 7.1 shows an insignificant coefficient on the triple interaction term, which indicates no impact for *CSCORE* when the dependent variable is *lnSALARY*. However, the coefficient on the triple interaction term in models 7.2 and 7.3 is negative and significant at the 10% level, which suggests that hiring female executives following the Davies Report (2011) is associated with lower bonuses and equity compensation by making the effect of *CSCORE* more prominent. Interestingly, when combining bonuses and equity compensation in the incentive-based compensation, the triple interaction term becomes significant at the 5% level, as shown in Model 7.4. This suggests that the transition from all-male to with-female boards is accompanied by lower incentive-based executive compensation by making the effect of conditional conservatism more salient. This result also applies to total compensation as indicated by the negative and significant coefficient on the triple interaction term in Model 7.5.

[Insert Table 7 Here]

The negative coefficient on the triple interaction in Table 7 could be interpreted as an increased inclination for female executives to report more conservatively in the post-Davies period. This observation can be explained by the critical mass theory of Kanter (1977), which predicts that the increased presence of females will boost their effectiveness and make their decisions more based upon (Joecks, Pull, & Vetter, 2013). As such, given the increased empowerment of female directors following the Davies Report (2011), our findings can be interpreted that the female-driven conservatism will be more manifested in the level of

conditional conservatism compared to the pre-Davies period. This observation also suggests that the introduction of the Davies Report (2011) has affected executive compensation not only through the increased presence of female directors, but also through making their presence more influential.

**4.4. Robustness tests**

To provide further reliability to our findings, we perform a number of robustness tests. We start with matching observations between the treatment and control groups used in the difference-in-differences approach. Bugeja et al. (2012) find that the evidence of the differential pay across gender disappears after matching observations. Thus, we match each treatment firm-year to one or more control firm-years (with replacement) using propensity score matching (PSM).[25] In doing so, we first run a probit model that uses *TREAT* as the dependent variable and all the control variables included in Equation (4) as regressors. We then estimate the propensity score and match based on it for each year-industry group using a 1% radius matching approach (Shipman, Swanquist, & Whited, 2017). We end up with 146 treatment observations (of 164 observations) matched to 740 control observations (of 1338 observations). The quality of the matching performed shows a Rubin's B of 18 (should be <25) and a Rubin's R of 0.8 (should be between 0.5 and 2) with mostly insignificant differences in the variables between the treatment and control groups.

Table 8 Panel A reports the results that replicate the regressions performed in Table 6 using the PSM sample. We do not report the coefficients on the control variables for brevity and due to their consistency with the coefficients reported in Tables 4-7. The insignificant coefficient on *TREAT* across all the regressions in Table 8 Panel A confirms the similar executive compensation among the treatment and control groups prior to the Davies Report

[25] We also use the same matching approach for the multivariate analysis where we match each all-male observation to a with-female observation. Our results remain unchanged when running the tests in Table 4 and Table 5 using the matched sample.

(2011). More importantly, the negative and significant coefficient on the interaction term *TREAT*×*DAVIES* in Models 8.2a, 8.3a, 8.4a, and 8.5a indicates that the transition from all-male boards to with-female boards is associated with a reduction in bonus, equity, incentive-based, and total compensation relative to boards that witnessed no change in their female executives' presence following the Davies Report (2011).

Table 8 Panel B reports the results that replicate the regressions of Table 7 using the PSM sample. The significant and negative coefficient on the triple interaction term *TREAT*×*DAVIES*×*CSCORE* in Models 8.2b, 8.3b, 8.4b, and 8.5b suggests that the transition from all-male to with-female boards is accompanied by lower bonus, equity, incentive-based, and total executive compensation through higher conditional conservatism.

[Insert Table 8 Here]

Our second main robustness test addresses the fact that the board structure is endogenous to the firm (Adams & Ferreira, 2009). We follow prior literature in addressing potential endogeneity concerns arising from the fact that firms might decide to hire female executive directors due to idiosyncratic economic changes (Carter et al., 2017) and regardless of the Davies Report (2011). In other words, hiring a female executive might be attributed to firm incentives rather than to the policy effect, and accordingly, *FEMDUM* will be rendered endogenous and thus bias our inferences. To address this empirical concern, we use 2SLS instrumental variable regressions to control for potential endogeneity arising from unobservable omitted variables (i.e., firm incentives). We apply the instrumental variable approach to the main regression table that examines our main hypothesis, i.e., Table 5. Specifically, we replicate Table 5 using 2SLS regressions by instrumenting the endogenous variable *FEMDUM* and the interaction *FEMDUM*×*CSCORE*. Despite that *CSCORE* is exogenous, the interaction between an endogenous variable with an exogenous variable, however, renders the interaction term endogenous (Wooldridge, 2010, p. 122). We instrument

*FEMDUM* using the industry's average of *BODDIV* in each year, following (Carter et al., 2017), while excluding the focal firm from the calculation of the industry average (Cheng, Ioannou, & Serafeim, 2014). The logic that applies here is that a higher average of the industry's *BODDIV* yields a higher supply of female executives, and at the same time, there is no direct relationship between the industry's average of *BODDIV* and our dependent variable (executive compensation). Hence, the industry's average of *BODDIV* seems to be a viable instrument in this context. We use the interaction between the used instrumental variable and *CSCORE* to instrument *FEMDUM*×*CSCORE*.

Table 9 reports two sets of regressions. The first set (Models 9.1 and 9.2) reports the first stage regressions where we regress the endogenous variable *FEMDUM* and its associated interaction *FEMDUM*×*CSCORE* on the instrumental variable *FEM_IND*, its associated interaction *FEM_IND*×*CSCORE*, and all other control variables. Model 9.1 has *FEMDUM* as the dependent variable and shows that the coefficient on *FEM_IND* is positive and significant at the 1% level, which indicates a high correlation between the instrument used and the endogenous variable. Model 9.2 has *FEMDUM*×*CSCORE* as the dependent variable and shows a positive yet insignificant coefficient on *FEM_IND*×*CSCORE*. The second set of regressions in Table 9 report the second stage regressions that use the fitted values from the first stage. The *p*-values reported at the bottom of the table test the null hypothesis that *FEMDUM* is exogenous. All *p*-values are greater than 0.1, which mitigates the concern of endogeneity arising from omitted variable bias. Overall, the results are highly consistent with those reported in Table 5 and show a negative association between *FEMDUM* and *CSCORE*, on the one hand, and bonus, equity, incentive-based, and total executive compensation, on the other hand. More importantly, the negative and significant coefficient on the interaction term *FEMDUM*×*CSCORE* in Models 9.6, 9.8, 9.10, and 9.12 confirms our hypothesis that the

negative association between female executives on bonus, equity, incentive-based, and total executive compensation is more negative when conditional conservatism is higher.

[Insert Table 9 Here]

We furnish an online appendix in which we further test the sensitivity of our main findings. We first start with addressing the issue of self-selection bias arising from the fact that firms voluntarily choose to hire a female executive, which is correlated with unobservable managerial intentions. In doing so, we follow Garcia Lara et al. (2017) and employ the Heckman (1979) two-step approach. In the first stage, we model the decision to hire a female director (i.e., probit model) in which we regress an indicator variable that takes the value 1 if any of the board members is a female (and zero otherwise) on all the independent variables in Equation (5) in addition to the exclusion restriction variable.[26] We then compute the Inverse Mills Ratio (*IMR*) and include it in the regressions of Table 5 and Table 7 (i.e., our main findings from the multivariate and the difference-in-differences analyses). Our inferences remain unchanged when using the Heckman (1979) two-step approach.

We then move on to test our main findings using different test specifications. Specifically, given the positive and significant correlation between *FEMDUM* and *DAVIES* as shown in Table 3, we test our main findings in the pre- and post-Davies periods separately. The coefficient on *FEMDUM*×*CSCORE* for the post-Davies regressions is more significant, economically and statistically, which indicates that the increased presence of female executives has a greater impact on executive compensation by increasing the prominence of conditional conservatism. In addition, we use the percentage of female executive directors on

[26] This dependent variable determines whether *FEMDUM* will be equal to one or zero (and similarly whether the firm will be assigned to the treatment or the control group). It is worth noting that we exclude *BODDIV* from the independent variables in the first stage because its positive values perfectly predict the dependent variable. Moreover, the exclusion restriction variable that we include in the first stage is the instrumental variable we use in Table 9 (i.e., the average board diversity in the industry). Essentially, the average board diversity in the industry is expected to affect the decision to hire a female director, but not the dependent variable in the second stage (i.e., executive compensation). This approach is similar to that employed in Garcia Lara et al. (2017, p. 665).

the board instead of the indicator variable we currently use throughout the study. Moreover, we use industry-adjusted compensation components as dependent variables since the compensation structure might vary by industry. We also replace salary, bonus, equity, and incentive-based compensation components by their ratios as a percentage of total compensation. The results and inferences from the aforementioned tests are consistent with those reported in the paper.

Finally, we replace conditional conservatism with another proxy for the financial reporting practice. Specifically, we replace *CSCORE* with a proxy for earnings management, as the literature documents a positive association between executive compensation and earnings management (Carter et al., 2009; Cheng & Warfield, 2005). We use discretionary accruals as calculated in Dechow, Sloan, & Sweeney (1995) as a proxy for earnings management. The results show a positive association between discretionary accruals and executive compensation (mainly incentive-based compensation). However, we find no role for earnings management in the association between female executive directors and executive compensation.

**5. Conclusions**

We examine the effect of the increased presence of female executives on UK FTSE 350 companies' boards following the introduction of the Davies Report (2011) on executive compensation and investigate a primary channel through which this effect articulates. Our results show that the female presence on boards has increased following the Davies Report (2011), which in turn has led to a decrease in the differential executive salaries paid. However, we find that the differential compensation persists in incentive-based rewards, including bonuses and equity compensation. The fact that the differential compensation exists in the components that are mainly determined by the firm's reported earnings has triggered us to examine whether the firm's financial reporting practice plays a role in explaining the

differential executive compensation. Our examination shows that female executives exhibit a higher level of conditional conservatism in their financial reporting than their male counterparts (Francis et al., 2015), which leads to lower reported earnings and eventually to a lower incentive-based compensation. Our results show that the differential reward in the bonuses and equity compensation is related to the difference in the level of conditional conservatism exhibited in the financial reporting of with-female boards compared to all-male boards. We employ a multifaceted empirical strategy that uses a multivariate regression approach and a difference-in-differences approach in which we take advantage of the Davies Report (2011). Our findings hold when using a PSM sample and controlling for potential endogeneity issues using a 2SLS instrumental variable approach. Overall, we find support for the hypothesis introduced in our study that the negative association between executive compensation and female presence on boards increases in magnitude when the level of conditional conservatism exhibited in financial reporting is higher. That is, the presence of female executives is negatively associated with executive compensation by increasing the effectiveness of conditional conservatism.

Our results complement existing academic research on gender differences in executive compensation and have important implications for managers and policy-makers. First, our study urges UK companies to increase the representation of female executives on corporate boards to reduce gender differences in executive compensation. Companies, whether operating in the UK or globally, will need to report regularly on the presence and development of female executive directors on corporate boards. Second, our study recommends that the gender of the executive director needs to be considered when making decisions, for example, when analyzing financial statements and reviewing earnings reports (Gull et al., 2018). As such, companies can improve the quality of their governance systems by maintaining better financial reporting practices. Finally, our paper shows that the gender

differences in executive compensation are more pronounced in incentive-based pay. Hence, a third implication for our study is that public companies need to improve their disclosure about the link between pay and performance by explaining how the criteria for incentive-based pay relate to the company's strategic objectives.

Our paper opens the door for future research in the area of corporate governance and financial reporting. Future research could investigate the impact of other observable diversity traits of directors (e.g., ethnic, racial minorities, sexual orientation) on executive compensation. Moreover, further research could focus on the specific effects of equity compensation structures on the gender pay differential of UK companies: For example, the sensitivity of executive equity portfolios to stock price (executive price sensitivity) and to stock return volatility (executive volatility sensitivity). Overall, this study contributes to the corporate governance and financial reporting literature and responds to the recent Davies Report (2015), *Women on Boards*, which promotes improvement of the gender balance on British boards. This study extends the prior academic research and informs the debate on the existence of gender differences in executive compensation and how financial reporting plays a significant role in the interplay between gender and compensation in the corporate world.

***References:***


Abbott, L. J., Parker, S., & Presley, T. J. (2012). Female board presence and the likelihood of financial restatement. *Accounting Horizons*, *26*(4), 607–629.

Adams, R., De Haan, J., Terjesen, S., & Van Ees, H. (2015). Board diversity: moving the field forward. *Corporate Governance: An International Review*, *23*(2), 77–82.

Adams, R., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, *94*(2), 291–309.

Adams, S. M., Gupta, A., Haughton, D. M., & Leeth, J. D. (2007). Gender differences in CEO compensation: Evidence from the USA. *Women in Management Review*, *22*(3), 208–224.

Aigner, D., & Cain, G. (1977). Statistical Theories of Discrimination in Labor Markets. *Industrial and Labor Relations Review*, *30*(2), 175.

Al-Shaer, H., & Zaman, M. (2016). Board gender diversity and sustainability reporting quality. *Journal of Contemporary Accounting & Economics*, *12*(3), 210–222.

Altonji, J. G., & Blank, R. M. (1999). Race and gender in the labor market. *Handbook of Labor Economics*, *3*(Part C), 3143–3259.

Ball, R. (2001). Infrastructure requirements for an economically efficient system of public financial reporting and disclosure. *Brookkings-Wharton Papers on Financial Services*, *2*(1), 127–169.

Ball, R., Li, X., & Shivakumar, L. (2015). Contractibility of financial statement information prepared under IFRS : Evidence from debt contracts. *Journal of Accounting Research*, *53*(5), 915–963.

Barber, B., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The Quarterly Journal of Economics*, *116*(1), 261–292.

Barua, A., Davidson, L. F., Rama, D. V., & Thiruvadi, S. (2010). CFO gender and accruals quality. *Accounting Horizons*, *24*(1), 25–39.

Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting and Economics*, *24*(1), 3–37.

Becker, G. (1971). *The economics of discrimination* (2nd ed.). Chicago: University of Chicago Press.

Bergmann, B. (1974). Occupational Segregation, Wages and Profits When Employers Discriminate by Race or Sex. *Eastern Economic Journal*, *1*(2), 103–110.

Berscheid, E., & Walster, E. (1969). *Interpersonal attraction*. Massachusetts: Addison-Wesley.

Bertrand, M., & Hallock, K. F. (2001). The gender gap in top corporate jobs. *Industrial & Labor Relations Review*, *55*(1), 3–21.

Birnberg, J. (2011). A Proposed Framework for Behavioral Accounting Research. *Behavioral Research in Accounting*, *23*(1), 1–43.

Blankspoor, E. (2019). The Impact of Information Processing Costs on Firm Disclosure Choice: Evidence from the XBRL Mandate. *Journal of Accounting Research*, *In Press*.

Blue Ribbon Committee. (1999). *Report and recommendations of the Blue Ribbon Committee on improving the effectiveness of corporate audit committees*. NYSE and National Association of

Securities Dealers.

Bugeja, M., Matolcsy, Z. P., & Spiropoulos, H. (2012). Is there a gender gap in CEO compensation? *Journal of Corporate Finance*, *18*(4), 849–859.

Bugeja, M., Matolcsy, Z., & Spiropoulos, H. (2016). The association between gender-diverse compensation committees and CEO compensation. *Journal of Business Ethics*, *139*(2), 375–390.

Carter, M. E., Franco, F., & Gine, M. (2017). Executive gender pay gaps: The roles of female risk aversion and board representation. *Contemporary Accounting Research*, *34*(2), 1232–1264.

Carter, M. E., Lynch, L. J., & Zechman, S. L. C. (2009). Changes in bonus contracts in the post-Sarbanes–Oxley era. *Review of Accounting Studies*, *14*(4), 480–506.

Cheng, B., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, *35*(1), 1–23.

Cheng, Q., & Warfield, T. D. (2005). Equity incentives and earnings management. *The Accounting Review*, *80*(2), 441–476.

Chung, K. H., & Pruitt, S. W. (1994). A simple approximation of Tobin's q. *Financial Management*, 70–74.

Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does one size fit all? *Journal of Financial Economics*, *87*(2), 329–356.

Collins, D., Chen, W., & Sam, M. (2019). The effect of conditional accounting conservatism on the predictive ability of accruals components with respect to future cash flows. *Working Paper*.

Core, J. E., Holthausen, R. W., & Larcker, D. F. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics*, *51*(3), 371–406.

Costa, P., Terracciano, A., & McCrae, R. (2001). Gender differences in personality traits across cultures: Robust and surprising findings. *Journal of Personality and Social Psychology*, *81*(2), 322–331.

Daily, C. M., Dalton, D. R., & Rajagopalan, N. (2003). Governance through ownership: Centuries of practice, decades of research. *Academy of Management Journal*, *46*(2), 151–158.

Davies Report. (2011). *Women on boards*. London: Department for Business, Innovation & Skills.

Davies Report. (2015). *Improving the gender balance in British boards*. London: Women on Boards.

Dechow, P., Sloan, R., & Sweeney, A. (1995). Detecting earnings management. *The Accounting Review*, *70*(2), 192–225.

DeFond, M., & Jiambalvo, J. (1994). Debt Covenant Effects and the Manipulation of Accruals. *Journal of Accounting and Economics*, *17*, 145–176.

Denis, D. K. (2001). Twenty-five years of corporate governance research and counting. *Review of Financial Economics*, *10*(3), 191–212.

Eagly, A., & Carli, L. (2003). The female leadership advantage: An evaluation of the evidence. *The Leadership Quarterly*, *14*(6), 807–834.

Elkinawy, S., & Stater, M. (2011). Gender differences in executive compensation: Variation with board gender composition and time. *Journal of Economics and Business*, *63*(1), 23–45.

Ely, R. (1995). The Power in Demography: Women's Social Constructions of Gender Identity at Work. *Academy of Management Journal*, *38*(3), 589–634.

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

Feingold, A. (1994). Gender differences in personality: a meta-analysis. *Psychological Bulletin*, *116*(3), 429–456.

Francis, B., Hasan, I., Park, J. C., & Wu, Q. (2015). Gender differences in financial reporting decision making: Evidence from accounting conservatism. *Contemporary Accounting Research*, *32*(3), 1285–1318.

FRC. (2016). *The UK Corporate Governance Code*. London: Financial Reporting Council.

Garcia Lara, J. M., Garcia Osma, B., Mora, A., & Scapin, M. (2017). The monitoring role of female directors over accounting quality. *Journal of Corporate Finance*, *45*, 651–668.

Grosvold, J., Rayton, B., & Brammer, S. (2016). Women on Corporate Boards: A Comparative Institutional Analysis. *Business & Society*, *55*(8), 1157–1196.

Gul, F. A., Hutchinson, M., & Lai, K. M. (2013). Gender-diverse boards and properties of analyst earnings forecasts. *Accounting Horizons*, *27*(3), 511–538.

Gul, F. A., Srinidhi, B., & Ng, A. C. (2011). Does board gender diversity improve the informativeness of stock prices? *Journal of Accounting and Economics*, *51*(3), 314–338.

Gull, A. A., Nekhili, M., Nagati, H., & Chtioui, T. (2018). Beyond gender diversity: How specific attributes of female directors affect earnings management. *The British Accounting Review*, *50*(3), 255–274.

Harakeh, M., Lee, E., & Walker, M. (2019a). The Differential Impact of IFRS Adoption on Aspects of Seasoned Equity Offerings in the UK and France. *Accounting in Europe*, *16*(1), 106–138.

Harakeh, M., Lee, E., & Walker, M. (2019b). The effect of information shocks on dividend payout and dividend value relevance. *International Review of Financial Analysis*, *61*(1), 82–96.

Heckman, J. (1979). Sample Selection Bias as a Specification Error. *Econometrica*, *47*(1), 153–161.

Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, *57*(4), 657–674.

Hermalin, B. (2005). Trends in corporate governance. *Journal of Finance*, *60*(5), 2351–2384.

Hermalin, Benjamin, & Weisbach, M. (1998). Endogenously chosen boards of directors and their monitoring role of the CEO. *American Economic Review*, *88*(1), 96–118.

Ho, S. S., Li, A. Y., Tam, K., & Zhang, F. (2015). CEO gender, ethical leadership, and accounting conservatism. *Journal of Business Ethics*, *127*(2), 351–370.

Huang, H., Kerstein, J., & Wang, C. (2018). The impact of climate risk on firm performance and financing choices: An international comparison. *Journal of International Business Studies*, *49*(5), 633–656.

Huang, J., & Kisgen, D. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives? *Journal of Financial Economics*, *108*, 822–839.

Iwasaki, T., Otomasa, S., Shiiba, A., & Shuto, A. (2018). The role of accounting conservatism in executive compensation contracts. *Journal of Business Finance & Accounting*, *45*(9–10), 1139–1163.

Jeanjean, T., & Stolowy, H. (2009). Determinants of board members' financial expertise — Empirical evidence from France. *The International Journal of Accounting*, *44*(4), 378–402. Retrieved from https://www.sciencedirect.com/science/article/pii/S0020706309000697

Joecks, J., Pull, K., & Vetter, K. (2013). Gender Diversity in the Boardroom and Firm Performance: What Exactly Constitutes a "Critical Mass?" *Journal of Business Ethics*, *118*(1), 61–72.

Kanter, R. M. (1977). *Men and Women of the Organization*. New York: Basic Books.

Khan, M., & Watts, R. (2009). Estimation and empirical properties of a firm-year measure of accounting conservatism. *Journal of Accounting and Economics*, *48*(2–3), 132–150.

Krishnan, G. V., & Parsons, L. M. (2008). Getting to the bottom line: An exploration of gender and earnings quality. *Journal of Business*, *78*(1), 65–76.

Kulich, C., Trojanowski, G., Ryan, M. K., Haslam, A., & Renneboog, L. D. (2011). Who gets the carrot and who gets the stick? Evidence of gender disparities in executive remuneration. *Strategic Management Journal*, *32*(3), 301–321.

Levi, M., Li, K., & Zhang, F. (2014). Director gender and mergers and acquisitions ☆. *Journal of Corporate Finance*, *28*, 185–200.

Levin, I., Snyder, M., & Chapman, D. (1988). The Interaction of Experiential and Situational Factors and Gender in a Simulated Risky Decision-Making Task. *The Journal of Psychology*, *122*(2), 173–181.

Maccoby, E. E., & Jacklin, C. N. (1974). *The Psychology of Sex Differences*. Stanford, CA: Stanford University Press.

Matsa, D., & Miller, A. (2013). A Female Style in Corporate Leadership? Evidence from Quotas. *American Economic Journal: Applied Economics*, *5*(3), 136–169.

Meyer, J., & Rowan, B. (1977). Institutionalized Organization: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, *83*(2), 340–363.

Mohan, N., & Ruggiero, J. (2003). Compensation differences between male and female CEOs for publicly traded firms: A nonparametric analysis. *Journal of Operational Research Society*, *54*(12), 1242–1248.

Mohan, N., & Ruggiero, J. (2007). Influence of firm performance and gender on CEO compensation. *Applied Economics*, *39*(9), 1107–1113.

Muñoz–Bullón, F. (2010). Gender-compensation differences among high-level executives in the United States. *Industrial Relations: A Journal of Economy and Society*, *49*(3), 346–370.

Murphy, K. (1999). Executive compensation. In: O. Ashenfelter, and D. Card (Eds.). *Handbook of Labor Economics*, *Vol. 3. Am*.

Niederle, M., & Vesterlund, L. (2007). Do Women Shy Away From Competition? Do Men Compete Too Much? *Quarterly Journal of Economics*, *122*(3), 1067–1101.

Office for National Statistics. (2018). *Annual survey of hours and earnings, 2018 provisional results. Newport: Office for National Statistics*.

Penalva, F., & Wagenhofer, A. (2019). Conservatism in debt contracting: theory and empirical evidence. *Accounting and Business Research*, *In Press*, 1–29.

Peni, E., & Vähämaa, S. (2010). Female executives and earnings management. *Managerial Finance*, *36*(7), 629–645.

Perryman, A. A., Fernando, G. D., & Tripathy, A. (2016). Do gender differences persist? An examination of gender diversity on firm performance, risk, and executive compensation. *Journal of Business Research*, *69*(2), 579–586.

Post, C., & Byron, K. (2015). Women on Boards and Firm Financial Performance: A Meta-Analysis. *Academy of Management Journal*, *58*(5), 1546–1571.

Roberts, M., & Whited, T. (2013). Endogeneity in empirical corporate finance. *Handbook of the Economics of Finance*, *2*(Part A), 493–572.

Ruch, G., & Taylor, G. (2015). Accounting conservatism: A review of the literature. *Journal of Accounting Literature*, *34*, 17–38.

Sapienza, P., Zingales, L., & Maestripieri, D. (2009). Gender differences in financial risk aversion and career choices are affected by testosterone. *Proceedings of the National Academy of Sciences*, *106*(36), 15268–15273.

Shipman, J., Swanquist, Q., & Whited, R. (2017). Propensity score matching in accounting research. *The Accounting Review*, *92*(1), 213–244.

Smith Committee. (2003). *Audit committees combined code guidance. A report and proposed guidance by the FRC - appointed group*. FRC, London.

Srinidhi, B., Gul, F. A., & Tsui, J. (2011). Female directors and earnings quality. *Contemporary Accounting Research*, *28*(5), 1610–1644.

Sterling, R. (1976). Conservatism: The fundamental principle of valuation in traditional accounting. *ABACUS*, *3*(2), 109–122.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.

Terjesen, S., Aguilera, R., & Lorenz, R. (2015). Legislating a woman's seat on the board: Institutional factors driving gender quotas for boards of directors. *Journal of Business Ethics*, *128*(2), 233–251.

Terjesen, S., Sealy, R., & Singh, V. (2009). Women directors on corporate boards: A review and research agenda. *Corporate Governance: An International Review*, *17*(3), 320–337.

Thams, Y., Bendell, B., & Terjesen, S. (2018). Explaining women's presence on corporate boards: The institutionalization of progressive gender-related policies. *Journal of Business Research*, *86*, 130–140.

Tosi, H. L., Misangyi, V. F., Fanelli, A., Waldman, D. A., & Yammarino, F. J. (2004). CEO charisma, compensation, and firm performance. *The Leadership Quarterly*, *15*(3), 405–420.

Vinnicombe, S., Doldor, E., & Turner, C. (2014). *The Female FTSE Board Report*. UK: Cranfield International Centre for Women Leaders. Retrieved from https://dspace.lib.cranfield.ac.uk/bitstream/handle/1826/8365/Female_FTSE_Report_2014.pdf?sequence=1

Wang, R. Z., Hógartaigh, C. Ó., & Zijl, T. V. (2009). Measures of accounting conservatism: A construct validity perspective. *Journal of Accounting Literature*, *28*, 165–203.

Watts, R. (2003). Conservatism in accounting. Part I: Explanations and implications. *Accounting Horizons*, *17*(3), 207–221.

Wooldridge, J. (2010). *Econometric analysis of cross section and panel data*. Massachusetts: MIT Press.

Wooldridge, J. (2013). *Introductory Econometrics: A Modern Approach* (5th ed.). Mason: South-Western.

**Appendix 1: Variable definitions**

| Variable | Definition |
|---|---|
| *BODDIV* | Percentage of female directors on board. |
| *BODDUAL* | Dummy variable that takes the value of 1 if a duality role is taken by the CEO on board, and zero otherwise. |
| *BODEXP* | Percentage of board members with financial expertise. Financial expertise is assessed based on (i) educational background and (ii) career history following the criteria contained in the Blue Ribbon Committee (1999) report and the Smith Committee (2003) report to assess directors' financial expertise. |
| *BODIND* | Percentage of independent directors on the board. |
| *BODMEET* | Number of board meetings held during the year. |
| *BODSIZ* | Number of directors on the board. |
| *CSCORE* | C_Score measure of conditional conservatism calculated following Khan & Watts (2009). It is estimated as the predicted value of the Basu (1997) regression conditional on market-to-book ratio, firm size, and leverage ratio. |
| *COMIND* | Percentage of independent directors on the compensation committee. |
| *DAVIES* | Dummy variable that takes the value 1 if the year if 2011 or beyond, and 0 other wise. |
| *FEMDUM* | Dummy variable that takes the value 1 when at least one female executive director is on the board of directors, and 0 otherwise. |
| *LEV* | Ratio of total debt to total asset. |
| *lnAGE* | Natural logarithm of the average of the executives' age. |
| *lnBONUS* | Natural logarithm of the sum of bonus compensation received by all executives on board. |
| *lnEQUITY* | Natural logarithm of the sum of equity compensation received by all executives on board. |
| *lnINCENT* | Natural logarithm of the sum of bonus and equity compensation received by all executives on board. |
| *lnSALARY* | Natural logarithm of the total salary compensation received by all executives on board. |
| *lnTOTAL* | Natural logarithm of total compensation received by all executives on board. It comprises the sum of salary, bonus, the value of equity-based compensation, and other compensations. |
| *lnTENURE* | Natural logarithm of the average of executives' tenure. |
| *MTB* | Market-to-book ratio calculated as market value of equity to book value of equity. |
| *NI* | Net income before extraordinary items scaled by beginning market value. |
| *RD* | Dummy variable that takes the value 1 if *RET* is negative, and 0 otherwise. |
| *RET* | Stock return calculated at the end of the fiscal and adjusted for the industry-year average of returns. |
| *ROE* | Return on equity ratio calculated as net income divided by stockholders' equity. |
| *SIZE* | Firm size calculated as the natural logarithm of market capitalization. |

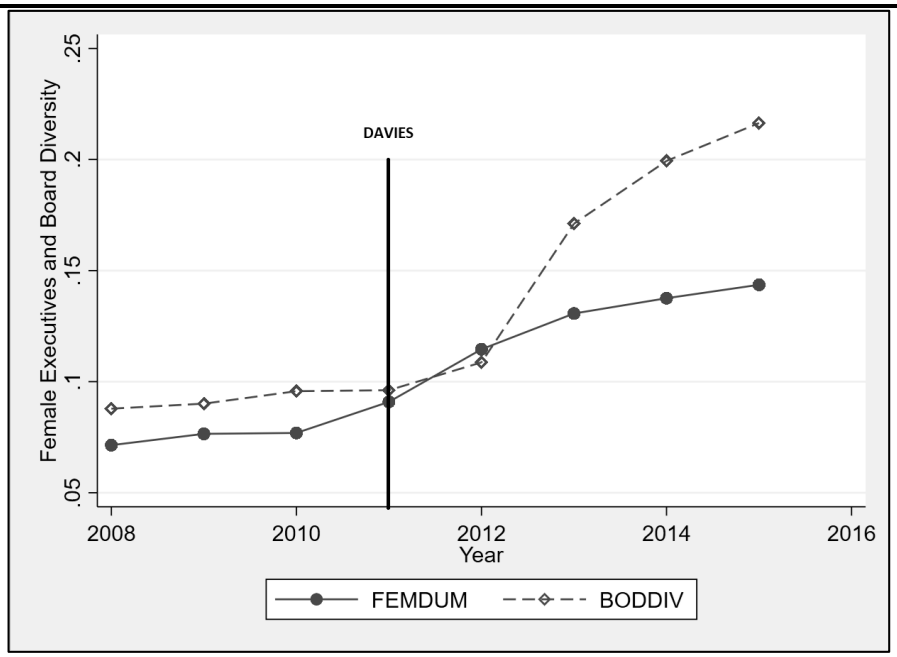
*continue next page*

| | |
|---|---|
| *TOBINQ* | Sum of firm equity value, book value of long-term debt, and current liabilities divided by total asset. |
| *TREAT* | Dummy variable that takes the value of 1 is a firm witnesses a transition from an all-male board in pre-Davies to a with-female board in post-Davies, and zero otherwise. |
| *VOLATIL* | Stock price volatility measured as the stock's average annual price movement to a high and low from a mean price for each year. |

This table presents the definition of all variables used in our analyses. Variables are sorted alphabetically.

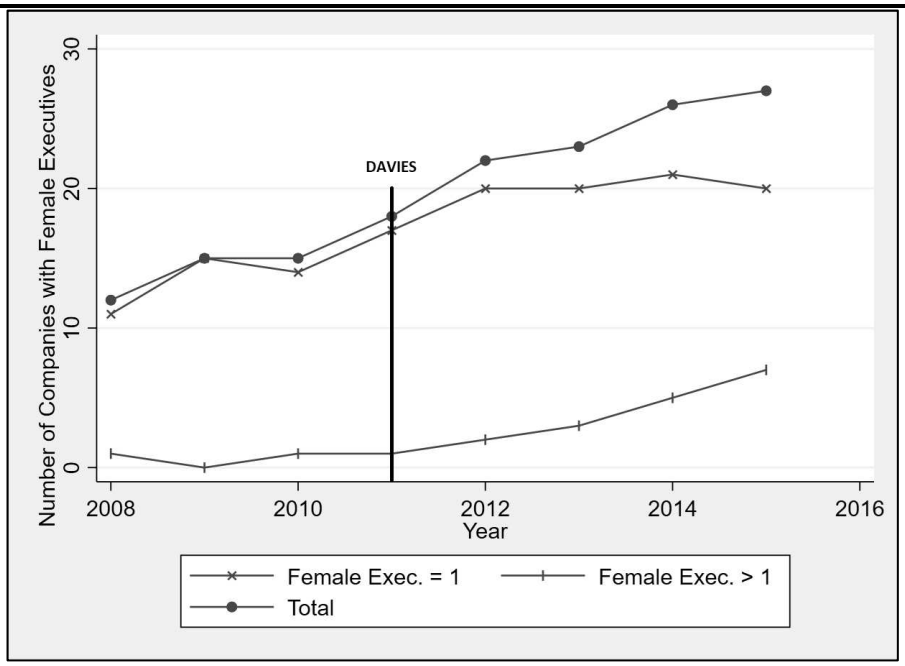
## Tables and Figures

**Figure 1: Female executives on board and board diversity in FTSE350 companies between 2008 and 2015**




Notes: Figure 1 demonstrates the average of the percentage of female executives in addition to the percentage of board diversity on FTSE350 boards between 2008 and 2015.

**Figure 2: Frequency of FTSE350 companies with female executives between 2008 and 2015**




Notes: Figure 2 demonstrates the number of FTSE350 companies with one or more female executive between 2008 and 2015.

**Table 1: Sample Construction and Distribution**

| Panel A: Sample construction | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FTSE350 companies (352 companies × 8 years) | | | | | | | | 2,816 firm-years | |
| ***Less:*** | | | | | | | | | |
| Financials (130 companies × 8 years) | | | | | | | | (1,040) firm-years | |
| Missing data | | | | | | | | (152) firm-years | |
| Non-continuously listed | | | | | | | | (122) firm-years | |
| Final sample | | | | | | | | **1,502 firm-years** | |
| Panel B: Sample distribution by industry and year | | | | | | | | | |
| SIC / Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | Total |
| Agriculture (100-999) | 9 | 10 | 10 | 10 | 9 | 8 | 9 | 6 | 71 |
| Mining and Construction (1000-1999) | 10 | 8 | 11 | 13 | 12 | 7 | 12 | 14 | 87 |
| Manufacturing 1 (2000-2999) | 46 | 49 | 49 | 46 | 45 | 43 | 48 | 42 | 368 |
| Manufacturing 2 (3000-3999) | 17 | 20 | 19 | 18 | 18 | 18 | 18 | 19 | 147 |
| Transportation and Utilities (4000-4999) | 4 | 8 | 8 | 6 | 6 | 7 | 7 | 8 | 54 |
| Trade (5000-5999) | 32 | 38 | 37 | 39 | 40 | 33 | 30 | 37 | 286 |
| Services 1 (7000-7999) | 8 | 10 | 8 | 12 | 10 | 12 | 11 | 11 | 82 |
| Services 2 (8000-8999) | 37 | 43 | 43 | 44 | 42 | 40 | 45 | 45 | 339 |
| Public Administration (9000-9999) | 5 | 10 | 10 | 10 | 10 | 8 | 9 | 6 | 68 |
| Total | 168 | 196 | 195 | 198 | 192 | 176 | 189 | 188 | 1502 |

Notes: Panel A of this table summarizes the construction of the sample. Panel B of this table reports the sample distribution by industry and year based on SIC one-digit industry classification.

**Table 2: Summary Statistics**

| | *FEMDUM*=0, N=1344 | | | | | *FEMDUM*=1, N=158 | | | | | *FEMDUM* (=0) − (=1) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D. | Q1 | Median | Q3 | Mean | S.D. | Q1 | Median | Q3 | Mean Diff. | *p*-value |
| *SALARY#* | 1193565 | 891710 | 650000 | 1000000 | 1500000 | 1127949 | 649973 | 653000 | 997000 | 1541000 | 65616 | 0.88 |
| *BONUS#* | 1142400 | 1290860 | 335000 | 747000 | 1443500 | 915848 | 689059 | 367000 | 774500 | 1320000 | 226552 | 0.46 |
| *EQUITY#* | 3325550 | 4374042 | 844500 | 1900000 | 3608500 | 2671449 | 2509778 | 585000 | 2002500 | 4052000 | 654101 | 0.01 |
| *INCENT#* | 4467950 | 5177678 | 1351000 | 2805000 | 5192000 | 3587297 | 3021570 | 1296000 | 2744500 | 5517000 | 880653 | 0.07 |
| *TOTAL#* | 11300000 | 10600000 | 4700000 | 8339000 | 14000000 | 8732709 | 5722757 | 4241000 | 7233000 | 12900000 | 2567291 | 0.02 |
| *FEMDUM* | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 | 1.000 | 1.000 | 1.000 | −1.000 | . |
| *TREAT* | 0.058 | 0.186 | 0.000 | 0.000 | 0.000 | 0.544 | 0.238 | 0.000 | 1.000 | 1.000 | −0.486 | 0.00 |
| *CSCORE* | 0.044 | 0.231 | −0.012 | 0.044 | 0.133 | 0.104 | 0.240 | −0.010 | 0.049 | 0.203 | −0.060 | 0.00 |
| *DAVIES* | 0.615 | 0.487 | 0.000 | 1.000 | 1.000 | 0.734 | 0.443 | 0.000 | 1.000 | 1.000 | −0.119 | 0.00 |
| *BODDIV* | 0.124 | 0.097 | 0.000 | 0.125 | 0.200 | 0.210 | 0.124 | 0.111 | 0.222 | 0.300 | −0.087 | 0.00 |
| *lnAGE* | 3.862 | 0.135 | 3.773 | 3.892 | 3.961 | 3.873 | 0.129 | 3.786 | 3.903 | 3.961 | −0.011 | 0.31 |
| *lnTENURE* | 2.039 | 0.695 | 1.661 | 2.140 | 2.526 | 2.203 | 0.487 | 1.887 | 2.225 | 2.557 | −0.164 | 0.00 |
| *BODSIZ* | 9.449 | 2.465 | 8.000 | 9.000 | 11.000 | 9.500 | 1.957 | 8.000 | 9.000 | 11.000 | −0.051 | 0.80 |
| *BODIND* | 0.661 | 0.114 | 0.583 | 0.667 | 0.750 | 0.626 | 0.111 | 0.556 | 0.625 | 0.700 | 0.034 | 0.00 |
| *BODDUAL* | 0.113 | 0.317 | 0.000 | 0.000 | 0.000 | 0.025 | 0.158 | 0.000 | 0.000 | 0.000 | 0.088 | 0.00 |
| *BODMEET* | 8.874 | 2.841 | 7.000 | 8.000 | 10.000 | 8.405 | 2.215 | 7.000 | 8.000 | 10.000 | 0.468 | 0.04 |
| *BODEXP* | 0.543 | 0.259 | 0.349 | 0.567 | 0.752 | 0.530 | 0.243 | 0.351 | 0.557 | 0.722 | 0.013 | 0.53 |
| *COMIND* | 0.926 | 0.143 | 0.833 | 1.000 | 1.000 | 0.939 | 0.115 | 1.000 | 1.000 | 1.000 | −0.012 | 0.30 |
| *SIZE* | 14.528 | 1.395 | 13.556 | 14.275 | 15.219 | 14.627 | 1.100 | 13.787 | 14.606 | 15.464 | −0.099 | 0.39 |
| *ROE* | 0.060 | 0.083 | 0.022 | 0.055 | 0.095 | 0.144 | 0.381 | 0.034 | 0.067 | 0.115 | −0.085 | 0.00 |
| *RET* | 0.001 | 0.324 | −0.198 | −0.011 | 0.159 | −0.002 | 0.307 | −0.199 | −0.043 | 0.143 | 0.003 | 0.90 |
| *TOBINQ* | 1.315 | 1.154 | 0.568 | 1.043 | 1.715 | 2.007 | 2.003 | 0.760 | 1.405 | 2.389 | −0.692 | 0.00 |
| *VOLATIL* | 26.924 | 8.289 | 21.020 | 26.265 | 31.405 | 25.276 | 7.416 | 20.380 | 24.305 | 28.440 | 1.648 | 0.01 |
| *LEV* | 0.641 | 1.760 | 0.087 | 0.263 | 0.552 | 0.317 | 0.362 | 0.079 | 0.197 | 0.422 | 0.324 | 0.02 |

Notes: This table reports summary statistics for all the variables used in our analysis for all-male boards and with-female boards, separately. It also reports the difference in mean values along with their statistical significance (*p*-values) based on the t-statistic test. The symbol # infers that the statistics of the variables are reported based on raw values while testing the difference in the means of both groups is based on logarithmic values.

**Table 3: Correlation Matrix**

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (23) | (24) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *lnSALARY (1)* | 1.00 | | | | | | | | | | | | | | | | | | | | | | | |
| *lnBONUS (2)* | **0.69** | 1.00 | | | | | | | | | | | | | | | | | | | | | | |
| *lnEQUITY (3)* | **0.62** | **0.53** | 1.00 | | | | | | | | | | | | | | | | | | | | | |
| *lnINCENT (4)* | **0.80** | **0.82** | **0.85** | 1.00 | | | | | | | | | | | | | | | | | | | | |
| *lnTOTAL (5)* | **0.91** | **0.86** | **0.73** | **0.95** | 1.00 | | | | | | | | | | | | | | | | | | | |
| *FEMDUM (6)* | 0.00 | −0.02 | **−0.06** | **−0.05** | **−0.06** | 1.00 | | | | | | | | | | | | | | | | | | |
| *TREAT (7)* | −0.03 | **−0.06** | **−0.08** | **−0.08** | **−0.09** | **0.66** | 1.00 | | | | | | | | | | | | | | | | | |
| *CSCORE (8)* | 0.05 | 0.06 | **−0.06** | **−0.01** | 0.03 | **0.08** | **0.04** | 1.00 | | | | | | | | | | | | | | | | |
| *DAVIES (9)* | **0.40** | **0.35** | **0.20** | **0.33** | **0.38** | **0.08** | 0.00 | **0.43** | 1.00 | | | | | | | | | | | | | | | |
| *BODDIV (10)* | 0.24 | 0.21 | 0.15 | 0.23 | 0.25 | **0.26** | **0.22** | **0.16** | **0.31** | 1.00 | | | | | | | | | | | | | | |
| *lnAGE (11)* | **0.41** | **0.36** | **0.21** | **0.33** | **0.40** | 0.03 | −0.02 | **0.31** | **0.73** | **0.24** | 1.00 | | | | | | | | | | | | | |
| *lnTENURE (12)* | **0.07** | **0.06** | **−0.06** | 0.00 | 0.05 | **0.07** | **0.06** | **0.08** | **0.13** | −0.03 | **0.27** | 1.00 | | | | | | | | | | | | |
| *BODSIZ (13)* | **0.49** | **0.42** | **0.42** | **0.52** | **0.53** | 0.01 | −0.03 | **−0.08** | −0.03 | **0.15** | **0.08** | **0.08** | 1.00 | | | | | | | | | | | |
| *BODIND (14)* | **0.13** | **0.19** | **0.28** | **0.25** | **0.21** | **−0.09** | **−0.10** | −0.01 | **0.12** | **0.12** | **0.16** | **−0.19** | **0.09** | 1.00 | | | | | | | | | | |
| *BODDUAL (15)* | **−0.11** | **−0.05** | **−0.13** | **−0.09** | **−0.09** | **−0.09** | **−0.05** | −0.02 | **−0.07** | **−0.07** | **−0.09** | **0.08** | **0.03** | **−0.10** | 1.00 | | | | | | | | | |
| *BODMEET (16)* | 0.00 | **−0.05** | 0.04 | 0.00 | −0.02 | **−0.05** | **−0.07** | **−0.05** | **−0.09** | **−0.06** | **−0.09** | **−0.17** | 0.00 | −0.04 | −0.04 | 1.00 | | | | | | | | |
| *BODEXP (17)* | **−0.17** | **−0.13** | **−0.14** | **−0.15** | **−0.16** | −0.02 | 0.00 | −0.04 | **−0.16** | **−0.19** | **−0.21** | 0.05 | **−0.08** | **−0.31** | **0.17** | 0.04 | 1.00 | | | | | | | |
| *COMIND (18)* | 0.02 | −0.02 | **0.06** | 0.01 | 0.00 | 0.03 | 0.04 | 0.03 | 0.03 | **0.05** | **0.05** | 0.03 | 0.01 | **0.07** | **0.05** | −0.01 | 0.01 | 1.00 | | | | | | |
| *SIZE (19)* | **0.60** | **0.51** | **0.60** | **0.68** | **0.67** | 0.02 | 0.01 | **−0.06** | **0.12** | **0.32** | **0.18** | −0.03 | **0.59** | **0.32** | **−0.13** | 0.02 | **−0.22** | **0.07** | 1.00 | | | | | |
| *ROE (20)* | 0.01 | 0.02 | 0.01 | 0.02 | 0.01 | **0.18** | **0.17** | −0.01 | **0.11** | 0.05 | 0.03 | **0.07** | **−0.07** | 0.01 | −0.02 | **−0.09** | −0.04 | 0.03 | 0.02 | 1.00 | | | | |
| *RET (21)* | **0.06** | **0.09** | **0.05** | **0.07** | **0.08** | 0.00 | 0.00 | −0.02 | 0.03 | −0.02 | 0.03 | **0.06** | −0.01 | −0.01 | −0.02 | −0.02 | 0.01 | −0.04 | **0.05** | **0.14** | 1.00 | | | |
| *TOBINQ (22)* | **0.14** | **0.13** | **0.06** | **0.13** | **0.15** | **0.17** | **0.12** | **0.19** | **0.55** | **0.19** | **0.36** | **0.09** | **−0.10** | 0.02 | −0.03 | **−0.11** | **−0.11** | 0.03 | **0.09** | **0.48** | **0.10** | 1.00 | | |
| *VOLATIL (23)* | **−0.27** | **−0.26** | **−0.22** | **−0.29** | **−0.29** | **−0.06** | **−0.08** | −0.04 | **−0.20** | **−0.32** | **−0.16** | −0.03 | **−0.20** | **−0.06** | −0.02 | **0.09** | **0.10** | −0.04 | **−0.42** | −0.04 | **0.10** | **−0.10** | 1.00 | |
| *LEV (24)* | 0.00 | −0.03 | 0.02 | −0.01 | −0.01 | **−0.06** | **−0.07** | **−0.14** | **−0.09** | **−0.07** | −0.04 | 0.00 | **0.07** | −0.02 | −0.03 | 0.05 | 0.03 | −0.03 | **−0.06** | **−0.14** | **−0.07** | **−0.14** | **0.21** | 1.00 |

Notes: This table reports the Pearson correlation matrix between the variables used in our analyses, where coefficients in bold indicate significance at the 5% level or better.

**Table 4: Testing the Effect of Female Executive Directors on Executive Compensation around the Davies Report**

| | Model 4.1 | Model 4.2 | Model 4.3 | Model 4.4 | Model 4.5 |
|---|---|---|---|---|---|
| | *lnSALARY* | *lnBONUS* | *lnEQUITY* | *lnINCENT* | *lnTOTAL* |
| *FEMDUM* | −0.3101*** | −0.3267** | −0.4383** | −0.3653*** | −0.3420*** |
| | (−2.77) | (−2.43) | (−2.43) | (−2.81) | (−2.93) |
| *FEMDUM×DAVIES* | 0.3014*** | 0.1878 | 0.0774 | 0.1601 | 0.0916 |
| | (2.59) | (1.27) | (0.31) | (1.10) | (0.74) |
| *BODDIV* | −0.1851 | −0.3568 | −1.0755*** | −0.5558*** | −0.234 |
| | (−1.27) | (−1.43) | (−3.27) | (−2.82) | (−1.49) |
| *lnAGE* | 0.7554*** | 0.9951*** | 0.3065 | 0.7193*** | 0.8837*** |
| | (4.27) | (3.86) | (0.99) | (3.22) | (4.75) |
| *lnTENURE* | −0.0138 | −0.0278 | −0.1185*** | −0.0694** | −0.0357 |
| | (−0.62) | (−0.73) | (−2.68) | (−2.20) | (−1.45) |
| *BODSIZ* | 0.0713*** | 0.0609*** | 0.0633*** | 0.0748*** | 0.0749*** |
| | (9.67) | (4.55) | (4.13) | (7.39) | (9.24) |
| *BODIND* | −0.7060*** | −0.0702 | 0.8224*** | 0.0973 | −0.3160* |
| | (−3.87) | (−0.30) | (2.72) | (0.50) | (−1.80) |
| *BODDUAL* | −0.0921** | 0.0757 | −0.2337** | −0.03 | −0.0446 |
| | (−2.01) | (1.02) | (−2.20) | (−0.48) | (−0.91) |
| *BODMEET* | 0.0044 | −0.0147* | 0.0068 | 0.0001 | −0.0038 |
| | (0.80) | (−1.82) | (0.75) | (0.00) | (−0.68) |
| *BODEXP* | 0.0194 | −0.0294 | 0.1724 | 0.1301* | 0.0834 |
| | (0.36) | (−0.33) | (1.29) | (1.65) | (1.42) |
| *COMIND* | −0.1033 | −0.5063*** | 0.2438 | −0.2584 | −0.2998*** |
| | (−1.21) | (−2.71) | (0.87) | (−1.61) | (−2.68) |
| *SIZE* | 0.2502*** | 0.3309*** | 0.5849*** | 0.4567*** | 0.3466*** |
| | (15.74) | (12.70) | (17.87) | (21.63) | (20.53) |
| *ROE* | 0.2054** | 0.1276 | 0.3263* | 0.2548* | 0.1820* |
| | (2.28) | (0.95) | (1.74) | (1.89) | (1.71) |
| *RET* | 0.0736* | 0.1646** | 0.0777 | 0.0959* | 0.0876* |
| | (1.65) | (2.40) | (0.98) | (1.65) | (1.84) |
| *TOBINQ* | −0.0789*** | −0.0484** | −0.0841** | −0.0503** | −0.0506*** |
| | (−6.95) | (−2.26) | (−2.18) | (−2.16) | (−3.58) |
| *VOLATIL* | 0.0008 | 0.0011 | 0.0072* | 0.0038 | 0.003 |
| | (0.42) | (0.34) | (1.75) | (1.35) | (1.40) |
| *LEV* | 0.0784 | −0.6217*** | 0.1381 | −0.1737 | −0.1480* |
| | (1.01) | (−4.91) | (0.84) | (−1.55) | (−1.73) |
| Industry & Year FE | Included | Included | Included | Included | Included |
| Adj. $R^2$ | 0.5632 | 0.4455 | 0.4285 | 0.5903 | 0.6223 |
| N | 1502 | 1502 | 1502 | 1502 | 1502 |

Notes: This table reports OLS regressions that examine the effect of the presence of female executives on board on all executives' compensation around the introduction of the Davies Report (2011). The t-statistics in parentheses are calculated based on clustered standard errors at the firm level. All variables are defined in Appendix 1. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

**Table 5: The Impact of Female Executive Directors on Executive Compensation and the Role of Conditional Conservatism**

| | Model 5.1 | Model 5.2 | Model 5.3 | Model 5.4 | Model 5.5 | Model 5.6 | Model 5.7 | Model 5.8 | Model 5.9 | Model 5.10 |
|---|---|---|---|---|---|---|---|---|---|---|
| | *lnSALARY* | *lnSALARY* | *lnBONUS* | *lnBONUS* | *lnEQUITY* | *lnEQUITY* | *lnINCENT* | *lnINCENT* | *lnTOTAL* | *lnTOTAL* |
| *FEMDUM* | −0.0884 | −0.1138** | −0.2188*** | −0.1163 | −0.2830** | −0.1677 | −0.2488*** | −0.1976** | −0.2209*** | −0.1837*** |
| | (−1.42) | (−2.33) | (−3.12) | (−1.46) | (−2.47) | (−1.52) | (−4.05) | (−2.48) | (−3.73) | (−2.82) |
| *CSCORE* | −0.0349 | −0.0629 | −0.2815** | −0.006 | −0.4894*** | −0.4111*** | −0.3462*** | −0.2184** | −0.5461*** | −0.5026*** |
| | (−0.49) | (−0.41) | (−2.51) | (−0.05) | (−3.42) | (−2.75) | (−3.62) | (−2.10) | (−4.97) | (−4.14) |
| *FEMDUM× CSCORE* | | 0.2448 | | −0.4262* | | −1.0092** | | −0.5084** | | −0.3649* |
| | | (1.43) | | (−1.73) | | (−2.20) | | (−2.21) | | (−1.70) |
| *Controls* | Included | Included | Included | Included | Included | Included | Included | Included | Included | Included |
| Industry & Year FE | Included | Included | Included | Included | Included | Included | Included | Included | Included | Included |
| Adj. $R^2$ | 0.5676 | 0.5688 | 0.4475 | 0.4476 | 0.4418 | 0.4598 | 0.5975 | 0.5988 | 0.6285 | 0.6294 |
| N | 1502 | 1502 | 1502 | 1502 | 1502 | 1502 | 1502 | 1502 | 1502 | 1502 |

Notes: This table reports OLS regressions that examine the effect of the presence of female executives on board, the effect of conditional conservatism, and the role of conditional conservatism in the association of female executive directors and executive compensation. The t-statistics in parentheses are calculated based on clustered standard errors at the firm level. All variables are defined in Appendix 1. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

**Table 6: Testing the Effect of Female Executive Directors on Executive Compensation around the Davies Report using DiD**

| | Model 6.1 | Model 6.2 | Model 6.3 | Model 6.4 | Model 6.5 |
|---|---|---|---|---|---|
| | *lnSALARY* | *lnBONUS* | *lnEQUITY* | *lnINCENT* | *lnTOTAL* |
| *TREAT* | 0.0088 | −0.0227 | 0.0133 | 0.0041 | 0.1041 |
| | (0.09) | (−0.17) | (0.07) | (0.03) | (1.05) |
| *TREAT×DAVIES* | −0.0462 | −0.3072** | −0.4579** | −0.3520** | −0.4754*** |
| | (−0.44) | (−2.02) | (−2.09) | (−2.45) | (−4.27) |
| *BODDIV* | −0.0889 | −0.2601 | −0.9907*** | −0.4592** | −0.1564 |
| | (−0.59) | (−1.03) | (−2.97) | (−2.27) | (−0.98) |
| *lnAGE* | 1.1944*** | 1.3905*** | 0.7163** | 1.1544*** | 1.2420*** |
| | (6.99) | (5.65) | (2.47) | (5.47) | (7.02) |
| *lnTENURE* | −0.0266 | −0.038 | −0.1281*** | −0.0806** | −0.0452* |
| | (−1.18) | (−1.00) | (−2.90) | (−2.55) | (−1.83) |
| *BODSIZ* | 0.0701*** | 0.0583*** | 0.0609*** | 0.0725*** | 0.0735*** |
| | (9.27) | (4.33) | (3.97) | (7.10) | (8.94) |
| *BODIND* | −0.7124*** | −0.0832 | 0.8235*** | 0.0917 | −0.3195* |
| | (−3.83) | (−0.36) | (2.70) | (0.46) | (−1.79) |
| *BODDUAL* | −0.0886* | 0.0833 | −0.2304** | −0.0244 | −0.0417 |
| | (−1.91) | (1.12) | (−2.17) | (−0.39) | (−0.85) |
| *BODMEET* | 0.0057 | −0.0138* | 0.0076 | 0.001 | −0.0028 |
| | (1.02) | (−1.70) | (0.83) | (0.15) | (−0.51) |
| *BODEXP* | 0.0247 | −0.0241 | 0.1787 | 0.1361* | 0.0881 |
| | (0.45) | (−0.26) | (1.33) | (1.71) | (1.48) |
| *COMIND* | −0.0945 | −0.4883*** | 0.2501 | −0.2461 | −0.2918*** |
| | (−1.09) | (−2.61) | (0.89) | (−1.52) | (−2.60) |
| *SIZE* | 0.2465*** | 0.3271*** | 0.5808*** | 0.4527*** | 0.3433*** |
| | (14.82) | (12.43) | (17.65) | (21.06) | (19.87) |
| *ROE* | 0.1848* | 0.1123 | 0.2918 | 0.2302 | 0.1608 |
| | (1.88) | (0.79) | (1.52) | (1.63) | (1.43) |
| *RET* | 0.0648 | 0.1592** | 0.0739 | 0.0897 | 0.0812* |
| | (1.41) | (2.29) | (0.93) | (1.52) | (1.67) |
| *TOBINQ* | −0.0432*** | −0.0152 | −0.0524 | −0.0154 | −0.0216 |
| | (−3.44) | (−0.70) | (−1.39) | (−0.67) | (−1.43) |
| *VOLATIL* | −0.0001 | −0.0001 | 0.0061 | 0.0027 | 0.0022 |
| | (−0.05) | (−0.02) | (1.46) | (0.90) | (0.96) |
| *LEV* | 0.0654 | −0.6395*** | 0.1281 | −0.1881* | −0.1587* |
| | (0.83) | (−5.03) | (0.78) | (−1.67) | (−1.84) |
| Industry & Year FE | Included | Included | Included | Included | Included |
| Adj. $R^2$ | 0.5417 | 0.438 | 0.4238 | 0.5809 | 0.6127 |
| N | 1502 | 1502 | 1502 | 1502 | 1502 |

Notes: This table reports difference-in-differences regressions that examine the effect of the transition from all-male boards to with female-boards on executive compensation around the introduction of the Davies Report (2011). The t-statistics in parentheses are calculated based on clustered standard errors at the firm level. All variables are defined in Appendix 1. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

**Table 7: The Impact of Female Executive Directors on Executive Compensation and the Role of Conditional Conservatism around the Davies Report using DiD**

| | Model 7.1 | Model 7.2 | Model 7.3 | Model 7.4 | Model 7.5 |
|---|---|---|---|---|---|
| | *lnSALARY* | *lnBONUS* | *lnEQUITY* | *lnINCENT* | *lnTOTAL* |
| *TREAT* | 0.0087 | −0.4088** | −0.5297** | −0.4405*** | −0.2410* |
| | (0.09) | (−2.35) | (−2.12) | (−2.77) | (−1.80) |
| *CSCORE* | −0.3742*** | −0.9672*** | −1.3918*** | −1.2814*** | −1.1175*** |
| | (−2.82) | (−4.96) | (−6.27) | (−6.72) | (−6.65) |
| *TREAT×DAVIES* | −0.0438 | 0.5950*** | 0.6991** | 0.6090*** | 0.2752* |
| | (−0.38) | (2.93) | (2.08) | (3.05) | (1.72) |
| *TREAT×CSCORE* | −0.4083 | −0.4617 | −0.7335 | −0.4298 | −0.1311 |
| | (−1.32) | (−0.94) | (−0.85) | (−0.84) | (−0.28) |
| *DAVIES×CSCORE* | 0.2018 | 1.3998*** | 1.6834*** | 1.6733*** | 1.4917*** |
| | (1.12) | (4.74) | (4.94) | (6.26) | (6.73) |
| *TREAT×DAVIES×CSCORE* | 0.4907 | −1.0383* | −1.8297* | −1.4165** | −1.1781** |
| | (1.40) | (−1.77) | (−1.85) | (−2.46) | (−2.37) |
| *BODDIV* | −0.0699 | −0.2466 | −0.8876*** | −0.4087** | −0.13 |
| | (−0.46) | (−0.97) | (−2.64) | (−2.01) | (−0.81) |
| *lnAGE* | 1.1714*** | 1.3994*** | 0.8051*** | 1.1822*** | 1.2444*** |
| | (6.71) | (5.62) | (2.72) | (5.53) | (6.93) |
| *lnTENURE* | −0.0239 | −0.0376 | −0.1308*** | −0.0805** | −0.0440* |
| | (−1.04) | (−0.98) | (−2.95) | (−2.55) | (−1.77) |
| *BODSIZ* | 0.0701*** | 0.0583*** | 0.0607*** | 0.0724*** | 0.0734*** |
| | (9.40) | (4.32) | (3.95) | (7.07) | (8.95) |
| *BODIND* | −0.7368*** | −0.0947 | 0.7955*** | 0.0685 | −0.3388* |
| | (−4.04) | (−0.40) | (2.62) | (0.34) | (−1.92) |
| *BODDUAL* | −0.0855* | 0.0842 | −0.2353** | −0.0249 | −0.0407 |
| | (−1.84) | (1.13) | (−2.21) | (−0.40) | (−0.82) |
| *BODMEET* | 0.0056 | −0.0138* | 0.0073 | 0.0008 | −0.003 |
| | (0.99) | (−1.70) | (0.80) | (0.12) | (−0.53) |
| *BODEXP* | 0.0139 | −0.0228 | 0.1898 | 0.1369* | 0.0852 |
| | (0.25) | (−0.25) | (1.40) | (1.71) | (1.43) |
| *COMIND* | −0.0902 | −0.4830** | 0.2732 | −0.2339 | −0.2845** |
| | (−1.04) | (−2.57) | (0.97) | (−1.44) | (−2.52) |
| *SIZE* | 0.2434*** | 0.3241*** | 0.5719*** | 0.4468*** | 0.3387*** |
| | (14.36) | (12.14) | (17.35) | (20.55) | (19.27) |
| *ROE* | 0.2175** | 0.1105 | 0.21 | 0.2102 | 0.1649 |
| | (2.16) | (0.78) | (1.12) | (1.50) | (1.45) |
| *RET* | 0.0562 | 0.1547** | 0.0779 | 0.0861 | 0.0747 |
| | (1.20) | (2.22) | (0.97) | (1.45) | (1.52) |
| *TOBINQ* | −0.0465*** | −0.0147 | −0.0483 | −0.0149 | −0.0225 |
| | (−3.69) | (−0.67) | (−1.30) | (−0.64) | (−1.48) |
| *VOLATIL* | 0.0003 | 0.000 | 0.0055 | 0.0026 | 0.0023 |
| | (0.13) | (0.01) | (1.32) | (0.88) | (1.02) |
| *LEV* | 0.0594 | −0.6458*** | 0.115 | −0.1978* | −0.1667* |
| | (0.74) | (−5.06) | (0.70) | (−1.75) | (−1.92) |
| Industry & Year FE | Included | Included | Included | Included | Included |
| Adj. $R^2$ | 0.5477 | 0.4386 | 0.4291 | 0.5838 | 0.6154 |
| N | 1502 | 1502 | 1502 | 1502 | 1502 |

Notes: This table reports difference-in-differences regressions that examine the change in the role of conditional conservatism upon the transition from all-male boards to with female-boards on executive compensation following the introduction of the Davies Report (2011). The t-statistics in parentheses are calculated based on clustered standard errors at the firm level. All variables are defined in Appendix 1. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

**Table 8: Propensity Score Matching Results**

Panel A: Replicating the Results of Table 6 using the PSM sample

| | Model 8.1a | Model 8.2a | Model 8.3a | Model 8.4a | Model 8.5a |
|---|---|---|---|---|---|
| | *lnSALARY* | *lnBONUS* | *lnEQUITY* | *lnINCENT* | *lnTOTAL* |
| *TREAT* | 0.0958 | 0.0203 | 0.1311 | 0.0911 | 0.1810* |
| | (0.95) | (0.14) | (0.69) | (0.75) | (1.80) |
| *TREAT×DAVIES* | −0.1382 | −0.3662** | −0.5269** | −0.4576*** | −0.5713*** |
| | (−1.22) | (−2.21) | (−2.16) | (−3.21) | (−5.05) |
| *Controls* | Included | Included | Included | Included | Included |
| Industry & Year FE | Included | Included | Included | Included | Included |
| Adj. $R^2$ | 0.6031 | 0.4625 | 0.4692 | 0.6231 | 0.6531 |
| N | 886 | 886 | 886 | 886 | 886 |

Panel B: Replicating the Results of Table 7 using the PSM sample

| | Model 8.1b | Model 8.2b | Model 8.3b | Model 8.4b | Model 8.5b |
|---|---|---|---|---|---|
| | *lnSALARY* | *lnBONUS* | *lnEQUITY* | *lnINCENT* | *lnTOTAL* |
| *TREAT* | 0.2820*** | −0.1635 | −0.308 | −0.2605 | −0.0867 |
| | (2.89) | (−0.90) | (−1.18) | (−1.54) | (−0.59) |
| *CSCORE* | −0.3110* | −1.2474*** | −1.6215*** | −1.2567*** | −1.0778*** |
| | (−1.95) | (−5.02) | (−6.17) | (−5.03) | (−5.00) |
| *TREAT×DAVIES* | −0.5546*** | 0.3827* | 0.7337** | 0.4885** | 0.1382 |
| | (−4.70) | (1.80) | (2.10) | (2.29) | (0.79) |
| *TREAT×CSCORE* | 0.081 | −0.2585 | −0.8226 | −0.3909 | −0.0908 |
| | (0.26) | (−0.50) | (−1.01) | (−0.76) | (−0.19) |
| *DAVIES×CSCORE* | 0.1513 | 1.7250*** | 1.9243*** | 1.4044*** | 1.3108*** |
| | (0.70) | (4.52) | (5.04) | (4.21) | (4.63) |
| *TREAT×DAVIES×CSCORE* | 0.4142 | −1.1506* | −1.9103* | −1.3541** | −1.1123** |
| | (0.90) | (−1.78) | (−1.83) | (−2.18) | (−2.09) |
| *Controls* | Included | Included | Included | Included | Included |
| Industry & Year FE | Included | Included | Included | Included | Included |
| Adj. $R^2$ | 0.6101 | 0.4643 | 0.4777 | 0.6298 | 0.6575 |
| N | 886 | 886 | 886 | 886 | 886 |

Notes: Panel A of this table replicates the results of Table 6 using the PSM sample. Panel B of this table replicates the results of Table 7 using the PSM sample. The matching criteria is explained in detail in section 4.4, including the quality of matching. All control variables are included in all regressions but not reported for brevity and better exposition. The t-statistics in parentheses are calculated based on clustered standard errors at the firm level. All variables are defined in Appendix 1. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

**Table 9: Testing for Endogeneity using the 2SLS Instrumental Variable Approach**

| | First Stage | | Second Stage | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Model 9.1 | Model 9.2 | Model 9.3 | Model 9.4 | Model 9.5 | Model 9.6 | Model 9.7 | Model 9.8 | Model 9.9 | Model 9.10 | Model 9.11 | Model 9.12 |
| | *FEMDUM* | *FEMDUM×CSCORE* | *lnSALARY* | *lnSALARY* | *lnBONUS* | *lnBONUS* | *lnEQUITY* | *lnEQUITY* | *lnINCENT* | *lnINCENT* | *lnTOTAL* | *lnTOTAL* |
| *FEMDUM* | | | −0.0216 | −0.0427 | −0.4868*** | −0.1455* | −0.2879* | −0.1196 | −0.3442*** | −0.3564** | −0.3038*** | −0.3021** |
| | | | (−0.20) | (−0.83) | (−3.49) | (−1.77) | (−1.82) | (−0.75) | (−3.33) | (−2.33) | (−3.98) | (−2.33) |
| *CSCORE* | −0.2494 | −0.0597 | 0.0003 | −0.0241 | −0.3255** | −0.3207** | −0.5610*** | −0.4117*** | −0.3870*** | −0.2361 | −0.2942*** | −0.0441 |
| | (−1.33) | (−0.44) | (0.00) | (−0.15) | (−2.44) | (−2.45) | (−3.81) | (−2.77) | (−3.93) | (−1.64) | (−3.64) | (−0.33) |
| *FEMDUM×CSCORE* | | | | 0.223 | | −0.4556* | | −1.0093** | | −0.6938** | | −0.5258** |
| | | | | (1.39) | | (−1.80) | | (−2.21) | | (−2.31) | | (−2.17) |
| *FEM_IND* | 0.9017*** | 0.1226 | | | | | | | | | | |
| | (2.83) | (1.10) | | | | | | | | | | |
| *FEM_IND×CSCORE* | 2.4878* | 1.4215 | | | | | | | | | | |
| | (1.84) | (1.46) | | | | | | | | | | |
| *Controls* | Included | Included | Included | Included | Included | Included | Included | Included | Included | Included | Included | Included |
| Industry & Year FE | Included | Included | Included | Included | Included | Included | Included | Included | Included | Included | Included | Included |
| Adj. $R^2$ | 0.141 | 0.1528 | 0.5104 | 0.5095 | 0.2867 | 0.2853 | 0.4251 | 0.4284 | 0.558 | 0.5575 | 0.6055 | 0.6054 |
| N | 1502 | 1502 | 1502 | 1502 | 1502 | 1502 | 1502 | 1502 | 1502 | 1502 | 1502 | 1502 |
| $H_0$: *FEMDUM* is exogenous | | | *p*-value= 0.42 | *p*-value= 0.39 | *p*-value= 0.24 | *p*-value= 0.22 | *p*-value= 0.36 | *p*-value= 0.35 | *p*-value= 0.31 | *p*-value= 0.33 | *p*-value= 0.26 | *p*-value= 0.21 |

Notes: This table reports 2SLS instrumental variable regressions. The instrument used is the industry's average of board diversity in each year (*FEM_IND*) excluding the focal firm from the calculation of the industry average. The first stage regresses the endogenous variable and its interaction with *CSCORE* (Models 9.1 and 9.2) on the instrument used and its interaction with *CSCORE*. The second stage uses the fitted values from the first stage to instrument the endogenous variables. All control variables are included in all regressions but not reported for brevity and better exposition. The t-statistics in parentheses are calculated based on clustered standard errors at the firm level. All variables are defined in Appendix 1. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.