

Does diversity pay in the boardroom?*

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Laura Casares Field
Department of Finance
University of Delaware
Newark, DE 19716
(302) 831-3810
lfield@udel.edu

Matthew E. Souther
Department of Finance
University of Missouri
Columbia, MO 65211
(573) 884-5666
southern@missouri.edu

Adam S. Yore
Department of Finance
University of Missouri
Columbia, MO 65211
(573) 884-1446
yorea@missouri.edu

Minority and female (“diverse”) directors earn significantly higher compensation than non-diverse directors. The difference is due to their increased likelihood of being appointed to the boards of larger, more visible firms which tend to pay more. However, within these same firms, diverse directors earn lower compensation than their peers despite having superior qualifications and receiving higher vote totals in director elections. This lower compensation is partially a function of board responsibilities. Although diverse directors are more likely to serve on certain committees (except the compensation committee), they are less likely to serve in key leadership positions associated with greater pay. Moreover, they earn less income beyond the formulaic components of director compensation. Female and minority representation on the director compensation committee and the existence of a board diversity policy attenuates this effect.

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1. Introduction

In this paper, we explore whether shareholders and boards as a whole value diversity by examining the compensation of individual female and minority (hereafter, diverse) directors and the composition of corporate leadership in the boardroom. With the board of the directors at the apex of an effective corporate governance system [Fama and Jensen (1983); Gillan (2006)], the composition of the board has received much academic attention [e.g., Linck, Netter, and Yang (2008)]. Prior research has focused on structural issues such as board size, leadership, independence, and busyness as well as the qualifications of the individual directors [Brickley, Coles, and Jarrell (1997); Coles, Daniel, and Naveen (2008); Adams, Akyol, and Verwijmeren (2015)]. Given the importance of the board for protecting and enhancing shareholder wealth, a natural question in this literature has been on how the firm should compensate their directors to ensure that they act in their investors' interests [Fich and Shivdasani (2005); Adams and Ferreira (2008)]. A general conclusion from these studies is that the composition and compensation of the board are important determinants of shareholder wealth.

Recently, scholars have explored whether gender or racial diversity in the boardroom is important for shareholders [e.g., Adams and Ferreira (2009); Anderson, Reeb, Udaphyay, and Zhao (2011); Ahern and Dittmar (2012); Tate and Yang (2015); Kim and Starks (2016); Agarwal, Qian, Reeb, and Sing (2016); Adams (2016); Eckbo, Nygaard, and Thornburn (2016); Kaplan and Sorensen (2016)]. Diversity on corporate boards is a controversial topic, but our results suggest meaningful differences in both pay and leadership opportunities for diverse directors. The issues we study in this paper are a central focus of the public policy debate over board composition. In a November 15, 2015 keynote address, Securities and Exchange Commission (SEC) chief Mary Jo White set a goal of 40% female participation on corporate boards by 2025, but extant evidence indicates that such participation currently falls far short of that goal [Farrell and Hersch (2005); Kim and Starks (2016)].¹ Minority representation in the boardroom and C-suite is also slight [Westphal and Stern (2007); McDonald and Westphal (2013)].

Mandatory gender diversity is already the norm in some European countries such as Belgium, France, and Norway. Stopping short of imposing diversity quotas, on February 28, 2010, the SEC issued "Proxy Disclosure Enhancements" which amended Item 407(c) of Regulation S-K (a.k.a. the "umbrella disclosure regulation"). These require issuers to disclose whether and how

¹ <https://www.sec.gov/news/speech/gender-parity-in-the-american-boardroom.html>

diversity is considered in the director nomination process. However, the SEC leaves it up to the company to define “diversity” (which can include nearly anything, not just race and gender, such as diversity of experience) and research suggests that over 60% of companies fail to comply with this regulation [Smallman (2013)].

In response to the ineffectiveness of efforts to increase gender diversity,² on March 7, 2016, Congressional Democrats led by Rep. Carolyn Maloney (D-N.Y.) introduced a bill intended to increase female representation on corporate boards in the United States with the backing of the U.S. Chamber of Commerce.³ The *Gender Diversity in Corporate Leadership Act of 2016* (H.R.4718) calls on the SEC to establish a “Gender Diversity Advisory Group” to encourage female representation. The bill would also require corporate boards to detail the gender composition of their nominees and directors. Similarly, a letter dated March 2, 2016 from House Financial Services and Senate Banking Committee members Rep. Maxine Waters (D-Calif.) and Sen. Sherrod Brown (D-Ohio) urges the SEC to require corporate boards to disclose the racial and gender makeup of their director candidate pool.

While some may not find politicking over this topic surprising, it is notable that capital market participants have also concerned themselves with diverse leadership in the most recent proxy season. On September 23, 2015, Mr. Antonio Maldoado, the creative director at the music company Insignia Entertainment, submitted a shareholder proposal to Apple Inc. that pushes for racial diversity on their board, arguing Apple’s leadership was “a bit too vanilla.”⁴ The proposal, if adopted, would have required Apple to increase the number of diverse managers and directors at the firm. Apple originally wished to deny inclusion of the proposal in its proxy statement, arguing to the SEC that the proposal represented an attempt to “micromanage the firm’s recruitment.” However, in a letter dated December 11, 2015, the SEC disagreed with Apple’s position, leaving the door open for an enforcement action should the company have attempted to block the proposal. Ultimately, the proposal failed to get majority support at the February 26, 2016 annual meeting, but CEO Tim Cook stated afterwards “[t]here’s much more work to do on diversity across the company. I can commit to you we are working very hard on it.”⁵

² <https://maloney.house.gov/media-center/press-releases/maloney-unveils-new-gao-report-showing-rampant-disparities-against-women>

³ <https://maloney.house.gov/media-center/press-releases/maloney-s-newly-introduced-gender-diversity-in-corporate-leadership-act>

⁴ <http://www.bloomberg.com/news/articles/2015-12-31/apple-pressured-by-investor-for-racial-diversity-in-senior-ranks>

⁵ <https://www.theguardian.com/technology/2016/feb/26/apple-rejects-diversity-plan-minorities-silicon-valley>

Finally, the finance industry at large also appears interested in the diversity of corporate leadership. On March 8, 2016, State Street Global Advisors launched their SPDR® SSGA Gender Diversity Index ETF⁶ with comparable funds by Barclays, Glenmede Funds, and Pax World Funds following suit. The California State Teachers' Retirement System (CalSTRS) has also pushed heavily for more inclusion on corporate boards, stating publicly “board diversity is an essential tool in the goals to improve corporate accountability and enhance long-term sustainable value shareholders.”⁷ In an open petition to the SEC dated March 31, 2015, nine public pension funds holding over \$1 trillion in assets advocated that corporate issuers be required to disclose director nominee's gender, race, and ethnicity clearly in a matrix format so that it may be aggregated across registrants.⁸ Law firm Akin Gump and consulting firm Spencer Stuart have placed board diversity as a top-10 issue for directors^{9,10} and Morgan Stanley recently recommended to their clients investing in gender diverse companies as a trading strategy.¹¹ Thus, board diversity is now a meaningful factor for the providers of finance and, by extension, a determinant of the cost of capital.

The public policy debate is clearly keyed in on simple board representation. We add to this discussion by examining the representation of diverse directors among the leadership positions within the board and how these individuals are compensated for their service. To assess the labor market value of diverse directors, we leverage the change in reporting requirements for director compensation. Prior to 2006, firms were not required to detail the remuneration of individual directors, but rather the overall compensation policy of the board. Thus, to this date, conclusions about the value of board diversity in the director labor market could only be observed at the firm level. However, with the adoption of SEC Rule 33-8732A on November 7, 2006, corporations must now disclose individual director compensation in a manner similar to executive compensation in a summary compensation table in accordance with FAS 123R. As a result, we are able to directly attribute the monetary value boards award for the service of diverse directors.

Using a large sample of 66,855 director-firm-year observations representing 13,402 individual directors serving at 1,828 unique firms from 2006 to 2013, we find that large and highly

⁶ The fund, which trades on the New York Stock Exchange under the ticker symbol “SHE,” invests in companies with women in senior leadership or board-level positions.

⁷ <http://www.calstrs.com/board-diversity-0>

⁸ <https://www.sec.gov/rules/petitions/2015/petn4-682.pdf>

⁹ https://www.spencerstuart.com/~media/pdf%20files/research%20and%20insight%20pdfs/ssbi-2015_110215-web.pdf

¹⁰ <https://www.akingump.com/images/content/4/0/v2/40031/AG-Corp-Alert-Top-10-121715.pdf>

¹¹ Parker, Adam S., Lin, Lin, Clavel, Charles, and Zlotnicka, Eva T., 2016, Putting Gender Diversity to Work: Better Fundamentals, Less Volatility, *Morgan Stanley Global Quantitative Research* (May 9, 2016).

publicly visible firms are more likely to appoint female and minority directors and that diverse directors comprise a greater proportion of the board at these firms. Consistent with Hillman, Cannella, and Harris (2002), in nearly every dimension that we can observe, diverse directors are more highly qualified than their non-diverse counterparts. On average female and minority directors exhibit a greater number of academic and professional credentials (even on a firm-adjusted basis), have more extensive outside board and other firm committee experience, and come from larger director networks.

Shareholders appear to appreciate the qualifications and experience of diverse directors and we use shareholders' "voice" in director elections as a proxy for the perceived value that investors place on their service. Annual voting outcomes should be relatively free of the self-selection problems associated with other performance metrics utilized in the literature such as market valuation or operating performance [Farrell and Hersch (2005); Carter, D'Souza, Simkins, and Simpson (2010)]. We find that diverse directors are associated with significantly higher vote totals than non-diverse directors. Specifically, we find that female and minority directors earn 0.39% and 0.16% higher vote "for" totals in their annual elections. While the point estimates are admittedly small and unlikely to affect election outcomes, they are on the same order of magnitude as other provisions studied such as CEO-Chairman duality or whether the firm has confidential voting [Cai, Garner, and Walkling (2009)]. More importantly, the evidence certainly does not suggest that shareholders systematically value the services of diverse directors less than their peers or that they are perceived in any way as less qualified at the ballot box. Further, we fail to find any evidence that these directors are any less effective than their fellow board members when it comes to monitoring the CEO. That is, CEO turnover is no less sensitive to performance in the presence of female or minority board members. All evidence points to the conclusion that diverse directors possess at least the same professional qualifications as their peers and perform their duties on the board as well as any other director.

A different story emerges when it comes to how the board's compensation committee values the participation of diverse directors. Diverse directors are more likely to be appointed to highly visible boards, which on average pay more in the cross-section. However, we find that female and minority directors experience systematically negative within-board variation in their total compensation. That is, while they tend to be appointed to boards which often pay more, diverse directors earn less than their peers within those same boards. This effect is observed in

both cash and equity-based components of compensation and for directors at the beginning, middle, and late stages of their careers. We note that our results hold while controlling for the commonly employed measures of director quality used in the literature such as education, board experience, professional background, outside board and committee experience, and the size of their director network [e.g., Fich (2005); Adams and Ferreira (2008); Fedaseyeu, Linck, Wagner (2016)]. We acknowledge that other unobservable qualifications that stratify by female and minority status could potentially explain our results. However, such characteristics would also have to be negatively correlated with shareholder votes. Indeed, we find no evidence that the “low paid” diverse directors earn any less shareholder support in annual elections.

The lower compensation that we observe is partially attributable to differences in titled responsibilities on the board. Director compensation is typically a function of the annual retainer, meeting fees, bonuses for serving on a committee, and, in particular, chairing one of the principal board committees or leading the entire board as chairman or lead director. All board members are entitled to the base retainer and meeting fees, so much of the within-board variation in pay is accounted for by a director’s additional committee and leadership responsibilities (with certain influential committees and chair positions being worth more than others). Our tests confirm that committee and chair service is a positive determinant of director pay. However, directors also have opportunities to earn supplemental compensation for special assignments such as consulting or perquisites and these “other” fees also play a role in determining total pay. Work by Fedeseyeu et al (2015) suggests that variation in these responsibilities is largely a function of the board’s perception of the director’s qualifications and that the pay for this additional workload can be material.

We do find evidence that diverse directors are more likely to be appointed to certain principal board committees. Female directors are more likely to be appointed to the standing audit, nominating, and governance committees and minorities are more likely to be appointed to the audit committee. Curiously, both women and minorities are *less* likely to be appointed to the one committee of particular interest in this study, the compensation committee.

Importantly, we find that diverse directors, on average, are less likely to be appointed to positions of authority on the board. That is, they are one to three percentage points less likely to serve as either the Chairman of the Board or Lead Director and five percentage points less likely to serve as the chair of a standing committee. On a relative basis, these results suggest that diverse

directors are 13%-29% less likely than non-diverse directors to serve as Chairman of the Board or Lead Director and 11.93% less likely to be receive a committee chair position. Again, the findings on committee chair positions are largely driven by female and minority board members being significantly less likely to serve as the chair of the two power committees: audit and compensation. Notably, while female directors are marginally more likely to be tapped as the governance committee chair, minority directors are significantly less likely to serve in *any* major leadership position on the board.

While differences in responsibilities partially explain the pay gap, there is some evidence that indicates diverse directors earn lower pay for similar work. Cognizant of the differences in opportunities effect noted above, we analyze a set of directors without these confounding influences on pay by studying a homogenous group that do not serve on the board's standing committees. For this smaller pool of directors, we find that the pay gaps empirically estimated become stronger. That is, diverse director pay is 9% lower among the set of directors whose only function on the board is that of an outside director. Furthermore, diverse directors are significantly less likely to participate in assignments that entitle them to the more discretionary "other" compensation and earn 6.4% less than their peers in this category. These results suggest that some of the pay gaps documented for diverse directors are the result of differences in opportunities to earn additional pay beyond the standard retainer.

An examination of corporate policies and the staffing of board committees suggests a causal relation. Approximately 22% of the companies in our sample (9% before 2010, 33% after 2010) have a formal diversity policy published in the corporate proxy which specifically states that the board considers gender and ethnicity in the nominations of directors. This sort of sensitivity to female and minority representation appears to mitigate the pay gaps we observe. We note that 47% of our sample firms have at least one diverse director on the committee setting director pay (typically the executive compensation committee, but sometimes the nominating or governance committees) and such representation also appears to make a difference. We find that female and minority participation on the director compensation committee significantly reduces the within-board pay disparity that we observe. However, the ultimate explanation for the differences in board responsibilities and pay that we observe are unknown at this point.

Our paper makes several important contributions to the literature. Previous studies have documented pay gaps for female CEOs [Bell (2005); Keloharju, Knüpfer, and Tåg (2016)] and the

lack of board participation for women and minorities [McDonald and Westphal (2013); Westphal and Stern (2007); Schnatterly, Berns, da Motta Veiga, and Ward (2015)]. However, to our knowledge, our paper is the first to document the pervasive inequities in pay and board leadership with respect to female and minority directors. Our paper also adds to a small literature concerning racial and gender inequality in finance [Park and Westphal (2013); Dougal, Gao, Mayew, and Parsons (2016); Agarwal, Qian, Reeb, and Sing (2016)] and the importance of having women or minorities in positions of leadership for promoting equity among employees [e.g., Tate and Yang (2015)]. We further add to an emerging literature that examines the determinants of individual director compensation at large, U.S. public companies. To our knowledge, Yermack (2004), Engel, Hayes, and Wang (2010), and Fedaseyev, Linck, Wagner (2016) are the only other studies which have examined this in detail and none of these do so in our context. Finally, we contribute to the broad literature on how firms value particular director characteristics when setting the compensation of the board [Adams and Ferreira (2008); Ryan and Wiggins (2004); Farrell, Friesen, and Hersch (2008); Becher, Campbell, and Frye (2005); Boumeshleh, Cline, and Yore (2014); Brick, Palmon, and Wald (2006); Fich and Shivdasani (2005); Gerety, Hoi, and Robin (2001); Hermalin and Weisbach (1991); Morck, Shleifer, and Vishny (1988); Vafeas (1999); Linck, Netter, and Yang (2009)].

2. Literature Review

There is very little research on how female and minority directors are paid relative to other directors or how they are appointed to leadership positions within the board. However, recently there has been considerable academic interest in finance concerning their representation on the board as a whole. From the shareholders' vantage point, director selection is ultimately a decision about how well a particular director will fulfill their two primary roles as monitor and advisor [Fama and Jensen (1983)]. When it comes to the choice of appointing a director with a diverse background and potentially varying views on how the firm should be run, there is an interplay between collegiality on the board and valuable dissent. Anderson, Reeb, Upadhyay, and Zhao (2011) share this nuanced view of the diversity of the board, arguing that there are costs and benefits to heterogeneity among the serving directors.

The literature suggests that the personal expertise motivates the appointment of diverse directors, but also that their demographic characteristics are of interest. In particular, Hillman,

Cannella, and Harris (2002) find that, at Fortune 1000 companies, female and minority directors are more likely to come from more varied, non-business backgrounds, and are more likely to hold advanced degrees. Kim and Starks (2016) show that female directors offer skillsets which typically complement those already in place, leading to a more complete functional expertise on the board when they are represented. Work by Agrawal and Knoeber (2001) also suggests diverse directors are appointed for their unique skills rather than serving in order for their firms to be seen as advocating diversity as a means to curry political favor. Similarly, Fan, Wong, and Zhang (2007) show that women are appointed to boards of Chinese firms for their specific expertise rather than their political connections. Farrell and Hersch (2005) on the other hand do find that the appointment of female directors is influenced by outside calls for diversity.

Scholars recognize the possibility that directors with diverse backgrounds may offer differences in opinions and such disagreement could introduce disruption at the company, thereby inhibiting performance. Adams and Ferreira (2007) put forth a theoretical model which explores this interplay between monitoring and dissent. They argue the potential optimality of management friendly boards since the CEO is reluctant to share information with a monitoring intensive board. The concern over dissent has empirical support. Faleye, Hoitash, and Hoitash (2011) find that monitoring intense boards are associated with poor acquisitions and less innovation. Adams, Akyol, and Verwijmeren (2015) further find that diverse director skill sets do not enhance firm performance; rather, “common ground” among directors is associated with better operating performance. When such dissent comes to a head, the outcome can be disastrous. Agrawal and Chen (2011) explore these disruptions with a sample of ex-post identified boardroom disputes using Form 8-K disclosures of correspondence between departing directors and top management. They find that such disruptions are associated with large declines in firm value and ongoing underperformance in profitability and stock returns subsequent to the dispute.

However, dissent is clearly valuable when the initial course of action chosen by management is incorrect. Kim, Pantzalis, and Park (2013) show that corporate directors are better monitors when their ideology differs from that of the CEO. Ideologically diverse boards are associated with higher firm value and fewer agency problems. Research suggests that diverse directors provide such valuable dissent [Jiang, Wan, and Zhao (2016)], but Agrawal and Chen (2011) find no evidence that female board representation is particularly associated with the “boardroom brawls” they study. Anderson, Reeb, Upadhyay, and Zhao (2011) find that diversity

among the board is valuable when the possibility for managerial mistakes is high. Board heterogeneity (and specifically gender and racial diversity) is associated with higher valuations at complex firms and those where CEO power is high. Female directors are associated with better board monitoring [Adams and Ferreira (2009)], more transparent corporate disclosure [Upadhyay and Zeng (2014); Gul, Srinidhi, and Ng (2011)], fewer agency problems [Jurkus, Park and Woodard (2011)], and profitable corporate deal-making [Huang and Kisgen (2013); Levi, Li, and Zhang (2014)]. The evidence is mixed, however, on the influence of female executives and directors on corporate risk-taking [Berger, Kick, and Schaeck (2014); Peltomäki, Swidler, Vähämaa (2015); Adams and Raganathan (2015); Sila, Gonzalez, and Hagendorff (2016)].

Whether such differing policy views are valuable to shareholders remains an open question, although a host of studies indicates that female and minority leadership is value-enhancing. Cross-country evidence suggests female representation in the C-suite is associated with larger profit margins and operating performance [Norland, Mora, and Kotschwar (2016)], particularly at financial institutions [Richard (2000); Strøm, D'Espallier, Mersland (2014); Ting (2016)], which translates into higher valuations for innovative companies [Dezso and Ross (2012)]. Female and minority board representation may also be value enhancing at U.S. firms [Carter, Simkins, and Simpson (2003); Erhardt, Werbel, and Shrader (2003)] and abroad [Liu, Wei, and Xie (2014); Low, Roberts, and Whiting (2015); Kang, Ding, and Charoenwong (2010); García-Meca, García-Sánchez, Martínez-Ferrero (2015)], particularly when those directors serve on the principal board committees [Carter, D'Souza, Simkins, and Simpson (2007)]. Miller and del Carmen Triana (2009) show that racial diversity on the board is associated with better corporate reputation and innovation. However, concerns over self-selection abound with these results [Farrell and Hersch (2005); Carter, D'Souza, Simkins, and Simpson (2010)]. Some evidence suggests that the beneficial effects of gender diversity in the boardroom persists when controlling for endogeneity [Adams and Raganathan (2015)] while other studies imply they do not [Eckbo, Nygaard, and Thornburn (2016)], or perhaps even reverse [Ahern and Dittmar (2012); Matsa and Miller (2013)].

While some of the literature points to the potential value of diversity among top managers and boards, several papers document that this value is not capitalized in the labor markets. We note that the evidence is largely limited to executive officers rather than the board of directors, which is the focus of our study. Bell (2005) finds that female top executives earn 8-25% less than their male counterparts, particularly among CEOs. Lam, McGuinness, and Vieito (2013) also

document this pay gap among Chinese CEOs. Tate and Yang (2015) examine the issue for lower level employees. They explore the career outcomes of displaced workers following plant closings and find that female employees suffer more than male employees who move from the same plant.

Female and minority executives and directors also appear to suffer diminished career opportunities, but this outcome is conditioned on the nature of those in power at the firm. The pay gaps documented by Bell (2005) for female junior executives diminish when females hold the top executive position. Kaplan and Sorensen (2016) show that, controlling for qualifications, women are less likely to become CEO. Agarwal, Qian, Reeb, and Sing (2016) document barriers for women to boardroom service as well, noting that female board appointments are often a function of non-professional social ties such as golfing rather than their professional skills. However, the extant literature suggests that diversity in corporate leadership can mitigate these problems. Lam, McGuinness, and Vieito (2013) find that women are more likely to rise to power when female board representation is strong and Tate and Yang (2015) find significantly smaller wage gaps when the displaced employees work at female-led firms. Such evidence emphasizes the importance of reviewing the determinants of board leadership as we do in this study.

There is some evidence to suggest that diverse directors and executives face opposition at U.S. public companies. Westphal and Stern (2007) find that minority and female directors are punished in the labor market for more heavily monitoring the CEO and are not rewarded for providing advice as they are less likely to receive outside directorships when performing these duties. Similarly, Park and Westphal (2013) find female and minority CEOs receive more “blame” for poor firm performance by journalists and fellow executives. These career concerns persist outside of the corporate setting. For example, Rider, Wade, Swaminathan, and Schwab (2016) use a sample of coaches in the National Football League (NFL) to document that minorities are promoted less often when examining lower level coaching jobs (ex. coordinators or position coaches). However, the effect is not observed among head coaches.

We leave it to the continuing literature to sort out whether diverse directors are perceived as value enhancing to the firm’s shareholders and instead focus on whether they are favored in the director labor market, as measured by their compensation and board responsibilities. The extensive literature on the importance of directors’ incentives for firm value suggests that differential pay on the basis of gender or minority status can affect shareholder wealth [see Morck, Shleifer, and Vishny (1988), Ryan and Wiggins (2004), Yermack (2004), and Becher, Campbell, and Frye

(2005) among others]. In particular, even variation in compensation as modest as \$1,000 is enough to induce meaningful differences in effort by corporate directors [Adams and Ferreira (2008)] and such effort significantly impacts shareholder wealth [Vafeas (1999)]. The existing literature suggests that, if diverse directors do indeed add value, we should expect to find female and minority directors to be rewarded with higher pay and to be placed in positions of board leadership.

3. Data

3.1. Sample Construction

We identify our sample observations using the universe of directors listed in the Institutional Shareholder Services (ISS), aka RiskMetrics/IRRC, “Directors” database available on the Wharton Research Database Services (WRDS) website. With coverage starting in 1996, this database contains over 260,000 director-firm-year observations and reports the composition of the board of directors up for election or continuing service as of their annual meetings at S&P 500, S&P Mid Cap, and S&P Small Cap companies. We collect from this database the identity, gender, ethnicity, age, tenure, independence, committee membership, title in their primary position of employment, number of outside directorships and outside committee assignments, and attendance for each of the corporate directors in our sample for the 2006-2013 annual meetings. *Female* directors are identified by the gender listed in the ISS Directors database and we define a director as *minority* if the ethnicity is listed in the database as “A” (i.e., Asian), “B” (i.e., African American), “BLACK/AFRICAN AM,” “H” (i.e., Hispanic), “HISPANIC/LATIN A,” “I” (i.e., Native American), “INDIAN,” or “MIDDLE-EASTERN.” We further define a director as *diverse* if they are either female or a minority.

With the effectiveness of SEC Rule 33-8732A on November 7, 2006, corporations must now disclose individual non-employee director compensation in a manner similar to executive compensation in a summary compensation table in accordance with FAS 123R. This data is reported in the EXECUCOMP database from fiscal year 2006 on in the table titled “Directorcomp” and it replaces the previously reported firm level director compensation table titled “Codirfin” which reported the retainers and ranges of stock and option grants for the board at large. This new dataset reports the dollar amounts of the fees paid in cash, the fair value of stock and option awards, any non-equity incentive compensation, pension earnings and non-qualified compensation, and any “other” compensation such as consulting fees, use of corporate aircraft for personal travel, or

perquisites for all non-employee directors. Named executive officers serving on the board as inside directors are not included in this table, but rather appear in the summary compensation table for named executive officers (“Anncomp”). We match each of these compensation items on an individual director basis to our sample observations from ISS.

Since contemporaneous work by Fedaseyeu, Linck, and Wagner (2016) shows that individual director qualifications are relevant determinants of director compensation and board assignments, we supplement our professional data from the ISS Directors database with the biographical data contained in Management Diagnostics Ltd’s BoardEx database. BoardEx contains full biographies on over 700,000 corporate directors and senior managers at over 18,000 U.S. public firms. Using this resource, we merge into our primary sample data on gender, nationality, education, professional experience, certifications, financial expertise, political connections, committee appointments, and outside board and committee service. If a director’s qualifications or board service are not listed in either the ISS Directors database or BoardEx, we assume that such characteristics do not exist.

We merge in other corporate financial data from the COMPUSTAT fundamentals annual database and stock prices from the Center for Research on Security Prices’ (CRSP) daily and monthly stock files. We require that each of our observations has complete data to run our primary tests and restrict our sample to all non-employee corporate directors. After conducting these screens, we arrive at a final sample consisting of 66,855 director-firm-year observations (8,696 firm-year observations) from 1,828 unique firms for the annual meeting years 2006-2013.

Given we have an interest on how shareholders perceive the value of the diverse directors we study, we also gather data on shareholder votes in director elections held at the annual meeting. We obtain our voting data from the ISS Voting Analytics database, which contains the outcomes of over 250,000 shareholder votes on director elections, auditor ratifications, and shareholder proposals from 2003 onward. Applying similar screens to our voting sample, we arrive at a sample of 51,327 individual director elections.

3.2. Female and Minority Board Representation, Firm Characteristics, and Diversity Policies

Figure 1a contains a visual representation of demographic groups across all boards in the ISS/Riskmetrics database. Caucasian females represent the largest component of diverse directors, with 10.42% of all directors. African-American males are the second largest group, comprising 3.27% of directors. Figure 1b describes the percentage of female and minority representation

across the time series. Both demographic groups display an upward trend in representation, approximately doubling the proportion of minority and female directors since 1996.

In Panel A of Table 1, we report the prevalence of diversity within our sample of corporate boards at major S&P 1,500 companies between 2006 and 2013. Minorities and females are both substantially underrepresented in our sample of boards. Only 42% of boards we study have any minority representation at all. For females, this number increases to just 72%. Of the entire pool of directors across all firms, only 7% are minority directors, and only 12% are female. The last portion of Panel A considers our diverse (minority or female) directors. More than 20% of boards have no diverse directors at all. Only 17% of all the directors in the sample are diverse. These figures are similar to those reported by Adams and Ferreira (2009) who find that 9% of directors are female with 61% of firms having a female board member during their 1996 to 2003 sample period while Fedaseyev, Linck, and Wagner (2016) find 15% of their directors are female in their 2006 to 2010 sample. As a basis for comparison, according to the 2010 census, minorities make up more than 34% of the population of the United States, and females account for 51%. While these figures do not reflect the available director labor force, it is clear that these groups are substantially underrepresented in the boardroom with respect to the general population.

Panel B of Table 1 describes our sample of firms. The typical firm in our sample has \$1.8 billion in sales, exhibits a Tobin's Q ratio of 1.4, and has 9 directors on their board. Again, these figures are in line with other published work utilizing this data [e.g., Coles, Daniel, and Naveen (2008, 2014)], suggesting our sample is not unusual. Approximately 22% of firms in the sample have a diversity policy, stating that the nominating committee will specifically promote racial and/or gender diversity by nominating candidates of diverse demographics.¹² Nearly half of our sample firms have diverse representation on the board committee tasked with setting director pay. In an untabulated result, we also find ten firms in the sample that have a diversity committee on the board, which has the goal of promoting diversity in the board and/or among the firm's employees.

3.3. Director Qualifications, Board Responsibilities, Voting Outcomes, and Compensation

Panel C of Table 1 describes our sample of directors. The average director in our sample is 63 years old, has served for ten years at the company, and has very few attendance problems.

¹² Our diversity policy definition is more stringent than the SEC's, which does not require an ethnic or gender component to the definition of diversity.

They typically serve on one other major company board, have 5.8 years of board experience outside the industry, and have served with an average of 29 unique other corporate directors across all public boards to date which we define as their *Director Network Size*.

We are careful to account for the academic and professional credentials of our sample directors. These characteristics are taken from a combination of ISS (RiskMetrics) and BoardEx. Since these two databases do not always agree on the skill sets or qualifications of a particular director, we take the maximum value reported by either database. For example, if BoardEx reports a director as having management experience but ISS does not, we record that director as having management experience. The same classification methods apply to identifying the committees on which a director serves.

For each of these directors, we identify relevant experience, classified as academic, legal/consulting, finance, management, political, or military, and education levels. The classifications are based on BoardEx employment histories and primary occupations reported by ISS as well as the educational background reported for each director. According to Panel C of Table 1, the most common experiences are in the areas of finance, management, and legal/consulting. Our data on education levels shows that 88% of our sample of directors have undergraduate degrees, 37% have an MBA degree, and 63% have an advanced graduate degree. Following Fedaseyeu, Linck, and Wagner (2016), we compute a *Qualifications Index* which is the sum of the six experience variables and our three education variables. The average director in our sample has 2.83 qualifications, which is similar to the 2.74 reported by Fedaseyeu *et al.*

We also identify the committees that a director serves on at the firm in question and classify these into the four major committees defined by ISS: audit, compensation, governance, and nominating, though the terminology may differ in BoardEx or on the actual proxy. We also identify directors that serve as chairs of these committees. Approximately half of directors serve on each of these committees (independent directors often have multiple committee appointments), while an average of 12%-14% of directors are committee chairs. Fedaseyeu, Linck, and Wagner (2016) report membership on the audit, compensation, and nominating committees at 52%, 52%, and 54% (respectively). As previously documented by Cai, Garner, and Walkling (2009), the typical director in our sample receives overwhelming support from shareholders as measured by the firm average and individual director average percentage votes “for” in the director elections. Similar to

the Cai *et al.* reported figure of 94.3%, we find that the average director in our sample receives 94.8% of the “for” votes.

Lastly, the average director in our sample earns a total pay package of \$196 K during our 2006 to 2013 sample period. Fedaseyeu, Linck, and Wagner (2016) report a slightly lower average of \$189 K in 2010, but note a substantial upward trend in director compensation. Nearly \$80 K of these fees are paid in cash and the rest is largely paid in stock or options. An additional \$7 K falls under the category of “other,” which reflects a variety of forms of compensation, including consulting fees, personal use of corporate aircraft, matched charitable contributions, life insurance, and other perquisites. Only 26% of the sample receives some form of “other” compensation.

3.4. Director Compensation, Responsibilities, and Qualifications by Diversity

Table 2 reports director responsibilities and compensation levels for the full sample and for the diverse subsets. T-statistics report the difference in means between the minority and non-minority director subsets, and between the female and male director subsets. Overall, we find that minority and female directors earn significantly higher average compensation levels than their non-minority and male counterparts in the cross-section. Minorities receive an average compensation of \$208 K, compared to \$195 K for non-minorities. Female directors receive \$200 K on average, while males receive \$196 K. Figure 2a displays the time series of these trends, indicating that diverse directors receive higher average compensation in every year of the sample period. However, as our later tests reveal, diverse directors are appointed to boards that are associated with systematically higher director compensation and the within-board variation tells a different story. On a firm-adjusted basis, calculated by subtracting the mean board compensation from each individual director’s compensation, minorities and females are paid significantly less on average. Minorities receive over \$5,000 less than non-minorities on the same board, while females receive \$6,670 less than male directors on the same board. These statistics are also displayed visually in Figure 2b.

Panel A of Table 2 also highlights significant differences in board responsibilities. We focus on four key committees: audit, compensation, nominating, and governance. Minorities and females are slightly more likely to serve on a board committee, but specifically less likely to serve on the audit and compensation committees.

We also look at board leadership. The role of Chairman of the Board is the primary leadership responsibility for a corporate director. The Chairman typically sets the board meeting

agendas, has the power to call special meetings, and may make certain procedural decisions in the adjudication of any meeting items. For those firms where the CEO is also the Chairman, many firms appoint a “Lead” or “Presiding” director to share this authority so as not to concentrate too much power in the hands of the CEO. In fact, New York Stock Exchange (NYSE) regulations require listed companies to meet regularly without management and designate a non-management director to preside over these sessions.¹³ Committee chairs perform a similar function for their respective committees. These are prestigious and powerful positions on the board and directors who serve in these leadership roles typically receive additional compensation for assuming these responsibilities.

Diverse directors seem to have fewer opportunities for board leadership positions. Minorities and females are significantly less likely to serve as Chairman of the Board or Lead Director. While approximately 8% of the full sample serves in these capacities, only 4% of minorities and 3% of females have these opportunities. We also find significant differences in committee leadership. Forty-one percent of non-minority directors serve as a committee chair, compared to only 29% of minorities. Forty-one percent of male directors serve as a committee chair, compared to 32% for female directors. We find that minorities and females are significantly less likely to hold a chaired position on each of the four committees, with one exception: females as chair of the governance committee; this effect is negative but insignificant. These trends are displayed visually in Figure 3.

In a univariate setting, the differences in compensation and board leadership appointments do not appear attributable to variations in observable qualifications as measured by the *Qualifications Index* devised by Fedaseyeu, Linck, and Wagner (2016). While the typical non-minority or non-female director holds an average of 2.8 qualifications, minority and female board members hold an average of 3.1 and 2.9 qualifications, respectively (difference p-values = 0.000 for both). The *Firm-Adjusted Qualifications Index*, calculated by subtracting the within-firm average Qualifications Index, indicates that diverse directors have significantly more qualifications than other directors serving within the same boardroom. Minorities average an additional 0.14 qualifications over other directors within the same board, while females average 0.03 more qualifications. Both differences are significant at the 1% level. We draw similar inferences by looking at other board experience. The average minority and female director holds 1.2 and 1.0

¹³ NYSE Listed Company Manual Section 303A.03

outside directorships, which are significantly greater than the non-minority and non-female average of 0.9 (difference p-values = 0.000) They have significantly more other industry experience, outside committee experience, and larger director networks. Figure 4 visually compares the key qualifications of diverse directors to their non-diverse counterparts. By nearly every observable dimension, diverse directors exhibit stronger credentials than non-diverse directors.

4. Results

4.1. *What types of boards appoint diverse directors?*

We begin by examining the characteristics of firms that appoint minority and/or female directors. With the increasing political and social attention placed on board diversity, we hypothesize that firms that are the most highly visible to consumers will be more likely to appoint a diverse board. To test this conjecture, we consider four aspects of the firm: size (estimated by the natural log of total sales), advertising expenses scaled by total assets, S&P 500 membership, and whether the firm is in a consumer industry (estimated based on the firm's Fama-French 48-industry category assignment).¹⁴ We consider the effect of each of these variables on the percentage of diverse directors serving on the board for a particular firm.

Panel A of Table 3 contains our tests. The dependent variable in each specification is the percentage of directors that are diverse (Column 1), minority (Column 2), or female (Column 3). In each specification, we see positive and significant coefficients on nearly all explanatory variables. These results suggest that firms are more likely to appoint a diverse board when they are larger, have more advertising expenses, belong to the S&P 500, or belong to a consumer industry. We consider firms that possess these characteristics to have a “high-visibility” board.

While these high-visibility firms have greater female and minority representation on the board, we cannot conclusively state that they are more likely to appoint directors with these characteristics based only on the results in Panel A of Table 3. If diverse directors are higher quality directors, firm visibility could endogenously increase through stronger growth. We address this concern by testing the characteristics of newly appointed directors. We first create an indicator variable to identify high-visibility boards. To create this variable, we run a principal component

¹⁴ We classify FF 48 industries candy and soda, beer and liquor, tobacco products, recreation, entertainment, printing and publishing, consumer goods, apparel, healthcare, automobiles and trucks, personal services, restaurants/hotels/motels, banking, and insurance (industries 3-11, 23, 33, 43-45) as consumer oriented and all others as non-consumer oriented.

analysis (PCA) on the four explanatory variables from Panel A: *ln(Assets)*, *Advertising/Total Assets*, *S&P 500 Firm*, and *Consumer Industry*. We then identify *High Visibility* firms as those for which the first principal component score is above the median score.

Panel B of Table 3 contains our empirical test considering the likelihood of a new director appointment occurring at a highly visible board for the 5,006 director appointment observations with complete data in our directors sample. The dependent variable is the *High Visibility Board Appointment* (0,1) indicator, and the sample is all new director appointments in our observation window. We establish indicator variables to identify diverse, minority, and female directors; these are our variables of interest. We control for director qualifications, education, and experience. Across the three specifications in Panel B, we find that our controls for other board appointments, academic experience, management experience, political experience, and graduate-level degrees all significantly increase the likelihood of an individual being appointed to a high visibility board. Plainly, talented individuals are selected by shareholders to serve on these boards.

Our variables of interest are also positive and significant in all three specifications, suggesting that female and minority directors are more likely to be appointed to highly visible boards. In terms of economic significance, the marginal effects are 5.3%, 7.5%, and 3.2% for *Diverse Director*, *Minority Director*, and *Female Director*, respectively, indicating that a diverse director is meaningfully more likely to be appointed at a high visibility board than a low visibility board. The effect for minority directors is substantially stronger than what we find for female, both in terms of magnitude and statistical significance. Minorities seem to be substantially underrepresented in all but the most visible companies. The underrepresentation of minorities and females on less visible boards also explains the unadjusted univariate compensation findings from Table 2; these individuals primarily serve on boards one would expect to pay more ex ante, although they seem to be paid less than their peers on the same board.¹⁵

4.2. *Are diverse directors valued by shareholders at the ballot box?*

Although highly visible boards are more likely to appoint a diverse board, the value that these directors add to the firm is unclear at this point. One might argue that the high visibility of these boards creates a pressure to acquiesce to public pushes for diversity, even if it means appointing under-qualified directors [Ahern and Dittmar (2012)]. We argue that if this is the case,

¹⁵ Untabulated tests reveal that high visibility boards pay their directors an average of \$222K, which is significantly larger than the \$170K offered at low visibility boards (difference p-value = 0.000).

the effects should be apparent in the voting results; value-maximizing shareholders should be less likely to vote in favor of an under-qualified director. If this argument is valid we should therefore see a negative relation between the diversity indicators and the percentage of votes cast in favor of the under-qualified director. Alternatively, if the diverse director candidates are no less qualified than their peers, we should expect to see no relation between director demographics and votes cast in favor.

In our first set of tests, found in columns 1-3 of Table 4, we use the percentage of votes cast in favor of the director at the annual meeting (*Percent Vote*) as the dependent variable in our empirical specification. Our tests control for a wide range of director qualifications and characteristics, including experience and education levels, as well as firm-level characteristics and ISS recommendations following Cai, Garner, and Walkling (2009). Our variables of interest are indicators for minority directors, female directors, or diverse (minority or female) directors. We include firm-fixed effects and cluster standard errors by shareholder meeting. In the second set of tests, found in columns 4-6, we consider the abnormal vote percentage for each director (*Abnormal Vote*), which we define as the percentage vote “for” for each director minus the average percentage “for” vote for all directors at the meeting, effectively adding a meeting fixed effect to the regression.

According to Column 1 of Table 4, shareholders are more likely to vote in favor of a diverse director candidate. A *Diverse Director*, on average, receives voting support 0.34% greater than their peers. The positive and significant effect remains for minority candidates in Column 2, with a point estimate of 0.16%. Female directors in Column 3 also find significantly higher vote totals by approximately 0.39%. The abnormal vote tests in columns 4-6 produce similar results. We find that diverse directors, including both minority and female, receive significantly higher abnormal vote totals than non-diverse candidates at the same meeting. While the estimate appears small, the coefficients are of similar magnitude to other director characteristics of interest such as financial expertise or possessing an advanced degree. Furthermore, Cai, Garner, and Walkling (2009) have noted that directors typically receive voting totals in excess of 90%, so even small variations in vote totals are strong enough signals to influence corporate policy.

Based on the evidence reported here, we find little to suggest that these candidates are less qualified or valued less by shareholders. In fact, the consistently positive effects of *Diverse*

Director, *Female Director*, and *Minority Director* provide evidence that shareholders actually place a premium on the services of diverse candidates.

4.3. *Are diverse directors paid differently?*

In this section, we examine whether director compensation varies by diversity status. These tests utilize recent changes to SEC rules; as of 2006, firms are required to disclose director compensation at the individual director level. We can therefore observe within-board variation in compensation levels and directly identify the monetary value awarded to diverse directors. Existing work shows that director pay has its own determinants [Yermack (2004); Fedaseyeu, Linck, and Wagner (2016)] and our tests in Appendix B replicate prior work by showing that compensation is a function of both firm characteristics and board responsibilities, with committee and chair service being associated with higher pay.¹⁶ These results are unsurprising, but reinforce that our data are not unusual.

We next examine the varying levels of compensation for diverse directors and model individual director compensation as a function of gender, ethnicity, experience, board responsibilities, and firm characteristics in Table 5. The dependent variable in our primary model is the natural log of director compensation levels. Our variables of interest are indicator variables for diverse, minority, and female directors. In order to properly evaluate compensation levels, we must also consider a wide range of director qualifications and experience. Previous studies such as Fich (2005), Fedaseyeu, Linck, and Wagner (2016) and Adams, Akyol, and Verwijmeren (2015) provide a blueprint on how to estimate director skills and experience. We follow these prior studies in setting our controls for experience in the areas of academic, legal/consulting, finance, management, political, and military. We also control for education at the undergraduate, advanced graduate, and MBA levels as well as outside board experience, industry experience, and the size of their professional network. Many boards also award bonuses for serving or chairing certain committees or serving as Chairman of the Board or Lead Director; we control for these potential variations in pay as well.

In addition to controlling for director-specific attributes, we also control for a wide range of firm characteristics that are consistent with prior studies of board compensation [e.g., Adams and Ferreira (2009) and Ryan and Wiggins (2004)] and each model includes controls for firm size

¹⁶ In Appendix B, we regress the natural log of director compensation onto a variety of firm controls. By using the natural log, we mitigate the effect that skewness in compensation might have on our estimates. We also include controls for committee assignments in Column 1 and controls for committee chair positions in Column 2.

($\ln(\text{Sales})$), the *Return on Assets*, *Long-Term Debt to Total Assets*, the *Market to Book Ratio*, *Volatility*, *Capital Expenditures to Sales*, and *R&D to Total Assets*, but the estimates are not reported to conserve space. To control for unobserved heterogeneity at our sample companies, we also include firm fixed effects in all of our models and use robust Rogers (1993) standard errors clustered at the individual director level to account for serial dependence.

As documented in Table 3, diverse directors are more likely to be appointed to highly visible firms. In a cross-sectional regression without firm fixed effects, minority and female directors should receive significantly higher compensation levels solely due to the size and complexity of the firms they serve, and untabulated specifications confirm this prediction along with the univariate evidence in Table 2. By including firm fixed effects, we focus our study on within-board variation in compensation and compare diverse directors to others serving on the same board. Any differences in compensation are therefore solely due to the decisions of the director compensation committee of the board rather than the cross-sectional differences of the firms themselves.

Overall, our results in Panel A of Table 5 suggest that diverse directors earn lower total pay, but we implement several specifications to ensure robustness. Our regression in Column 1 considers all director qualifications and firm-level controls, but does not consider any responsibility-related bonuses. While committee service does contribute to overall compensation levels, the regression without committee service controls allows us to consider the possibility that diverse candidates are less likely to serve on high-bonus committees or chairman/lead director positions. Among our set of director-level controls, the estimates on legal/consulting experience, finance experience, undergraduate degree, and MBA degree are significantly positive, while academic experience and management experience are negatively related to compensation levels. The statistically significant parameter estimate of -0.0225 on *Diverse Director* indicates that minority and female directors receive approximately 2% lower compensation than non-diverse directors.¹⁷

Committee service is also a significant determinant of total compensation. We consider the effect of the number of committees a director serves on in Column 2. This control suggests that director compensation is increasing in the *number of committees* he/she serves on. Our variable of interest, however, sees little change, remaining significantly negative. Similarly, in Column 3, we

¹⁷ $=\exp(-0.0225)-1$

include fixed effects for every individual committee reported in BoardEx or RiskMetrics. These controls should explain a large portion of the variation in the committee-related bonus component of total compensation. Despite including these controls, the effect on *Diverse Director* remains negative and significant, suggesting just under a 2% difference in compensation levels for diverse directors.

Column 4 presents a unique test excluding all directors that serve on principal committees. While this excludes the overwhelming majority of directors, the remaining subset is a homogeneous group of directors who are only compensated at the base level specified in their contract or perhaps on the basis of service on less prestigious committees. Service-related bonuses should therefore play a smaller role in this sample, allowing us to isolate the diversity-related compensation differences from potential other endogenous explanations of compensation differences. Despite the number of observations declining to 3,588, we again find a negative and significant effect of *Diverse Director* on total compensation levels. The magnitude of the effect increases substantially in this homogeneous sample; the parameter estimate of -0.0873 implies that minority and female directors receive compensation levels nearly 9% lower than other directors with similar responsibilities serving on the same board.

In Column 5, we also consider committee chair service and chairman of the board / lead director appointments as additional determinant of compensation levels. Although these explain a large proportion of variation in compensation, the effect of diverse remains negative and significant. In Column 6, we consider the Fedaseyeu, Linck, and Wagner (2016) *Qualifications Index*, which is defined as the sum of the experience variables plus the sum of the education variables. This method aggregates our director-specific controls from prior regressions into a single index, and we replace the individual qualifications with this summary index. Although the *Qualifications Index* is positively related to compensation levels, the effect of *Diverse Director* actually becomes stronger in this specification, suggesting a 2.6% difference in compensation levels.

In our remaining tests on total compensation, we consider the effects of minority and female directors independently. In Columns 7 and 8, we focus on minority directors. Column 7 is the base model from Column 1, while Column 8 also includes the control for committee service and leadership roles. The coefficient on *Minority Director* is negative and significant in the two models, suggesting that controlling for director qualifications and firm characteristics, minority

directors receive compensation levels that are on average 1.0-1.8% lower than non-minorities. The results from the tests for female directors in Columns 9 and 10 are slightly stronger, suggesting a gender pay difference of 1.2-2.0%.

4.4. Which components of total pay explain the difference?

We next separate total compensation into its equity- and cash-based components to better determine the driving factors of the pay differences. Panel B of Table 5 reports a similar set of tests to Panel A but uses the natural log of cash-based compensation as the dependent variable, which reflects the cash retainer and meeting fees awarded to directors. The results are similar to those on total compensation, and we omit the control variable estimates to conserve space. Column 1 reports that diverse directors receive an average cash retainer fee 2.6% lower than their peers. Including controls for the number of committees and committee fixed effects (Columns 2 and 3, respectively), excluding committee members (column 4), and qualifications (column 6) results in significantly negative estimates. Controlling for committee chair / chairman / lead director positions (column 5) explains most of the variation in cash compensation; the coefficient on *Diverse Director* is negative but insignificant. According to Column 7, which controls for committee service, we find that minorities earn significantly lower pay. In Column 8, which controls for leadership and committee chairs, the parameter is negative, but not significant. The results for female directors in Columns 9 and 10 are similar.

We look at the equity-based component of total director compensation in Panel C of Table 5. The dependent variable in these regressions is the total amount of stock or option compensation. The models in this panel employ similar specifications to those in the prior panels. Column 1, our base model, suggests that diverse directors receive equity-based compensation 0.9% lower than non-diverse directors. This effect is weaker than what we find for the cash-based component, but remains statistically significant at the 1% level. The other specifications generally yield similar inferences. Columns 7 and 8 focus on minority directors. Although both coefficients on *Minority Director* are negative, neither is statistically significant, so we cannot conclusively state that minority directors receive less incentive-based compensation than non-minorities. Our data does suggest that female directors receive less incentive-based compensation. In Columns 9 and 10, the coefficients on *Female Directors* suggest that women receive 1.1% less incentive-based compensation than male directors. The effect is significant at the 1% level.

As noted in Panel C of Table 1, cash and incentive-based compensation are the primary components of total pay for corporate directors. However, Fedaseyeu, Linck, and Wagner (2016) find that firms often offer opportunities for directors to earn extra compensation in exchange for other duties such as ad-hoc committees or consulting on special projects. They may also provide perquisites such as tax gross-ups, personal use of corporate aircraft, life insurance premiums, or matched charitable contributions. However, it is not clear whether there is equal opportunity for such additional compensation or if these benefits are doled out on the basis of qualifications or perhaps some other measure.

We test the level of “other” compensation in Panel D of Table 5. The results suggest a larger magnitude of differences between diverse directors and non-diverse directors. In Column 1, *Diverse Director* has a coefficient of -0.0636, indicating that diverse directors receive around 6% less of this form of compensation than other directors. The effects are similar in Columns 2 and 3. In Column 4, focusing on the sample of directors not serving on principal committees, the difference widens to more than 20%. According to Columns 7-10, the effects are generally larger for minorities than females, although both are statistically significant at the 1% level.

In untabulated results, we also test the likelihood of receiving “other” compensation in any amount. We re-estimate our model (1) specification with a (0,1) indicator of *Received “Other” Compensation* as the dependent variable which is regressed on our diversity indicators and controls. The estimate on the diversity indicator in this regression is -0.01414 (p-value = 0.000). Given that only 25.5% of directors receive “other” pay, this reflects a 5.54% decrease in the unconditional likelihood of receiving this type of compensation. Thus, diverse directors are less likely than their peers at the same board to be awarded any “other” compensation and, combined with the results in Panel D, they earn less of it when it is paid out.

Our sample of director compensation produces clear and consistent evidence that minority and female directors receive lower compensation levels, which is in line with prior work examining corporate executives or employees [Bell (2005); Tate and Yang (2015)]. The differences are particularly stark when focusing on the subsample of directors not serving on a principal committee. Further, the differences are present among both the minority and female components of our “diverse director” measure. The effects are primarily concentrated in the cash retainer fee and in the more discretionary “other” compensation.

4.5. Is the pay gap attributable to differences in career stages at the firm?

One potential question arising from our findings is how diversity may correlate with director tenure. If recent attention by the SEC and the media to the issue of diversity has encouraged firms to hire more diverse directors, these directors may be less likely to take on additional responsibilities at the board solely due to their recent appointments. We address this concern in Table 6. This test follows a similar specification to Column 5 of the compensation tests in Table 5, but we split the sample of directors into those with tenure of 1-5 years, 6-10 years, and 11+ years. This separation gives us three sets of directors in different stages of their service at the firm. The effect of *Diverse Director* is negative and significant in all three regressions, but we find the largest effect sizes for those directors with 6-10 years and 11+ years of experience at the firm. Interestingly, the parameter estimate on the mid and late stage career estimates is significantly more negative than the early career stage estimate (difference p-values of 0.000 and 0.031, respectively), which is the opposite one might expect if new directors are responsible for our results. This finding provides evidence against the argument above and suggests varying career stages do not drive the observed difference in compensation.

4.6. Do shareholders perceive the “low paid” directors as less valuable?

Although prior results have suggested that diverse candidates receive higher voting totals than non-diverse candidates, the compensation results might lead some to suggest the compensation differences are due to some omitted variable related to director abilities. If this were occurring, shareholders would likely respond to lower-quality directors (which might rationally be paid less) with lower voting support. We next test this hypothesis by returning to the voting tests from Table 4, but now include an interaction term between our diversity indicators and an abnormal compensation measure. We define *abnormal pay* as the residual from a regression of director compensation onto controls for committee service and leadership positions (i.e., committee and board chairs) with firm and year fixed effects, which essentially provides the pay not attributable to statutory fees detailed in the corporate proxy. If we suspect that the compensation results are actually driven by unobserved director quality or abilities, then the interaction of pay and diversity should have a positive coefficient. In this scenario, voting totals are representative of the directors’ ability- that is, diverse candidates would receive higher compensation when they have higher abilities (proxied for by vote totals), and lower vote totals when they have lower ability.

Our results in Table 7 include this interaction term, while additional controls following Table 4 are included in the model but not reported to conserve space. According to Column 1, diverse directors receive higher vote totals overall, but the interaction term is significantly negative, suggesting that the lowest-paid diverse directors are the ones that receive the highest voting support. This finding is inconsistent with arguments citing unobserved qualifications driving our compensation results. In Column 2, the effect on the interaction term for minority directors is again negative and significant, providing no evidence of any alternative explanations of the compensation findings. Lastly, the result for female directors in Column 3 suggests that female directors receive higher support overall, while the interaction term is negative but insignificant. The results for abnormal votes in Columns 4-6 are qualitatively similar, with the low-pay, diverse directors receiving significantly higher voting support.

4.7. Are diverse directors poor monitors?

With the inside directors serving as advisors, the outside directors are often viewed as shareholders' monitors on the board and this role is a primary responsibility of their position [Faleye, Hoitash, and Hoitash (2011)]. The sensitivity of CEO turnover to firm performance is a widely-used measure of the quality of board monitoring. Several studies, including Weisbach (1988), Adams and Ferreira (2009), and Coles, Daniel, and Naveen (2014) use this sensitivity to measure the monitoring quality of the board. If minority or female directors are on average less effective monitors, this could justify the lower compensation. Monitoring ability is not an easily measurable characteristic ex-ante like our qualifications index; we therefore use this test as a means of estimating the unobservable component of director quality to ensure it is not driving the observed differences in compensation.

We follow a regression specification close to Adams and Ferreira (2009). The dependent variable is an indicator taking a value of one if the CEO leaves the position during the following year. We include *Percent Diverse Directors*, the percentage of minority and/or female directors serving on the board, as an explanatory variable and also interact this with stock performance. The interaction term is the variable of interest; if we find a positive effect, we can conclude that these directors are less effective monitors. We recreate the same test focusing on minority and female directors independently.

The CEO-turnover performance sensitivity regressions are found in Table 8. Columns 1-2 focus on diverse directors. In Column 1, which does not include the interaction term, we find no

significant effect of *Percent Diverse Directors* on CEO turnover. However, in keeping with prior work [e.g., Weisbach (1988)], we document a strong inverse performance-turnover relation where poorly performing CEOs are more likely to be dismissed. The model in Column 2 interacts stock performance with the percentage of diverse directors, which also produces a negative but insignificant coefficient. Our interpretation is that, while there is no evidence that diverse directors are stronger monitors, there is certainly no evidence to suggest that they are weaker. Their monitoring ability appears to be similar to non-diverse directors.

Columns 3 and 4 run the same tests focusing only on minority directors, and Columns 5 and 6 consider female directors. There are again no significant effects found in either the percentage of minority/female directors or in the interaction terms with stock performance. These tests again provide no evidence of inferior monitoring arising from director demographics.

4.8. Are diverse directors more likely to serve on influential committees on the board?

We next question whether diverse directors are more or less likely to serve on committees. We focus on the four main committees: audit, compensation, nominating, and governance. Our models follow the lead of a similar test in Adams and Ferreira (2009). In that study, the authors show that females are more likely to serve on the audit, nominating, and governance committees, and less likely to serve on the compensation committee. We replicate their tests using our sample, but also extend the results to consider minority candidates. In addition, we build on their models by including controls for director qualifications, which would likely be strong determinants of the committees to which they are assigned.

Following Adams and Ferreira (2009), Table 9 reports the results from firm and year fixed effects linear probability models, where the dependent variable takes a value of one if a director serves on any committee (Column 1), or on the audit, compensation, nominating, or governance committees (Columns 2-5). Panel A focuses on our diversity measure, considering both minorities and females. We first take note of the controls for qualifications, which add a great deal of explanatory power to our tests. Finance experience in particular is a strong determinant of whether a director serves on the audit committee, in which case they are less likely to serve on the other committees. Directors with legal or consulting experience are more likely to serve on nominating and governance committees. An MBA degree increases the likelihood of serving on the compensation and audit committees.

Our variable of interest in Panel A of Table 9 is the *Diverse Director* indicator. In Column 1, we find that these directors are more likely to serve on a committee by approximately 1.6 percentage points. Diverse directors are 2.3% more likely to serve on the audit committee, 2.3% more likely to serve on the nominating committee, and 3.2% more likely to serve on the governance committee. Curiously, diverse candidates are 4.5% *less* likely to serve on the compensation committee, however, which is typically the committee that sets their compensation levels.¹⁸

Panel B of Table 9 focuses on minority directors. We find similar results here. Minority directors are more likely to serve on committees, particularly the audit committee, but less likely to serve on the compensation committee by 5.50 percentage points. Panel C focuses on females and produces results in line with Adams and Ferreira (2009). Women are more likely to serve on audit, nominating, and governance committees and less likely to serve on the compensation committee by 3.54 percentage points.

4.9. Are diverse directors appointed to positions of leadership on the board?

Several studies have documented that women and minorities are less likely to rise to positions of leadership in corporations [Lam, McGuinness, and Vieito (2013); Kaplan and Sorensen (2016)]. We test the likelihood of diverse directors taking board leadership positions. The major leadership roles on the board involve the Chairman of the Board, Lead (or Presiding) Director, and the committee chair positions on the four principal committees used above.

Table 10 presents the results. We utilize similar specifications to those in Table 9, but our dependent variable becomes an indicator taking a value of one if the director chairs the board, is the lead director, or chairs a specified committee. The results show that diverse directors are significantly less likely to serve as Chairman or as a lead director which is consistent with our evidence in Table 2. The coefficients in Columns 1 and 2 indicate that diverse directors are 1.4 percentage points less likely to serve as chairman of the board and 3.2 percentage points less likely to serve as lead director. For an average board of nine directors, implying a naïve probability chairman/lead director of 0.111 or 11.1 percentage points, these coefficients represent relative decreases in the likelihood of serving these key leadership positions on the magnitude of 13-29%.

¹⁸ Adams and Ferreira (2009) note that, at some firms, a committee other than the compensation committee sets director pay. To examine the prevalence of that condition, we look to proxy filings to determine the committee setting director compensation. We find that 69% of firms use the compensation committee to determine director remuneration while 22% use the nominating committee, and 9% use another committee such as the governance committee.

Although we established in Table 9 that diverse directors are more likely to serve on certain committees, Panel A of Table 10 reports that diverse candidates are significantly less likely to chair these committees. The coefficient estimates suggest that diversity decreases the probability of chairing a committee by 5.3 percentage points. On a relative basis, if we assume four chair positions per nine director board, this suggests a 11.93% decrease in the likelihood of receiving a chair position. *Diverse Director* is also negatively related to the probability of serving as the chair of the audit and compensation committees, but insignificantly related to chairing the nominating and governance committees. Overall, the strongest effect is on compensation committee, with diverse directors more than four percentage points less likely to chair this committee than non-diverse candidates.

We next focus solely on minority directors. Every column of Panel B reports a negative and significant coefficient on *Minority Director*, indicating that minority director candidates are less likely to fulfill *any* leadership role on the board. The parameter estimates suggest that minority directors are one to three percentage points less likely to serve as Chairman or Lead Director. The estimates are also negative for the chairs of each of the four major committees. The compensation chair effect is again the strongest, suggesting that minorities are 5.46 percentage points less likely to serve as chair. Overall, the probability of a minority director chairing a committee is 7.86 percentage points lower than that of a non-minority.

According to Panel C, female directors are 1.65 percentage points less likely to serve as Chairman of the board and 2.76 percentage points less likely to serve as Lead Director. Women are also less likely to chair the audit and compensation committees, but more likely to serve as chair of the governance committee. The effect on compensation committee is again the strongest, indicating that the probability of serving on this committee is 3.49 percentage points lower for females than males.

4.10. Do compensation committee participation or corporate diversity policies reduce the pay gap?

Our previous tests produce strong evidence that minority and female directors are less likely to serve on or chair the compensation committee. This underrepresentation on the committee that most commonly sets director pay may serve to explain why these directors receive lower compensation on average. If so, we would expect to find higher compensation levels for diverse directors when a female or minority serves on the committee setting director compensation.

We test this hypothesis in Table 11. The dependent variable in these tests measures the difference between the average compensation of non-diverse directors and the average compensation of diverse directors on a given board (*Diversity Pay Gap*). The measure is positive when non-diverse directors are paid more and negative when diverse directors are paid more. We regress this measure onto several controls for board and firm characteristics along with our variable of interest in Columns 1-3, an indicator variable taking a value of one if a female or minority serves on the committee tasked with setting director compensation (typically compensation, but sometimes nominating or governance). This indicator should have a negative effect, reducing the difference in pay between non-diverse and diverse candidates, if having a diverse director involved in setting director compensation improves the pay gap. We include firm fixed effects in each regression, which focuses our analysis on the time-varying aspects of the director compensation committee composition. In order to prevent a mechanical relation between the variable of interest and the dependent variable arising from committee bonuses, we exclude the pay of the compensation-setting committee member from our average calculated above. Because this requires at least one diverse director to be serving on the board and not on the director compensation-setting committee, the number of observations vary across specifications.

In Column 1 of Table 11, we find that having a female or minority on the compensation committee produces a significant negative coefficient, indicating that the pay gap between non-diverse and diverse candidates is lower when the committee setting director compensation is diverse. The coefficient of -8.4764 suggests that minority and female directors are paid \$8,476 more, on average, when diversity is present on the compensation committee. The effect is similarly strong when focusing on the compensation difference between minorities and non-minorities in Column 2, and the difference between men and women in Column 3. Overall, this evidence strongly suggests that diversity on the compensation committee ameliorates some of the gender and minority compensation differences.

According to Table 1, approximately 22% of firms have a diversity policy stating that the nominating committee will consider gender and/or racial status when nominating directors to the board. In Columns 4-6 of Table 11, we consider the effect of this policy on the diversity-related pay gaps. In Column 4, we find that the presence of a *Formal Diversity Policy* reduces the pay gap between diverse and non-diverse directors by \$4,091. Columns 5 and 6 indicate that a diversity policy has a similar effect by reducing pay discrepancies for minorities and females.

5. Conclusions

Board diversity has been a focus of recent corporate governance policy debates. Despite receiving much attention from the media and social activists, women and minority directors remain overwhelmingly underrepresented in the boardroom. This study points to several areas of concern. We find that diverse directors stand out from their peers in terms of academic and professional credentials, possess more outside board and committee experience, and enjoy greater support from shareholders in director elections. We also find they are more likely to be appointed at highly visible firms that tend to pay more. However, when we examine the within-board variation at these companies, we document that minority and female directors are on average paid less, even controlling for education and experience. Although women and minorities are more likely to take positions on certain committees, they are less likely to take leadership positions such as Chairman of the Board, Lead Director, or the chair of certain board committees. They are also less likely to have any role on the compensation committee, which seems a potential source of the observed pay gap. We find little evidence that any of these differences arise due to monitoring quality or differences in director qualifications by diversity status.

Our results raise important questions about inequality among firm leaders and lend justification to several recent public concerns on these issues. While most concerns raised by advocates have focused primarily on board composition, we point to evidence of inequality even after these directors have been elected to the board.

References

- Adams, R.B. and Ferreira, D., 2007. A theory of friendly boards. *The Journal of Finance*, 62(1), pp.217-250.
- Adams, R.B. and Ferreira, D., 2008. Do directors perform for pay?. *Journal of Accounting and Economics*, 46(1), pp.154-171.
- Adams, R.B. and Ferreira, D., 2009. Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94(2), pp.291-309.
- Adams, Renee B. and Rangunathan, Vanitha, 2015. Lehman Sisters. FIRN Research Paper. Available at SSRN: <http://ssrn.com/abstract=2380036> (August 1, 2015).
- Adams, Renee B. and Akyol, Ali C. and Verwijmeren, Patrick, 2015, Director Skill Sets, Available at SSRN: <http://ssrn.com/abstract=2365748> (March 24, 2015).
- Adams, Renee B., 2016, Women on Boards: The Superheroes of Tomorrow?, Available at SSRN: <http://ssrn.com/abstract=2696804> (March 2016).
- Agrawal, Anup and Chen, Mark A., 2011, Boardroom Brawls: An Empirical Analysis of Disputes Involving Directors, Available at SSRN: <http://ssrn.com/abstract=1362143> (January 29, 2011).
- Agarwal, S., Qian, W., Reeb, D.M. and Sing, T.F., 2016. Playing the Boys Game: Golf Buddies and Board Diversity. *The American Economic Review*, 106(5), pp.272-276
- Agrawal, A. and Knoeber, C., 2001. Do Some Outside Directors Play a Political Role?. *Journal of Law and Economics*, 44(1), pp 179-98.
- Ahern, K.R. and Dittmar, A.K., 2012. The changing of the boards: The impact on firm valuation of mandated female board representation. *Quarterly Journal of Economics*, 127(1), pp.137-197.
- Anderson, R.C., Reeb, D.M., Upadhyay, A. and Zhao, W., 2011. The economics of director heterogeneity. *Financial Management*, 40(1), pp.5-38.
- Barber, B.M. and Odean, T., 2001. Boys will be boys: Gender, overconfidence, and common stock investment. *Quarterly Journal of Economics*, pp.261-292.
- Becher, D.A., Campbell II, T.L. and Frye, M.B., 2005. Incentive Compensation for Bank Directors: The Impact of Deregulation. *The Journal of Business*, 78(5), pp.1753-1778.
- Bell, L.A., 2005. Women-led firms and the gender gap in top executive jobs. IZA Discussion Paper No. 1689 (July 2005).
- Berger, A.N., Kick, T. and Schaeck, K., 2014. Executive board composition and bank risk taking. *Journal of Corporate Finance*, 28, pp.48-65.
- Boumosleh, Anwar S. and Cline, Brandon N. and Yore, Adam S., 2014, Should the Outsiders Be Left Out? Director Stock Options, Expectations and Earnings Management, Available at SSRN: <http://ssrn.com/abstract=1928166>.
- Brick, I.E., Palmon, O. and Wald, J.K., 2006. CEO compensation, director compensation, and firm performance: Evidence of cronyism?. *Journal of Corporate Finance*, 12(3), pp.403-423.
- Brickley, J.A., Coles, J.L. and Jarrell, G., 1997. Leadership structure: Separating the CEO and chairman of the board. *Journal of Corporate Finance*, 3(3), pp.189-220.
- Cai, J., Garner, J.L. and Walkling, R.A., 2009. Electing directors. *The Journal of Finance*, 64(5), pp.2389-2421.
- Carter, David and D'Souza, Frank P. and Simkins, Betty J. and Simpson, W. Gary, 2007, The Diversity of Corporate Board Committees and Firm Financial Performance, Available at SSRN: <http://ssrn.com/abstract=972763> (March 15, 2007).
- Carter, D.A., D'Souza, F., Simkins, B.J. and Simpson, W.G., 2010. The gender and ethnic diversity of US boards and board committees and firm financial performance. *Corporate Governance: An International Review*, 18(5), pp.396-414.

- Carter, D.A., Simkins, B.J. and Simpson, W.G., 2003. Corporate governance, board diversity, and firm value. *Financial Review*, 38(1), pp.33-53.
- Coles, J.L., Daniel, N.D. and Naveen, L., 2008. Boards: Does one size fit all?. *Journal of Financial Economics*, 87(2), pp.329-356.
- Coles, J.L., Daniel, N.D. and Naveen, L., 2014. Co-opted boards. *Review of Financial Studies*, 27(6), pp.1751-1796.
- Dezsö, C.L. and Ross, D.G., 2012. Does female representation in top management improve firm performance? A panel data investigation. *Strategic Management Journal*, 33(9), pp.1072-1089.
- Dougal, Casey and Gao, Pengjie and Mayew, William J. and Parsons, Christopher A., 2016, What's in a (School) Name? Racial Discrimination in Higher Education Bond Markets. Available at SSRN: <http://ssrn.com/abstract=2727763> (February 4, 2016).
- Eckbo, B. Espen and Nygaard, Knut and Thorburn, Karin S., 2016, Does Gender-Balancing the Board Reduce Firm Value?. European Corporate Governance Institute (ECGI) - Finance Working Paper No. 463/2016; Tuck School of Business Working Paper No. 2746786. Available at SSRN: <http://ssrn.com/abstract=2746786> (April 21, 2016).
- Engel, E., Hayes, R.M. and Wang, X., 2010. Audit committee compensation and the demand for monitoring of the financial reporting process. *Journal of Accounting and Economics*, 49(1), pp.136-154.
- Erhardt, N.L., Werbel, J.D. and Shrader, C.B., 2003. Board of director diversity and firm financial performance. *Corporate Governance: An International Review*, 11(2), pp.102-111.
- Faleye, O., Hoitash, R. and Hoitash, U., 2011. The costs of intense board monitoring. *Journal of Financial Economics*, 101(1), pp.160-181.
- Fama, E.F. and French, K.R., 1997. Industry costs of equity. *Journal of Financial Economics*, 43(2), pp.153-193.
- Fama, E.F. and Jensen, M.C., 1983. Separation of ownership and control. *The Journal of Law & Economics*, 26(2), pp.301-325.
- Fan, J.P., Wong, T.J. and Zhang, T., 2007. Politically connected CEOs, corporate governance, and Post-IPO performance of China's newly partially privatized firms. *Journal of Financial Economics*, 84(2), pp.330-357.
- Farrell, K.A. and Hersch, P.L., 2005. Additions to corporate boards: the effect of gender. *Journal of Corporate Finance*, 11(1), pp.85-106.
- Farrell, K.A., Friesen, G.C. and Hersch, P.L., 2008. How do firms adjust director compensation?. *Journal of Corporate Finance*, 14(2), pp.153-162.
- Fedaseyeu, Viktor and Linck, James S. and Wagner, Hannes F., 2016, Do Qualifications Matter? New Evidence on Director Compensation. Available at SSRN: <http://ssrn.com/abstract=2335584> (March 1, 2016).
- Fich, E.M., 2005. Are some outside directors better than others? Evidence from director appointments by fortune 1000 firms. *The Journal of Business*, 78(5), pp.1943-1972.
- Fich, E.M. and Shivdasani, A., 2005. The Impact of Stock-Option Compensation for Outside Directors on Firm Value. *The Journal of Business*, 78(6), pp.2229-2254.
- Fich, E.M. and Shivdasani, A., 2006. Are busy boards effective monitors?. *The Journal of Finance*, 61(2), pp.689-724.
- García-Meca, E., García-Sánchez, I.M. and Martínez-Ferrero, J., 2015. Board diversity and its effects on bank performance: An international analysis. *Journal of Banking & Finance*, 53, pp.202-214.
- Gerety, M., Hoi, C.K. and Robin, A., 2001. Do shareholders benefit from the adoption of incentive pay for directors?. *Financial Management*, pp.45-61.
- Gillan, S.L., 2006. Recent developments in corporate governance: An overview. *Journal of Corporate Finance*, 12(3), pp.381-402.
- Gul, F.A., Srinidhi, B. and Ng, A.C., 2011. Does board gender diversity improve the informativeness of stock prices?. *Journal of Accounting and Economics*, 51(3), pp.314-338.

- Hermalin, B.E. and Weisbach, M.S., 1991. The effects of board composition and direct incentives on firm performance. *Financial Management*, pp.101-112.
- Hillman, A.J., Cannella, A.A. and Harris, I.C., 2002. Women and racial minorities in the boardroom: How do directors differ?. *Journal of Management*, 28(6), pp.747-763.
- Huang, J. and Kisgen, D.J., 2013. Gender and corporate finance: Are male executives overconfident relative to female executives?. *Journal of Financial Economics*, 108(3), pp.822-839.
- Jiang, W., Wan, H. and Zhao, S., 2016. Reputation concerns of independent directors: Evidence from individual director voting. *Review of Financial Studies* 29(3), p. 655-696.
- Jurkus, A.F., Park, J.C. and Woodard, L.S., 2011. Women in top management and agency costs. *Journal of Business Research*, 64(2), pp.180-186.
- Kang, E., Ding, D.K. and Charoenwong, C., 2010. Investor reaction to women directors. *Journal of Business Research*, 63(8), pp.888-894.
- Kaplan, Steven N. and Sorensen, Morten, 2016, Are CEOs Different? Characteristics of Top Managers. Columbia Business School Research Paper No. 16-27. Available at SSRN: <http://ssrn.com/abstract=2747691> (February 2016).
- Keloharju, M., Knüpfer, S. and Tåg, J., 2016. Equal Opportunity? Gender Gaps in CEO Appointments and Executive Pay. *Gender Gaps in CEO Appointments and Executive Pay (February 9, 2016)*. Harvard Business School Research Paper Series, pp.16-092.
- Kim, I., Pantzalis, C. and Park, J.C., 2013. Corporate boards' political ideology diversity and firm performance. *Journal of Empirical Finance*, 21, pp.223-240.
- Kim, Daehyun, and Laura T. Starks. 2016, Gender Diversity on Corporate Boards: Do Women Contribute Unique Skills?. *The American Economic Review* 106.5, p. 267-271.
- Lam, K.C., McGuinness, P.B. and Vieito, J.P., 2013. CEO gender, executive compensation and firm performance in Chinese-listed enterprises. *Pacific-Basin Finance Journal*, 21(1), pp.1136-1159.
- Levi, M., Li, K. and Zhang, F., 2014. Director gender and mergers and acquisitions. *Journal of Corporate Finance*, 28, pp.185-200.
- Linck, J.S., Netter, J.M. and Yang, T., 2008. The determinants of board structure. *Journal of Financial Economics*, 87(2), pp.308-328.
- Linck, J.S., Netter, J.M. and Yang, T., 2009. The effects and unintended consequences of the Sarbanes-Oxley Act on the supply and demand for directors. *Review of Financial Studies*, 22(8), pp.3287-3328.
- Liu, Y., Wei, Z. and Xie, F., 2014. Do women directors improve firm performance in China?. *Journal of Corporate Finance*, 28, pp.169-184.
- Low, D.C., Roberts, H. and Whiting, R.H., 2015. Board gender diversity and firm performance: Empirical evidence from Hong Kong, South Korea, Malaysia and Singapore. *Pacific-Basin Finance Journal*, 35, pp.381-401.
- Matsa, D.A. and Miller, A.R., 2013. A female style in corporate leadership? Evidence from quotas. Evidence from Quotas. *American Economic Journal: Applied Economics* 4, 136-169.
- McDonald, M.L. and Westphal, J.D., 2013. Access denied: Low mentoring of women and minority first-time directors and its negative effects on appointments to additional boards. *Academy of Management Journal*, 56(4), pp.1169-1198.
- Miller, T. and del Carmen Triana, M., 2009. Demographic diversity in the boardroom: Mediators of the board diversity–firm performance relationship. *Journal of Management studies*, 46(5), pp.755-786.
- Morck, R., Shleifer, A. and Vishny, R.W., 1988. Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20, pp.293-315.
- Norland, M, Mora, T, and Kotschwar, B, 2016, Is gender diversity profitable? Evidence from a global survey. PIIE working paper 16-3 (February 2016).

- Park, S.H. and Westphal, J.D., 2013. Social Discrimination in the Corporate Elite How Status Affects the Propensity for Minority CEOs to Receive Blame for Low Firm Performance. *Administrative Science Quarterly*, 58(4), pp.542-586.
- Peltomäki, Jarkko and Swidler, Steve and Vähämaa, Sami, Age, 2015. Gender, and Risk-Taking: Evidence from the S&P 1500 Executives and Firm Riskiness. Available at SSRN: <http://ssrn.com/abstract=2547516> (June 25, 2015).
- Richard, O.C., 2000. Racial diversity, business strategy, and firm performance: A resource-based view. *Academy of Management Journal*, 43(2), pp.164-177.
- Rider, Christopher I. and Wade, James and Swaminathan, Anand and Schwab, Andreas, 2016. Racial Disparity in Leadership: Performance-Reward Bias in Promotions of National Football League Coaches. Georgetown McDonough School of Business Research Paper No. 2710398. Available at SSRN: <http://ssrn.com/abstract=2710398> (January 7, 2016).
- Rogers, W. 1993. Regression standard errors in clustered samples. *Stata Technical Bulletin* 13, 19-23.
- Ryan, H.E. and Wiggins, R.A., 2004. Who is in whose pocket? Director compensation, board independence, and barriers to effective monitoring. *Journal of Financial Economics*, 73(3), pp.497-524.
- Schnatterly, K, Berns, J, da Motta Veiga, S, and Ward, A, 2015. Spillover effects of certification embedded in nested domains: Negative board certifications and their impact on individual directors. Unpublished manuscript.
- Sila, V., Gonzalez, A. and Hagedorff, J., 2016. Women on board: Does boardroom gender diversity affect firm risk?. *Journal of Corporate Finance*, 36, pp.26-53.
- Smallman, T.S., 2013. Glass Boardroom: The SEC's Role in Cracking the Door Open So Women May Enter, *The Columbia Business Law Review* 2013(3), p.801.
- Strøm, R.Ø., D'Espallier, B. and Mersland, R., 2014. Female leadership, performance, and governance in microfinance institutions. *Journal of Banking & Finance*, 42, pp.60-75.
- Tate, G. and Yang, L., 2015. Female leadership and gender equity: Evidence from plant closure. *Journal of Financial Economics*, 117(1), pp.77-97.
- Ting, Hsiu-I, 2016. CEO Gender, Power, and Bank Performance: Evidence from Chinese Banks. Available at SSRN: <http://ssrn.com/abstract=2764126> (April 13, 2016).
- Upadhyay, A. and Zeng, H., 2014. Gender and ethnic diversity on boards and corporate information environment. *Journal of Business Research*, 67(11), pp.2456-2463.
- Vafeas, N., 1999. Board meeting frequency and firm performance. *Journal of Financial Economics*, 53(1), pp.113-142.
- Weisbach, M.S., 1988. Outside directors and CEO turnover. *Journal of Financial Economics*, 20, pp.431-460.
- Westphal, J.D. and Stern, I., 2007. Flattery will get you everywhere (especially if you are a male Caucasian): How ingratiation, boardroom behavior, and demographic minority status affect additional board appointments at US companies. *Academy of Management Journal*, 50(2), pp.267-288.
- Yermack, D., 2004. Remuneration, retention, and reputation incentives for outside directors. *The Journal of Finance*, 59(5), pp.2281-2308.

Figure 1

This figure describes female and minority representation for the entire ISS Riskmetrics/IRRC Database between 1996 and 2015. Figure 1a contains the representation of the various minority and female demographic groups throughout the sample period. Figure 1b displays the changes in female and minority representation across the time series.

Figure 1a

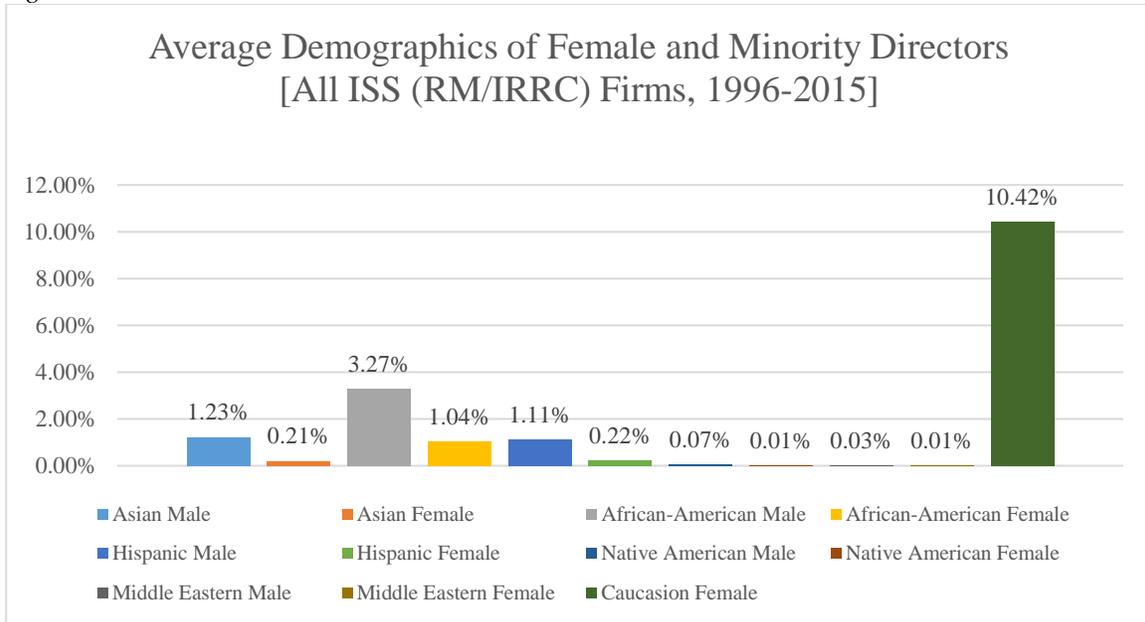


Figure 1b

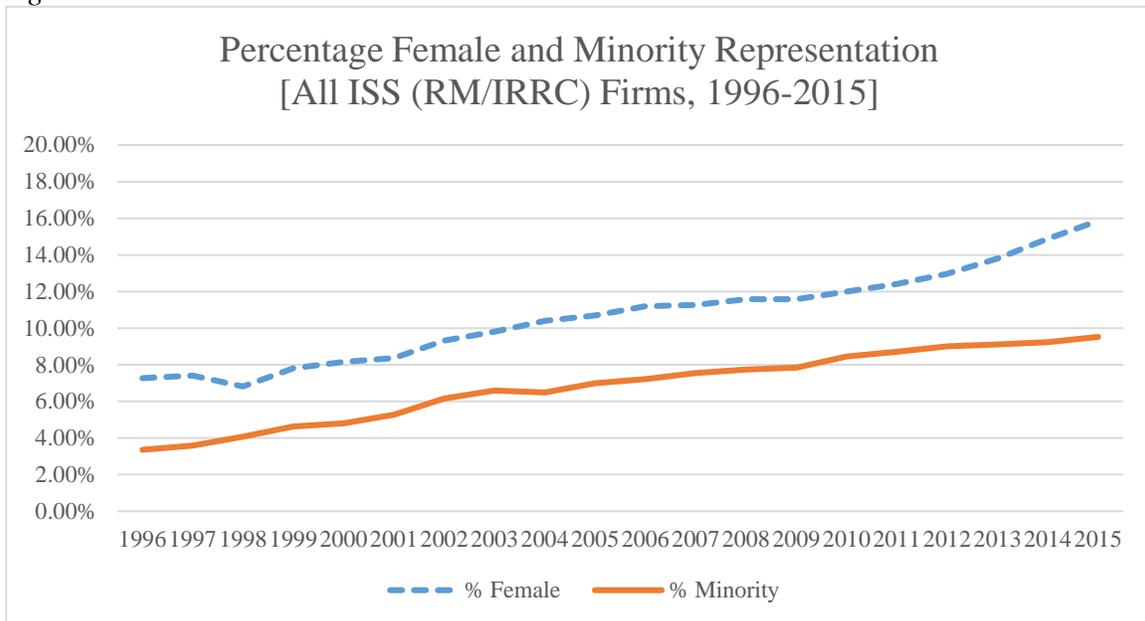


Figure 2

Figure 2 describes director compensation within the merged sample of ISS Riskmetrics/IRRC, Execucomp, and Boardex databases. Figure 2a examines director compensation by demographic group during the 2006-2013 sample period. Figure 2b displays firm-adjusted compensation levels, calculated as the difference between each individual director's compensation and the mean director compensation on that particular board, by female and minority status. ***, **, and * represent significant differences from the corresponding population (between female and male, and between minority and non-minority) at the 1%, 5%, and 10%, respectively.

Figure 2a

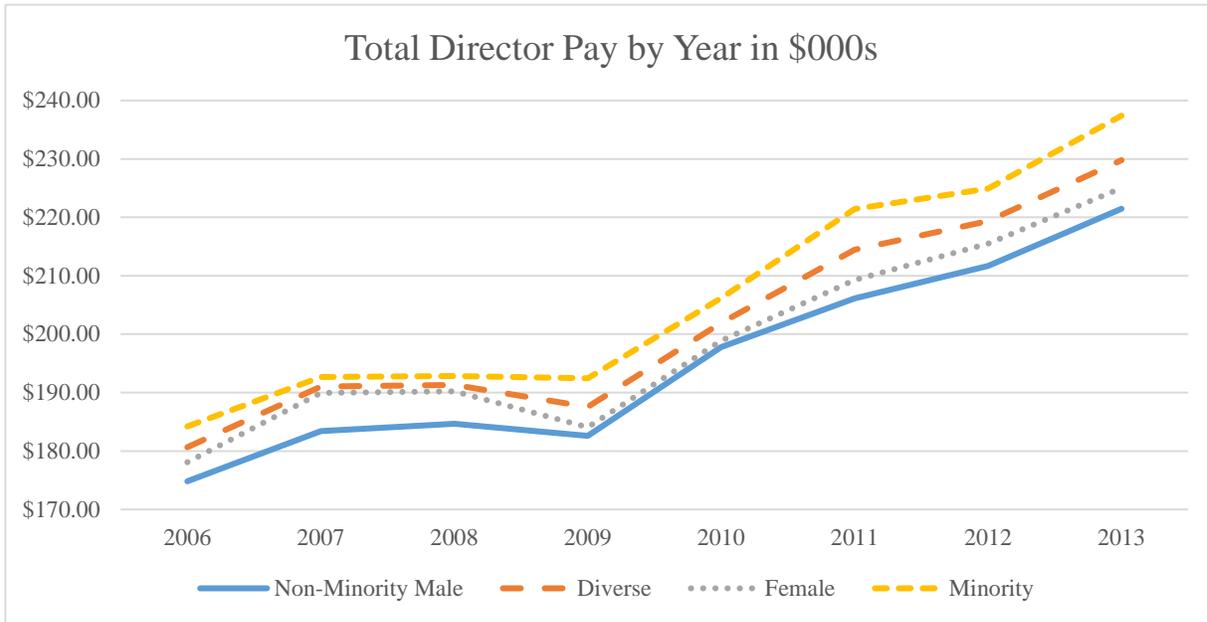


Figure 2b

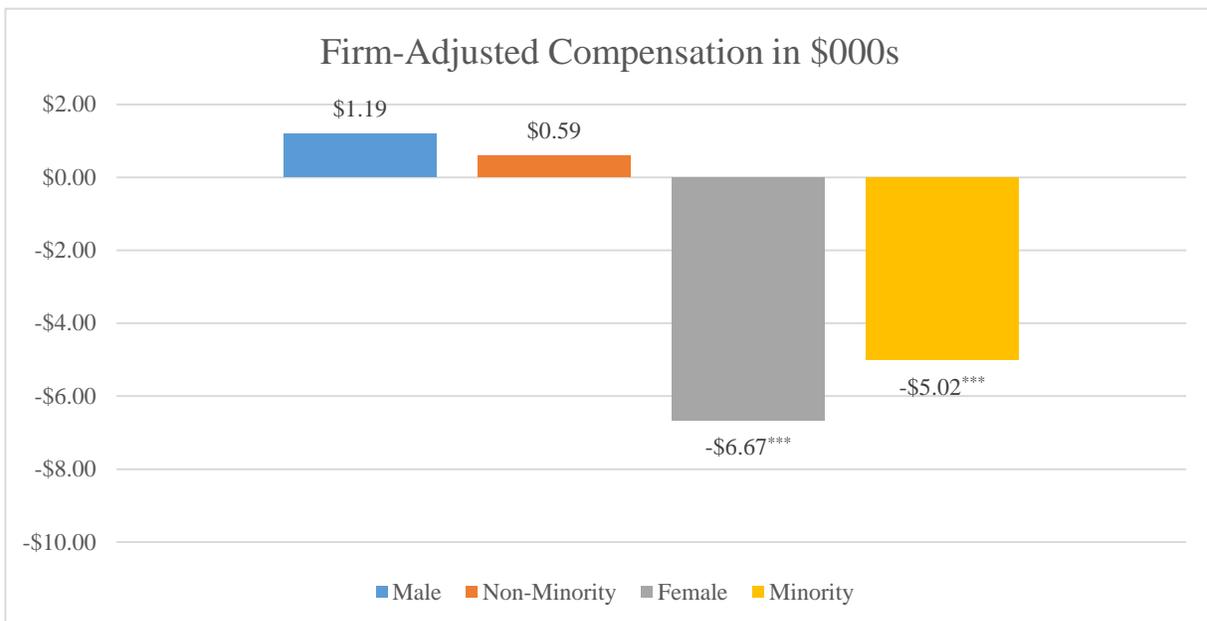


Figure 3

Figure 4 describes minority and female representation across board leadership positions. *Chairman/Lead Director* refers to any directors serving as Chairman of the Board or Lead Director. *Committee Chair* refers to directors serving as the chair of any committee. The remaining bar charts examine each of the principle committees individually. ***, **, and * represent significant differences from the corresponding population (between female and male, and between minority and non-minority) at the 1%, 5%, and 10%, respectively.



Figure 4

This figure examines director qualifications and experience by demographic group. *Director Qualifications* refers to the Qualifications Index, which is an index of nine components: academic experience, legal/consulting experience, finance experience, management experience, political experience, military experience, undergraduate degree, MBA degree, and advanced graduate degree. *Outside Board Experience* is the number of outside boards that the director serves on. *Years of Other Industry Experience* refers to the number of years serving on the boards of firms in other industries. *Other Firm Committee Experience* takes a value of one if the director serves on a committee of another firm. ***, **, and * represent significant differences from the corresponding population (between female and male, and between minority and non-minority) at the 1%, 5%, and 10%, respectively.

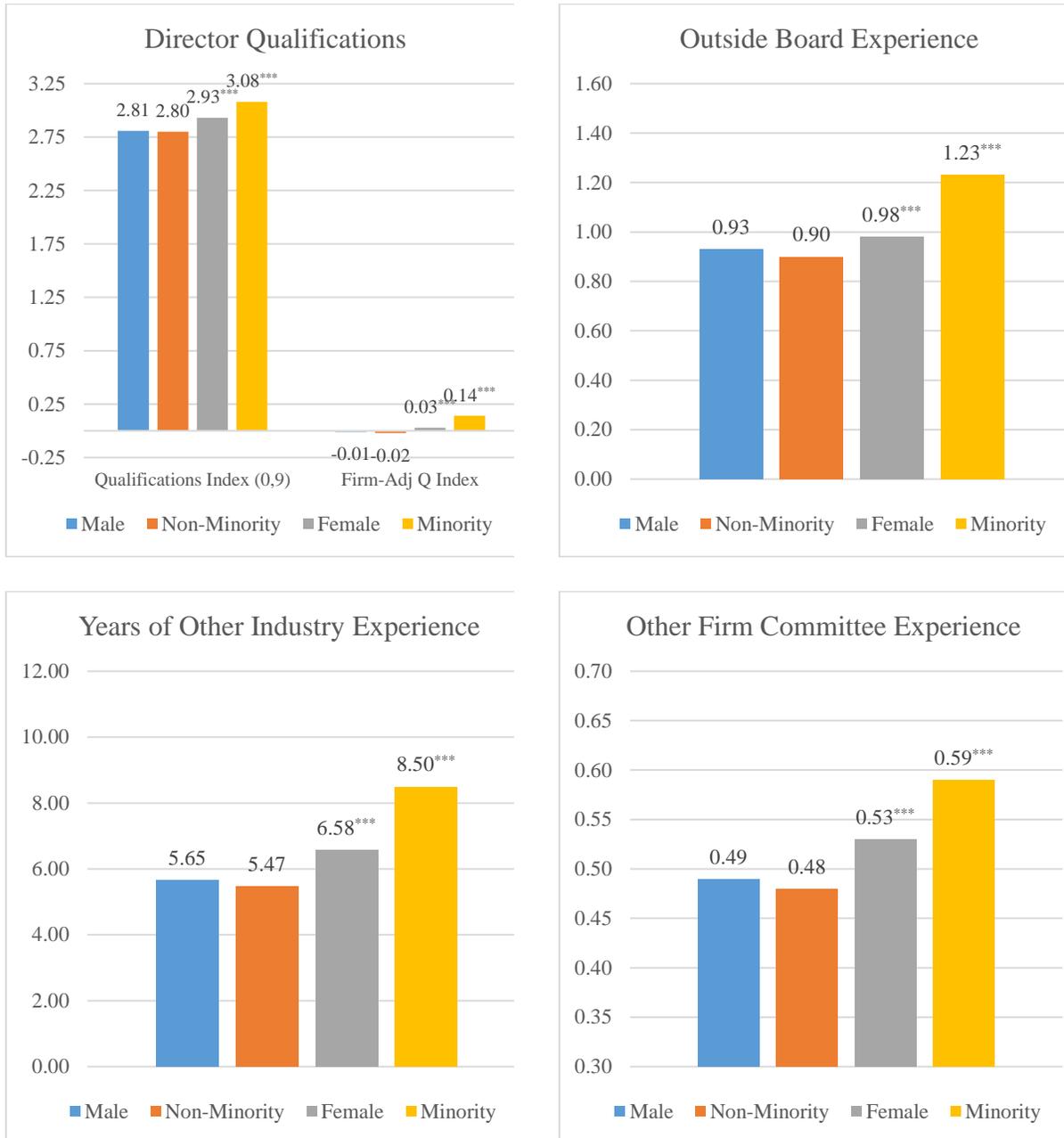


Table 1
Summary Statistics

This table describes our sample obtained from the universe of companies listed in the merged ISS(RiskMetrics) / EXECUCOMP database from 2006 until 2013. Panel A offers basic characteristics of board diversity, and Panel B provides firm-level statistics for our primary sample of 8,696 firm-year observations. Panel C contains summary statistics for our 66,855 director-firm-year observations and our sample of 58,662 director elections from the ISS Voting Analytics database. Director characteristics and experience are taken from a combination of ISS (RiskMetrics) and BoardEx databases. If a director is reported as serving on a committee, chairing a committee, or having a particular experience or education level in either of the two databases, we consider the director to have that particular characteristic in our combined database.

Panel A: Female and Minority Board Representation (N = 8,696)

Board-year observations with at least 1 minority director	41.85%
Percent of minority directors	6.67%
Board-year observations with at least 1 female director	71.71%
Percent of female directors	12.17%
Board-year observations with diversity	79.28%
Percent of diverse directors	16.62%

Panel B: Firm Characteristics and Diversity Policies (N = 8,696)

	Mean	SD	P25	Median	P75
Assets - Total	19,602	110,895	931	2,763	8,860
Sales/Turnover (Net)	7,495	23,066	688	1,805	5,516
Board Size	9.36	2.38	8	9	11
Return on Assets	0.05	0.09	0.02	0.05	0.08
Long-Term Debt to Total Assets	0.21	0.17	0.06	0.2	0.33
Market to Book Ratio	3.27	14.52	1.36	2.05	3.2
Tobin's Q	1.72	1.02	1.08	1.4	1.98
Capital Expenditures to Sales	0.07	0.16	0.02	0.03	0.06
R&D to Total Assets	0.02	0.05	0	0	0.02
Percent Independent Directors	78.51	11.23	71.43	80	87.5
CEO is Chairman	0.51	0.5	0	1	1
Has Diversity Policy	0.22	0.037	0	0	0
Diversity on Director Compensation Committee	0.47	0.499	0	0	1

Panel C: Director Qualifications, Board Responsibilities, Voting Outcomes, and Compensation

	N	Mean	SD	Q1	Median	Q3
<i>Director Board Experience and Attendance</i>						
Director Tenure	66,855	9.600	6.767	5	8	13
Director Age	66,855	63.057	7.586	58	64	68
# of other major company boards	66,855	0.936	1.091	0	1	2
Attended <75% of meetings	66,855	0.007	0.084	0	0	0
Other Industry Experience	66,855	5.788	9.598	0	0	9
Other Firm Committee Experience	66,855	0.493	0.500	0	0	1
Director Network Size	66,855	29.359	27.095	11	19	38
<i>Career Experience and Education</i>						
Academic Experience	66,855	0.062	0.241	0	0	0
Legal or Consulting Experience	66,855	0.255	0.436	0	0	1
Finance Experience	66,855	0.300	0.458	0	0	1
Management Experience	66,855	0.285	0.452	0	0	1
Political Experience	66,855	0.036	0.186	0	0	0
Military Experience	66,855	0.002	0.049	0	0	0
Undergrad Degree	66,855	0.884	0.321	1	1	1
Advanced Graduate Degree	66,855	0.634	0.482	0	1	1
MBA Degree	66,855	0.374	0.484	0	0	1
Qualifications Index	66,855	2.832	1.335	2	3	4
<i>Board Service</i>						
Chairman/Lead Director	66,855	0.075	0.264	0	0	0
Any Committee	66,855	0.946	0.225	1	1	1
Audit Committee Member	66,855	0.527	0.499	0	1	1
Compensation Committee Member	66,855	0.519	0.500	0	1	1
Nominating Committee Member	66,855	0.508	0.500	0	1	1
Governance Committee Member	66,855	0.516	0.500	0	1	1
Serves as a Committee Chair	66,855	0.402	0.490	0	0	1
Audit Committee Chair	66,855	0.139	0.346	0	0	0
Compensation Committee Chair	66,855	0.132	0.339	0	0	0
Nominating Committee Chair	66,855	0.120	0.325	0	0	0
Governance Committee Chair	66,855	0.127	0.333	0	0	0
<i>Voting Results</i>						
Average Percent "For" Votes (Firm-level)	8,896	94.188	7.783	93.630	96.837	98.316
Range of Percent "For" Votes within Firm	8,896	7.105	10.051	0.806	3.114	8.934
Percent "For" Votes (Director-level)	51,327	94.814	8.337	94.836	97.783	98.957
<i>Director Compensation (in \$000s)</i>						
Total Compensation	66,855	195.59	139.16	130.96	180.00	234.43
Fees Earned or Paid in Cash	66,855	79.03	38.65	56.00	75.00	96.25
Incentive-Based Compensation	66,855	109.67	104.67	60.02	97.36	130.23
Other Compensation	66,855	6.51	82.86	0.00	0.00	1.00

Table 2
Director Compensation, Responsibilities, and Qualifications by Diversity

This table examines director responsibilities and compensation levels. The columns contain sample averages for the full sample and for the non-minority, minority, male, and female director subsamples. In the *Minority* column, the number in parentheses is a *t*-statistic comparing the means of the minority and non-minority samples. The number in parentheses in the *Female* column is a *t*-statistic comparing the average of the male and female samples.

Variable	Full Sample	Non-Minority	Minority	Male	Female
<i>Director Compensation</i>					
Average Director Compensation	195.59	194.73	207.88 (10.70)***	196.05	199.69 (4.40)***
Firm-Adjusted Compensation	0	0.59	-5.02 (-4.69)***	1.19	-6.67 (-7.68)***
<i>Committee Assignments</i>					
Any Committee	0.95	0.95	0.95 (1.90)*	0.95	0.95 (3.25)***
Audit Committee Member	0.53	0.53	0.48 (-8.01)***	0.53	0.49 (-7.37)***
Compensation Committee Member	0.52	0.53	0.47 (-8.93)***	0.53	0.47 (-9.74)***
Nominating Committee Member	0.51	0.51	0.51 (-0.51)	0.51	0.51 (-0.68)
Governance Committee Member	0.52	0.52	0.52 (1.24)	0.51	0.53 (3.17)***
<i>Leadership Roles</i>					
Chairman/Lead Director	0.08	0.08	0.04 (-11.67)***	0.08	0.03 (-18.48)***
Committee Chair	0.4	0.41	0.29 (-18.80)***	0.41	0.32 (-17.12)***
Audit Committee Chair	0.14	0.15	0.08 (-14.02)***	0.15	0.09 (-14.72)***
Compensation Committee Chair	0.13	0.14	0.08 (-12.96)***	0.14	0.09 (-12.82)***
Nominating Committee Chair	0.12	0.12	0.11 (-3.63)***	0.12	0.11 (-3.20)***
Governance Committee Chair	0.13	0.13	0.12 (-3.06)***	0.13	0.12 (-1.12)
<i>Director Qualifications</i>					
Qualifications Index	2.83	2.80	3.08 (16.15)***	2.81	2.93 (8.22)***
Firm-Adjusted Qualifications Index	0	-0.02	0.14 (10.64)***	-0.01	0.03 (2.84)***
# of other major company boards	0.94	0.90	1.23 (24.39)***	0.93	0.98 (3.89)***
Other Industry Experience	5.79	5.47	8.50 (25.19)***	5.65	6.58 (9.03)***
Outside Committee Experience	0.49	0.48	0.59 (16.70)***	0.49	0.53 (8.57)***
Network Size	29.36	28.28	38.46 (30.04)***	28.80	32.48 (12.56)***
Observations	66,855	59,798	7,057	56,766	10,089

Table 3**What types of boards appoint diverse directors?**

Panel A examines characteristics of firms appointing minority directors. The dependent variable is the percentage of directors that are diverse (Column 1), minority (Column 2), or female (Column 3) during a firm-year observation. *S&P 500 Firm* takes a value of one if the firm is in the S&P 500. *Consumer Industry* takes a value of one if the firm is in a consumer-related industry according to the 48 Fama-French industry classifications. Standard errors are clustered by firm. Panel B contains logit models estimating the likelihood of a director serving on a “high-visibility” board. The dependent variable, *High Visibility Board Appointment* (0,1), is based on the first principal component of the four explanatory variables in Panel A. *High Visibility Board Appointment* takes a value of 1 if the firm’s component score is above the median score.

	<i>Panel A: Diverse Boards</i>			<i>Panel B: Director Appointments to High Visibility Boards</i>		
	(1) % Diverse	(2) % Minority	(3) % Female	(1)	(2)	(3)
ln(Sales)	2.51 [11.17]***	0.629 [3.13]***	1.857 [10.53]***	Diverse Director 0.2360 [3.57]***		
Advertising/Assets	0.11 [1.31]	0.057 [1.16]	0.226 [2.72]***	Minority Director	0.3313 [3.51]***	
S&P 500 Firm	2.60 [3.52]***	2.073 [3.80]***	1.264 [2.21]**	Female Director		0.1434 [1.91]*
Consumer Ind.	2.13 [3.24]***	1.122 [2.02]**	2.201 [4.44]***	# of other boards	0.0719 [1.95]*	0.0647 [1.76]*
Observations	8,696	8,696	8,696	Other Industry Experience	-0.1016 [-7.91]***	-0.1012 [-7.90]***
Adj R-squared	0.1389	0.0331	0.1260	Director Network Size	0.0656 [9.79]***	0.0652 [9.74]***
				Other Firm Committee Exp.	-0.0804 [-0.82]	-0.0658 [-0.67]
				Academic Experience	0.3784 [2.67]***	0.3835 [2.71]***
				Legal/Consulting Experience	-0.1408 [-1.81]*	-0.1296 [-1.67]*
				Finance Experience	0.0430 [0.65]	0.0462 [0.70]
				Management Experience	0.2574 [4.15]***	0.2557 [4.13]***
				Political Experience	0.4636 [2.63]***	0.4572 [2.58]***
				Military Experience	0.0801 [0.16]	0.0862 [0.17]
				Undergrad Degree	0.2157 [2.04]**	0.2162 [2.05]**
				Advanced Graduate Degree	0.3088 [3.60]***	0.2973 [3.46]***
				MBA Degree	-0.0633 [-0.76]	-0.0560 [-0.67]
				Observations	5,006	5,006
				Pseudo R-squared	0.0762	0.0762

Table 4**Are diverse directors valued by shareholders at the ballot box?**

This table focuses on voting results in director elections. The dependent variable in each regression is the percentage of votes cast in favor of the director (in percentage terms). Each model contains firm fixed effects and robust Rogers (1993) standard errors clustered by shareholder meeting. *Diverse Director* takes a value of one if the director is classified as minority or female according to RiskMetrics. *Minority Director* (*Female Director*) takes a value of one if the director is classified as minority (female). Columns 1-3 consider the raw percentage vote in support of a director, while Columns 4-6 consider the abnormal vote (Percentage vote – average vote across all directors at the meeting).

	(1)	(2)	(3)	(4)	(5)	(6)
	Percent vote	Percent vote	Percent vote	Abnormal votes	Abnormal votes	Abnormal votes
Diverse Director	0.3414 [7.57]***			0.3263 [7.49]***		
Minority Director		0.1597 [2.56]**			0.2060 [3.38]***	
Female Director			0.3860 [7.80]***			0.3394 [7.17]***
Academic Experience	0.1254 [1.47]	0.1522 [1.79]*	0.1370 [1.61]	0.1824 [2.21]**	0.2065 [2.51]**	0.1957 [2.38]**
Finance Experience	0.2281 [4.84]***	0.2196 [4.65]***	0.2219 [4.72]***	0.2935 [6.59]***	0.2868 [6.44]***	0.2872 [6.45]***
Legal or Consulting Experience	-0.3162 [-5.97]***	-0.3027 [-5.71]***	-0.3135 [-5.92]***	-0.2785 [-5.59]***	-0.2700 [-5.42]***	-0.2760 [-5.55]***
Political Experience	0.0175 [0.17]	0.0307 [0.30]	0.0259 [0.25]	0.0036 [0.04]	0.0202 [0.21]	0.0191 [0.20]
Military Experience	-0.2822 [-0.75]	-0.2601 [-0.69]	-0.2533 [-0.67]	-0.2484 [-1.07]	-0.2330 [-1.01]	-0.2239 [-0.97]
Undergrad Degree	-0.4207 [-6.49]***	-0.4196 [-6.48]***	-0.4251 [-6.56]***	-0.3463 [-5.71]***	-0.3425 [-5.64]***	-0.3481 [-5.74]***
Advanced Graduate Degree	-0.1816 [-3.10]***	-0.1790 [-3.04]***	-0.1692 [-2.88]***	-0.1847 [-3.26]***	-0.1805 [-3.18]***	-0.1710 [-3.01]***
MBA Degree	-0.0245 [-0.43]	-0.0309 [-0.54]	-0.0285 [-0.50]	0.0004 [0.01]	-0.0034 [-0.06]	-0.0037 [-0.07]
Residual of ISS Vote 'For' Rec.	24.4751 [64.93]***	24.4781 [64.92]***	24.4771 [64.94]***	10.1998 [34.95]***	10.2002 [34.94]***	10.2001 [34.94]***
Log of Total Assets	-0.5366 [-2.29]**	-0.5356 [-2.29]**	-0.5360 [-2.29]**			
Ind-Adj (FF48) Return on Assets	2.8231 [3.79]***	2.8183 [3.78]***	2.8259 [3.79]***			
Classified Board	-0.7614 [-4.18]***	-0.7625 [-4.19]***	-0.7616 [-4.18]***			

Poison Pill	-0.6695 [-4.31]***	-0.6721 [-4.33]***	-0.6700 [-4.31]***			
Board Size	0.0326 [0.77]	0.0321 [0.76]	0.0328 [0.78]			
CEO is Chairman	-0.1338 [-0.95]	-0.1346 [-0.95]	-0.1327 [-0.94]			
Abnormal CEO Compensation (\$)	-0.0032 [-2.81]***	-0.0032 [-2.82]***	-0.0032 [-2.82]***			
Percent Independent Directors	0.0628 [8.25]***	0.0629 [8.26]***	0.0628 [8.26]***			
Total Director Ownership	-0.0371 [-4.14]***	-0.0373 [-4.17]***	-0.0370 [-4.14]***			
Litigation	-1.3949 [-4.69]***	-1.3990 [-4.70]***	-1.3959 [-4.69]***			
Accounting Restatement	-0.1863 [-0.89]	-0.1865 [-0.89]	-0.1876 [-0.90]			
Nontimely SEC filing	-0.7076 [-2.75]***	-0.7102 [-2.76]***	-0.7057 [-2.74]***			
Unequal Voting Rights	-0.5542 [-0.97]	-0.5538 [-0.97]	-0.5515 [-0.97]			
Confidential Voting	0.3234 [1.32]	0.3232 [1.32]	0.3219 [1.31]			
Majority Vote Requirement	1.1149 [7.34]***	1.1165 [7.35]***	1.1144 [7.33]***			
Observations	51,327	51,327	51,327	51,327	51,327	51,327
Firm Fixed Effects	Yes	Yes	Yes	No	No	No
Clustering by Meeting ID	Yes	Yes	Yes	No	No	No
Adj R-squared	0.6620	0.6618	0.6620	0.2471	0.2465	0.2469

Table 5**Are diverse directors paid differently?**

Panel A examines total director compensation as a function of director characteristics. Panels B, C, and D are reduced panels that follow the same functional form as Panel A but focus on the cash-based, incentive-based, and “other” components of total compensation, respectively. The dependent variable in each regression is the natural log of the specified form of compensation. *Diverse Director* takes a value of one if the director is classified as minority or female according to ISS (RiskMetrics). *Minority Director (Female Director)* takes a value of one if the director is classified as minority (female). Column 4 excludes all directors who serve on committees, therefore excluding any committee-related bonuses. In every model, we exclude any directors with less than one year of service. Each model uses robust Rogers (1993) standard errors clustered at the individual director level to account for serial dependence.

Panel A: Total Compensation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Diverse Director	-0.0225 [-7.88]***	-0.0208 [-7.36]***	-0.0172 [-6.16]***	-0.0873 [-4.25]***	-0.0112 [-4.17]***	-0.0260 [-9.15]***				
Minority Director							-0.0182 [-4.57]***	-0.0094 [-2.50]**		
Female Director									-0.0206 [-6.90]***	-0.0118 [-4.15]***
Total Number of Committees		0.0300 [10.18]***			0.0213 [7.50]***		0.0302 [10.24]***	0.0214 [7.52]***	0.0301 [10.23]***	0.0213 [7.51]***
Committee Chair					0.0346 [12.65]***			0.0348 [12.70]***		0.0348 [12.76]***
Chairman/Lead Director					0.1701 [22.73]***			0.1709 [22.83]***		0.1704 [22.81]***
Qualifications Index						0.0059 [5.14]***				
Academic Experience	-0.0200 [-3.83]***	-0.0186 [-3.60]***	-0.0157 [-3.05]***	-0.0183 [-0.66]	-0.0106 [-2.17]**		-0.0198 [-3.82]***	-0.0113 [-2.29]**	-0.0194 [-3.75]***	-0.0110 [-2.24]**
Legal or Consulting Experience	0.0079 [2.27]**	0.0082 [2.39]**	0.0076 [2.20]**	0.1065 [3.60]***	0.0080 [2.46]**		0.0074 [2.16]**	0.0076 [2.32]**	0.0081 [2.36]**	0.0080 [2.45]**
Finance Experience	0.0321 [11.39]***	0.0285 [10.51]***	0.0229 [6.74]***	-0.1311 [-2.75]***	0.0250 [9.56]***		0.0291 [10.76]***	0.0253 [9.70]***	0.0290 [10.70]***	0.0252 [9.64]***
Management Experience	-0.0099 [-2.73]***	-0.0083 [-2.31]**	-0.0089 [-2.52]**	0.0001 [0.01]	-0.0071 [-2.08]**		-0.0082 [-2.31]**	-0.0071 [-2.07]**	-0.0083 [-2.32]**	-0.0071 [-2.08]**
Political Experience	0.0099 [1.16]	0.0111 [1.31]	0.0108 [1.30]	0.1927 [4.21]***	0.0095 [1.20]		0.0108 [1.27]	0.0094 [1.17]	0.0103 [1.21]	0.0091 [1.14]
Military Experience	0.0152 [0.57]	0.0125 [0.48]	0.0174 [0.69]	0.0213 [0.19]	0.0186 [0.70]		0.0120 [0.46]	0.0183 [0.69]	0.0104 [0.40]	0.0175 [0.66]
Undergrad Degree	0.0155 [3.09]***	0.0135 [2.69]***	0.0132 [2.66]***	0.0276 [0.84]	0.0097 [2.02]**		0.0134 [2.66]***	0.0096 [2.00]**	0.0138 [2.74]***	0.0099 [2.05]**
Advanced Graduate Degree	-0.0062 [-1.51]	-0.0066 [-1.62]	-0.0064 [-1.58]	-0.0645 [-1.88]*	-0.0069 [-1.80]*		-0.0064 [-1.57]	-0.0068 [-1.77]*	-0.0075 [-1.82]*	-0.0074 [-1.91]*
MBA Degree	0.0103	0.0102	0.0103	0.1168	0.0080		0.0106	0.0081	0.0105	0.0081

	[2.60]***	[2.62]***	[2.63]***	[3.47]***	[2.15]**		[2.70]***	[2.20]**	[2.69]***	[2.19]**
Director Tenure	0.0041	0.0037	0.0031	0.0072	0.0024	0.0040	0.0038	0.0024	0.0038	0.0024
	[9.03]***	[7.92]***	[7.26]***	[3.50]***	[5.14]***	[8.81]***	[8.05]***	[5.20]***	[8.06]***	[5.20]***
Director Age	0.0014	0.0013	0.0014	0.0047	0.0011	0.0016	0.0014	0.0011	0.0013	0.0011
	[5.80]***	[5.42]***	[5.91]***	[2.52]**	[4.67]***	[6.38]***	[5.65]***	[4.80]***	[5.26]***	[4.57]***
# of other major company boards	0.0020	0.0019	0.0019	0.0186	0.0011	0.0032	0.0021	0.0012	0.0017	0.0009
	[1.27]	[1.20]	[1.21]	[1.56]	[0.70]	[1.99]**	[1.30]	[0.75]	[1.05]	[0.61]
Other Industry Experience	-0.0012	-0.0011	-0.0011	-0.0060	-0.0010	-0.0013	-0.0011	-0.0010	-0.0011	-0.0010
	[-3.06]***	[-2.91]***	[-2.82]***	[-2.12]**	[-2.75]***	[-3.25]***	[-2.89]***	[-2.74]***	[-2.82]***	[-2.70]***
Director Network Size	0.0005	0.0005	0.0004	0.0021	0.0003	0.0005	0.0005	0.0003	0.0005	0.0003
	[3.46]***	[3.15]***	[2.86]***	[2.06]**	[2.06]**	[3.51]***	[3.13]***	[2.04]**	[3.03]***	[1.99]**
Other Firm Committee Experience	0.0141	0.0126	0.0123	-0.0630	0.0078	0.0154	0.0125	0.0077	0.0129	0.0079
	[3.70]***	[3.35]***	[3.28]***	[-2.32]**	[2.18]**	[4.03]***	[3.30]***	[2.14]**	[3.41]***	[2.21]**
Attended <75% of meetings	-0.0623	-0.0585	-0.0593	-0.0946	-0.0498	-0.0667	-0.0581	-0.0496	-0.0591	-0.0501
	[-3.68]***	[-3.48]***	[-3.50]***	[-1.12]	[-2.96]***	[-3.95]***	[-3.46]***	[-2.94]***	[-3.52]***	[-2.98]***
ln(Sales)	0.1360	0.1373	0.1377	0.1436	0.1375	0.1360	0.1373	0.1375	0.1372	0.1375
	[17.86]***	[18.07]***	[18.11]***	[3.49]***	[18.17]***	[17.88]***	[18.07]***	[18.17]***	[18.06]***	[18.16]***
Board Size	-0.0069	-0.0060	-0.0061	-0.0140	-0.0051	-0.0071	-0.0060	-0.0050	-0.0060	-0.0050
	[-4.47]***	[-3.90]***	[-3.96]***	[-1.70]*	[-3.31]***	[-4.59]***	[-3.87]***	[-3.29]***	[-3.88]***	[-3.29]***
Return on Assets	-0.0525	-0.0551	-0.0523	0.0613	-0.0538	-0.0525	-0.0555	-0.0540	-0.0552	-0.0538
	[-2.15]**	[-2.25]**	[-2.15]**	[0.41]	[-2.20]**	[-2.15]**	[-2.27]**	[-2.21]**	[-2.26]**	[-2.20]**
Long-Term Debt to Total Assets	-0.1232	-0.1208	-0.1190	-0.2645	-0.1194	-0.1231	-0.1213	-0.1197	-0.1210	-0.1195
	[-4.63]***	[-4.53]***	[-4.47]***	[-1.45]	[-4.48]***	[-4.62]***	[-4.55]***	[-4.49]***	[-4.54]***	[-4.49]***
Market to Book Ratio	0.0001	0.0001	0.0001	-0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	[3.27]***	[3.10]***	[2.93]***	[-0.24]	[3.22]***	[3.25]***	[3.11]***	[3.23]***	[3.11]***	[3.23]***
Volatility	-7.1960	-6.9768	-6.8043	-21.7291	-6.9534	-7.1918	-6.9990	-6.9656	-6.9945	-6.9624
	[-2.71]***	[-2.63]***	[-2.57]**	[-1.58]	[-2.63]***	[-2.71]***	[-2.64]***	[-2.64]***	[-2.64]***	[-2.63]***
Capital Expenditures to Sales	0.1197	0.1207	0.1215	0.1528	0.1225	0.1188	0.1206	0.1225	0.1208	0.1226
	[5.81]***	[5.86]***	[5.89]***	[1.06]	[5.95]***	[5.77]***	[5.86]***	[5.95]***	[5.87]***	[5.96]***
R&D to Total Assets	-0.0065	-0.0030	0.0081	-1.1380	-0.0030	-0.0043	-0.0016	-0.0023	-0.0023	-0.0027
	[-0.05]	[-0.02]	[0.06]	[-2.30]**	[-0.02]	[-0.03]	[-0.01]	[-0.02]	[-0.02]	[-0.02]
Percent Independent Directors	0.0005	0.0005	0.0006	-0.0015	0.0006	0.0005	0.0005	0.0006	0.0005	0.0006
	[1.90]*	[2.06]**	[2.31]**	[-0.94]	[2.28]**	[1.82]*	[2.06]**	[2.27]**	[2.07]**	[2.28]**
CEO is Chairman	-0.0097	-0.0098	-0.0091	-0.1441	-0.0091	-0.0094	-0.0100	-0.0092	-0.0098	-0.0091
	[-1.85]*	[-1.88]*	[-1.73]*	[-4.34]***	[-1.75]*	[-1.80]*	[-1.91]*	[-1.77]*	[-1.88]*	[-1.75]*
Observations	66,855	66,855	66,855	3,588	66,855	66,855	66,855	66,855	66,855	66,855
Firm Fixed Effects	Yes									
Clustering by Director	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Exclude Committee Members	No	No	No	Yes	No	No	No	No	No	No
Committee Fixed Effects	No	No	Yes	No						
Adj R-squared	0.7018	0.7031	0.7045	0.5999	0.7107	0.7009	0.7030	0.7107	0.7031	0.7107

Panel B: Cash Compensation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Diverse Director	-0.0262 [-4.41]***	-0.0222 [-3.78]***	-0.0219 [-3.81]***	-0.0492 [-2.40]**	-0.0046 [-0.83]	-0.0350 [-5.90]***				
Minority Director							-0.0201 [-2.23]**	-0.0029 [-0.33]		
Female Director									-0.0169 [-2.70]***	-0.0013 [-0.22]
Observations	66,855	66,855	66,855	3,588	66,855	66,855	66,855	66,855	66,855	66,855
Additional Firm and Director Controls	Yes	Yes	Yes	Yes	Yes	Firm, QINDEX	Yes	Yes	Yes	Yes
Adj R-squared	0.5668	0.5736	0.5762	0.6138	0.5954	0.5616	0.5735	0.5954	0.5735	0.5954

Panel C: Incentive-based Compensation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Diverse Director	-0.0090 [-2.81]***	-0.0083 [-2.57]**	-0.0064 [-1.98]**	-0.0178 [-0.86]	-0.0053 [-1.66]*	-0.0097 [-3.06]***				
Minority Director							-0.0032 [-0.71]	-0.0007 [-0.15]		
Female Director									-0.0108 [-3.14]***	-0.0081 [-2.34]**
Observations	66,855	66,855	66,855	3,588	66,855	66,855	66,855	66,855	66,855	66,855
Additional Firm and Director Controls	Yes	Yes	Yes	Yes	Yes	Firm, QINDEX	Yes	Yes	Yes	Yes
Adj R-squared	0.7445	0.7446	0.7448	0.7276	0.7450	0.7445	0.7446	0.7450	0.7446	0.7450

Panel D: Other Compensation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Diverse Director	-0.0636 [-5.88]***	-0.0612 [-5.67]***	-0.0515 [-4.77]***	-0.2039 [-2.64]***	-0.0521 [-4.88]***	-0.0674 [-6.27]***				
Minority Director							-0.0826 [-5.13]***	-0.0693 [-4.38]***		
Female Director									-0.0385 [-3.23]***	-0.0322 [-2.73]***
Observations	66,855	66,855	66,855	3,588	66,855	66,855	66,855	66,855	66,855	66,855
Additional Firm and Director Controls	Yes	Yes	Yes	Yes	Yes	Firm, QINDEX	Yes	Yes	Yes	Yes
Adj R-squared	0.4372	0.4377	0.4396	0.3609	0.4419	0.4367	0.4377	0.4419	0.4374	0.4417

Table 6**Is the pay gap attributable to differences in career stages at the firm?**

This table uses the specification of Column 5 in Table 5, but separates the sample of directors based on their tenure with the firm. Column 1 considers recently-appointed directors with tenures ranging from 1-5 years. Column 2 focuses on directors with tenures from 6-10 years. Column 3 considers all directors with 11 or more years of tenure. Each regression includes firm fixed effects and robust Rogers (1993) standard errors clustered by director. Additional firm-level controls identical to Table 5 are also included.

	(1) 1-5 Years	(2) 6-10 Years	(3) 11+ Years
Diverse Director	-0.0075 [-1.86]*	-0.0235 [-4.65]***	-0.0176 [-2.42]**
Total # Committees in Firm Year	0.0323 [7.56]***	0.0178 [4.16]***	0.0202 [3.78]***
Committee Chair	0.0468 [8.10]***	0.0401 [9.64]***	0.0167 [2.79]***
Chairman/Lead Director	0.2199 [8.24]***	0.1520 [14.52]***	0.1682 [17.72]***
Academic Experience	-0.0044 [-0.48]	-0.0138 [-1.82]*	-0.0032 [-0.30]
Legal or Consulting Experience	0.0015 [0.24]	0.0084 [1.72]*	0.0159 [2.45]**
Finance Experience	0.0232 [4.69]***	0.0247 [5.99]***	0.0334 [5.47]***
Management Experience	-0.0147 [-2.92]***	-0.0078 [-1.65]*	-0.0058 [-0.70]
Political Experience	0.0130 [1.38]	0.0051 [0.49]	0.0134 [0.74]
Military Experience	0.0147 [0.34]	0.0150 [0.28]	0.0113 [0.31]
Undergrad Degree	0.0009 [0.11]	0.0106 [1.19]	0.0097 [0.97]
Advanced Graduate Degree	0.0020 [0.29]	-0.0015 [-0.26]	-0.0187 [-2.31]**
MBA Degree	0.0039 [0.64]	0.0011 [0.21]	0.0077 [0.83]
Director Tenure	0.0041 [1.95]*	0.0049 [3.12]***	0.0022 [2.42]**
# of other major company boards	0.0053 [2.04]**	0.0021 [0.98]	0.0004 [0.15]
Other Industry Experience	0.0002 [0.30]	0.0002 [0.43]	-0.0012 [-1.83]*
Director Network Size	-0.0002 [-0.79]	-0.0001 [-0.67]	0.0004 [1.55]
Other Firm Committee Experience	0.0037 [0.63]	0.0051 [0.91]	0.0166 [2.17]**
Designated director	-0.0904 [-2.85]***	-0.0356 [-1.42]	0.0002 [0.01]
Attended <75% of meetings	0.0041 [1.95]*	0.0049 [3.12]***	0.0022 [2.42]**
Additional Firm-Level Controls	Yes	Yes	Yes
Observations	21,475	22,322	23,058
Adj R-squared	0.7107	0.7277	0.7236

Table 7**Do shareholders perceive the “low paid” directors as less valuable?**

This table is similar to Table 4 but includes additional variables describing abnormal compensation. *Abnormal Pay* is the residual from a regression of compensation onto committee and committee chair indicators, with firm and year fixed effects. This variable is then interacted with the *Minority*, *Female*, and *Diverse* indicator variables. The dependent variable in Columns 1-3 is the percentage of votes cast in favor of the director (in percentage terms). The dependent variable in Columns 4-6 is a firm adjusted abnormal vote, where the mean director vote is subtracted from each individual director’s vote total. Each model contains firm fixed effects and robust Rogers (1993) standard errors clustered by shareholder meeting. *Diverse Director* takes a value of one if the director is classified as minority or female according to ISS (RiskMetrics). *Minority Director* (*Female Director*) takes a value of one if the director is classified as minority (female). Columns 1-3 consider the raw percentage vote in support of a director, while Columns 4-6 consider the abnormal vote (Percentage vote – average vote across all directors at the meeting).

	(1) Percent vote	(2) Percent vote	(3) Percent vote	(4) Abnormal vote	(5) Abnormal vote	(6) Abnormal vote
Diverse Director	0.3440 [7.60]***			0.3288 [7.53]***		
Diverse x Abnormal Pay	-0.0021 [-2.17]**			-0.0016 [-1.93]*		
Minority Director		0.1653 [2.64]***			0.2076 [3.41]***	
Minority x Abnormal Pay		-0.0029 [-2.12]**			-0.0010 [-1.03]	
Female			0.3870 [7.82]***			0.3425 [7.23]***
Female x Abnormal Pay			-0.0011 [-1.07]			-0.0017 [-1.57]
Abnormal Pay	-0.0008 [-2.00]**	-0.0007 [-1.86]*	-0.0005 [-1.41]	-0.0005 [-0.83]	-0.0003 [-0.53]	-0.0004 [-0.74]
Observations	51,327	51,327	51,327	51,327	51,327	51,327
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	No	No	No
Clustering by Meeting ID	Yes	Yes	Yes	No	No	No
Adj R-squared	0.6621	0.6619	0.6620	0.2472	0.2465	0.2470

Table 8
Are diverse directors poor monitors?

This table examines CEO-turnover performance sensitivity as a function of director diversity. The test is based on a similar model found in Table 6 of Adams and Ferreira (2009). The dependent variable takes a value of one if the CEO leaves the position in the following year. *Percent Diverse Directors* is the percentage of directors in a firm's board classified as either minority or female according to ISS (RiskMetrics). *Stock Performance* is the raw return net of the CRSP value-weighted index, following Adams and Ferreira (2009). Firm fixed effects are included in each specification.

	(1)	(2)	(3)	(4)	(5)	(6)
Percent Diverse Directors	0.0041 [0.17]	0.0094 [0.38]				
% Diverse x Stock Performance		-0.0499 [-1.03]				
Percent Minority Directors			-0.0003 [-0.85]	-0.0003 [-0.79]		
% Minority x Stock Performance				-0.0000 [-0.03]		
Percent Female Directors					0.0004 [1.08]	0.0005 [1.37]
% Female x Stock Performance						-0.0010 [-1.47]
Stock Performance	-0.0328 [-4.20]***	-0.0243 [-2.09]**	-0.0329 [-4.20]***	-0.0328 [-3.73]***	-0.0328 [-4.19]***	-0.0213 [-1.89]*
CEO Age	0.0049 [8.97]***	0.0049 [8.98]***	0.0049 [8.96]***	0.0049 [8.96]***	0.0049 [9.00]***	0.0049 [9.01]***
Estimated Tenure of CEO	-0.0060 [-10.31]***	-0.0060 [-10.32]***	-0.0060 [-10.30]***	-0.0060 [-10.30]***	-0.0060 [-10.21]***	-0.0060 [-10.20]***
CEO Insider Ownership	-0.0014 [-2.67]***	-0.0014 [-2.67]***	-0.0014 [-2.66]***	-0.0014 [-2.66]***	-0.0014 [-2.69]***	-0.0014 [-2.70]***
Female CEO	-0.0137 [-0.77]	-0.0140 [-0.79]	-0.0127 [-0.73]	-0.0127 [-0.73]	-0.0179 [-1.00]	-0.0185 [-1.03]
CEO is Chairman	-0.0102 [-1.45]	-0.0103 [-1.45]	-0.0100 [-1.41]	-0.0100 [-1.41]	-0.0107 [-1.51]	-0.0108 [-1.52]
Board Size	0.0035 [1.91]*	0.0035 [1.91]*	0.0035 [1.94]*	0.0035 [1.94]*	0.0033 [1.81]*	0.0033 [1.81]*
Percent Independent Directors	-0.0003 [-1.05]	-0.0003 [-1.04]	-0.0003 [-1.00]	-0.0003 [-1.00]	-0.0004 [-1.18]	-0.0004 [-1.16]
ln(Sales)	-0.0039 [-1.24]	-0.0039 [-1.25]	-0.0034 [-1.11]	-0.0034 [-1.11]	-0.0043 [-1.41]	-0.0044 [-1.43]
Volatility	11.0178 [2.49]**	11.0543 [2.49]**	10.9152 [2.46]**	10.9139 [2.46]**	11.0305 [2.49]**	11.1773 [2.51]**
Observations	8,696	8,696	8,696	8,696	8,696	8,696
Adj R-squared	0.0268	0.0268	0.0269	0.0268	0.0270	0.0271

Table 9**Are diverse directors more likely to serve on influential committees on the board?**

This table examines the characteristics of directors being appointed to committees. Each column contains the results of a logit model, where the dependent variable takes a value of one if the director serves on the specified committee. The dependent variable in Column 1 of each Panel takes a value of one if the director serves on any committee. Panel A considers diverse directors, Panel B considers minority directors, and Panel C considers female directors. Firm fixed effects are included in each specification. Panels B and C include the same controls as Panel A.

Panel A: Diversity on Committees

	(1) Committee Member	(2) Audit Member	(3) Compensation Member	(4) Nominating Member	(5) Governance Member
Diverse Director	0.0159 [7.67]***	0.0232 [5.81]***	-0.0450 [-9.73]***	0.0232 [5.07]***	0.0319 [6.89]***
Percent of Years with Attendance Problems	-0.0244 [-2.77]***	-0.0616 [-3.97]***	-0.0688 [-3.83]***	0.0079 [0.45]	0.0011 [0.06]
# of other major company boards	-0.0025 [-2.51]**	-0.0043 [-2.38]**	-0.0030 [-1.36]	0.0001 [0.06]	0.0011 [0.49]
Other Industry Experience	0.0008 [2.99]***	0.0009 [2.07]**	0.0010 [1.97]**	-0.0003 [-0.61]	-0.0011 [-1.96]**
Director Network Size	0.0003 [2.55]**	-0.0013 [-7.96]***	0.0013 [6.37]***	0.0013 [6.49]***	0.0017 [8.14]***
Other Firm Committee Experience	0.0037 [1.53]	-0.0127 [-2.88]***	0.0344 [6.52]***	0.0087 [1.68]*	0.0088 [1.68]*
Board Size	-0.0037 [-3.38]***	-0.0075 [-4.23]***	-0.0140 [-6.68]***	-0.0117 [-5.67]***	-0.0118 [-5.66]***
Percent Independent Directors	0.0008 [4.94]***	-0.0003 [-0.92]	-0.0006 [-1.79]*	-0.0003 [-0.97]	-0.0007 [-2.20]**
Director Tenure	-0.0037 [-17.79]***	-0.0025 [-8.59]***	-0.0006 [-1.63]	0.0050 [14.63]***	0.0053 [15.39]***
Director age	0.0013 [8.81]***	0.0004 [1.41]	0.0009 [2.81]***	0.0027 [8.94]***	0.0027 [8.89]***
ln(Sales)	-0.0058 [-1.29]	-0.0025 [-0.32]	-0.0096 [-1.03]	-0.0156 [-1.68]*	-0.0137 [-1.46]
Return on Assets	0.0101 [0.92]	-0.0261 [-1.02]	0.0112 [0.38]	0.0283 [0.96]	0.0108 [0.37]
Volatility	1.9384 [1.29]	0.6297 [0.26]	-2.4406 [-0.83]	-3.8772 [-1.31]	-2.6210 [-0.89]
Academic Experience	0.0030 [0.75]	0.0016 [0.22]	-0.0751 [-9.12]***	0.0363 [4.45]***	0.0369 [4.48]***
Legal or Consulting Experience	-0.0128 [-5.72]***	0.0046 [1.13]	-0.0295 [-6.09]***	0.0152 [3.19]***	0.0253 [5.28]***
Finance Experience	0.0610 [39.80]***	0.6572 [230.25]***	-0.2949 [-72.43]***	-0.1842 [-45.07]***	-0.1878 [-45.55]***
Management Experience	-0.0068 [-3.29]***	-0.0471 [-12.64]***	0.0153 [3.44]***	-0.0041 [-0.92]	-0.0074 [-1.67]*
Political Experience	-0.0165 [-2.94]***	0.0070 [0.78]	-0.0531 [-5.14]***	-0.0169 [-1.67]*	-0.0154 [-1.52]
Military Experience	0.0542 [3.47]***	-0.0193 [-0.51]	0.0229 [0.54]	0.0604 [1.56]	0.0835 [2.19]**
Undergrad Degree	0.0035 [1.09]	-0.0066 [-1.16]	0.0262 [4.00]***	0.0306 [4.77]***	0.0386 [6.01]***
Advanced Graduate Degree	0.0001 [0.04]	-0.0017 [-0.35]	-0.0624 [-11.11]***	0.0257 [4.66]***	0.0271 [4.89]***
MBA Degree	0.0112 [4.46]***	0.0186 [4.00]***	0.0651 [11.90]***	-0.0301 [-5.63]***	-0.0313 [-5.81]***
Observations	66,855	66,855	66,855	66,855	66,855
Adj R-squared	0.1401	0.3926	0.1425	0.1698	0.1591

Panel B: Minorities on Committees

	(1)	(2)	(3)	(4)	(5)
	Committee Member	Audit Member	Compensation Member	Nominating Member	Governance Member
Minority Director	0.0126 [4.30]***	0.0220 [3.92]***	-0.0550 [-8.61]***	0.0032 [0.51]	0.0056 [0.88]
Observations	66,855	66,855	66,855	66,855	66,855
Additional Controls	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.1396	0.3924	0.1422	0.1695	0.1585

Panel C: Females on Committees

	(1)	(2)	(3)	(4)	(5)
	Committee Member	Audit Member	Compensation Member	Nominating Member	Governance Member
Female Director	0.0157 [6.78]***	0.0178 [3.87]***	-0.0354 [-6.68]***	0.0331 [6.32]***	0.0454 [8.58]***
Observations	66,855	66,855	66,855	66,855	66,855
Additional Controls	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.1399	0.3924	0.1418	0.1700	0.1595

Table 10**Are diverse directors appointed to positions of leadership on the board?**

This table examines the characteristics of directors being appointed to major leadership positions on the board. Each column contains the results of a firm fixed effects linear probability model, where the dependent variable takes a value of one if the director is the Chairman of the Board, Lead Director, or chair of the specified committee. Panels B and C are presented in reduced form but include the same controls as Panel A.

Panel A: Diverse Chair

	(1) Chairman of Board	(2) Lead Director	(3) Committee Chair	(4) Audit Chair	(5) Comp Chair	(6) Nom Chair	(7) Gov Chair
Diverse Director	-0.0137 [-12.11]***	-0.0324 [-18.16]***	-0.0525 [-11.84]***	-0.0205 [-7.77]***	-0.0428 [-14.26]***	-0.0011 [-0.37]	0.0010 [0.32]
% of Years with Attendance Problems	-0.0163 [-5.24]***	-0.0141 [-1.79]*	-0.1931 [-12.31]***	-0.0676 [-8.46]***	-0.0752 [-7.44]***	-0.0385 [-3.39]***	-0.0431 [-3.86]***
# of other major company boards	0.0029 [4.01]***	0.0003 [0.31]	0.0057 [2.60]***	0.0080 [5.73]***	-0.0008 [-0.53]	0.0008 [0.53]	0.0005 [0.31]
Other Industry Experience	-0.0007 [-3.93]***	0.0004 [1.51]	-0.0027 [-4.95]***	-0.0011 [-3.39]***	0.0001 [0.30]	-0.0014 [-3.53]***	-0.0017 [-4.23]***
Director Network Size	0.0003 [4.04]***	0.0004 [3.71]***	0.0026 [12.84]***	0.0002 [1.98]**	0.0008 [5.56]***	0.0012 [8.02]***	0.0015 [9.46]***
Other Firm Committee Experience	0.0082 [5.02]***	0.0098 [4.23]***	0.0608 [11.67]***	0.0188 [5.75]***	0.0289 [7.74]***	0.0209 [5.84]***	0.0205 [5.60]***
Board Size	-0.0019 [-2.99]***	-0.0012 [-1.34]	-0.0193 [-9.45]***	-0.0045 [-3.53]***	-0.0076 [-5.26]***	-0.0071 [-5.14]***	-0.0076 [-5.31]***
Percent Independent Directors	0.0003 [2.77]***	-0.0004 [-2.82]***	-0.0011 [-3.21]***	-0.0004 [-1.77]*	-0.0003 [-1.31]	-0.0003 [-1.43]	-0.0004 [-1.78]*
Director Tenure	0.0022 [17.19]***	0.0037 [22.82]***	0.0119 [34.02]***	0.0027 [13.79]***	0.0038 [16.15]***	0.0051 [21.72]***	0.0053 [22.26]***
Director age	0.0004 [4.11]***	0.0006 [4.78]***	0.0024 [7.91]***	0.0013 [6.81]***	-0.0002 [-1.08]	0.0012 [5.77]***	0.0013 [5.84]***
ln(Sales)	-0.0049 [-1.63]	0.0019 [0.49]	-0.0081 [-0.87]	-0.0061 [-1.03]	-0.0056 [-0.82]	-0.0015 [-0.23]	-0.0010 [-0.15]
Return on Assets	0.0133 [1.47]	-0.0114 [-1.06]	0.0109 [0.37]	0.0056 [0.31]	-0.0009 [-0.04]	0.0049 [0.22]	0.0006 [0.03]
CEO is Chairman	-0.0307 [-17.78]***	0.0272 [9.51]***	-0.0051 [-0.79]	0.0006 [0.14]	-0.0022 [-0.48]	-0.0023 [-0.51]	-0.0023 [-0.51]
Academic Experience	-0.0116 [-5.76]***	-0.0229 [-7.36]***	-0.0548 [-7.02]***	0.0093 [2.06]**	-0.0628 [-12.23]***	-0.0021 [-0.36]	-0.0103 [-1.76]*
Legal or Consulting Experience	-0.0007 [-0.43]	-0.0023 [-1.07]	0.0188 [3.94]***	0.0062 [2.09]**	-0.0118 [-3.42]***	0.0232 [6.90]***	0.0267 [7.70]***
Finance Experience	-0.0151 [-12.29]***	-0.0018 [-0.96]	0.2192 [51.72]***	0.4363 [121.91]***	-0.1165 [-43.20]***	-0.0822 [-32.15]***	-0.0876 [-33.36]***
Management Experience	-0.0065 [-5.18]***	0.0016 [0.84]	-0.0237 [-5.45]***	-0.0270 [-10.04]***	0.0014 [0.44]	0.0005 [0.17]	0.0008 [0.26]
Political Experience	0.0052 [1.59]	0.0013 [0.28]	0.0097 [0.99]	-0.0011 [-0.20]	0.0156 [2.17]**	0.0063 [0.89]	0.0034 [0.47]
Military Experience	-0.0213 [-2.74]***	-0.0045 [-0.29]	0.0050 [0.13]	-0.0623 [-4.76]***	0.0885 [2.68]***	-0.0386 [-1.46]	-0.0455 [-1.69]*
Undergrad Degree	0.0125 [6.18]***	0.0033 [1.22]	0.0510 [8.14]***	0.0219 [5.82]***	0.0052 [1.14]	0.0214 [4.99]***	0.0212 [4.85]***
Advanced Graduate Degree	-0.0004 [-0.22]	0.0058 [2.38]**	-0.0067 [-1.23]	-0.0278 [-8.69]***	-0.0187 [-4.68]***	0.0273 [7.07]***	0.0278 [7.04]***
MBA Degree	0.0025 [1.42]	0.0035 [1.48]	0.0228 [4.27]***	0.0167 [5.26]***	0.0362 [9.29]***	-0.0142 [-3.78]***	-0.0142 [-3.67]***
Observations	66,855	66,855	66,855	66,855	66,855	66,855	66,855
Adj R-squared	0.0811	0.0707	0.1329	0.3130	0.0365	0.0407	0.0391

Panel B: Minority Chair

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Chairman of Board	Lead Director	Committee Chair	Audit Chair	Comp Chair	Nom Chair	Gov Chair
Minority Director	-0.0070 [-4.48]***	-0.0311 [-13.59]***	-0.0786 [-13.31]***	-0.0181 [-5.09]***	-0.0546 [-14.36]***	-0.0133 [-3.23]***	-0.0142 [-3.33]***
Observations	66,855	66,855	66,855	66,855	66,855	66,855	66,855
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.0800	0.0689	0.1332	0.3127	0.0361	0.0408	0.0392

Panel C: Female Chair

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Chairman of Board	Lead Director	Committee Chair	Audit Chair	Comp Chair	Nom Chair	Gov Chair
Female Director	-0.0165 [-15.09]***	-0.0276 [-14.19]***	-0.0332 [-6.51]***	-0.0169 [-5.65]***	-0.0349 [-10.30]***	0.0032 [0.92]	0.0077 [2.11]**
Observations	66,855	66,855	66,855	66,855	66,855	66,855	66,855
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.0813	0.0691	0.1316	0.3127	0.0353	0.0407	0.0391

Table 11**Do compensation committee participation or diversity policies reduce the pay gap?**

This table examines factors that influence the difference in compensation levels between diverse directors and non-diverse directors serving on the same board. The dependent variable in Column 1 is the average compensation level of non-diverse directors during a particular firm-year minus the average compensation of diverse directors during the same firm-year. The dependent variable in Column 2 is the difference in compensation between minority directors and non-minority directors. In Column 3, the dependent variable is the difference in compensation between men and women. *Diverse Director Sets Director Compensation* takes a value of one if a diverse (female or minority) director serves on committee that sets director compensation, typically the Compensation Committee or the Nominating Committee. If a female or minority serves on the committee setting compensation, we remove their compensation from the average in the dependent variable to prevent committee-related bonuses from influencing the results. *Formal Diversity Policy* is set to one if the firm has an official policy in its corporate proxy regarding gender or ethnicity when selecting nominees for the board of directors.

	(1) Diversity Pay Gap	(2) Minority Pay Gap	(3) Female Pay Gap	(4) Diversity Pay Gap	(5) Minority Pay Gap	(6) Female Pay Gap
Diverse Director Sets Director Compensation	-8.4764 [-2.96]***	-10.0612 [-2.74]***	-9.6899 [-2.94]***			
Formal Diversity Policy				-4.0912 [-1.86]*	-6.0745 [-1.97]**	-3.6620 [-1.73]*
Percent of Years with Attendance < 75%	-0.0365 [-0.01]	-3.3041 [-0.93]	3.9617 [1.13]	-1.8059 [-0.52]	-8.1447 [-1.52]	6.3080 [2.63]***
Board Size	0.8602 [1.10]	0.9894 [0.94]	0.3155 [0.38]	0.1782 [0.28]	0.3806 [0.44]	-0.0536 [-0.09]
Percent Independent Directors	0.1874 [1.30]	0.3041 [1.63]	0.0199 [0.14]	0.0550 [0.60]	0.0821 [0.65]	0.0702 [0.75]
Average Age of Directors	-0.1023 [-0.19]	0.7193 [0.74]	-1.0364 [-1.67]*	0.2135 [0.57]	0.4449 [0.72]	-0.4510 [-1.09]
CEO Age	-0.1005 [-0.42]	-0.5520 [-1.43]	0.2610 [0.99]	-0.0717 [-0.44]	-0.5392 [-2.04]**	0.2136 [1.33]
CEO Insider Ownership	-0.1258 [-0.46]	-0.3147 [-0.93]	0.0042 [0.02]	0.0341 [0.15]	0.1058 [0.29]	0.1395 [0.58]
CEO is Chairman	4.5807 [1.57]	2.6892 [0.62]	6.9229 [2.14]**	3.6988 [1.77]*	1.5061 [0.54]	4.6660 [2.11]**
Estimated CEO Tenure	0.0682 [0.25]	0.4417 [1.02]	0.0013 [0.00]	0.1416 [0.77]	0.5600 [2.07]**	-0.0148 [-0.08]
Ln(Sales)	-7.3384 [-2.17]**	-2.1012 [-0.39]	-9.2078 [-2.19]**	-1.4703 [-0.55]	0.0982 [0.02]	-2.1886 [-0.72]
Volatility	7.8569 [1.01]	5.5130 [0.35]	3.3977 [0.40]	5.8667 [1.09]	8.4678 [0.76]	3.7916 [0.65]
Observations	5,195	3,033	4,186	7,169	4,532	6,293
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.2744	0.4013	0.2105	0.3838	0.3916	0.3662

Appendix A - Variable Definitions

Variable	Definition	Source
Diverse director	=1 if director is classified as minority or female	ISS
Minority director	=1 if director is classified as minority	ISS
Female director	=1 if director is classified as female	ISS
Board Size	Number of directors on the board	ISS
Percent Independent Directors	Number of Independent Directors/Board Size	ISS
CEO is Chairman	=1 if CEO is chairman of board	ISS
Capital Expenditures to Sales	CAPX/SALE	Compustat
Long-Term Debt to Total Assets	DLTT/AT	Compustat
R&D to Total Assets	XRD/AT	Compustat
Return on Assets	NI/AT	Compustat
Market to Book Ratio	MKVALT/AT	Compustat
Tobin's Q	(AT+MKVALT-CEQ-TXDB)/AT	Compustat
Volatility	Based on prior-year raw daily returns	CRSP
ln(Sales)	natural log of net sales (SALE)	Compustat
# of other major company boards	Number of other public board positions held	ISS
Director Tenure	Number of years served on board	ISS
Director Age	Age in years	ISS
Other Industry Experience	Number of years serving on boards outside the industry	ISS
Director Network Size	Number of unique directors contacted through board service	ISS
Attended <75% of meetings	=1 if attended fewer than 75% of meetings	ISS
Chairman of the Board	=1 if Chairman of the Board in ISS	ISS
Lead Director	=1 if Lead Director in ISS	ISS
Other Firm Committee Experience	=1 if served on a committee as director of another firm	ISS/BoardEx
Any Committee Member (Chair)	=1 if served on any committee (chair) in either ISS or BoardEx	ISS/BoardEx
Audit Committee Member (Chair)	=1 if audit committee member (chair) in either ISS or BoardEx	ISS/BoardEx
Compensation Committee Member (Chair)	=1 if comp committee member (chair) in either ISS or BoardEx	ISS/BoardEx
Governance Committee Member (Chair)	=1 if governance committee member (chair) in either ISS or BoardEx	ISS/BoardEx
Nominating Committee Member (Chair)	=1 if nominating committee member in either ISS or BoardEx	ISS/BoardEx
Total Number of Committees	= Number of committees served on in either ISS or BoardEx	ISS/BoardEx
Chairman/Lead Director	=1 if Chairman or Lead Director in either ISS or BoardEx	ISS/BoardEx
Academic Experience	=1 if has academic experience in either ISS or BoardEx	ISS/BoardEx
Legal or Consulting Experience	=1 if has legal/consulting experience in either ISS or BoardEx	ISS/BoardEx
Finance Experience	=1 if has finance experience in either ISS or BoardEx	ISS/BoardEx
Management Experience	=1 if has management experience in either ISS or BoardEx	ISS/BoardEx
Political Experience	=1 if has political experience in either ISS or BoardEx	ISS/BoardEx
Military Experience	=1 if has military experience in either ISS or BoardEx	ISS/BoardEx
Undergrad Degree	=1 if has bachelor's degree in either ISS or BoardEx	ISS/BoardEx
Advanced Graduate Degree	=1 if has master's degree or PhD in either ISS or BoardEx	ISS/BoardEx
MBA Degree	=1 if has MBA	ISS/BoardEx
Fees Earned or Paid in Cash	Cash fees earned (\$000s)	Execucomp
Incentive-Based Compensation	Equity-based (stock and option) fees earned (\$000s)	Execucomp
Other Compensation	Other non-standard compensation (\$000s)	Execucomp
Total Compensation	Total fees earned as reported (\$000s)	Execucomp
Low Pay	=1 if more than 5% below the median board compensation	Execucomp
Percent Vote For	=Percentage vote "for" / (For + Against)	ISS Voting Analytics
Accounting Restatement	=1 if earnings are restated	Audit Analytics
Nontimely SEC Filing	=1 if filing is late	Audit Analytics
Confidential Voting	=1 if confidential voting	ISS
Unequal Voting Rights	=1 if dual class shares	ISS
Majority Vote Requirement	=1 if majority vote provision in director elections	ISS
Residual of ISS Vote 'For' Rec.	Residual from LPM using Table 5 explanatory variables	Various
Litigation	=1 if targeted with class action lawsuit during fiscal year	Stanford SCACs

Appendix B - Determinants of Director Compensation

This table examines the firm-level factors that contribute to total director compensation. The dependent variable in each regression is the natural log of total director compensation. Columns 1 and 2 focus on the effect of committee memberships, while Columns 3 and 4 focus on the effect of chaired positions.

	(1)	(2)
In(Sales)	0.1397 [18.28]***	0.1390 [22.49]***
Board Size	-0.0064 [-4.13]***	-0.0055 [-3.77]***
Return on Assets	-0.0539 [-2.22]**	-0.0534 [-2.46]**
Long-Term Debt to Total Assets	-0.1227 [-4.58]***	-0.1210 [-5.56]***
Market to Book Ratio	0.0001 [2.98]***	0.0001 [3.11]***
Volatility	-6.9320 [-2.61]***	-7.0518 [-2.88]***
Capital Expenditures to Sales	0.1197 [5.79]***	0.1214 [5.93]***
R&D to Total Assets	0.0109 [0.08]	0.0042 [0.03]
Percent Independent Directors	0.0004 [1.52]	0.0005 [2.05]**
CEO is Chairman	-0.0098 [-1.86]*	-0.0092 [-2.04]**
Audit Committee Member	0.0332 [7.95]***	
Compensation Committee Member	0.0148 [3.87]***	
Nominating Committee Member	0.0076 [1.27]	
Governance Committee Member	0.0180 [2.87]***	
Audit Committee Chair		0.0787 [25.09]***
Compensation Committee Chair		0.0457 [13.84]***
Nominating Committee Chair		-0.0062 [-0.72]
Governance Committee Chair		0.0416 [5.04]***
Chairman/Lead Director		0.1923 [34.47]***
Observations	66,855	66,855
Firm Fixed Effects	Yes	Yes
Adj R-squared	0.6970	0.7084