

Board Diversity, Director Dissent, and Monitoring Effectiveness

Jun-Koo Kang, Seil Kim, and Seungjoon Oh*

August 17, 2019

Abstract

Using unique director voting data from Korean firms, we examine how board diversity affects the likelihood of director dissent and whether proposal rejection due to dissension affects firm value and policies. We find that directors on diverse boards are more likely to dissent. The result is robust to exploiting unexpected director resignations as exogenous variation in board diversity. Following proposal rejection, firms, particularly those with diverse boards, experience improvements in firm value and governance (lower earnings management, higher forced CEO turnover-performance sensitivity, and less investment inefficiency) and a decrease in risk, suggesting that board diversity enhances directors' monitoring effectiveness.

Keywords: Board Diversity, Director Voting, Dissent, Proposal Rejection, Firm Value, Monitoring Effectiveness

JEL Classification: G30, G32, G34

* Jun-Koo Kang is from the Nanyang Business School, Nanyang Technological University (jkkang@ntu.edu.sg), Seil Kim is from the Zicklin School of Business, Baruch College, CUNY (seil.kim@baruch.cuny.edu), and Seungjoon Oh is from the HSBC Business School, Peking University (sjoonoh@phbs.pku.edu.cn). We thank Amy Dittmar, Jaehoon Hahn, Sheng Huang, E. Han Kim, Seoyoung Kim, Yao Lu, David Yermack, Xiaoyun Yu, and seminar participants at the 2017 American Finance Association (AFA) Meeting, 2017 CEIBS Symposium, 2017 FMA Asia/Pacific Annual Meeting, 2017 Asian Meetings of the Econometric Society, Baruch College, Korea University, Sungkyunkwan University, Peking University (HSBC), and Tsinghua University for their helpful comments and suggestions. Kim gratefully acknowledges the financial support from the PSC-CUNY Research Foundation. All errors are our own.

Previous studies show that board diversity affects corporate decisions and business operations.¹ However, despite the increasing importance of director diversity in board composition and firm value, little is known about how board diversity affects directors' voting behavior and whether proposal rejection resulting from dissension leads to changes in firm value and corporate governance.

In this paper, we explore these important but unexplored issues by utilizing a novel hand-collected dataset of board proposals, individual director votes, and voting outcomes in large Korean firms. In 2001, the Korean Commercial Act mandated that all listed firms publicly disclose detailed information about the specifics of each proposal, individual directors' votes, and the outcome of these votes. Korea is one of few countries in which data on proposal-specific characteristics and individual directors' voting behavior are publicly available.² Appendix A presents disclosure examples of director voting outcomes for different proposals discussed at the board of Naver Corp., the largest internet content service company in Korea.

Studies on board diversity have used observable director characteristics to capture director disagreements and the diversity of director opinions within the board. For example, Bernile, Bhagwat, and Yonker (2018) use an aggregate index reflecting diversity in gender, age, the number of directorships, ethnicity, education, and financial expertise to proxy for board diversity. Giannetti and Zhao (2019) use ethnic diversity to measure board diversity. However, because these studies do not directly measure the heterogeneity of director behavior in the boardroom, they do not provide any direct evidence of whether directors on diverse boards have more heterogeneous opinions than those on homogenous boards and whether such diverse opinions affect the outcomes of the proposals put forward by managers. Examining director voting behavior and the impacts of proposal rejection resulting from director dissension on firm outcomes allows us to extend the literature on board diversity because director voting is a direct measure of director disagreement in the boardroom. Moreover, director voting can more directly capture directors' willingness to

¹ See, for example, Anderson et al. (2011), Knyazeva, Knyazeva, and Raheja (2014), Coles, Daniel, and Naveen (2015), and Bernile, Bhagwat, and Yonker (2018) for studies that examine the importance of board diversity in firm operations and value. Some papers focus on a specific dimension of board diversity such as gender diversity (e.g., Adams and Ferreira (2009), Gul, Srinidhi, and Ng (2011), Ahern and Dittmar (2012), Eckbo, Nygaard, and Thorburn (2019)), nationality diversity (Masulis, Wang, and Xie (2012), Naveen, Daniel, and McConnell (2013), Giannetti, Liao, and Yu (2015)), and ancestral (ethnic) diversity (Giannetti and Zhao (2019)).

² China is another country in which all listed firms are required by law to publicly disclose information about these details. In the U.S., disagreement among directors is not publicly disclosed except for extreme cases such as when a director resigns after expressing disagreement with management (Agrawal and Chen (2017), Dewally and Peck (2010), Marshall (2010)).

exert influence over managers than other measures based on director characteristics. Thus, we distinguish our paper from previous studies by examining whether diversity in the boardroom translates into director dissension and proposal rejection and, as a result, whether it affects firm value and other firm outcome variables, including risk, investment, and governance.

Specifically, we first examine whether board heterogeneity—measured as diversity in age, tenure, industry experience, nationality, and gender among independent board members—affects the likelihood of director dissension on management proposals. The common argument for advocating board diversity is that directors with diverse backgrounds representing a broader range of perspectives can provide more diverse, independent views in setting the corporate agenda.³ However, evidence on this argument, particularly whether board diversity affects directors' voting behavior on corporate boards, is not well established. A priori, it is unclear whether board diversity leads to a higher or lower likelihood of director dissension on management proposals. Studies on group decision making generally suggest that individuals feel more comfortable disagreeing with people who are dissimilar (Festinger (1954), Heider (1958), Phillips et al. (2004)).⁴ In contrast, Packer (2008) argues that individuals in a homogenous group are more likely to challenge harmful norms in the group. In his follow-up study, Packer (2009) further shows that individuals who do not share similar traits with other group members are less likely to voice unpopular opinions because they are less committed. Therefore, how diversity in the boardroom affects directors' voting behavior remains an empirical question, which we intend to address in this paper.

Second, we investigate whether diverse boards make better corporate decisions by rejecting risky, value-reducing proposals. Theoretical predictions of and empirical evidence on whether dissenting opinions on diverse boards lead to value-enhancing corporate decisions are mixed. For example, Janis (1972) suggests that diverse groups are better at critical thinking than homogenous groups because homogenous groups think alike. Sah and Stiglitz (1986, 1991) further argue that decision making by diverse groups leads to moderation because the probability of rejecting both good and bad projects increases. Consistent with these arguments, previous experimental studies

³ For example, according to PwC's 2018 Annual Corporate Directors Survey, 94% of respondents indicate that board diversity brings unique perspectives to the boardroom, and 84% report that board diversity enhances board performance.

⁴ Social psychology literature shows that individuals tend to prioritize relationships with people who are similar to them rather than relationships with those who are not and that they respond more sensitively to information from similar people. Therefore, individuals in a homogenous group are more likely to encounter greater criticism from other members for expressing disagreement (Festinger (1954), Heider (1958), Phillips et al. (2004)).

find that diverse groups make better decisions because they are more receptive to dissenting opinions (Phillips and Loyd (2006)). Bernile, Bhagwat, and Yonker (2018) also find that firms with diverse boards take less risk and invest more efficiently than those with homogeneous boards. In contrast, Arrow (1951) argues that group decisions can be more erratic if group members are more diverse. Malenko (2014) also predicts that diverse boards make worse decisions than homogeneous boards due to communication costs, suggesting that diverse groups tend to make suboptimal decisions. These arguments are supported by Giannetti and Zhao (2019), who find that board ancestral diversity increases firm risk, and Ahern and Dittmar (2012), who find that the 40% female director quota on the boards of Norwegian firms leads to lower firm performance, possibly due to a trade-off between board diversity and director expertise.

Using a large sample of director voting on proposals discussed at the board meetings of Korean firms covered in the KOSPI 200 index from 2001 to 2014, we find that after controlling for firm-, board-, and director-specific characteristics and firm (director) and proposal type fixed effects, directors on heterogeneous boards are more likely to dissent than those on homogenous boards. This result provides supporting evidence for the current trend towards increased board diversity as a means to increase the diversity of director opinions. We perform several additional tests to mitigate the concern that board composition is endogenously determined.⁵ First, to alleviate the concern that firm and board characteristics simultaneously affect both the likelihood of dissension and board diversity, we limit the sample to firms that experience director dissension at least once during our sample period and find that our results do not change. Second, we explore a plausibly exogenous variation in board diversity that is correlated with the change in director dissent and examine whether this variation affects the likelihood of director dissension. Specifically, we consider director resignation due to death, appointment to an important government position, or appointment to a position at a larger firm as an exogenous shock to board diversity. We then match firms that experience director resignation to control firms that do not experience such resignation and perform a difference-in-differences test around the three months before and after the director resignation using a propensity score-matched sample. We find that after director resignation, board diversity and the likelihood of director dissension significantly decrease. Third, we use a propensity score-matched sample of firms with high and low board

⁵ See Hermalin and Weisbach (2003) for a review of the literature on the endogeneity of board structure and the effect of board structure on firm performance.

diversity that have similar firm and board characteristics and find that board diversity positively affects the likelihood of director dissension.

Next, we examine whether director dissension improves firm value, particularly for firms with a diverse board. To the extent that diverse boards incorporate different views of directors in their decision making and thus facilitate informed decision making, we expect director dissension to have a positive effect on firm value, particularly for firms with a diverse board. We find that the resignation announcements of directors who have ever dissented during their term at the focal firms are greeted more negatively by the stock market than the resignation announcements of other directors, particularly for a subsample of dissenting directors departing from boards with low diversity. These results suggest that dissension has a positive impact on firm value - particularly if firms' boards lack diversity.

To better understand how director dissension in firms with a diverse board affects firm value more positively, we examine whether the likelihood of proposal rejection increases as board diversity increases and whether firms with a diverse board that experience such proposal rejection have higher firm value than other firms in the post-rejection period. In an untabulated test, we find that firms with a diverse board are more likely to reject a proposal than those with a homogenous board, suggesting that outside directors of these firms tend to dissent together. Using a propensity score-matched sample of firms with and without proposal rejection, we further find that firms whose boards reject the proposals due to dissension experience an increase in Tobin's q in the two years following proposal rejection, particularly when firms have high board diversity.

Since firm value is determined by firm risk and cash flows, we examine whether an increase in firm value for firms with a diverse board that experience proposal rejection is due to either a decrease in risk or an increase in cash flow or both. Bernile, Bhagwat, and Yonker (2018) show that board diversity, by moderating board decisions, leads to lower return volatility, while Giannetti and Zhao (2019) find that board diversity, by inducing erratic decisions, increases return volatility. We find that proposal rejection resulting from dissension reduces firms' stock return volatility, especially idiosyncratic volatility, in the years following proposal rejection and that this reduction in return volatility is more pronounced for firms with high board diversity, consistent with the findings of Bernile, Bhagwat, and Yonker (2018). However, cash flows, measured by the return on assets (ROA), do not change following proposal rejection. Thus, the increase in firm value for firms whose diverse boards reject proposals appears to be due to a decrease in their

discount rate associated with lower risk rather than to an increase in future cash flows, suggesting that diverse boards add value to firms by rejecting risky, value-reducing proposals.

Finally, we examine whether diverse boards that reject proposals make better governance decisions. We find that firms whose boards reject proposals engage in less earnings management, are more likely to replace poorly performing CEOs, and reduce overinvestment in research and development (R&D) expenditures in the years following proposal rejection. Consistent with the view that board diversity improves monitoring effectiveness, we further find that these results are concentrated in firms with high board diversity. Consistent with Jiang, Wan, and Zhou (2016), who argue that director dissension in China, which seldom leads to proposal rejection, affects corporate governance through passive monitoring, we do not find any evidence of improved governance when proposal dissent but not rejection occurs. Thus, director dissent appears to affect corporate governance mainly through proposal rejection rather than through passive monitoring.

Overall, our results show that diverse boards improve firm value by actively rejecting erratic proposals that increase firm risk and by monitoring management more effectively.

Our study contributes to the literature in at least two important ways. First, our study adds to the literature on board diversity. Prior studies find mixed evidence on whether board diversity affects firm value and volatility. Adams and Ferreira (2009) and Ahern and Dittmar (2012) find that gender diversity has a negative effect on firm performance. Giannetti and Zhao (2019) further find that board ancestral diversity increases a firm's return volatility and lowers its performance. In contrast, using multidimensional diversity measures, Anderson et al. (2011) and Bernile, Bhagwat, and Yonker (2018) find that board diversity increases firm value. Bernile, Bhagwat, and Yonker (2018) further find that board diversity decreases firm return volatility. We extend these studies by showing that board diversity affects directors' dissenting behavior and board decisions to reject the proposals, which contributes to increased firm value, decreased firm risk, and improved corporate governance.

Second, our study contributes to the literature on director voting by providing evidence of the consequences of proposal rejection, which is a direct outcome of dissension. Previous studies on director voting and dissension, presumably due to data availability, rely mainly on analytical models (Warther (1998), Malenko (2014), Chemmanur and Fedaseyeu (2018), Donaldson, Malenko, and Piacentino (2019), Drymiotes and Sivaramakrishnan (2018)). Several empirical studies recently exploit Chinese data on director voting and its outcomes (Tang, Du, and Hou

(2013), Jiang, Wan, and Zhou (2016), Ma and Khanna (2016), Zhu et al. (2016)) and Israeli government-owned firms' proprietary board minutes (Schwartz-Ziv and Weisbach (2013)) to examine the inner workings of boards. We complement these studies by considering director voting behavior as an outcome of board dynamics and showing that director dissent (via proposal rejection) has a positive (negative) effect on firm value and monitoring effectiveness (risk).⁶ Notably, unlike other countries in which director dissent is unlikely to lead to proposal rejection,⁷ the proposals with dissenting votes tend to be rejected in the majority of cases in Korea, suggesting that active monitoring by independent directors in Korean firms has a real effect on firm value. By using data from Korea, in which corporate governance rules in listed firms and market mechanisms are comparable to those in developed economies, we are better able to establish the effect of dissension on firm value and governance and generalize it to other developed economies.

The remainder of this paper is organized as follows. In Section I, we discuss the institutional background of the board of directors in Korea. In Section II, we discuss the sample and variable definition and provide summary statistics. Section III presents results for the impact of board diversity on the likelihood of director dissent, and Section IV reports results for the impact of director dissent on firm value. In Section V, we examine the effects of the board's rejection of proposals resulting from dissension on firm value, risk, and corporate governance. In Section VI, we examine the effects of dissension that does not lead to proposal rejection on firm value, risk, and corporate governance. Finally, we present our summary and concluding remarks in Section VII.

I. Institutional Background in Korea

Listed firms in Korea are mandated by law to disclose in their proxy statements the detailed activities of independent directors at board meetings, including whether an independent director attends the board meeting and how she votes on each proposal.⁸ This disclosure is currently

⁶ In her recent study, Schwartz-Ziv (2017) finds that the boards of Israeli government-owned firms are more likely to voice out when there are more than three female directors.

⁷ Jiang, Wan, and Zhou (2016) find that most cases of director dissent in their Chinese sample firms do not materialize into proposal rejection, and Schwartz-Ziv and Weisbach (2013) find that even though directors of Israeli government-owned firms voice concern during the discussion at board meetings, they tend to eventually vote with management.

⁸ Firms follow a standard disclosure format to comply with legal requirements: for each board meeting, firms report the information relating to the board meetings and activities of independent directors, including the board meeting date, proposals put forward for consideration, each independent director's vote or absence, and the final outcome of the vote. Inside directors' votes are not required to be disclosed.

mandated under Article 542-4 of the Commercial Act and Article 31 of the Enforcement Decree to the Commercial Act. It was initially introduced in March 2001 in Article 191-10 of the Securities and Exchange Act as part of the effort to enhance the corporate transparency of listed firms in the aftermath of the Asian financial crisis.

While several studies provide insights into the inner workings of boards using Chinese and Israeli data (e.g., Jiang, Wan, and Zhou (2016), Schwartz-Ziv and Weisbach (2013)), Korean data are better suited to examine our research question. First, the frequency of dissension is much higher in Korea than in China and Israel, which allows us to examine how board diversity is related to dissension and whether dissension has a real effect on the board's decision to reject a proposal. For example, Jiang, Wan, and Zhou (2016) find that 92% of proposals in their sample of Chinese firms eventually pass despite dissension, suggesting that director dissension in China is mainly for passive monitoring (i.e., evaluating management and disseminating value-relevant information, not directly altering the firm's course of action). In contrast, we find that conditional on at least one director dissent, proposals in our Korean sample firms pass in their original state in only 27% of the cases; the majority of proposals are rejected, deferred, or modified. Moreover, unlike China, where directors' voting outcomes are required to be publicly disclosed immediately after board meetings, Korea requires these outcomes to be disclosed specifically in a proxy statement prior to a shareholder meeting. Thus, this delay in the disclosure of voting outcomes until the shareholder meetings reduces the potential concern that dissension is mainly intended to exert public pressure on management, a concern that arises when Chinese data are used.

Second, corporate governance rules and ownership structure in Korea are comparable to those in developed economies. For example, large Korean firms with at least KRW 2 trillion (approximately USD 2 billion) of total assets are mandated by law to have majority independent boards after 2004. In comparison, the Chinese Company Law requires one-third of directors on the board to be independent from unrelated parties, and most firms listed on the stock exchanges meet but do not surpass the threshold. Moreover, a large proportion of Chinese firms are state-owned enterprises (SOEs); their CEOs and board members are usually appointed by the government, and their roles are largely different from those of CEOs and directors in non-SOE firms. Similarly, as for Israeli government-owned firms, all directors are appointed by the government rather than through a shareholder vote. Thus, the results using Korean data are more generalizable to other developed economies in which most firms are not government owned.

II. Sample and Summary Statistics

A. Sample

Our sample consists of firms covered in the KOSPI 200 index, a stock index that includes 200 large blue-chip stocks that account for approximately 90% of the total market capitalization of all listed firms in Korea, from 2001 to 2014. The sample period begins in 2001 because the disclosure requirement became effective in early 2001. For these firms, we manually collect data on individual directors' voting behavior from the filings retrieved from DART, an electronic filing system similar to the SEC's Electronic Data Gathering and Retrieval (EDGAR) in the U.S. We exclude firms in the financial and utilities industries, but our inferences are unchanged if we include these firms in the sample.

We obtain director characteristics, such as age, gender, nationality, education, occupation, and tenure, from TS-2000, a financial database maintained by the Korea Listed Companies Association, and supplement this information with hand-collected data. We then merge data on director voting with data on individual director characteristics. We obtain financial and stock price data from TS-2000 and Compustat Global, respectively.

Our final sample consists of 110,337 director votes by 179 unique firms (2,165 firm-years), which represents one of the most comprehensive databases used for academic research on individual director voting, in addition to Jiang, Wan, and Zhou (2016).

B. Summary Statistics

Panels A, B, and C of Table I provide the frequencies of director votes and dissension by industry, year, and proposal type, respectively. Panel A shows that the number of director votes is largest in the manufacturing industry, followed by the retail and wholesale industry and high-tech industries. The ratio of the number of dissensions to the number of director votes (hereafter, "dissension rate") is the highest in the entertainment and retail service sectors, while it is zero in the business service and transportation sectors. Of 110,337 director votes made during our sample period, 860 are dissenting votes, showing a 0.8% dissension rate. Jiang, Wan, and Zhou (2016) show that dissension occurs in approximately 0.6% of board meetings in Chinese firms compared to 0.98% of board meetings in our sample Korean firms (untabulated). In Panel B, we see that dissents are fairly evenly distributed across years, with dissension rates ranging from 0% to 1.9%.

In Panel C, the dissension rate is the highest for internal governance-related proposals (3.3%), including managerial compensation, by-law amendments, and board structure, followed by budgeting-related (2.3%) and investment-related (2.2%) proposals.

Table II compares board-, meeting-, director-, and firm-specific characteristics at the firm-year level between firms with an above-median *Diversity Index* and those with a below-median *Diversity Index*. For board, meeting, and director characteristics observed at the director (director vote) level, we report their firm-year averages. We define a firm's board diversity using five different measures of the dispersion of independent directors' characteristics, including their age, tenure, industry experience, nationality, and gender. *Diversity Index* is an aggregate measure of these five different measures of board diversity.⁹

Specifically, *Age Dispersion* is our first board diversity measure, calculated as the age difference between the oldest and youngest directors. Directors with different ages may have different levels of monitoring ability and incentive. For example, Jiang, Wan, and Zhou (2016) suggest that younger directors have stronger reputation concerns and exhibit a higher likelihood of dissension on management proposals than older directors. Moreover, since directors in our sample consist of individuals with different experience in their early life—directors who grew up during the Korean War, postwar baby boomer directors, and directors experiencing rapid economic development—their different experience may affect their risk preferences and thus their performance (Malmendier, Tate, and Yan (2011), Bernile, Bhagwat, and Yonker (2018)). *Tenure Dispersion*, the tenure difference between the longest and shortest serving directors, is our second measure of board diversity.¹⁰ Directors with longer tenure tend to have more knowledge about the firm, but those with shorter tenure are able to bring fresh perspectives. The third dimension of board diversity we consider is *Experience Dispersion*, one minus the sum of squared industry experience share for a board in a given year (i.e., the Herfindahl index of industry experience among directors) (Knyazeva, Knyazeva, and Raheja (2014)). The industry share is the tenure-weighted number of incumbent directors with board experience in each industry divided by the total number of industries in which incumbent directors served on a board. Work experience from a variety of industries can bring more diverse views to board decisions. Finally, we consider

⁹ In untabulated tests, we construct a diversity measure using all directors rather than using only independent directors and find that the results do not change.

¹⁰ Alternatively, we define *Age Dispersion* and *Tenure Dispersion* as the standard deviations of age and tenure, respectively, and find similar results.

Gender Dispersion and *Country Dispersion* as two additional measures of board diversity; they take the value of one if the director is female and non-Korean, respectively, and zero otherwise. Only 3% and 7% of firm-years have female and non-Korean directors on the board, respectively, and thus, variation is limited in these two dimensions of board diversity. However, because boards of Korean firms are primarily run by Korean male directors, female or foreign directors can not only bring different perspectives to the board but also change the group dynamics of the board. Using these five different measures of board diversity, we create indicators for each dimension of diversity, which equals one if the measure is greater than the sample median and zero otherwise, and we construct a firm-year level diversity index by summing all five components (*Diversity Index*). Appendix B provides detailed descriptions of the variables used in the table.

As expected, the mean and median *Diversity Index* for firms with a high *Diversity Index* are significantly higher than those for firms with a low *Diversity Index*. The results are similar for individual components of board diversity. Our sample firms on average have eight directors on the board, of whom slightly more than half (53%) are independent directors. Prior to 2004, large Korean firms with at least KRW 2 trillion in total assets were required to have independent directors constitute at least 50% of their directors on the board. After 2004, the requirement of “at least 50% independence” changed to “more than 50% (i.e., majority) independence.” Smaller listed firms were required to have a minimum of only 25% of independent directors on the board throughout our sample period. Although our sample includes mainly large firms with total assets greater than KRW 2 trillion, it also includes several small firms whose total assets are less than KRW 2 trillion, resulting in an average board independence level of 53%. Table II also shows that on average, 7% and 6% of our sample firms experience dissension from at least one independent director and proposal rejection, respectively.¹¹ In comparison, Jiang, Wan, and Zhou (2016) show that 3% of their firm-year observations experience dissension by at least one independent director.

¹¹ Given that Article 391 of the Commercial Act requires all board decisions to have an affirmative vote with a majority of directors present, where a majority of the full board constitutes a quorum, our sample boards on average would need all independent directors to vote against a proposal in order to reject it. Most firm-years in our sample follow this rule in Article 391 of the Commercial Act except a few firms that have higher requirements, such as an affirmative vote of a majority (or higher proportion) of the full board for approval. Thus, for large firms that are required to have 50% or greater board independence, independent directors have the power to reject a management proposal. The Commercial Act was amended in April 2011 by requiring an affirmative vote of two-thirds of directors present for the approval of proposals on related party transactions. The act was amended again in April 2012 by requiring the same threshold for proposals related to the corporate opportunity doctrine.

The proportions of firms with dissension and those with proposal rejection are significantly higher for firms with a high *Diversity Index* than for those with a low *Diversity Index*.

In addition, compared to firms with a low *Diversity Index*, those with a high *Diversity Index* have significantly larger boards and greater board independence but are less likely to have CEO-chair duality. Directors' board attendance rate is lower for firms with a high *Diversity Index*, possibly because of the greater number of foreign and busy directors on the board who have difficulties attending meetings as a result of long-distance travel and busy schedules.¹² Firms with a high *Diversity Index*, on average, hold fewer board meetings per year (11.52 compared to 12.96 for firms with a low *Diversity Index*),¹³ but their boards discuss a larger number of proposals at the meetings (25.51 proposals per meeting compared to 22.41 proposals per meeting).

Turning to director characteristics, we find no significant difference in the average age of directors between firms with a high *Diversity Index* and those with a low *Diversity Index*. However, directors on boards with a high *Diversity Index* have, on average, longer tenure, more director experience, and more directorships in other firms. These directors are also more likely to be professors, attorneys, non-Korean, and female and to have an MBA degree, but they are less likely to be accountants.

For firm characteristics, compared to firms with a low *Diversity Index*, those with a high *Diversity Index* are larger and more likely to belong to a business group (Chaebol). They also have a larger number of affiliated firms, higher foreign ownership, lower ownership by controlling shareholders, better future growth opportunities (i.e., higher Tobin's q), and lower risk (i.e., lower stock return volatility and lower idiosyncratic volatility). These firms also invest less (lower capital expenditures and lower overinvestment) than firms with a low *Diversity Index*.

III. Board Diversity, Director Dissension, and Firm Value

A. Board Diversity and Likelihood of Director Dissension

In this section, we examine whether heterogeneity within the board of directors leads to more director dissension against management proposals at board meetings. Diverse perspectives

¹² Compared to firms with a low *Diversity Index*, those with a high *Diversity Index*, on average, have more foreign directors (0.03 compared to 0.01) and hold more directorships (1.17 compared to 1.08).

¹³ Our sample firms, on average, have 12 board meetings per year. In comparison, the average number of board meetings per year for U.S. firms is approximately eight (Giannetti and Zhao (2019)). The larger number of board meetings for Korean firms may be due to the ease of scheduling, as most board members live within a one-hour driving distance of the firm.

and expertise among independent directors lead to diverse opinions and active discussion at meetings and thus can provide independent directors with incentives to voice out. Supporting this view, experimental studies document that diverse groups make better decisions because they are more receptive to dissenting opinions (Phillips and Loyd (2006)).

To examine whether board diversity affects the likelihood of director dissension, we estimate the following vote-level linear probability regression:

$$Prob(Dissent_{ijkt}) = \alpha + \beta Diversity\ Index_{jkt} + \gamma Control + \gamma_t + \omega_j + \varphi_k + \varepsilon_{ijkt} \quad (1)$$

where $Dissent_{ijkt}$ is an indicator that equals one if director i in firm j dissents on proposal k at time t and zero otherwise. *Diversity Index* is the composite index of board diversity measured by summing the indicators for five dimensions of director heterogeneity: age, tenure, industry experience, nationality, and gender. *Control* includes firm and board characteristics, including firm size, leverage, Tobin's q , ROA, stock return volatility, foreign ownership, controlling shareholder ownership, institutional ownership, the number of affiliates, the log of board size, board independence, and CEO-chair duality. It also includes director-specific characteristics such as director age, tenure, the number of directorships, and indicators for unseasoned directors, professors, attorneys, accountants, MBA degree holders, foreigners, and females. In addition, we control for firm fixed effects (ω_j) to account for any unobserved time-invariant firm characteristics potentially affecting the results. As an alternative test, we replace firm fixed effects with director fixed effects. We also control for year fixed effects (γ_t) to account for any common time trends affecting directors' voting decisions, such as changes in governance regulations. Fixed effects for the twelve proposal types (φ_k) reported in Panel C of Table I are also included. Heteroscedasticity-robust standard errors (White (1980)) are clustered by director to capture the correlation in director voting behavior.

Our approach differs from Jiang, Wan, and Zhou (2016), who include proposal fixed effects in the regressions to subsume heterogeneity at the proposal level and capture the variation in individual director characteristics with regard to dissension. Unlike Jiang, Wan, and Zhou (2016), we are interested in the effect of board-level diversity on the likelihood of dissension. Given that boards ultimately make decisions as a group, we estimate regressions that are suited for board-level heterogeneity while controlling for director-specific effects. Although director-level characteristics could have independent effects on voting behavior, there is also evidence that

directors who bring diversity to the board can change the behavior of other directors (Adams and Ferreira (2009), Phillips and Loyd (2006)).

Moreover, to reject a proposal, outside directors usually have to dissent together. In later analyses, we show that dissension that does not result in proposal rejection (i.e., partial dissension) does not significantly affect firm value and governance. This result suggests that partial dissension is not effective in rejecting proposals or influencing managers to change firm policies. Estimating the likelihood of director dissension with proposal fixed effects would exclude cases where all independent directors dissent and effectively reject proposals. In our sample, the number of proposals in which dissension results in proposal rejection is much larger than that of proposals with partial dissension (181 compared to 49); thus, if we use proposal fixed effects, we would lose a large proportion of the sample with director dissension.

The results are reported in Panel A of Table III, in which the regressions control for firm fixed effects. We find a positive relation between the probability of director dissension and board diversity. In column (1), the coefficient on *Diversity Index* is 0.002, which is significant at the 1% level. The coefficient of 0.002 suggests that a one-standard-deviation increase in *Diversity Index* increases the probability of dissension by 0.2%. Given that the unconditional probability of dissension for the full sample is 0.76%, the magnitude of the effect of diversity on the probability of dissension is economically large. The coefficients on the five board diversity components in columns (2)–(6) are also positive and significant, except for that on *Country Dispersion*. To the extent that the interests of directors who are from foreign joint ventures, foreign product market partners, and foreign consulting firms are more likely aligned with management than with other directors, these directors may have weaker incentives to cast dissenting votes against management proposals.¹⁴ In column (7), we include all five board diversity components and find that the coefficients on three out of five components (*Tenure Dispersion*, *Experience Dispersion*, and *Gender Dispersion*) are positive and significant at the 1% level. Overall, these results are consistent with board diversity increasing director disagreement and diversity of opinions on boards.

In Panel B of Table III, we replace firm fixed effects in the previous regressions with director fixed effects to control for unobserved heterogeneity in director characteristics that

¹⁴ In an untabulated analysis, we find that 64% of foreign directors are from foreign joint ventures, foreign product market partners, and foreign consulting firms; 28% are from financial institutions; and 8% are attorneys.

correlates with the likelihood of director dissension. We find that the results are largely consistent with those in Panel A, although the coefficient on *Tenure Dispersion* is no longer significant. These results suggest that board-level heterogeneity has an impact on director dissension that is orthogonal to individual director characteristics.

B. Endogeneity of Board Diversity

We acknowledge the potential endogeneity bias inherent in our study. For example, unobservable omitted firm characteristics might affect both a firm's decision to have a diverse board and the likelihood of dissension. However, as in Jiang, Wan, and Zhou (2016), endogenous director selection and proposal selection would likely bias our results in the direction of finding no relation between board diversity and dissension. In the director selection process, directors who are likely to dissent are more likely to be nominated and appointed by well-governed firms. Moreover, while board composition is not random, it is difficult for a firm to have a precise level of board diversity by selecting directors with different characteristics, especially since we consider multiple dimensions of director diversity when constructing our *Diversity Index*. A firm could select an optimal level of board independence and maintain it for years, but doing so across multiple dimensions of board diversity may be difficult. In the proposal selection process, managers who have appointed directors with diverse backgrounds and expertise and thus whose boards are highly diverse are less likely to put forth proposals that will be voted against. All these arguments suggest that our results are unlikely to be entirely driven by endogeneity.

Nonetheless, to minimize the concern that the endogenous relation between dissension and board diversity drives our results, we use three different empirical strategies. First, we limit our attention to firms that experience dissension from at least one outside director. Second, we use director resignation as a plausibly exogenous shock to board diversity and examine whether our results are robust to using such a shock in the analysis. Third, we match boards with a high *Diversity Index* to those with a low *Diversity Index* using propensity score matching and examine whether the likelihood of dissension is different between these two groups of boards.

B.1. Using a Subsample of Firms Experiencing Dissension

As a first test, we use only a subsample of firms that experience at least one director dissension during our sample period and reestimate the regressions in Table III. Focusing on this

subsample helps mitigate the potential concern that certain firm and board characteristics simultaneously affect both the likelihood of dissension and the likelihood of appointing independent directors with diverse characteristics.

The results presented in Table IV echo those in Table III. In Panel A, the coefficient on our main variable of interest, *Diversity Index*, and those on three out of five components of *Diversity Index* are positive and significant at the 1% level. In Panel B, controlling for director fixed effects in the regressions does not change the results.

B.2. Using Director Resignation as an Exogenous Shock to Board Diversity

As a second test to mitigate the endogeneity concern, we explore a plausibly exogenous variation in board diversity. We focus on director resignations due to death and those likely to be caused by events unrelated to the firms, such as appointments to an important government position (e.g., prime minister, Minister of Justice, presidential transition team) and appointments to a new position at a larger listed firm.¹⁵ To obtain data on these director resignation events, we search news articles reporting information on the new positions directors take after leaving a focal firm's board. We then exclude resignations that are likely to be endogenous, such as resignations where the director is involved in a scandal or does not find a new job after departure and the firm undergoes board restructuring. Our goal is to use (unexpected) director resignations as the events that result in a decrease in board diversity for a certain period and thus, the likelihood of dissension decreases during this period as our hypothesis predicts.

While our sample of director resignations is plausibly exogenous, several observable board- and firm-specific characteristics may affect the probability of firms being included in the treatment group. To address this concern, we use a propensity score matching approach. Specifically, using board meeting-level data, we estimate a probit regression that predicts the propensity of director resignation. We use as matching covariates firm size, leverage, ROA,

¹⁵ Our unexpected director resignation events include both directors' sudden deaths and appointments to positions in governments or larger listed firms. While sudden deaths and appointments to government positions are considered unexpected events, appointments to other firms may not be, as directors tend to resign and take positions in other firms after boardroom disputes or the anticipation of negative events (Marshall (2010), Dou (2017), Fahlenbrach, Low, and Stulz (2017)). To ensure a sufficient number of plausibly exogenous resignations in our sample, we include only the cases where directors leave the focal firms and join larger listed firms. We exclude resignation events where directors join smaller firms, since they may have been forced out involuntarily as a result of their conflict with a management team. This type of director departure may result in a decrease in dissension that is unrelated to a change in board diversity. In contrast, moving to a larger firm is more likely to be a voluntary decision by the director unrelated to conflict and can thus be considered a resignation exogenous to director dissension.

foreign ownership, the number of affiliates, average director characteristics measured at the firm level (director age, director tenure, unseasoned director (indicator), the number of directorships), the log of board size, and board independence. We then match without replacement a treatment firm that experiences director resignation with a control firm in the same industry and year that does not experience director resignation and has the closest propensity score for the three months before and after the director resignation.

The results are presented in Table V. In Panel A, we do not find any significant difference in the average values of firm and board characteristics between the treatment and control firms, suggesting that our matching approach identifies matching firms that are very similar to treatment firms.

Panel B presents results from difference-in-differences tests. In column (1), we first regress *Diversity Index* on the interaction term between *Resign* (an indicator that equals one for the treatment firms and zero otherwise) and *Post* (an indicator that equals one for the post-resignation period and zero otherwise) and the control variables. We find that the coefficient on the interaction term is negative and significant at the 1% level, suggesting that board diversity decreases with director resignation. In column (2), we regress *Dissent* on the interaction term between *Resign* and *Post* and the control variables to examine whether the likelihood of dissension decreases in the three-month period after director resignation. We find that the coefficient on the interaction term is negative and significant, suggesting that the likelihood of dissension decreases with a decrease in board diversity. In column (3), we further divide periods of three months before and after resignation into separate months and find that director resignation affects the likelihood dissension only in the post-resignation months. In columns (4)–(6), we replace firm fixed effects in columns (1)–(3) with director fixed effects and find similar results. In sum, these results suggest that board diversity drives the likelihood of director dissension.

B.3. Propensity Score Matching Analysis

To mitigate the concern that observable factors other than board diversity affect director dissension, we construct a propensity score-matched sample based on the probability of having a highly diverse board. Specifically, we predict the propensity of having an above-median *Diversity Index* using a probit regression for each firm-year observation. We use predictors such as firm size, leverage, ROA, foreign ownership, the number of affiliates, average director characteristics

measured at the firm level (director age, unseasoned director, the number of directorships), the log of board size, and board independence. We then match a firm with an above-median *Diversity Index* to a control firm with a below-median *Diversity Index* in the same industry and year, without replacement, using a caliper of 0.1. Our matched sample consists of 440 high-diversity firm-years (treatment firms) and 440 low-diversity firm-years (control firm).

The results are presented in Table VI. Panel A compares the mean characteristics of the treatment and control firms. We find insignificant differences in the means for all firm, board, and director characteristics. In Panel B, we reestimate the regressions in Panel A of Table III using the propensity score-matched sample. We find that the coefficient on *Diversity Index* is positive and significant at the 1% level in column (1). When we use each component of *Diversity Index* separately in columns (2)–(6), we find that three out of five components load positively (*Tenure Dispersion*, *Experience Dispersion*, and *Gender Dispersion*). When we include all five components in the same regression (column (7)), four out of five components are significantly related to the likelihood of dissension. In Panel C, we reestimate these regressions by replacing firm fixed effects with director fixed effects and find that our results generally do not change, although some *Diversity Index* components are no longer significant. Overall, these results suggest that board diversity has a positive impact on director dissension, which is incremental to the effect of individual director characteristics on director dissension.

B.4. Pre-communication

Another potential concern is that our results may be affected by extensive pre-communication between management and board members prior to the board meeting (Malenko (2014)). This concern may be pertinent in Korea because directors' voting outcomes are publicly disclosed in a proxy statement prior to a shareholder meeting. For example, Korean managers may be more likely to engage in pre-communication with independent directors to discuss proposals prior to board meetings and drop the proposals that are unlikely to pass unanimously.¹⁶ However, we expect the effect of pre-communication on our results to be minimal because pre-communication efforts by managers are likely to bias our results in the direction of finding no relation between board diversity and dissenting. If managers expect outside directors to vote

¹⁶ Our discussions with several board members of Korean public firms confirm that pre-communication often occurs prior to board meetings.

against proposals, they would have strong incentives to pre-communicate and persuade outside directors to change their votes before the board meeting. This managerial effort would reduce the likelihood of director dissension and proposal rejection. Thus, our results are expected to provide conservative estimates for the relation between board diversity and the likelihood of director dissension.

C. Cross-sectional Variation in Governance and Director Characteristics

To better understand the circumstance under which the positive relation between board diversity and the likelihood of director dissension is more pronounced, we examine whether the results in Table III are different across governance and director characteristics.

Panel A of Table VII reports results for whether the effect of board diversity on the likelihood of director dissension differs across proposal types and governance characteristics. Given that monitoring-related proposals (i.e., personnel appointments, internal governance, financial reporting, legal issues, and related party transactions) require more subjective director judgments than other types of proposals (Malenko (2013)) and diverse boards facilitate such director judgments, we expect the effect of board diversity on the likelihood of dissension to be more pronounced for monitoring-related proposals. Similarly, we expect the effect of board diversity on the likelihood of dissension to be more pronounced for better governed firms since director dissension is more likely to occur in those firms. Consistent with our expectation, in column (1), we find that the coefficient on the interaction term between *Diversity Index* and an indicator for monitoring-related proposals is positive and significant at the 1% level. This result suggests that diverse boards are more likely to take action when a proposal requires better monitoring. In columns (2)–(5), we further find that the relation between *Diversity Index* and the likelihood of director dissension is stronger for firms with better governance, such as firms in the post-governance reform period, firms with higher foreign ownership, non-Chaebol firms, and firms in which the roles of CEO and chairman are separated.

In Panel B of Table VII, we explore whether the relation between board diversity and the likelihood of director dissension is more evident for firms whose directors have certain characteristics. In column (1), consistent with Jiang, Wan, and Zhou (2016), we find that young directors, who tend to have greater career concerns, are more likely to dissent on diverse boards. However, in column (2), we find that director tenure has no incremental effect on the relation

between board diversity and the likelihood of director dissension. In column (3), we find weak evidence that unseasoned directors are less likely to dissent on diverse boards, implying that new directors who serve their first term on firms' boards may be uncomfortable going against management even on diverse boards. In columns (4)–(6), we find that female directors, foreign directors, and directors with high board attendance rates are more likely to dissent on diverse boards. Overall, these results suggest that board diversity helps facilitate the dissension of outside directors with different career concerns and monitoring incentives, and they confirm that the director characteristics we consider in constructing *Diversity Index* (e.g., age, female, and foreigner) are indeed important attributes of board diversity.

IV. Director Dissension and Firm Value

Dissenting independent directors are likely to perform an important monitoring role in improving firm value. For example, dissenting directors may consciously craft their role to actively influence managers to pursue value-enhancing changes in firm governance and strategy and sometimes vote against value-destroying proposals. These arguments suggest that the resignation of dissenting directors reduces potential monitoring benefits that firms can receive, and thus, the market's ex ante assessments of director resignation announcements are more negative for dissenting directors than for other directors.¹⁷ To test this prediction, we focus only on plausibly exogenous resignations that are less likely to be anticipated and confounded by other events. We include resignations due to death and appointments to a government position or a larger firm and omit resignations that occur due to restructuring, conflict with management, and misconduct.

We compute abnormal returns surrounding the director resignation announcement date using the market model and the Fama-French (1993) three-factor model. We estimate the market model parameters using 250 days of return data beginning 300 days before and ending 46 days before the resignation announcements. We use the KOSPI 200 index return as a proxy for the market portfolio return. The three factors used in the Fama-French (1993) three-factor model are the KOSPI 200 index, SMB (daily return difference between the returns on small and large size

¹⁷ Alternatively, we could examine the appointment announcement effects of directors who have ever dissented in order to examine how director dissension affects firm value. However, the announcement effects for many of these appointments tend to be contaminated by the announcements of other corporate events made at annual shareholder meetings and those of multiple outside director appointments made on the same date, thereby preventing us from using these events in the analysis.

portfolios), and HML (daily return difference between the returns on high and low book-to-market-ratio portfolios). Daily abnormal returns are cumulated to obtain the cumulative abnormal return from one day before the director resignation date to one day after the director resignation date, $CAR(-1, 1)$.

Table VIII reports the results from ordinary least squares (OLS) regressions in which the dependent variable is $CAR(-1, 1)$. We control for the variables used in Table III and year and industry fixed effects. Heteroscedasticity-robust standard errors are clustered by firm. In untabulated tests, we estimate the regressions by replacing industry fixed effects with firm fixed effects and find that our results do not change. In columns (1)–(3), $CAR(-1, 1)$ is computed using the market model, and in columns (4)–(6), it is computed using the Fama-French (1993) three-factor model. In column (1), we use an indicator for the resignation of directors who have ever dissented before as the measure of director resignation. In column (2), director resignation is limited to the resignation of directors who have ever dissented during their term at the focal firm. We find that the coefficients on both indicators are negative and significant. The coefficient estimate of -0.019 in column (1) suggests that the resignation of dissenting directors results in a $CAR(-1, 1)$ that is 1.9 percentage points lower than the $CAR(-1, 1)$ for the resignation of directors who have not dissented before. With a mean market value of about \$2.9 billion for our sample firms, this coefficient suggests that, all else being equal, the resignation of dissenting directors leads to an average value loss of more than \$55.1 million for firms than that of other directors.¹⁸ These results are consistent with our prediction that dissenting directors perform a value-enhancing monitoring role for firms and the loss of such directors is perceived negatively by investors. In column (3), we separate an indicator for director resignation in column (2) into an indicator for director resignation that occurs on boards with high diversity and an indicator for that occurring on boards with low diversity. We find that the negative market reaction to dissenting directors' resignation in column (2) is concentrated in firms with less diverse boards. Since the resignation of dissenting directors reduces firm value and this reduction in firm value is concentrated in firms with less diverse boards, our results indirectly suggest that board diversity adds value to firms. The results in columns (4)–(6) are almost identical to those in columns (1)–(3).

¹⁸ In an untabulated univariate analysis of the market reaction to the resignation of non-dissenting directors, we find that $CAR(-1, 1)$ is not significantly different from zero.

Overall, the results in Table VIII suggest that dissenting directors positively affect firm value and that investors perceive the resignation of such directors as a value-reducing event.

V. Effects of Proposal Rejection Due to Dissension on Firm Fundamentals

Unlike Jiang, Wan, and Zhou (2016), who find that only 8% of their sample proposals are rejected despite dissension, we find that 73% of our sample proposals with dissension are eventually rejected and that the correlation between dissension from at least one outside director and proposal rejection for a full sample of 41,028 proposals is 0.69. Hence, compared to independent directors in Chinese firms, who tend to perform a passive monitoring role through dissension (Jiang, Wan, and Zhou (2016)), those in Korean firms take a more direct and active role in corporate decision making by casting dissenting votes against management proposals. Thus, we expect that proposal rejection resulting from director dissension leads to significant improvements in firm fundamentals (i.e., value, risk, and governance) in the post-rejection period. To the extent that diverse boards bring fresh perspectives and different views of directors to the board and provide more independent views in setting the corporate agenda, we also expect these results to be more pronounced for firms with highly diverse boards than for those with less diverse boards.

A. Proposal Rejection and Firm Value

To assess whether firms experience significant improvements in their fundamentals after proposal rejection, we perform difference-in-differences tests using firm-year observations two years before and two years after the proposal rejection. For each treatment firm that experiences at least one proposal rejection in a given year, we identify a control firm that does not experience proposal rejection using propensity score matching. The propensity score is calculated using the probit regression of *Proposal Rejection* (an indicator that takes the value of one if a firm experiences proposal rejection in a given year and zero otherwise) on the variables used in Panel A of Table VI. We then match, without replacement, a treatment firm with a control firm in the same industry and year that has the closest propensity score, with a caliper of 0.1.

We estimate the following difference-in-differences regression.

$$Tobin's\ q_{jt} = \alpha + \beta Proposal\ Rejection_{jt} \times Post_{jt} + \gamma Control + \gamma_t + \omega_j + \varepsilon_{jt} \quad (2)$$

where *Tobin's q*_{jt} is firm value for firm *j* at year *t*. We measure *Tobin's q* as the ratio of the sum of the market value of equity and the book value of debt to total assets. *Post* is an indicator that takes

the value of one for firm-years in the post-rejection period and zero for the pre-rejection period. *Proposal Rejection_{jt}* is an indicator that takes the value one if firm *j* at time *t* experiences a proposal rejection in a given year and zero if firm *j* at time *t* is a control firm. *Control* includes the same variables used in equation (1), except that we exclude Tobin's *q*. γ_t and ω_j are year and firm fixed effects, respectively. The interaction term between *Proposal Rejection* and *Post* is our key independent variable of interest.

Panel A of Table IX reports descriptive statistics for a sample of 62 propensity score-matched sample firms (238 firm-year observations): 31 treatment firms with proposal rejection and 31 control firms without proposal rejection. We find that none of the mean values for the variables used in matching are significantly different between the treatment and control firms, suggesting that our matching approach identifies matched firms that are similar to treatment firms.

Panel B of Table IX reports estimates of difference-in-differences OLS regressions using *Tobin's q* as the dependent variable. In column (1), the coefficient on the interaction term between *Proposal Reject* and *Post* is 0.198, which is significant at the 1% level. This coefficient estimate suggests that a firm experiencing proposal rejection has a post-rejection *Tobin's q* that is 0.198 higher than that for a control firm. Since the unconditional mean *Tobin's q* for the full sample is approximately 1.32, this number accounts for almost 15% of the mean value. In column (2), we further control for director-level characteristics including director age, tenure, the number of directorships, and indicators for unseasoned directors, professors, attorneys, accountants, MBA degree holders, foreigners, and females. We find that the coefficient on the interaction term between *Proposal Rejection* and *Post* is positive and significant at the 5% level. In column (3), we separate pre- and post-rejection periods into individual years to examine whether there exists any pretreatment trend in *Tobin's q*. We omit $Year_{t-2}$ from the regression, where $Year_t$ is the fiscal year in which proposal rejection occurs. We find that in the year prior to proposal rejection and in the year of proposal rejection, there is no significant difference in *Tobin's q*, suggesting that there exists no pretreatment trend before proposal rejection. In the first year following proposal rejection, we find a marginally significantly higher *Tobin's q* for firms with proposal rejection. In the second year following proposal rejection, the magnitude of the positive coefficient on the interaction term is similar to that in the second year following proposal rejection, but the coefficient is not significant.

In columns (4) and (5), we divide the sample into firms with a high-diversity board and those with a low-diversity board and reestimate the regression in column (2) separately for these two subsamples. To the extent that diverse boards provide better value-enhancing service to firms than homogenous boards, we expect proposal rejections in firms with highly diverse boards to experience a greater increase in firm value than those in firms with less diverse boards. Consistent with this prediction, in column (4), where we limit the sample to firms with a high-diversity board, we find a significant increase in Tobin's q post-proposal rejection. In contrast, in column (5), we find a positive and insignificant increase in Tobin's q after proposal rejection for firms with a low-diversity board.

B. Proposal Rejection and Risk

Next, we explore whether the increase in firm value following proposal rejection is due to changes in firm risk or changes in firm cash flows. If the increase in Tobin's q following proposal rejection shown in Table IX reflects investors' correct assessment of future changes in firm value, to the extent that firm value is determined by the discount rate (risk) and future cash flows, we expect firms experiencing proposal rejection to have a larger decrease in risk and/or a larger increase in cash flows in the post-rejection period than firms that do not experience proposal rejection. We measure firm risk using three variables: *Total Volatility* (the standard deviation of daily stock returns during the fiscal year), *Idiosyncratic Volatility* (the square root of the residual variance of daily stock returns from the Fama-French three-factor model), and *Systematic Volatility* (the square root of the variance of daily stock returns explained by the Fama-French three-factor model). We measure cash flow using ROA. We then estimate the regressions in columns (2) and (3) of Panel B of Table IX by replacing Tobin's q with return volatility and ROA.

Panel A of Table X presents results using a full sample. In column (1), we find that firms having proposal rejection experience a significant decrease in *Total Volatility* in the years after proposal rejection. In columns (3) and (5), we decompose *Total Volatility* into *Idiosyncratic Volatility* and *Systematic Volatility* and use these two risk measures respectively as the dependent variables. We find that the coefficient on the interaction term between *Proposal Rejection* and *Post* is negative and significant only when we use *Idiosyncratic Volatility* as the dependent variable (column (3)). Thus, firm risk, particularly firm-specific idiosyncratic risk, decreases significantly in the post-rejection period for firms whose boards reject proposals, suggesting that outside

directors, in their primary role to monitor management, vote against risky projects. In column (7), we use ROA as the dependent variable and find an insignificant positive change in ROA for firms experiencing proposal rejection in the post-rejection period.

In columns (2), (4), and (6), in which we separate pre- and post-rejection periods into individual years, we find no pretreatment trend in *Total Volatility*, *Idiosyncratic Volatility*, and *Systematic Volatility* before proposal rejection and significant decreases in these variables after proposal rejection. In column (8), we find that in the year after proposal rejection, ROA increases significantly for firms with proposal rejection, but we also find a marginal increase in ROA in the year prior to proposal rejection.

Overall, these results suggest that an increase in firm value following proposal rejection that results from dissension is largely due to outside directors' dissension on risky, value-decreasing proposals rather than to their ability to identify projects with high cash flow.

In Panel B of Table X, we investigate whether the impacts of proposal rejection on return volatility and ROA differ between firms with a high-diversity board and those with a low-diversity board. In columns (1), (3), (5), and (7), we use a subsample of firms with an above-median level of board diversity, and in columns (2), (4), (6), and (8), we use a subsample of firms with a below-median level of board diversity. We find that the coefficient on the interaction term between *Proposal Rejection* and *Post* is negative and significant only in columns (1) and (3), in which the dependent variables are *Total Volatility* and *Idiosyncratic Volatility*, respectively. These results, together with our findings in Table IX that firms with highly diverse boards experience an increase in Tobin's q in the years after proposal rejection, suggest that heterogeneous boards are more likely to select value-enhancing, less risky proposals than homogenous boards are. The results are consistent with those of Bernile, Bhagwat, and Yonker (2018), who show that board diversity decreases return volatility. However, we extend their analysis by providing evidence of the mechanism through which board diversity leads to lower return volatility (i.e., dissension on and rejections of risky, value-reducing projects).

C. Proposal Rejection and Corporate Governance

As an additional test for whether proposal rejection leads to changes in firm fundamentals by improving board monitoring effectiveness and preventing erratic management behavior, in this subsection, we examine changes in corporate governance following proposal rejection.

First, we examine whether earnings management behavior is attenuated following proposal rejection. Prior studies show that boards monitor managerial discretion to manage earnings (Klein (2002)). We measure earnings management as the absolute value of residuals from the modified Dechow-Dichev model (Dechow and Dichev (2002), McNichols (2002)) estimated for each industry-year (*Abnormal Accruals*).

The results using an OLS regression in which the dependent variable is *Abnormal Accruals* are presented in Panel A of Table XI. In column (1), we find that the coefficient on the interaction term between *Proposal Rejection* and *Post* is negative and significant at the 5% level, suggesting that the earnings management practices of managers decrease in the post-rejection period. In column (2), we additionally control for director characteristics and find that the result does not change. In columns (3) and (4), we divide the sample into firms with a high-diversity board and those with a low-diversity board and reestimate the regression in column (2) separately for the two subsamples. We find that the negative effect of proposal rejection on earnings management in the post-rejection period is concentrated only in firms with highly diverse boards.

Next, we examine whether a board's decision to fire a CEO becomes more sensitive to performance following proposal rejection. We focus on forced CEO turnover because firing a CEO is viewed as one of the most aggressive governance actions taken by a board (e.g., Weisbach (1988), Bonnier and Bruner (1989), Hirshleifer and Thakor (1994)). We classify a turnover as forced when a news article mentions the involuntary departure of a CEO or when the departing CEO does not take any position in the focal firm or its affiliate.¹⁹ We then estimate a linear probability model with firm fixed effects in which the dependent variable is an indicator for forced CEO turnover. Our key independent variable of interest is a triple interaction term among *Proposal Rejection*, *Post*, and *High ROA* (an indicator that takes a value of one if the firm's ROA is higher than the sample median ROA and zero otherwise).

The results are reported in Panel B of Table XI. In columns (1) and (2), we find that the coefficient on the triple interaction term is negative and significant at the 5% level, suggesting that underperforming CEOs are more likely to be fired in the post-rejection period. In columns (3) and (4), we find that the results using a full sample in columns (1) and (2) are evident only in a subsample of firms with highly diverse boards.

¹⁹ We search Naver, the largest internet portal in Korea, for news articles pertaining to CEO departures.

Finally, we examine whether a firm's investment efficiency improves following proposal rejection. We define firms' tendency to overinvest (underinvest) based on their level of cash and leverage (Biddle, Hilary, and Verdi (2009)) and examine whether firms that experience proposal rejection reduce overinvestment (underinvestment) in the post-rejection period (Kim, Mauldin, and Patro (2014)). We use an OLS regression with firm fixed effects in which the dependent variable is the ratio of R&D (capital) expenditures to total assets. Our key independent variable of interest is a triple interaction term among *Proposal Rejection*, *Post*, and *Overinvest*. Following Biddle, Hilary, and Verdi (2009), *Overinvest* is a ranked variable based on the level of a firm's overinvestment. Specifically, we rank firms into deciles based on their cash balance and their (negative) leverage and then rescale the average of the two deciles so that its value ranges from zero to one.

Panel C of Table XI presents the results. In columns (1)–(4), we use the ratio of R&D expenditures to total assets as the dependent variable, and in columns (5)–(8), we use the ratio of capital expenditures (CAPEX) to total assets as the dependent variable. In columns (1) and (2), we find a negative and significant coefficient on the triple interaction term, suggesting that firms experiencing proposal rejection reduce overinvestment in R&D activity in the post-rejection period. Subsample analyses in columns (3) and (4) show that the results in column (2) using the full sample are concentrated in only a subsample of firms with highly diverse boards. We find an insignificant coefficient on the triple interaction term when we use capital expenditures as the measure of investment in columns (5)–(8). To the extent that managers have more discretion in R&D investment than in other investments (Baber et al. (1991), Dechow and Sloan (1991)), these results suggest that boards that reject proposals are effective in reducing discretionary investment by managers.

Overall, the results in this subsection support the view that the increase in firm value after proposal rejection resulting from director dissension is largely due to a board's effective monitoring, especially in firms with highly diverse boards.

VI. Effects of Director Dissension with No Proposal Rejection on Firm Fundamentals

Jiang, Wan, and Zhou (2016) argue that director dissension in Chinese firms that seldom leads to proposal rejection affects the firms through passive rather than active monitoring. Their argument suggests that director dissension that does not result in proposal rejection is less likely

to influence firm policies than director dissension that does result in proposal rejection. In this section, we examine this prediction using a propensity score-matched sample of treatment firms that experience director dissension but not proposal rejection and control firms that do not experience any director dissension and proposal rejection. Specifically, using the same predictors as those used in Panel A of Table IX, we estimate the probability of director dissension that does not result in proposal rejection. Then, for each treatment firm, we match, without replacement, a control firm that has the closest propensity score, with a caliper of 0.1.

The results are reported in Table XII. Panel A shows that the mean values of matching variables are not significantly different between the treatment and control firms. In Panels B–G, we repeat the difference-in-differences regressions in Tables IX–XI using a newly constructed propensity score-matched sample. In all panels, we find generally insignificant results or contradicting results for the coefficients on the variables of interest that are significant in Tables IX–XI. These results indicate that director dissension that does not result in proposal rejection has little impact on firm fundamentals such as firm value, risk, and governance, suggesting that director dissension influences managers mainly through proposal rejection.

VII. Summary and Conclusion

In this study, using individual directors' voting records in large Korean firms and a multiple dimension of director diversity measured by director age, tenure, industry experience, nationality, and gender, we examine how board diversity affects directors' voting behavior and whether proposal rejection resulting from dissension leads to changes in firm value and governance.

Consistent with the view that directors with diverse backgrounds represent a broader range of perspectives and independent views and thus perform a more effective monitoring role, we find that directors on highly diverse boards are more likely to dissent on management proposals, which are more likely to be rejected by the boards. These results are robust to using unexpected director resignation events as exogenous variation in board diversity.

We also find that the resignations of directors who have ever dissented in the focal firms, particularly the resignations of directors departing from relatively homogenous boards, are associated with significantly lower abnormal returns than those of directors who have not dissented. The results suggest that board diversity adds value to firms by having diverse views of directors on their boards and by facilitating informed decision making. We further find that firms whose

diverse boards reject proposals experience improvements in firm value and corporate governance and a decrease in firm risk in the post-rejection period, suggesting that more diverse boards make better decisions in evaluating proposals than less diverse boards do.

Compared to approaches in prior studies of board diversity, our tests that use director voting data and link it with board diversity allow us to examine the relation between board composition and firm performance more directly. Studies that examine the effect of board diversity on firm value and other outcome variables do not clearly show the channels through which board diversity affects them. Our study provides evidence that having directors with different backgrounds and characteristics on the board increases the likelihood of voting against management and proposal rejection. We also find that the rejection of proposals due to dissension by highly diverse boards leads to an increase in firm value and a decrease in firm risk. These results suggest that directors with different backgrounds and characteristics provide diverse opinions in the boardroom and are more likely to directly disagree with management on risky, value-reducing proposals, thereby contributing to firm value.

Appendix A. Examples of disclosures on director voting and voting outcomes

This appendix provides excerpts from NAVER Corp.'s proxy statement disclosures related to director voting and voting outcomes. The excerpts are translated from NAVER Corp.'s proxy statement as of Mar 14, 2013, which is available at <http://dart.fss.or.kr/dsa/f001/main.do?repNo=20130314000290>. The standard disclosure format includes the order of board meetings (first column), the date of the board meeting (second column), the specifics of the proposal (third column), the outcome of the vote (fourth column), and the names and votes of each outside director (remaining columns).

No.	Date	Proposal	Outcome	Name of independent director		
				Gyeong-Hoon Boo	Jae-Seung Yoon	Hyun-Soon Do
1	Jan 12, 2012	1. Acquisition of Fever Studio Co., Ltd. - Deal terms: 50,000 shares (100%)	Deferred	Defer	Absent	Defer
2	Jan 31, 2012	1. Acquisition of Fever Studio Co., Ltd. - Deal terms: 37,500 shares (75%)	Rejected	Absent	Against	Against
3	Feb 8, 2012	1. Approval of FY 2011 financial statements 2. Convene annual shareholder meeting for FY 2011 - Time and date: 10:00 AM, March 23, 2012 - Location: Hanwool Hall, Korea Job World 3. Contribution to employee welfare fund - All profits from the parking lot operation, KRW 450 million as of year-end 2011 4. Sale of treasury stock in response to stock option exercises - Number of shares: 11,140 - Amount: KRW 1,382,934,000 5. Investment in NHN Investment Co., Ltd. - Amount: KRW 50 billion - Number of shares: 4 million (KRW 12,500 per share) - Date of transaction: Feb 15, 2012	Approved Approved Approved Approved Approved Approved Approved	For For For For For For For	For For For For For For For	For For For For For For For

Appendix B. Variable definition

This appendix provides detailed descriptions of all the independent variables used in the tables.

<i>Variable</i>	<i>Definition</i>
<i>Voting Measures:</i>	
Director Dissent (indicator)	Equals one if the director votes against the proposal, and zero otherwise
Partial Dissent (indicator)	Equals one if at least one director votes against the proposal but the proposal is not rejected, deferred, or modified, and zero otherwise
Proposal Rejection (indicator)	Equals one if the proposal is rejected, deferred, or modified and zero if the proposal is accepted
<i>Diversity Measures:</i>	
Age Dispersion	Age difference between the oldest and youngest directors
Country Dispersion (indicator)	Equals one if the director is not Korean and zero otherwise
Experience Dispersion	One minus the sum of squared industry experience share for a board in a given year. The industry share is the tenure-weighted number of incumbent directors with board experience in each industry divided by the total number of industries that incumbent directors served on a board.
Gender Dispersion (indicator)	Equals one if the director is female and zero otherwise
Tenure Dispersion	Tenure difference between the longest and shortest serving directors
Diversity Index	Sum of five indicator variables for the five diversity measures above. Each indicator equals one if the diversity measure is greater than the sample median and zero otherwise.
<i>Firm Characteristics:</i>	
Abnormal Accruals	Absolute value of residuals estimated using the modified Dechow-Dichev (2002) model at the industry-year level: $Accruals_{j,t} = a_{0j} + a_{1j} CFO_{j,t-1} + a_{2j} CFO_{j,t} + a_{3j} CFO_{j,t+1} + a_{4j} \Delta Sales_{j,t} + a_{5j} PPE_{j,t} + e_{j,t}$, where <i>Accruals</i> is net income minus cash flow from operations (<i>CFO</i>), $\Delta Sales$ is the annual change in sales, and <i>PPE</i> is gross property, plant, and equipment. All variables are scaled by lagged total assets.
CAPEX / assets	Capital expenditures divided by total assets
CAR (-1,+1): Fama-French Three-Factor	Three-day abnormal return around the director resignation date using the Fama-French three-factor model. The three factors are the KOSPI 200 index, SMB (daily return difference between the returns on small and large size portfolios), and HML (daily return difference between the returns on high and low book-to-market-ratio portfolios).
CAR (-1,+1): Market Model	Three-day abnormal return around the director resignation date using the market model. The market model parameters using 250 days of return data beginning 300 days before and ending 46 days before the resignation announcements. We use the KOSPI 200 index return as a proxy for the market portfolio return.
CEO-Chair Duality (indicator)	Equals one if the CEO is the chairperson and zero otherwise
Chaebol (indicator)	Equals one if the firm is affiliated with a large business group as defined by the Korean Fair Trade Commission and zero otherwise
Controlling Shareholder Ownership	Percentage ownership by controlling shareholders
Domestic Institutional Ownership	Percentage ownership by domestic institutions
Forced CEO Turnover (indicator)	Equals one if the CEO leaves the firm involuntarily according to news articles or if the departing CEO does not obtain a different position in the focal firm or its affiliate and zero otherwise
Foreign Ownership	Percentage ownership by foreign institutions
High ROA (indicator)	Equals one if the firm's ROA is higher than the sample median and zero otherwise
Idiosyncratic Volatility	Square root of the residual variance of daily stock returns from the Fama-French three-factor model
Leverage	Book value of total liabilities divided by total assets
Number of Affiliates	Natural logarithm of one plus the number of affiliates that the firm has

Overinvest	Ranked variable based on a firm's tendency to overinvest. We rank firms into deciles based on their cash balance and (negative) leverage and then rescale the average of the two deciles so that its value ranges from zero to one.
ROA	Net income divided by total assets
R&D / Assets	Research and development expenditures divided by total assets
Size	Natural logarithm of total assets
Systematic Volatility	Square root of the variance of daily stock returns explained by the Fama-French three-factor model
Total Volatility	Standard deviation of daily stock returns
Board Characteristics:	
Attendance Rate	Percentage of board meetings attended by an outside director in a year
Board Size	Natural logarithm of the total number of directors on the board
Independence	Percentage of outside directors on the board
Number of Board Meetings	Number of board meetings in a year
Number of Proposals	Number of proposals voted on in a year
Director Characteristics:	
Accountant (indicator)	Equals one if the director is an accountant and zero otherwise
Attorney (indicator)	Equals one if the director is an attorney and zero otherwise
Director Age	Director age in years scaled by ten
Director Tenure	Director tenure at the focal firm in years scaled by ten
Director Total Tenure	Total number of years as a director in any firm scaled by ten
Female (indicator)	Equals one if the director is female and zero otherwise
Foreigner (indicator)	Equals one if the director is not Korean and zero otherwise
MBA (indicator)	Equals one if the director has an MBA degree and zero otherwise
Number of Directorships	Number of board seats held by each outside director
Professor (indicator)	Equals one if the director is a professor and zero otherwise
Resignation of Directors Ever Dissented Before (indicator)	Equals one if the resigning director has a history of dissent on any board and zero otherwise
Resignation of Directors Ever Dissented at the Focal Firm (indicator)	Equals one if the resigning director has a history of dissent on the board from which the director is departing and zero otherwise
Unseasoned Director (indicator)	Equals one if the director is serving the first term on the focal board and zero otherwise
Proposal Type Classifications:	
Budgeting	Budget and revised supplementary budget
Contracting	Contract, service agreement, cancellation, and extension
Financial Reporting	Accounting estimate, write-off, revaluation, and financial report
Financing	Financing, offering, borrowing, treasury stock, dividend, and credit line
Internal Governance	Compensation, bonus, by-laws, committee, ethics, and authority
Investments	Investment, divestiture, spin-off, merger, acquisition, new entity, and asset sale
Legal	Lawsuit, license, and registration
Other	Donation, relocation, etc.
Personnel Appointment	Appointment, nomination, dismissal, and promotion
Related Party Transaction	Related party transaction, self-dealing, and guarantee
Shareholder Meeting	Annual meeting, shareholder list, and meeting minutes
Strategy	Alliance, management plan, operating plan, and strategy

References

- Adams, R. B., Ferreira, D., 2009. Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics* 94, 291–309.
- Ahern, K. R., Dittmar, A. K., 2012. The changing of the boards: The impact on firm valuation of mandated female board representation. *Quarterly Journal of Economics* 127, 137–197.
- Anderson, R. C., Reeb, D. M., Upadhyay, A., Zhao, W., 2011. The economics of director heterogeneity. *Financial Management* 40, 5–38.
- Arrow, K., 1951. *Social Choice and Individual Values*. New York: John Wiley and Sons, Inc.
- Baber, W. R., Fairfield, P. M., Haggard, J. A., 1991. The effect of concern about reported income on discretionary spending decisions: The case of research and development. *The Accounting Review* 66, 818–829.
- Bernile, G., Bhagwat, V., Yonker, S., 2018. Board diversity, firm risk, and corporate policies. *Journal of Financial Economics* 127, 588–612.
- Biddle, G. C., Hilary, G., Verdi, R. S., 2009. How does financial reporting quality relate to investment efficiency? *Journal of Accounting and Economics* 48, 112–131.
- Bonnier K. A., Bruner, R. F., 1989. An analysis of stock price reaction to management change in distressed firms. *Journal of Accounting and Economics* 11, 95–106.
- Chemmanur, T. J., Fedaseyeu, V., 2018. A theory of corporate boards and forced CEO turnover. *Management Science* 64, 4798–4817.
- Coles, J. L., Daniel, N. D., Naveen, L., 2015. Director overlap: Groupthink versus teamwork. Unpublished working paper. University of Utah.
- Dechow, P. M., Dichev, I. D., 2002. The quality of accruals and earnings: the role of accrual estimation errors. *Accounting Review* 77, 35–59.
- Dechow, P. M., Sloan, R. G., 1991. Executive incentives and the horizon problem: An empirical investigation. *Journal of Accounting and Economics* 14, 51–89.
- Dewally, M., Peck, S. W., 2010. Upheaval in the boardroom: Outside director public resignations, motivations, and consequences. *Journal of Corporate Finance* 16, 38–52.
- Donaldson, J., Malenko, N., Piacentino, G., 2019. Deadlock on the board. Unpublished working paper. Washington University in St. Louis.
- Dou, Y., 2017. Leaving before bad times: Does the labor market penalize preemptive director resignations? *Journal of Accounting and Economics* 63, 161–178.
- Drymiotis, G., Sivaramakrishnan, K., 2018. Strategic director appointments and board voting patterns. Unpublished working paper. Texas Christian University.
- Eckbo, B. E., Nygaard, K., Thorburn, K. S., 2019. Board gender-balancing and firm value. Unpublished working paper. Tuck School of Business at Dartmouth.
- Fahlenbrach, R., Low, A., Stulz, R., 2017. Do independent director departures predict future bad events? *Review of Financial Studies* 30, 2313–2358.

- Fama, E. F., French, K. R., 1993. Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics* 33, 3–56.
- Festinger, L., 1954. A theory of social comparison processes. *Human Relations* 7, 117–140.
- Giannetti, M., Liao, G., Yu, X., 2015. The brain gain of corporate boards: Evidence from China. *Journal of Finance* 70, 1629–1682.
- Giannetti, M., Zhao, M., 2019. Board ancestral diversity and firm-performance volatility. *Journal of Financial and Quantitative Analysis* 54, 1117–1155.
- Gul, F. A., Srinidhi, B., Ng, A. C., 2011. Does board gender diversity improve the informativeness of stock prices? *Journal of Accounting and Economics* 51, 314–338.
- Heider, F., 1958. *The Psychology of Interpersonal Relations*. Wiley, New York.
- Hermalin, B. E., Weisbach, M. S., 2003. Boards of directors as an endogenously determined institution: A survey of the economic literature. *FRBNY Economic Policy Review* 9, 7–26.
- Hirshleifer, D., Thakor, A. V., 1994. Managerial performance, boards of directors, and takeover bidding. *Journal of Corporate Finance* 1, 63–90.
- Janis, I.L., 1972. *Victims of Groupthink: A Psychological Study of Foreign Policy Decisions and Fiascoes*. Houghton Mifflin Company, Boston, MA.
- Jiang, W., Wan, H., Zhao, S., 2016. Reputation concerns of independent directors: Evidence from individual director voting. *Review of Financial Studies* 29, 655–696.
- Kim, K., Mauldin, E., Patro, S., 2014. Outside directors and board advising and monitoring performance. *Journal of Accounting and Economics* 57, 110–131.
- Klein, A., 2002. Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics* 33, 375–400.
- Knyazeva, A., Knyazeva, D., Raheja, C., 2014. The benefits of focus vs. heterogeneity: Dissimilar directors and coordination within corporate boards. Unpublished working paper. Wake Forest University.
- Ma, J., Khanna, T., 2016. Independent directors' dissent on boards: Evidence from listed companies in China. *Strategic Management Journal* 37, 1547–1557.
- Malenko, N., 2014. Communication and decision-making in corporate boards. *Review of Financial Studies* 27, 1486–1532.
- Malmendier, U., Tate, G., Yan, J., 2011. Overconfidence and early-life experiences: The effect of managerial traits on corporate financial policies. *Journal of Finance* 66, 1687–1733.
- Marshall, C. D., 2010. Are dissenting directors rewarded? Unpublished working paper. University of Richmond.
- Masulis, R. W., Wang, C., Xie, F., 2012. Globalizing the boardroom—The effects of foreign directors on corporate governance and firm performance. *Journal of Accounting and Economics* 53, 527–554.
- McNichols, M. F., 2002. Discussion of the quality of accruals and earnings: the role of accrual estimation errors. *Accounting Review* 77, 61–69.

- Naveen, L., Daniel, N. D., McConnell, J. J., 2013. The advisory role of foreign directors in U.S. firms. Unpublished working paper. Temple University.
- Packer, D. J., 2008. On being both with us and against us: A normative conflict model of dissent in social groups. *Personality and Social Psychology Review* 12, 50–72.
- Packer, D. J., 2009. Avoiding groupthink: Whereas weakly identified members remain silent, strongly identified members dissent about collective problems. *Psychological Science* 20, 546–548.
- Phillips, K. W., Loyd, D. L., 2006. When surface and deep-level diversity collide: The effects on dissenting group members. *Organizational Behavior and Human Decision Processes* 99, 143–160.
- Phillips K. W., Mannix, E. A., Neale, M. A., Gruenfeld, D. H., 2004. Diverse groups and information sharing: The effects of congruent ties. *Journal of Experimental Social Psychology* 40, 497–510.
- Sah, R. K., Stiglitz, J. E., 1986. The architecture of economic systems: Hierarchies and polyarchies. *American Economic Review* 76, 716–727.
- Sah, R. K., Stiglitz, J. E., 1991. The quality of managers in centralized versus decentralized organizations. *Quarterly Journal of Economics*, 289–295.
- Schwartz-Ziv, M., 2017. Gender and board activeness: The role of a critical mass. *Journal of Financial and Quantitative Analysis* 52, 751–780.
- Schwartz-Ziv, M., Weisbach, M. S., 2013. What do boards really do? Evidence from minutes of board meetings. *Journal of Financial Economics* 108, 349–366.
- Tang, X., Du, J., Hou, Q., 2013. The effectiveness of the mandatory disclosure of independent directors' opinions: Empirical evidence from China. *Journal of Accounting and Public Policy* 32, 89–125.
- Warther, V. A., 1998. Board effectiveness and board dissent: A model of the board's relationship to management and shareholders. *Journal of Corporate Finance* 4, 53–70.
- Weisbach, M. S., 1988. Outside directors and CEO turnover. *Journal of Financial Economics* 20, 431–460.
- White, H., 1980. A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica* 48, 817–838.
- Zhu, J., Ye, K., Tucker, J. W., Chan, K. C., 2016. Board hierarchy, independent directors, and firm value: Evidence from China. *Journal of Corporate Finance* 41, 262–279.

Table I. Distribution of the Number of Director Dissents by Industry, Year, and Proposal Type

This table presents the distribution of the number of director dissents by industry, year, and proposal type. The sample consists of 110,337 director votes and 860 director dissents of 179 Korean firms. The sample is limited to firms covered in the KOSPI 200 index from 2001 to 2014. We exclude firms that operate in the financial and utility industries from the sample. Percent dissent is the ratio of the number of dissents divided by the total number of votes.

Panel A. Dissents by Industry		
Industry Classification	Total Number of Votes	Number of Dissents (Percent Dissent)
Business Service	337	0 (0.0%)
Construction	6,827	49 (0.7%)
Entertainment	2,028	175 (8.6%)
High Tech	10,060	27 (0.3%)
Manufacturing	70,384	456 (0.6%)
Personal Service	623	21 (3.4%)
Publishing and Communication	6,063	93 (1.5%)
Retail and Whole	10,497	39 (0.4%)
Transportation	3,518	0 (0.0%)
Total	110,337	860 (0.8%)

Panel B. Dissents by Year		
Year	Total Number of Votes	Number of Dissents (Percent Dissent)
2001	4,320	83 (1.9%)
2002	5,914	68 (1.1%)
2003	6,154	55 (0.9%)
2004	7,624	44 (0.6%)
2005	7,829	99 (1.3%)
2006	7,899	67 (0.8%)
2007	8,652	84 (1.0%)
2008	9,040	69 (0.8%)
2009	9,517	40 (0.4%)
2010	8,819	55 (0.6%)
2011	9,494	59 (0.6%)
2012	11,972	104 (0.9%)
2013	11,276	33 (0.3%)
2014	1,827	0 (0.0%)
Total	110,337	860 (0.8%)

Panel C. Dissents by Proposal Type		
Proposal Type	Total Number of Votes	Number of Dissents (Percent Dissent)
<i>Monitoring-related proposals:</i>		
Personnel Appointment	11,549	26 (0.2%)
Internal Governance	8,817	287 (3.3%)
Financial Reporting	6,831	27 (0.4%)
Legal	431	5 (1.2%)
Related Party Transaction	8,842	44 (0.5%)
<i>Managerial- (advisory-) related proposals:</i>		
Investments	10,941	241 (2.2%)
Financing	12,709	81 (0.6%)
Shareholder Meeting	5,743	19 (0.3%)
Budgeting	386	9 (2.3%)
Strategy	2,049	22 (1.1%)
Contracting	6,651	17 (0.3%)
Other	35,388	82 (0.2%)
Total	110,337	860 (0.8%)

Table II. Summary Statistics

This table presents summary statistics for firms covered in the KOSPI 200 index from 2001 to 2014. The sample consists of 2,165 firm-year observations. We exclude firms that operate in the financial and utility industries from the sample. *Diversity Index* is a composite measure of the five diversity variables (i.e., age, tenure, experience, gender, and country) pertaining to director diversity, and it ranges from 0 to 5. Specifically, we create an indicator for each dimension of diversity that equals one if its diversity measure is greater than the sample median and zero otherwise, and then we sum the value of the indicators for the five diversity variables to create the *Diversity Index* variable. A higher index score indicates greater director diversity. The sample is divided into firms with high and low *Diversity Index* values according to the sample median *Diversity Index*. The significance in the test-of-difference columns is based on *t*-statistics (*z*-statistics) for *t*-tests (Wilcoxon rank sum tests) for equality of means (medians). Appendix B provides detailed descriptions of the variables used in the table. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Variable	Full sample (N=2,165)		Subsample with high diversity index (N=864): A		Subsample with low diversity index (N=1,301): B		Test of difference: (A - B)	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Board and board meeting characteristics:								
Director Dissent (indicator)	0.07	0.00	0.10	0.00	0.05	0.00	0.05***	0.00***
Proposal Rejection (indicator)	0.06	0.00	0.08	0.00	0.04	0.00	0.04***	0.00***
Diversity Index	1.25	1.00	2.32	2.00	0.53	0.86	1.78***	1.14***
Age Dispersion	0.96	0.90	1.45	1.50	0.64	0.50	0.81***	1.00***
Tenure Dispersion	0.26	0.20	0.44	0.40	0.15	0.10	0.30***	0.30***
Experience Dispersion	0.17	0.00	0.28	0.28	0.09	0.00	0.19***	0.28***
Gender Dispersion (indicator)	0.03	0.00	0.06	0.00	0.01	0.00	0.05***	0.00***
Country Dispersion (indicator)	0.07	0.00	0.16	0.00	0.01	0.00	0.14***	0.00***
Board Size	8.31	8.00	8.99	9.00	7.86	8.00	1.13***	1.00***
Independence	0.53	0.56	0.59	0.60	0.49	0.50	0.10***	0.10***
CEO-Chair Duality (indicator)	0.81	1.00	0.77	1.00	0.84	1.00	-0.07***	-0.00***
Attendance Rate	0.91	0.97	0.90	0.95	0.92	0.99	-0.02***	-0.04***
Number of Board Meetings	12.38	10.00	11.52	10.00	12.96	11.00	-1.44***	-1.00***
Number of Proposals	23.65	20.00	25.51	22.00	22.41	19.00	3.10***	3.00***
Director characteristics:								
Director Age	5.94	5.97	5.93	5.93	5.96	6.00	-0.03	-0.07*
Director Tenure	0.42	0.40	0.45	0.41	0.41	0.37	0.04***	0.04***
Director Total Tenure	0.51	0.46	0.57	0.53	0.47	0.40	0.10***	0.13***
Unseasoned Director (indicator)	0.06	0.00	0.04	0.00	0.07	0.00	-0.03***	0.00
Number of Directorships	1.12	1.00	1.17	1.00	1.08	1.00	0.09***	0.00***
Professor (indicator)	0.32	0.27	0.35	0.33	0.29	0.00	0.06***	0.33***
Attorney (indicator)	0.14	0.00	0.17	0.10	0.12	0.00	0.06***	0.10***
Accountant (indicator)	0.10	0.00	0.09	0.00	0.10	0.00	-0.02*	0.00**
MBA (indicator)	0.11	0.00	0.13	0.00	0.10	0.00	0.03***	0.00***
Foreigner (indicator)	0.02	0.00	0.03	0.00	0.01	0.00	0.03***	0.00***
Female (indicator)	0.01	0.00	0.02	0.00	0.01	0.00	0.01**	0.00***
Firm characteristics:								
Size	14.26	14.19	14.87	14.90	13.85	13.70	1.03***	1.20***
Leverage	0.45	0.46	0.46	0.48	0.44	0.45	0.01	0.03

Tobin's q	1.32	1.08	1.36	1.13	1.28	1.05	0.08**	0.08***
ROA	0.06	0.05	0.06	0.05	0.05	0.05	0.00	-0.01
Foreign Ownership	0.20	0.17	0.25	0.22	0.17	0.13	0.08***	0.09***
Controlling Shareholder Ownership	0.39	0.37	0.36	0.35	0.40	0.39	-0.04***	-0.04***
Domestic Institutional Ownership	0.06	0.00	0.06	0.00	0.06	0.00	0.01	0.00**
Number of Affiliates	1.41	1.10	1.59	1.39	1.29	1.10	0.30***	0.29***
Chaebol (indicator)	0.53	1.00	0.66	1.00	0.45	0.00	0.21***	1.00***
Total Volatility	0.03	0.03	0.03	0.03	0.03	0.03	-0.002*	-0.002***
Idiosyncratic Volatility	0.03	0.02	0.02	0.02	0.03	0.02	-0.003*	-0.002***
Systematic Volatility	0.01	0.01	0.01	0.01	0.01	0.01	-0.00	-0.00
Abnormal Accruals	-0.004	-0.001	-0.003	-0.001	-0.005	-0.001	0.002	0.000
R&D / assets	0.01	0.00	0.01	0.00	0.01	0.00	0.00***	0.00***
CAPEX / assets	0.22	0.13	0.19	0.13	0.25	0.13	-0.06***	-0.01***
Overinvest	0.55	0.56	0.53	0.56	0.56	0.56	-0.03**	0.00**

Table III. Effects of Board Diversity on Director Dissension: Director Voting-Level Analysis Using a Full Sample

This table presents estimates of linear probability regressions using director voting-level data in which the dependent variable is *Director Dissent (indicator)*, which equals one if the director votes against the proposal and zero otherwise. In Panel A, we control for firm fixed effects, and in Panel B, we control for director fixed effects. The sample consists of 110,337 director vote observations of 179 unique firms covered in the KOSPI 200 index from 2001 to 2014. We exclude firms that operate in the financial and utility industries from the sample. The data on director voting are collected from proxy statements. Appendix B provides detailed descriptions of the variables used in the table. The *t*-statistics reported in parentheses are based on heteroscedasticity-robust standard errors clustered by director. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Independent Variable	Dependent Variable = Director Dissent (indicator)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Diversity Index	0.002*** (3.68)						
Age Dispersion		0.001* (1.87)					0.000 (0.54)
Tenure Dispersion			0.006*** (3.05)				0.006*** (3.01)
Experience Dispersion				0.009*** (3.32)			0.009*** (3.20)
Gender Dispersion (indicator)					0.017*** (2.94)		0.017*** (2.86)
Country Dispersion (indicator)						0.000 (0.07)	0.001 (0.55)
Log (Board Size)	0.001 (0.54)	0.002 (0.81)	0.001 (0.59)	0.002 (1.00)	0.002 (1.03)	0.002 (0.99)	0.001 (0.59)
Independence	0.000 (0.08)	0.001 (0.21)	0.001 (0.19)	0.000 (0.03)	0.002 (0.47)	0.001 (0.29)	0.000 (0.09)
Size	0.006*** (4.14)	0.006*** (4.27)	0.006*** (4.20)	0.006*** (4.18)	0.006*** (3.87)	0.006*** (4.29)	0.006*** (3.75)
Leverage	0.008** (2.09)	0.007* (1.75)	0.007* (1.79)	0.006* (1.69)	0.010** (2.41)	0.007* (1.75)	0.009** (2.41)
Tobin's <i>q</i>	-0.001 (-0.88)	-0.001 (-0.95)	-0.001 (-0.99)	-0.001 (-0.86)	-0.001 (-0.98)	-0.001 (-0.98)	-0.001 (-0.86)
ROA	0.001 (0.41)	0.001 (0.26)	0.001 (0.35)	0.001 (0.50)	0.001 (0.42)	0.001 (0.26)	0.002 (0.79)
Total Volatility	-0.004 (-0.90)	-0.004 (-0.75)	-0.002 (-0.50)	-0.003 (-0.72)	-0.004 (-0.76)	-0.003 (-0.56)	-0.004 (-0.90)
Foreign Ownership	-0.032*** (-4.43)	-0.033*** (-4.48)	-0.031*** (-4.20)	-0.032*** (-4.37)	-0.033*** (-4.53)	-0.032*** (-4.44)	-0.031*** (-4.23)
Controlling Shareholder Ownership	0.055*** (3.92)	0.055*** (3.93)	0.057*** (4.02)	0.055*** (3.90)	0.056*** (4.00)	0.055*** (3.92)	0.058*** (4.10)
Institutional Ownership	0.013 (1.59)	0.013 (1.58)	0.014* (1.68)	0.013 (1.56)	0.014* (1.68)	0.013 (1.56)	0.015* (1.79)
Number of Affiliates	-0.000 (-0.14)	0.000 (0.07)	-0.000 (-0.04)	0.000 (0.01)	-0.000 (-0.18)	0.000 (0.06)	-0.000 (-0.35)
CEO-Chair Duality (indicator)	-0.002 (-0.97)	-0.003 (-1.00)	-0.003 (-1.03)	-0.002 (-0.77)	-0.003 (-1.17)	-0.002 (-0.91)	-0.003 (-1.11)
Director Age	-0.001 (-1.24)	-0.001 (-1.39)	-0.001 (-1.34)	-0.001* (-1.68)	-0.001 (-1.41)	-0.001 (-1.42)	-0.001 (-1.55)
Director Tenure	0.002 (1.21)	0.003 (1.37)	0.002 (1.07)	0.003 (1.52)	0.003 (1.38)	0.003 (1.35)	0.003 (1.29)
Unseasoned Director (indicator)	-0.000 (-0.03)	0.000 (0.07)	-0.000 (-0.28)	0.000 (0.13)	0.000 (0.09)	0.000 (0.09)	-0.000 (-0.23)
Number of Directorships	0.000 (0.15)	0.001 (0.66)	0.000 (0.61)	-0.000 (-0.56)	0.000 (0.52)	0.001 (0.68)	-0.001 (-0.71)
Professor (indicator)	0.000 (0.01)	-0.000 (-0.02)	0.000 (0.07)	-0.000 (-0.24)	-0.000 (-0.01)	-0.000 (-0.02)	-0.000 (-0.13)
Attorney (indicator)	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	(0.47)	(0.37)	(0.40)	(0.27)	(0.36)	(0.38)	(0.29)
Accountant (indicator)	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	(0.54)	(0.61)	(0.71)	(0.47)	(0.72)	(0.63)	(0.63)
MBA (indicator)	0.003**	0.003**	0.003**	0.003**	0.003**	0.003**	0.003**
	(2.12)	(2.05)	(2.07)	(2.05)	(2.16)	(2.13)	(2.00)
Foreigner (indicator)	-0.001	-0.001	-0.001	-0.000	-0.000	-0.001	-0.001
	(-0.36)	(-0.20)	(-0.21)	(-0.12)	(-0.07)	(-0.20)	(-0.16)
Female (indicator)	0.004	0.005	0.006	0.005	-0.004	0.006	-0.004
	(0.64)	(0.78)	(0.80)	(0.77)	(-0.49)	(0.79)	(-0.48)
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Proposal Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	110,337	110,337	110,337	110,337	110,337	110,337	110,337
Adj. R-squared	0.059	0.059	0.059	0.059	0.060	0.059	0.060

Panel B. Controlling for Director Fixed Effects

Independent Variable	Dependent Variable = Director Dissent (indicator)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Diversity Index	0.002** (2.23)						
Age Dispersion		0.002* (1.72)					0.001 (1.11)
Tenure Dispersion			0.003 (1.16)				0.002 (0.97)
Experience Dispersion				0.007* (1.84)			0.007* (1.83)
Gender Dispersion (indicator)					0.019** (2.26)		0.019** (2.17)
Country Dispersion (indicator)						-0.002 (-0.73)	-0.002 (-0.80)
Firm and Director Characteristics in Panel A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Director Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Proposal Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	106,325	106,325	106,325	106,325	106,325	106,325	106,325
Adj. R-squared	0.061	0.061	0.061	0.061	0.062	0.061	0.062

Table IV. Effects of Board Diversity on Director Dissension: Director Voting-Level Analysis Using a Subsample of Firms Experiencing at Least One Dissent

This table presents estimates of linear probability regressions using director voting-level data in which the dependent variable is *Director Dissent (indicator)*, which equals one if the director votes against the proposal and zero otherwise. In Panel A, we control for firm fixed effects, and in Panel B, we control for director fixed effects. The sample consists of 45,818 director vote observations of 43 unique firms covered in the KOSPI 200 index that experience at least one director dissent from 2001 to 2014. We exclude firms that operate in the financial and utility industries from the sample. The data on director voting are collected from proxy statements. Appendix B provides detailed descriptions of the variables used in the table. The *t*-statistics reported in parentheses are based on heteroscedasticity-robust standard errors clustered by director. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Panel A. Controlling for Firm Fixed Effects							
Independent Variable	Dependent Variable = Director Dissent (indicator)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Diversity Index	0.005*** (4.18)						
Age Dispersion		0.002* (1.67)					0.001 (0.91)
Tenure Dispersion			0.021*** (3.69)				0.017*** (3.13)
Experience Dispersion				0.020*** (3.44)			0.019*** (3.13)
Gender Dispersion (indicator)					0.045*** (3.14)		0.041*** (2.90)
Country Dispersion (indicator)						0.001 (0.20)	0.001 (0.18)
Firm and Director Characteristics in Table III	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Proposal Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	45,818	45,818	45,818	45,818	45,818	45,818	45,818
Adj. R-squared	0.062	0.061	0.062	0.062	0.063	0.061	0.064
Panel B. Controlling for Director Fixed Effects							
Independent Variable	Dependent Variable = Director Dissent (indicator)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Diversity Index	0.004** (2.18)						
Age Dispersion		0.002 (0.83)					0.001 (0.49)
Tenure Dispersion			0.019** (2.33)				0.012 (1.52)
Experience Dispersion				0.016* (1.82)			0.014* (1.68)
Gender Dispersion (indicator)					0.061*** (3.65)		0.060*** (3.47)
Country Dispersion (indicator)						-0.008 (-1.24)	-0.010 (-1.49)
Firm and Director Characteristics in Table III	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Director Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Proposal Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	45,818	45,818	45,818	45,818	45,818	45,818	45,818
Adj. R-squared	0.068	0.068	0.068	0.068	0.070	0.068	0.070

Table V. Effects of Board Diversity on Director Dissension: Director Voting-Level Analysis (Difference-in-Differences Test) Using Director Resignation as an Exogenous Shock

This table presents the mean firm, board, and director characteristics for a propensity score-matched sample (Panel A) and estimates of OLS and linear probability regressions using the propensity score-matched sample (Panel B). The dependent variable in columns (1) and (4) of Panel B is *Diversity Index*, which is a composite measure of the five director diversity variables. The dependent variable in columns (2), (3), (5), and (6) of Panel B is *Director Dissent (indicator)*, which equals one if the director votes against the proposal and zero otherwise. The sample consists of 2,782 director vote observations (1,178 director votes of 103 treatment firm-months (29 unique treatment firms) with director resignations and 1,604 director votes of 87 control firm-months (29 unique control firms) during which there are no director resignations in the six-month period surrounding director resignation in the treatment firm) from 2001 to 2014. We obtain the control sample by estimating the probability of director resignation using firm size, leverage, ROA, foreign ownership, controlling shareholder ownership, the number of affiliates, average director characteristics measured at the firm level (director age, unseasoned director (indicator), the number of directorships), the log of board size, board independence, and industry and year fixed effects. We then use the predicted probability to match, without replacement, a treated firm with a control firm that has the closest propensity score using a caliper of 0.1. *Post* is an indicator that takes the value of one for firm-months in the post-resignation period (Month $t+1$, Month $t+2$, and Month $t+3$) and zero for the pre-resignation period (Month $t-3$, Month $t-2$, and Month $t-1$), where Month t is the month in which director resignation occurs. In Panel A, the significance in the test-of-difference columns is based on t -statistics for t -tests for equality of means. In Panel B, the t -statistics reported in parentheses are based on heteroscedasticity-robust standard errors clustered by director. Appendix B provides detailed descriptions of the variables used in the table. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Panel A. Descriptive Statistics for Propensity Score-Matched Sample				
Variable	Treated Sample (N = 29): A	Control Sample (N = 29): B	Test of difference: (A - B)	
Log(Board Size)	2.30	2.17	0.13	
Independence	0.59	0.62	-0.03	
Size	15.35	15.46	-0.11	
Leverage	0.49	0.56	-0.07	
ROA	0.02	0.02	0.00	
Foreign Ownership	0.22	0.27	-0.05	
Number of Affiliates	1.89	1.63	0.26	
Director Age	6.00	5.92	0.08	
Unseasoned Director (indicator)	0.03	0.02	0.02	
Number of Directorships	1.03	1.04	-0.00	

Panel B. Difference-in-Differences Test						
Independent variable	Controlling for Firm Fixed Effects			Controlling for Director Fixed Effects		
	Diversity Index	Director Dissent (indicator)		Diversity Index	Director Dissent (indicator)	
	(1)	(2)	(3)	(4)	(5)	(6)
Resign (indicator) × Post (indicator)	-0.030** (-2.58)	-0.025*** (-2.63)		-0.030** (-2.54)	-0.026** (-2.57)	
Post (indicator)	-0.006** (-2.22)	0.005 (0.70)		-0.006 (-1.15)	0.004 (0.66)	
Resign (indicator) × Month $t-2$			-0.032 (-1.45)			-0.032 (-1.47)
Resign (indicator) × Month $t-1$			-0.048 (-1.60)			-0.049 (-1.62)
Resign (indicator) × Month $t+1$			-0.052 (-1.66)			-0.052 (-1.66)
Resign (indicator) × Month $t+2$			-0.060* (-1.77)			-0.059* (-1.74)
Resign (indicator) × Month $t+3$			-0.089** (-2.12)			-0.089** (-2.11)
Month $t-2$			-0.001 (-0.07)			-0.001 (-0.08)
Month $t-1$			-0.006 (-0.32)			-0.005 (-0.31)
Month $t+1$			-0.004 (-0.33)			-0.004 (-0.34)
Month $t+2$			0.007			0.007

			(0.58)			(0.56)
Month $t+3$			0.011			0.011
			(1.51)			(1.60)
Firm and Director Characteristics in Table III	Yes	Yes	Yes	Yes	Yes	Yes
Month Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	No	No	No
Proposal Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Director Fixed Effects	No	No	No	Yes	Yes	Yes
Observations	2,782	2,782	2,782	2,777	2,777	2,777
Adj. R-squared	0.992	0.222	0.223	0.993	0.182	0.182

Table VI. Effects of Board Diversity on Director Dissension: Director Voting-Level Analysis Using a Propensity Score-Matched Sample

This table presents the mean firm, board, and director characteristics for a propensity score-matched sample (Panel A) and estimates of linear probability regressions using the propensity score-matched sample in which the dependent variable is *Director Dissent (indicator)*, which equals one if the director votes against the proposal and zero otherwise (Panels B and C). In Panel B, we control for firm fixed effects, and in Panel C, we control for director fixed effects. The sample consists of 27,878 director votes of 440 treatment firm-years with a high *Diversity Index* and 24,860 director votes of 440 control firm-years with a low *Diversity Index*. We obtain the control sample by estimating the probability of having high board diversity using firm size, leverage, ROA, foreign ownership, the number of affiliates, average director characteristics measured at the firm level (director age, unseasoned director (indicator), the number of directorships), the log of board size, and board independence. We then use the predicted probability to match, without replacement, a firm with a high *Diversity Index* with a firm with a low *Diversity Index* in the same industry and year that has the closest propensity score using a caliper of 0.1. In Panel A, the significance in the test-of-difference columns is based on *t*-statistics for *t*-tests for equality of means. In Panels B and C, the *t*-statistics reported in parentheses are based on heteroscedasticity-robust standard errors clustered by director. Appendix B provides detailed descriptions of the variables used in the table. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Panel A. Descriptive Statistics for Propensity Score-Matched Sample							
Variable	Treated Sample (N = 440): A	Control Sample (N = 440): B		Test of difference: (A - B)			
Log(Board Size)	2.08	2.10		-0.02			
Independence	0.54	0.55		-0.01			
Size	14.31	14.39		-0.09			
Leverage	0.44	0.45		-0.01			
ROA	0.06	0.06		-0.00			
Foreign Ownership	0.22	0.22		-0.01			
Number of Affiliates	1.39	1.45		-0.06			
Director Age	5.93	5.92		0.01			
Unseasoned Director (indicator)	0.04	0.03		0.01			
Number of Directorships	1.14	1.13		0.01			

Panel B. Controlling for Firm Fixed Effects							
Independent Variable	Dependent variable = Director Dissent (indicator)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Diversity Index	0.002*** (2.60)						
Age Dispersion		-0.001 (-1.00)					-0.002** (-2.43)
Tenure Dispersion			0.005* (1.66)				0.004* (1.67)
Experience Dispersion				0.007** (2.01)			0.008** (2.15)
Gender Dispersion (indicator)					0.029*** (3.44)		0.030*** (3.62)
Country Dispersion (indicator)						0.002 (1.25)	0.003* (1.72)
Firm and Director Characteristics in Table III	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Proposal Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	52,738	52,738	52,738	52,738	52,738	52,738	52,738
Adj. R-squared	0.069	0.069	0.069	0.069	0.071	0.069	0.071

Panel C. Controlling for Director Fixed Effects							
Independent Variable	Dependent variable = Director Dissent (indicator)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Diversity Index	0.001** (2.13)						
Age Dispersion		-0.001 (-1.08)					-0.002* (-1.91)
Tenure Dispersion			0.005* (1.71)				0.005 (1.51)
Experience Dispersion				0.002 (0.78)			0.002 (0.67)
Gender Dispersion (indicator)					0.031*** (2.66)		0.032*** (2.79)

Country Dispersion (indicator)						-0.000 (-0.05)	0.001 (0.36)
Firm and Director Characteristics in Table III	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Director Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Proposal Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	52,733	52,733	52,733	52,733	52,733	52,733	52,733
Adj. R-squared	0.071	0.071	0.071	0.071	0.073	0.071	0.073

Table VII. Effects of Board Diversity on Director Dissension: Cross-Sectional Variation in Governance and Director Characteristics

This table presents estimates of linear probability regressions using director voting-level data in which the dependent variable is *Director Dissent (indicator)*, which equals one if the director votes against the proposal and zero otherwise. In Panel A, we examine cross-sectional variation in the likelihood of director dissension across proposal types and governance characteristics, and in Panel B, we examine cross-sectional variation in the likelihood of director dissension across director characteristics. The sample consists of 110,337 director vote observations of 179 unique firms covered in the KOSPI 200 index from 2001 to 2014. We exclude firms that operate in the financial and utility industries from the sample. The *t*-statistics reported in parentheses are based on heteroscedasticity-robust standard errors clustered by director. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Panel A. Governance Characteristics						
Independent Variable	Dependent variable = Director Dissent (indicator)					
	(1)	(2)	(3)	(4)	(5)	
Diversity Index	0.001 (1.27)	0.001 (1.20)	0.000 (0.96)	0.004** (2.44)	0.005*** (3.26)	
Diversity Index × Monitoring-related Proposal (indicator)	0.003*** (3.48)					
Diversity Index × After Governance Reform (indicator)		0.002** (2.26)				
Diversity Index × High Foreign Ownership (indicator)			0.003*** (3.47)			
Diversity Index × Chaebol (indicator)				-0.003* (-1.68)		
Diversity Index × CEO-Chair Duality (indicator)					-0.004** (-2.36)	
Firm and Director Characteristics in Panel A	Yes	Yes	Yes	Yes	Yes	
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	
Proposal Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	
Observations	110,337	110,337	110,337	110,337	110,337	
Adj. R-squared	0.059	0.059	0.059	0.059	0.059	
Panel B. Director Characteristics						
Independent Variable	Dependent variable = Director Dissent (indicator)					
	(1)	(2)	(3)	(4)	(5)	(6)
Diversity Index	0.011*** (3.98)	0.001 (1.59)	0.002*** (3.81)	0.002*** (3.64)	0.002*** (3.44)	-0.004** (-2.14)
Diversity Index × Director Age	-0.002*** (-3.34)					
Diversity Index × Director Tenure		0.002 (0.81)				
Diversity Index × Unseasoned Director (indicator)			-0.003* (-1.72)			
Diversity Index × Female (indicator)				0.004** (2.08)		
Diversity Index × Foreign (indicator)					0.007*** (2.59)	
Diversity Index × Attendance Rate						0.007*** (3.18)
Firm and Director Characteristics in Panel A	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Proposal Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	110,337	110,337	110,337	110,337	110,337	110,337
Adj. R-squared	0.059	0.059	0.059	0.059	0.059	0.059

Table VIII. Market Reaction to Director Resignations

This table presents estimates of OLS regressions using director-level data in which the dependent variable is a three-day cumulative abnormal return (CAR (-1, 1)) around the director resignation announcement date. The sample consists of 200 independent director resignations from 2001 to 2014. The abnormal stock returns are calculated using the market model (columns (1)–(3)) and Fama-French (1993) three-factor model (columns (4)–(6)). The market model parameters are estimated using 250 days of return data beginning 300 days before and ending 46 days before the resignation announcement date, using the KOSPI 200 value-weighted return as a proxy for the market portfolio return. The three factors used in the Fama-French (1993) three-factor model are the KOSPI 200 value-weighted index, SMB (daily return difference between the returns on small and large size portfolios), and HML (daily return difference between the returns on high and low book-to-market-ratio portfolios). Appendix B provides detailed descriptions of the variables used in the table. The *t*-statistics reported in parentheses are based on heteroscedasticity-robust standard errors clustered by firm. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Independent Variable	Market Model: CAR (-1, 1)			Fama-French Three-Factor: CAR (-1, 1)		
	(1)	(2)	(3)	(4)	(5)	(6)
Resignation of Directors Ever Dissented Before (indicator)	-0.019* (-1.97)			-0.018* (-1.96)		
Resignation of Directors Ever Dissented at the Focal Firm (indicator)		-0.027** (-2.22)			-0.027** (-2.20)	
Resignation of Directors on High Diversity Ever Dissented at the Focal Firm (indicator)			-0.003 (-0.20)			-0.004 (-0.27)
Resignation of Directors on Low Diversity Ever Dissented at the Focal Firm (indicator)			-0.031*** (-3.18)			-0.030*** (-2.99)
Log (Board Size)	-0.050** (-2.09)	-0.051** (-2.14)	-0.054** (-2.35)	-0.051** (-2.22)	-0.051** (-2.28)	-0.055** (-2.49)
Independence	0.015 (0.48)	0.008 (0.27)	0.014 (0.45)	0.017 (0.60)	0.011 (0.38)	0.017 (0.58)
Size	-0.003 (-0.39)	-0.002 (-0.19)	-0.001 (-0.15)	-0.001 (-0.09)	0.001 (0.14)	0.001 (0.16)
Leverage	-0.027 (-0.77)	-0.021 (-0.63)	-0.020 (-0.60)	-0.037 (-1.10)	-0.031 (-0.98)	-0.030 (-0.95)
Tobin's <i>q</i>	-0.019** (-2.37)	-0.020** (-2.53)	-0.019** (-2.46)	-0.019** (-2.51)	-0.020*** (-2.66)	-0.020** (-2.57)
ROA	0.055 (0.52)	0.072 (0.74)	0.069 (0.77)	0.068 (0.64)	0.085 (0.86)	0.081 (0.89)
Total Volatility	2.095*** (3.17)	2.104*** (3.18)	2.101*** (3.23)	2.118*** (3.52)	2.128*** (3.52)	2.124*** (3.58)
Foreign Ownership	0.058 (1.21)	0.071 (1.48)	0.066 (1.50)	0.041 (0.93)	0.054 (1.21)	0.048 (1.19)
Controlling Shareholder Ownership	0.038 (0.94)	0.037 (0.90)	0.045 (1.12)	0.044 (1.10)	0.043 (1.06)	0.051 (1.28)
Domestic Institutional Ownership	-0.039 (-0.56)	-0.055 (-0.82)	-0.030 (-0.47)	-0.046 (-0.66)	-0.062 (-0.91)	-0.038 (-0.58)
Number of Affiliates	-0.005 (-0.91)	-0.004 (-0.89)	-0.006 (-1.17)	-0.004 (-0.83)	-0.004 (-0.80)	-0.005 (-1.08)
CEO-Chair Duality (indicator)	-0.033*** (-2.92)	-0.035*** (-3.20)	-0.030*** (-2.68)	-0.032*** (-3.05)	-0.034*** (-3.34)	-0.029*** (-2.79)
Director Age	0.005 (1.15)	0.005 (1.13)	0.004 (1.08)	0.002 (0.50)	0.002 (0.48)	0.002 (0.43)
Director Tenure	0.015 (0.55)	0.014 (0.52)	0.010 (0.38)	0.019 (0.79)	0.018 (0.77)	0.015 (0.62)
Unseasoned Director (indicator)	-0.012 (-0.71)	-0.013 (-0.84)	-0.012 (-0.72)	0.001 (0.08)	-0.000 (-0.00)	0.001 (0.09)
Number of Directorships	-0.032** (-2.23)	-0.033** (-2.25)	-0.027* (-1.74)	-0.028* (-1.82)	-0.029* (-1.71)	-0.024 (-1.45)
Professor (indicator)	-0.008 (-0.79)	-0.008 (-0.87)	-0.008 (-0.83)	-0.011 (-1.14)	-0.012 (-1.19)	-0.011 (-1.18)
Attorney (indicator)	0.004 (0.39)	0.004 (0.39)	0.004 (0.45)	0.001 (0.14)	0.001 (0.15)	0.002 (0.20)

Accountant (indicator)	-0.012 (-0.83)	-0.013 (-0.94)	-0.013 (-0.88)	-0.014 (-1.03)	-0.016 (-1.14)	-0.015 (-1.06)
MBA (indicator)	0.024** (2.06)	0.022** (2.00)	0.025** (2.06)	0.024** (2.30)	0.023** (2.24)	0.025** (2.29)
Foreigner (indicator)	-0.052*** (-3.08)	-0.049*** (-2.78)	-0.054*** (-3.17)	-0.049*** (-3.46)	-0.046*** (-3.07)	-0.051*** (-3.52)
Female (indicator)	0.018 (0.80)	0.021 (1.02)	0.020 (0.90)	0.008 (0.39)	0.012 (0.59)	0.011 (0.49)
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	200	200	200	200	200	200
Adj. R-squared	0.475	0.480	0.486	0.508	0.513	0.517

Table IX. Effects of Proposal Rejection Due to Dissension on Firm Value

This table presents the mean firm, board, and director characteristics for a propensity score-matched sample (Panel A) and estimates of OLS regressions using the treatment and control firms of the propensity score-matched sample in which the dependent variable is Tobin's q (Panel B). The sample consists of 238 firm-year observations from two years before and two years after proposal rejection (31 treatment firm-years with proposal rejection and 31 control firm-years with no proposal rejection) over the period 2001-2014. We obtain the control sample by estimating the probability of proposal rejection using firm size, leverage, ROA, foreign ownership, the number of affiliates, average director characteristics measured at the firm level (director age, unseasoned director (indicator), the number of directorships), the log of board size, and board independence. We then use the predicted probability to match, without replacement, a treated firm with a control firm in the same industry and year that has the closest propensity score using a caliper of 0.1. *Post* is an indicator that takes the value of one for firm-years in the post-rejection period (Year t , Year $t+1$ and Year $t+2$) and zero for the pre-rejection period (Year $t-2$ and Year $t-1$), where Year t is the year in which proposal rejection occurs. *Proposal Rejection* is an indicator that takes the value of one for treatment firms (i.e., if a firm experiences a proposal rejection in Year t) and zero for control firms. In columns (4) and (5) of Panel B, the sample is divided into firms with high and low *Diversity Index* values according to the sample median *Diversity Index*. *Diversity Index* is a composite measure of the five diversity variables (i.e., age, tenure, experience, gender, and country) pertaining to director diversity, and it ranges from 0 to 5. Specifically, we create an indicator for each dimension of diversity that equals one if its diversity measure is greater than the sample median and zero otherwise, and then we sum the value of the indicators for the five diversity variables to create the *Diversity Index* variable. In Panel A, the significance in the test-of-difference columns is based on t -statistics for t -tests for equality of means. In Panel B, the t -statistics reported in parentheses are based on heteroscedasticity-robust standard errors clustered by industry. Appendix B provides detailed descriptions of the variables used in the table. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Panel A. Descriptive Statistics for Propensity Score-Matched Sample				
	Treated Sample (N = 31): A	Control Sample (N = 31): B	Test of difference:(A - B)	
Log(Board Size)	2.11	2.07	0.04	
Independence	0.59	0.58	0.01	
Size	14.69	14.70	-0.00	
Leverage	0.56	0.53	0.02	
ROA	0.04	0.04	-0.00	
Foreign Ownership	0.16	0.21	-0.05	
Number of Affiliates	1.76	1.96	-0.21	
Director Age	6.13	5.93	0.20	
Unseasoned Director (indicator)	0.08	0.09	-0.01	
Number of Directorships	1.17	1.09	0.08	

Panel B. OLS Regression Analysis: Using Tobin's Q as the Dependent Variable					
Independent Variable	Tobin's q				
	Full Sample			Subsample	
	(1)	(2)	(3)	High Diversity (4)	Low Diversity (5)
Proposal Rejection (indicator) \times Post (indicator)	0.198*** (2.77)	0.152** (2.37)		0.229** (2.32)	0.004 (0.06)
Post (indicator)	0.032 (0.60)	0.027 (0.59)		0.016 (0.21)	0.084 (0.77)
Proposal Rejection (indicator) \times Year $t-1$			0.030 (0.40)		
Proposal Rejection (indicator) \times Year t			0.183 (1.60)		
Proposal Rejection (indicator) \times Year $t+1$			0.169* (1.80)		
Proposal Rejection (indicator) \times Year $t+2$			0.166 (1.15)		
Director Characteristics in Table III	No	Yes	Yes	Yes	Yes
Firm Characteristics in Table III Excluding Tobin's q	Yes	Yes	Yes	Yes	Yes
Year and Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Year Indicators (Year $t-1$, Year t , Year $t+1$, Year $t+2$)	No	No	Yes	No	No
Observations	238	238	238	107	123
Adj. R-squared	0.812	0.824	0.819	0.902	0.742

Table X. Effects of Proposal Rejection Due to Dissension on Risk (Return Volatility) and Cash Flow (ROA)

This table presents estimates of OLS regressions using a propensity score-matched sample in Table IX in which the dependent variables are *Total Volatility* (columns (1) and (2)), *Idiosyncratic Volatility* (columns (3) and (4)), *Systematic Volatility* (columns (5) and (6)), and *ROA* (columns (7) and (8)). The sample consists of 238 firm-year observations from two years before and two years after proposal rejection (32 treatment firm-years with proposal rejection and 32 control firm-years with no proposal rejection). *Total Volatility* is the standard deviation of daily returns during the fiscal year. *Idiosyncratic Volatility* (*Systematic Volatility*) is the square root of the residual variance of daily stock returns not explained (explained) by the market model in which the KOSPI 200 value-weighted return is used as a proxy for the market portfolio return. *ROA* is the return on assets. *Post* is an indicator that takes the value of one for firm-years in the post-rejection period (Year t , Year $t+1$ and Year $t+2$) and zero for the pre-rejection period (Year $t-2$ and Year $t-1$), where Year t is the year in which proposal rejection occurs. *Proposal Rejection* is an indicator that takes the value of one for treatment firms that experiences a proposal rejection in Year t and zero for control firms. In Panel B, the sample is divided into firms with high and low *Diversity Index* values according to the sample median *Diversity Index*. *Diversity Index* is a composite measure of the five diversity variables (i.e., age, tenure, experience, gender, and country) pertaining to director diversity, and it ranges from 0 to 5. We create an indicator for each dimension of diversity that equals one if its diversity measure is greater than the sample median and zero otherwise, and then we sum the value of the indicators for the five diversity variables to create the *Diversity Index* variable. In columns (1)–(6) (columns (7) and (8)), we do not include *Total Volatility* (*ROA*) as the control variables in the regressions. Appendix B provides detailed descriptions of the variables used in the table. The t -statistics reported in parentheses are based on heteroscedasticity-robust standard errors clustered by industry. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Panel A. Using Return Volatility and ROA as the Dependent Variables: Full Sample Analyses								
	Total Volatility		Idiosyncratic Volatility		Systematic Volatility		ROA	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Proposal Rejection (indicator)	-0.002*		-0.003**		0.000		0.006	
× Post (indicator)	(-1.75)		(-2.39)		(0.46)		(0.53)	
Post (indicator)	-0.001		-0.000		-0.002**		-0.008	
	(-1.05)		(-0.24)		(-2.45)		(-0.98)	
Proposal Rejection (indicator) × Year $t-1$		0.000		0.001		-0.001		0.066*
		(0.18)		(0.42)		(-0.36)		(1.75)
Proposal Rejection (indicator) × Year t		0.000		-0.000		0.001		0.046
		(0.21)		(-0.05)		(0.65)		(1.59)
Proposal Rejection (indicator) × Year $t+1$		-0.004**		-0.005**		-0.001		0.057**
		(-2.53)		(-2.48)		(-0.49)		(2.50)
Proposal Rejection (indicator) × Year $t+2$		-0.002		-0.003		0.000		0.029
		(-1.01)		(-1.41)		(0.09)		(1.04)
Director Characteristics in Table III	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Characteristics in Table III	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year and Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Indicators	No	Yes	No	Yes	No	Yes	No	Yes
Observations	238	238	238	238	238	238	238	238
Adj. R-squared	0.751	0.758	0.678	0.682	0.777	0.777	0.485	0.502

Panel B. Using Return Volatility and ROA as the Dependent Variables: Subsample Analyses								
	Total Volatility		Idiosyncratic Volatility		Systematic Volatility		ROA	
	High Diversity	Low Diversity	High Diversity	Low Diversity	High Diversity	Low Diversity	High Diversity	Low Diversity
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Proposal Rejection (indicator)	-0.146*	-0.002	-0.143*	-0.003	-0.001	0.002	-0.013	0.000
× Post (indicator)	(-1.88)	(-0.51)	(-1.88)	(-0.89)	(-0.56)	(1.35)	(-0.77)	(0.02)
Post (indicator)	0.000	0.000	0.000	0.000	-0.000	-0.001	0.002	-0.002
	(0.01)	(0.20)	(0.00)	(0.19)	(-0.51)	(-0.71)	(0.30)	(-0.13)
Director Characteristics in Table III	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Characteristics in Table III	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year and Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	102	123	102	123	101	120	102	123
Adj. R-squared	0.220	0.685	0.217	0.603	0.771	0.794	0.736	0.249

Table XI. Effects of Proposal Rejection Due to Dissension on Corporate Governance

This table presents estimates of OLS regressions using a propensity score-matched sample in Table IX in which the dependent variables are *Abnormal Accruals* (Panel A), *Forced CEO Turnover (indicator)* (Panel B), and R&D / assets (CAPEX / assets) (Panel C). The sample consists of 238 firm-year observations from two years before and two years after proposal rejection (31 treatment firm-years with proposal rejection and 31 control firm-years with no proposal rejection). *Abnormal Accruals* is the absolute value of residuals estimated using the modified Dechow-Dichev (2002) model. *Forced CEO Turnover (indicator)* equals one if the departure of CEO is involuntary according to a news article or if the departing CEO does not obtain a position in a focal firm or its affiliate and zero otherwise. *Overinvest* is a ranked variable based on the average decile of a firm's cash and (negative) leverage. We first rank firms into deciles based on their cash balance and their (negative) leverage. We then rescale the average of the two deciles so that its value ranges from zero to one. *Post* is an indicator that takes the value of one for firm-years in the post-rejection period (Year t , Year $t+1$ and Year $t+2$) and zero for the pre-rejection period (Year $t-2$ and Year $t-1$), where Year t is the year in which proposal rejection occurs. *Proposal Rejection* is an indicator that takes the value of one for treatment firms that experience a proposal rejection in Year t and zero for control firms. The sample is divided into firms with high and low *Diversity Index* values according to the sample median *Diversity Index*. *Diversity Index* is a composite measure of the five diversity variables (i.e., age, tenure, experience, gender, and country) pertaining to director diversity, and it ranges from 0 to 5. Specifically, we create an indicator for each dimension of diversity that equals one if its diversity measure is greater than the sample median and zero otherwise, and then we sum the value of the indicators for the five diversity variables to create the *Diversity Index* variable. Appendix B provides detailed descriptions of the variables used in the table. The t -statistics reported in parentheses are based on heteroscedasticity-robust standard errors clustered by industry. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Panel A. Using Abnormal Accruals as the Dependent Variable				
Independent Variable	Abnormal Accruals			
	Full Sample	Subsample		
		High Diversity	Low Diversity	
(1)	(2)	(3)	(4)	
Proposal Rejection (indicator) × Post (indicator)	-0.021** (-2.11)	-0.018** (-2.65)	-0.023* (-1.74)	-0.008 (-0.74)
Post (indicator)	0.003 (0.46)	0.005 (0.81)	0.001 (0.20)	-0.005 (-0.66)
Director Characteristics in Table III	No	Yes	Yes	Yes
Firm Characteristics in Table III	Yes	Yes	Yes	Yes
Year and Firm Fixed Effects	Yes	Yes	Yes	Yes
Observations	232	232	102	120
Adj. R-squared	0.502	0.542	0.510	0.432

Panel B. Using CEO Forced Turnover (indicator) as the Dependent Variable				
Independent Variable	Forced CEO Turnover (indicator)			
	Full Sample	Subsample		
		High Diversity	Low Diversity	
(1)	(2)	(3)	(4)	
Proposal Rejection (indicator) × Post (indicator) × High ROA	-0.318** (-2.22)	-0.333** (-2.37)	-0.717** (-2.08)	-0.070 (-0.25)
Proposal Rejection (indicator) × Post (indicator)	-0.044 (-0.43)	-0.056 (-0.59)	0.089 (0.36)	-0.089 (-0.39)
Proposal Rejection (indicator) × High ROA (indicator)	0.312** (2.62)	0.319** (2.67)	0.288 (0.85)	0.277 (1.01)
Post (indicator) × High ROA (indicator)	0.090 (0.82)	0.096 (0.79)	0.280 (1.42)	-0.132 (-0.56)
High ROA (indicator)	-0.109 (-1.06)	-0.117 (-0.98)	0.026 (0.12)	-0.162 (-0.70)
Post (indicator)	0.033 (0.35)	0.035 (0.36)	0.001 (0.01)	0.044 (0.19)
Director Characteristics in Table III	No	Yes	Yes	Yes
Firm Characteristics in Table III	Yes	Yes	Yes	Yes
Year and Firm Fixed Effects	Yes	Yes	Yes	Yes
Observations	235	235	102	126
R-squared	0.324	0.341	0.603	0.514
Adj. R-squared	-0.001	-0.036	0.022	-0.125

Panel C. Using R&D /Assets (CAPEX / Assets) as the Dependent Variable

Independent Variable	R&D / Assets				CAPEX / Assets			
	Full Sample		Subsample		Full Sample		Subsample	
	(1)	(2)	High Diversity (3)	Low Diversity (4)	(5)	(6)	High Diversity (7)	Low Diversity (8)
Proposal Rejection (indicator) × Post × Overinvest (indicator)	-0.019*	-0.013*	-0.019*	0.004	0.186	0.079	0.096	0.354
	(-1.73)	(-1.87)	(-1.91)	(0.79)	(0.81)	(0.39)	(0.29)	(1.06)
Proposal Rejection (indicator) × Post	0.007*	0.008**	0.013*	-0.002	-0.089	-0.059	-0.059	-0.241
	(1.98)	(2.19)	(1.79)	(-0.75)	(-0.65)	(-0.55)	(-0.39)	(-1.40)
Proposal Rejection (indicator) × Post (indicator) × Overinvest	0.011	0.011	0.023***	-0.010	0.047	0.118	0.288	-0.135
	(1.14)	(1.67)	(2.90)	(-1.37)	(0.21)	(0.72)	(1.01)	(-0.43)
Post (indicator) × Overinvest	0.013	0.004	0.005	-0.003	0.087	0.070	-0.110	0.007
	(1.13)	(0.61)	(0.49)	(-0.85)	(0.64)	(0.62)	(-0.86)	(0.04)
Post (indicator)	-0.003	-0.001	-0.002	-0.000	0.002	0.006	0.073	0.112
	(-0.98)	(-0.22)	(-0.29)	(-0.32)	(0.03)	(0.10)	(0.98)	(1.41)
Overinvest (indicator)	-0.012	-0.006	-0.000	0.002	-0.203	-0.133	0.067	-0.093
	(-1.08)	(-0.94)	(-0.07)	(0.52)	(-1.08)	(-1.10)	(0.62)	(-0.71)
Director Characteristics in Table III	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Firm Characteristics in Table III	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year and Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	236	236	106	120	236	236	106	120
Adj. R-squared	0.861	0.890	0.934	0.968	0.395	0.445	0.496	0.454

Table XII. Effects of Director Dissent with No Proposal Rejection on Firm Outcome Variables

This table reestimates the regressions in Tables IX–XI using firm-years that experience director dissension but not proposal rejection. Panel A presents the mean firm, board, and director characteristics for a propensity score-matched sample, and Panels B–G present estimates of OLS and linear probability regressions using the treatment and control firms of the propensity score-matched sample. The dependent variables are Tobin’s q (Panel B), return volatility and ROA (Panels C and D), *Abnormal Accruals* (Panel E), *Forced CEO Turnover (indicator)* (Panel F), and R&D / assets and CAPEX / assets (Panel G). *Total Volatility* is the standard deviation of daily returns during the fiscal year. *Idiosyncratic Volatility (Systematic Volatility)* is the square root of the residual variance of daily stock returns not explained (explained) by the market model in which the KOSPI 200 value-weighted return is used as a proxy for the market portfolio return. *ROA* is the return on assets. *Abnormal Accruals* is the absolute value of residuals estimated using the modified Dechow-Dichev (2002) model. *Forced CEO Turnover (indicator)* equals one if the departure of CEO is involuntary according to a news article or if the departing CEO does not obtain a position in a focal firm or its affiliate and zero otherwise. The sample consists of 240 firm-year observations from two years before and two years after dissension (28 treatment firm-years with director dissension but no proposal rejection and 28 control firm-years without any director dissension and proposal rejection) over the period 2001-2014. We obtain the control sample by estimating the probability of having director dissension but not proposal rejection using firm size, leverage, ROA, foreign ownership, the number of affiliates, average director characteristics measured at the firm level (director age, unseasoned director (indicator), the number of directorships), the log of board size, and board independence. We then use the predicted probability to match, without replacement, a treated firm with a control firm in the same industry and year that has the closest propensity score using a caliper of 0.1. *Post* is an indicator that takes the value of one for firm-years in the post-rejection period (Year t , Year $t+1$ and Year $t+2$) and zero for the pre-rejection period (Year $t-2$ and Year $t-1$), where Year t is the year in which proposal rejection occurs. *Partial Dissent* is an indicator that takes the value of one for treatment firms that experience director dissension but no proposal rejection in Year t and zero for control firms. In Panel A, the significance in the test-of-difference columns is based on the t -statistics for t -tests for equality of means. In Panels B–G, the sample is divided into firms with high and low *Diversity Index* values according to the sample median *Diversity Index*. *Diversity Index* is a composite measure of the five diversity variables (i.e., age, tenure, experience, gender, and country) pertaining to director diversity, and it ranges from 0 to 5. Specifically, we create an indicator for each dimension of diversity that equals one if its diversity measure is greater than the sample median and zero otherwise, and then we sum the value of the indicators for the five diversity variables to create the *Diversity Index* variable. The t -statistics reported in parentheses are based on heteroscedasticity-robust standard errors clustered by industry. Appendix B provides detailed descriptions of the variables used in the table. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Panel A. Descriptive Statistics (Mean) for Propensity Score-Matched Sample				
	Treated Sample (N = 28): A	Control Sample (N = 28): B	Test of difference: (A - B)	
Log(Board Size)	2.13	2.04	0.08	
Independence	0.63	0.68	-0.05	
Size	15.06	15.04	0.02	
Leverage	0.56	0.55	0.01	
ROA	0.08	0.05	0.03	
Foreign Ownership	0.17	0.16	0.01	
Number of Affiliates	1.86	2.38	-0.52	
Director Age	5.85	5.96	-0.11	
Unseasoned Director (indicator)	0.05	0.05	-0.00	
Number of Directorships	1.15	1.22	-0.07	

Panel B. Using Tobin’s q as the Dependent Variable					
Independent Variable	Tobin’s q				
	Full Sample			Subsample	
	(1)	(2)	(3)	High Diversity	Low Diversity
Partial Dissent (indicator) × Post (indicator)	0.010 (0.07)	0.025 (0.18)		0.076 (0.75)	-0.351 (-1.10)
Post (indicator)	0.044 (0.42)	0.004 (0.03)		-0.120 (-1.38)	0.276 (1.00)
Partial Dissent (indicator) × Year $t-1$			-0.026 (-0.31)		
Partial Dissent (indicator) × Year t			0.034 (0.18)		
Partial Dissent (indicator) × Year $t+1$			-0.007 (-0.04)		
Partial Dissent (indicator) × Year $t+2$			-0.002 (-0.01)		
Director Characteristics in Table III	No	Yes	Yes	Yes	Yes

Firm Characteristics in Table III Excluding Tobin's q	Yes	Yes	Yes	Yes	Yes
Year and Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Year Indicators (Year $t-1$, Year t , Year $t+1$, Year $t+2$)	No	No	Yes	No	No
Observations	240	240	240	114	114
Adj. R -squared	0.696	0.707	0.699	0.742	0.614

Panel C. Using Return Volatility (ROA) as the Dependent Variable: Full Sample Analyses

	Total Volatility		Idiosyncratic Volatility		Systematic Volatility		ROA	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Partial Dissent (indicator) \times Post (indicator)	-0.009 (-0.36)		-0.008 (-0.33)		-0.004 (-0.77)		-0.047** (-2.27)	
Post (indicator)	0.004 (0.21)		0.003 (0.18)		0.003 (0.78)		0.026** (2.21)	
Partial Dissent (indicator) \times Year $t-1$		0.004 (0.20)		0.005 (0.26)		-0.001 (-0.27)		0.004 (0.17)
Partial Dissent (indicator) \times Year t		0.022 (1.19)		0.022 (1.24)		0.002 (0.59)		-0.031 (-0.88)
Partial Dissent (indicator) \times Year $t+1$		-0.027 (-0.74)		-0.025 (-0.69)		-0.009 (-1.33)		-0.068* (-1.71)
Partial Dissent (indicator) \times Year $t+2$		-0.032 (-0.82)		-0.030 (-0.79)		-0.009 (-1.21)		-0.042 (-1.49)
Director Characteristics in Table III	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Characteristics in Table III	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year and Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Indicators (Year $t-1$, Year t , Year $t+1$, Year $t+2$)	No	Yes	No	Yes	No	Yes	No	Yes
Observations	240	240	240	240	240	240	240	240
Adj. R -squared	0.073	0.089	0.067	0.083	0.254	0.278	0.365	0.361

Panel D. Using Return Volatility (ROA) as the Dependent Variable: Subsample Analyses

	Total Volatility		Idiosyncratic Volatility		Systematic Volatility		ROA	
	High Diversity	Low Diversity	High Diversity	Low Diversity	High Diversity	Low Diversity	High Diversity	Low Diversity
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Partial Dissent (indicator) \times Post (indicator)	-0.038 (-0.68)	0.008 (1.58)	-0.036 (-0.66)	0.008 (1.47)	-0.009 (-0.88)	0.002 (0.77)	-0.036** (-2.53)	-0.054 (-0.84)
Post (indicator)	0.031 (0.70)	-0.003 (-0.86)	0.030 (0.68)	-0.004 (-1.06)	0.006 (0.78)	0.001 (0.88)	0.034*** (4.68)	0.062 (1.52)
Director Characteristics in Table III	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Characteristics in Table III	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year and Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	112	109	112	109	112	109	112	109
R -squared	0.541	0.807	0.540	0.783	0.584	0.865	0.879	0.801
Adj. R -squared	-0.085	0.479	-0.087	0.414	0.018	0.634	0.714	0.464

Panel E. Using Abnormal Accruals as the Dependent Variable

Independent Variable	Abnormal Accruals			
	Full Sample		Subsample	
	(1)	(2)	High Diversity (3)	Low Diversity (4)
Partial Dissent (indicator) \times Post (indicator)	-0.008 (-1.20)	-0.003 (-0.53)	-0.015 (-1.32)	0.017* (1.94)
Post (indicator)	0.005 (0.90)	0.002 (0.40)	0.017 (1.60)	-0.012 (-1.22)
Director Characteristics in Table III	No	Yes	Yes	Yes
Firm Characteristics in Table III	Yes	Yes	Yes	Yes
Year and Firm Fixed Effects	Yes	Yes	Yes	Yes
Observations	223	223	103	104
Adj. R -squared	0.515	0.521	0.376	0.730

Panel F. Using CEO Forced Turnover (indicator) as the Dependent Variable

Independent Variable	Forced CEO Turnover (indicator)			
	Full Sample		Subsample	
	(1)	(2)	High Diversity (3)	Low Diversity (4)
Partial Dissent (indicator) × Post (indicator) × High ROA (indicator)	-0.030 (-0.17)	-0.013 (-0.07)	0.379 (1.64)	0.509 (1.07)
Partial Dissent (indicator) × Post (indicator)	-0.021 (-0.21)	-0.032 (-0.28)	-0.350** (-2.28)	-0.094 (-0.34)
Partial Dissent (indicator) × High ROA (indicator)	-0.110 (-0.72)	-0.066 (-0.37)	-0.370 (-1.43)	0.192 (0.57)
Post (indicator) × High ROA (indicator)	0.024 (0.17)	0.039 (0.24)	0.043 (0.26)	-0.374 (-1.12)
High ROA (indicator)	-0.034 (-0.36)	-0.078 (-0.67)	0.012 (0.07)	-0.243 (-1.21)
Post (indicator)	-0.036 (-0.47)	-0.031 (-0.38)	-0.051 (-0.57)	0.049 (0.29)
Director Characteristics in Table III	No	Yes	Yes	Yes
Firm Characteristics in Table III	Yes	Yes	Yes	Yes
Year and Firm Fixed Effects	Yes	Yes	Yes	Yes
Observations	236	236	111	112
R-squared	0.314	0.349	0.639	0.659
Adj. R-squared	-0.020	-0.033	0.077	0.031

Panel G. Using R&D /Assets (CAPEX / Assets) as the Dependent Variable

Independent Variable	R&D / assets				CAPEX / assets			
	Full Sample		Subsample		Full Sample		Subsample	
	(1)	(2)	High Diversity (3)	Low Diversity (4)	(5)	(6)	High Diversity (7)	Low Diversity (8)
Partial Dissent (indicator) × Post × Overinvest (indicator)	0.006 (0.50)	-0.004 (-0.41)	-0.015 (-1.04)	0.018 (1.23)	-0.692 (-1.48)	-0.544 (-1.64)	0.064 (0.54)	-1.018 (-1.00)
Partial Dissent (indicator) × Post	-0.007 (-1.07)	-0.001 (-0.27)	0.003 (0.63)	-0.012 (-1.54)	0.253 (0.95)	0.074 (0.53)	-0.024 (-0.42)	0.058 (0.15)
Partial Dissent (indicator) ×	-0.003 (-0.25)	0.006 (0.71)	0.026* (1.74)	-0.019 (-1.39)	0.321 (0.78)	0.141 (0.55)	-0.066 (-0.44)	-0.513 (-0.70)
Post (indicator) × Overinvest	-0.007 (-0.52)	-0.000 (-0.01)	0.014 (1.08)	-0.028** (-2.68)	0.794 (1.66)	0.905** (2.54)	0.094 (0.83)	1.470** (2.35)
Post (indicator)	0.006 (0.99)	0.004 (0.74)	-0.005 (-1.05)	0.016*** (3.17)	-0.393 (-1.48)	-0.416** (-2.55)	-0.064 (-1.24)	-0.529** (-2.10)
Overinvest (indicator)	-0.001 (-0.14)	-0.008 (-0.89)	-0.022 (-1.70)	0.023** (2.23)	-0.508 (-1.30)	-0.398* (-1.90)	-0.179 (-1.51)	-0.400 (-0.72)
Director Characteristics in Table III	0.006	-0.004	-0.015	0.018	-0.692	-0.544	0.064	-1.018
Firm Characteristics in Table III	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Year and Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R-squared	232	232	112	107	234	234	112	109
	0.853	0.872	0.733	0.939	0.777	0.818	0.606	0.828