# **Board Diversity and Director Dissent in Corporate Boards**

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> > January 3, 2017

# Abstract

While several studies examine how differences in director characteristics impact firm-level performance outcomes, there is limited evidence that heterogeneous boards affect firm value by offering diverse opinions. This is partly due to data availability on the process and outcome of board decisions. We utilize Korean data on individual director voting at board meetings to directly measure director dissent as evidence of diversity of opinion. We find that directors in heterogeneous boards are more likely to vote against management proposals and reject them. Firms that experience proposal rejection exhibit lower return volatility, consistent with independent directors restricting CEO influence. Firm value implications of director dissent and proposal rejection varies depending on firm complexity and industry dynamism. Our results suggest that board diversity, by increasing dissenting opinions and proposal rejections, affects firm performance.

We thank Amy Dittmar, E. Han Kim, and seminar participants at Baruch College, Korea University, Peking University (HSBC), and Tsinghua University for helpful comments.

# 1. Introduction

Corporate failures attributed to groupthink or rubberstamping by board of directors have led to advocacy for greater board diversity on several dimensions. Many countries have adopted quotas for female directors or placed restrictions on director tenure to achieve this goal. Institutional investors have also demanded such changes. To test whether increasing diversity on the board has its intended outcomes, several studies relate measures of board diversity with firm performance and find a mixed relationship.<sup>1</sup> Few studies, however, are able to directly measure the diversity of opinion that is apparent in dissenting votes on board proposals. By merely linking board diversity to firm performance, prior studies could not examine whether diverse boards affect firm performance by providing different opinions and changing the outcomes of board meetings.

In this paper, we present new evidence on the relationship between board heterogeneity, diversity of opinions, and firm-level outcomes by analyzing individual director voting data. We use a comprehensive dataset of management proposals and individual director votes from Korean listed firms. Since 2001, Korean law mandates detailed disclosure of outside directors' activities, which include their votes on board meeting agenda. These disclosures are included in the proxy statement filed prior to shareholder meetings. Companies follow a standard disclosure format by reporting the date of the board meeting, specifics of each proposal, individual directors' votes, and the outcome of the vote, as in the example provided in Appendix A. This level of disclosure is unavailable in most capital markets, with the exception of China.

The first question we address is whether heterogeneous boards—measured as the diversity of age, tenure, industry experience, nationality, and gender among board members—are more

<sup>&</sup>lt;sup>1</sup> These studies include Anderson, Reeb, Upadhyay, and Zhao (2011), Ahern and Dittmar (2012), Knyazeva, Knyazeva, and Raheja (2014), Coles, Daniel, and Naveen (2015), Bernile, Bhagwat, and Yonker (2016), Eckbo, Nygaard, and Thorburn (2016), and Giannetti and Zhao (2016).

likely to vote against management proposals. Our purpose is to test the commonly held belief that diversity on the board is desirable because directors representing a broader range of perspectives will offer different opinions to the board. Using detailed proposal-level director voting data, we test and find that directors are more likely to dissent when boards consist of directors of different characteristics and experience. Thus, we provide evidence supporting the current trend towards increased board diversity. These results are largely robust to controlling for director fixed effects and observable director characteristics, suggesting that director dissent is not merely a reflection of personal trait but also a result of group dynamics.

Next, we examine whether board diversity increases the probability of proposal rejection, deferral, or modification. Analyses at the proposal level show that board diversity has a positive relation to proposal rejection. This relation may seem obvious from the previous analysis showing that diverse boards are more likely to dissent. However, prior studies show that director dissent does not necessarily have real impact on the voted proposal. Jiang et al. (2016), with Chinese director dissenting data, find that 92% of director dissents do not materialize into proposal rejection. Accordingly, they interpret dissenting as independent directors' attempt to convey information rather than a means to prevent a specific proposal. Schwartz-Ziv and Weisbach (2013), using a proprietary dataset of board minutes in Israeli government-owned firms, also find that even when directors voice a concern during discussions, they vote with management eventually. In our sample, in the majority of cases where there is at least one dissenting vote, the proposal is rejected, deferred, or modified, suggesting an active monitoring role of independent directors. To further mitigate endogeneity concerns, we apply an instrumental variable approach focusing on the variation in board diversity due to absence—on the assumption that attendance is uncorrelated with directors'

opinion on proposals but affects the diversity of the group present at the meeting—and find that board diversity positively affects probability of proposal rejection.

Lastly, we examine the relation between director dissent, proposal rejection, and firm-level outcomes. Based on prior studies (Sah and Stiglitz 1985, 1991; Adams, Almeida, and Ferreira 2005; Cheng 2008; Bernile et al. 2016), we predict and find that firms experiencing proposal rejection have lower stock return volatility. Our result suggests that independent directors are able to prevent erratic management decisions by dissenting in the boardroom. Given that directors may also reject risky proposals that may later turn out to be successful, we do not have a clear prediction on the directional relationship between proposal rejection and firm value. Thus, we focus on crosssectional variations of firm complexity and industry dynamism that may affect the cost and benefits of proposal rejection. We find that proposal rejection has net benefits to firm value for more complex firms where it is beneficial to incorporate a diverse information set and has net costs in dynamic industries where it may be costly to forgo opportunities.

In the U.S., disagreement among board of directors is not publicly disclosed and only observed in extreme cases: when a director resigns expressing dissent (Agrawal and Chen 2011; Dewally and Peck 2010; Marshall 2010) or when there is a lawsuit against board actions. Researchers have relied on other observable director characteristics to proxy for the level of disagreement or diversity of opinion within the board. Coles et al. (2015) uses the average of director-pairs' overlapping tenure as a measure of group dynamics, representing both groupthink and teamwork depending on its effect on firm value. Anderson et al. (2011) and Bernile et al. (2016) develop a board diversity index based on six director characteristics: age, gender, race, education, experience, and tenure. Knyazeva et al. (2014) uses similarity among directors in terms of industry experience, number of other board seats, and stock ownership, and Giannetti and Zhao

(2016) uses dispersion of director ethnicity. These studies, because they rely on director characteristics and cannot observe director behavior in the boardroom, offer limited evidence on whether boards of directors actually provide diverse opinions and alter managers' proposals.

Studies on director dissent or voting, presumably due to data availability rely on analytical models (Warther 1998; Malenko 2014; Chemmanuer and Fedaseyeu 2016; Drymiotes and Sivaramakrishnan 2016). As for empirical studies, several of them exploit the Chinese disclosure requirements on director opinion (Tang, Du, and Hou 2013; Du, Hou, and Tang 2015; Ma and Khanna 2016) and director votes (Jiang, Wan, and Zhou 2016; Zhu, Ye, Tucker, and Chan 2016). Schwartz-Ziv and Weisbach (2013) access proprietary board minutes in Israeli government-owned firms and examines directors' taking initiative against management during meetings for a small number of firms. However, the above mentioned studies do not approach director voting behavior as an outcome of board dynamics but as individual director behavior. An exception is Schwartz-Ziv (2016), which finds in Israeli government-owned firms that boards are more likely to take action when there are more than three female directors and emphasizes the effect of a critical mass.

While the studies listed above provide insights into the inner-workings of boards, we believe the Korean setting is better suited than the Chinese or Israeli to examine our research question. First, directors are less sensitive to political and reputational considerations than in China, reducing concerns of dissenting as a public statement (Jiang et al. 2016; Du et al. 2015). Jiang et al. (2016) find that 92% of proposals with director dissent get passed and interpret it as Chinese directors' dissent intended not to reject management proposals but to inform management and investors, a form of "passive monitoring". However, in Korea, conditional on at least one director dissent, proposals pass as-is in only 27% of the cases; in the majority of cases they are rejected, deferred, or modified. Also, the fact that a dissenting vote may not be publicized immediately due

to delays in disclosure requirements, reduces concern of dissenting to make public pressure on management.

Second, corporate governance rules and ownership structures in Korea are comparable to those in developed economies. In our sample, the average board is majority independent as firms with KRW 2 trillion (about USD 2 billion) or more of total assets are mandated by law to have majority independent boards. In contrast, Chinese law only requires one-third independence of the board with most firms merely meeting the threshold; Jiang et al. (2016) reports an average 35% independence of the board. This exacerbates the previous point about director dissent not having real consequences on management proposals. Also, major Chinese companies are state-owned and the CEO and board members are appointed by the government. As for Israeli government owned firms, all directors are appointed by a government official rather than through a shareholder vote. Thus, we believe the implications of our study are better generalizable to developed economies.

While we have detailed information about director voting for each proposal, in this paper we focus on the firm-year level outcomes rather than examine the impact of each proposal separately. It is difficult to tie a direct relationship between specific action of director dissent and shareholder value on average for a number of reasons. First, multiple proposals are voted on and approved in the same board meeting, confounding the relationship between each proposal and stock price. Second, voting information is not immediately disclosed and delayed until shareholder meetings. Thus, it is difficult to determine when investors become aware of a board decision. Third, the benefits of director dissent may go beyond averting specific projects. Director dissent can improve overall governance because managers that experience director dissent or proposal rejection would perceive more monitoring and behave as better agents. By examining a direct measure of directors' contribution to the decision-making process, based on individual director voting, and its firm value implications, we contribute to the literature on board composition and its effect on firm-level outcomes. We find that heterogeneous boards in terms of age, tenure, and industry experience are more likely to dissent and reject management proposals. We also provide evidence on the active monitoring role of directors by dissenting against management proposals and rejecting, deferring, or modifying the proposals. Further, we explore the value implications of board heterogeneity and find that director dissent and proposal rejection has firm-level outcomes. In sum, we show that diversity of opinion within the board has real impact to the firm by voting on and altering management proposals.

The paper proceeds as follows. Section 2 describes the board structures and director voting data in Korea. Section 3 investigates whether board diversity affects director dissent and proposal rejection. Section 4 presents results on how board diversity affects firm-level outcomes through director dissent and proposal rejection. Section 5 concludes.

# 2. Data

#### 2.1. Korean Boards and Director Voting Disclosures

Listed firms in Korea are mandated by law to disclose in proxy statements the activities of independent directors. Disclosed activities include whether an independent director attended each board meeting and how they voted on each proposal. As of 2016, the disclosure is 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 corporate transparency in the aftermath of the Asian financial crisis.<sup>2</sup>

Companies follow a standard disclosure format where the board meeting date, proposals put forward for consideration, each outside directors' vote or absence, and final outcome of the vote is listed by board meeting date (see Appendix A).<sup>3</sup> We hand-collect data on individual board of directors' voting results for the KOSPI 200, a stock index that includes 200 blue chip stocks and accounts for about 90% of total market capitalization, during 2001-2014.<sup>4</sup> Filings are retrieved from DART, an electronic filing system similar to SEC EDGAR. The disclosure mandate came into effect in early 2001 and thus required certain firms to report board activity during 2000. But until 2001, many firms have inconsistent or incomplete disclosures regarding director votes so we drop earlier years. We also drop financials and utilities in our analysis; but the inferences are unchanged if we include them in the sample.

We obtain individual director information such as age, gender, nationality, education, occupation, and director tenure from TS-2000, a database based on companies' annual reports and maintained by the Korea Listed Companies Association and supplement with hand collection. We merge director voting data with individual director characteristics. Financial statement numbers and stock price data are from TS-2000 and Compustat Global. TS-2000 and Compustat are merged

<sup>&</sup>lt;sup>2</sup> Other related efforts to increase independent director monitoring included requiring all listed companies to reach at least 25% board independence (in 1998) and requiring large firms with KRW 2 trillion or more of total assets to have at least 50% board independence (in 2001).

<sup>&</sup>lt;sup>3</sup> Final vote outcomes are sometimes not disclosed in the proxy statements but in annual reports. We check both filings during data collection.

<sup>&</sup>lt;sup>4</sup> During our sample period, there are several corporate governance reforms that may have affected boards' voting behavior. In 2004, the board independence requirement for firms with KRW 2 trillion or more of total assets was increased from at least 50% to more than 50%. In 2010, financial firms were recommended to adopt 5 year tenure limits for independent directors and some non-financials have followed. To ensure robustness of our results to exogenous changes in board composition, we re-rerun our analyses without the affected firms and find consistent results.

using the 6-digit ticker used by Korean listed firms, available in Compustat as part of the ISIN identifier. We include financial and utility firms in our sample for completeness. Following these procedures yields one of the most comprehensive databases used for academic research on individual director voting.<sup>5</sup> Our sample consists of 1,916 firm-year observations, 1,528 outside directors, 43,622 proposals, and 136,071 votes. The number of observations reported in our regression tables are less than the total number of votes or proposals due to complete separation in estimation.

One limitation of the data is that we can only observe outside directors' individual voting information. Inside directors' votes are not required to be disclosed. Inside directors generally include the CEO and other high ranking executives who play an active role in forming proposals. Thus, they have the least interest in dissenting on the proposals in board meetings. Based on this argument, we treat all inside directors' votes to be for all the proposals.

### 2.2. Summary Statistics

Table 1 presents the summary statistics of the variables used in our study. In Panel A, we report on the characteristics of outside directors in our sample. An outside director dissents on average 0.90 times during the sample period. Those who dissent tend to dissent on multiple proposals. Outside directors' primary occupation is professors (25%), attorneys (11%), and accountants (7%). Foreign directors (2%) and female directors (2%) are significantly less represented compared to the U.S. or other major economies. The average director is born in 1949 and are around the ages of 50 to 70. 9% of directors serve on multiple boards.

<sup>&</sup>lt;sup>5</sup> A policy paper, Kim and Lee (2015), provides descriptive statistics on outside directors' dissent for 100 firms during 2010-2012.

Panel B describes board characteristics, including our measures of board diversity at the firm-year level. We construct multiple complementary measures of board diversity based on directors' age, tenure, industry experience, nationality, and gender. Age Dispersion is our first board diversity measure, calculated as the standard deviation of director age. Directors of different age may have different levels of monitoring ability and incentive. Jiang et al. (2016) suggest younger directors have stronger reputation concerns and exhibit a higher likelihood of dissenting on management proposals. Also, directors in our sample are a mix early-life experience—growing up during the Korean War, as post-war baby boomers, or experiencing rapid economic development-which has been suggested to be relevant to risk preferences. Tenure Dispersion, standard deviation of director tenure within a board, is our next measure of board diversity, which represents heterogeneity in one dimension of director experience. Directors with longer tenure have more knowledge regarding the firm but those with shorter tenure are able to provide fresh perspectives. Another dimension of director experience we consider is *Experience Dispersion*, one minus the sum of squared industry experience share for a board in a given year; essentially the Herfindahl index of industry experience among directors. The industry share is the tenureweighted number of incumbent directors with board experience in each industry divided by the total number of industries that incumbent directors served a board. Work experience from a variety of industries can bring more diverse views to board decisions. For measures of Gender Dispersion and *Nationality Dispersion*, we construct a dummy that equals one if the director is female and non-Korean, respectively. Only 2% of all directors non-Korean and only 2% are female as reported in Panel A and thus variation is limited in these dimensions. However, because boards are primarily run by Korean male directors, not only can female or foreign directors bring different perspectives, it can change the group dynamics of the board. Lastly, we create dummies for each

dimension of diversity, equals one if the measure is greater than the sample median, and construct a firm-year level diversity index by summing up all five components (*Diversity Index*).

Board characteristics include additional descriptive statistics at the firm-year level. Boards have eight directors on average with the average board having a slight majority (53%) of independent directors. Large Korean firms, with KRW 2 trillion or more of total assets, are required to have 50% (during 2001–2004) or majority (after 2004) independent boards and it seems that firms, on average, barely meet the threshold. Also, because smaller firms are only required to have at least 25% independent directors, even when all outsiders vote against a proposal, it may still be approved.<sup>6</sup> Firms have on average 12 board meetings a year, much more than around eight per year for U.S. firms. This may be due to the ease of scheduling, as most board members live within an hour from the firm. About 23 proposals are voted on board meetings in a year, of which a very small portion, about 1%, is rejected, deferred, or modified. Attendance rates are usually over 90%.

Panel C includes firm characteristics. We examine three firm-level outcomes: stock return volatility, Tobin's Q, and ROA. We include basic firm characteristics such as size, leverage, and ROA and governance controls such as *Foreign Ownership* and *Chaebol* affiliation. Firm complexity is proxied by calculating the log of one plus the number of business segments (*Log(Segments)*) and industry dynamics is defined as industries with above median sales growth and below median change in the number of firms (*Matured Industry*) and the total number of M&A

<sup>&</sup>lt;sup>6</sup> Article 391 of the Commercial Act requires all board decisions to have an affirmative vote of a majority of directors present where a majority of the full board constitutes a quorum. Most firm-years in our sample follow this rule 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 have requirements for 50% or higher board independence, outside directors have the power to reject a management proposal. Also, the Commercial Act was amended in April 2011 to require an affirmative vote of two-thirds of directors present for approval of proposals related to related-party transactions and again in April 2012 to require the same threshold for proposals related to the corporate opportunity doctrine.

transactions divided by the total number of firms in an industry in a given year (*Ind. Merger Intensity*). Variable definitions are also listed in Appendix B.

Table 2 provides descriptions on proposals that receive at least one dissenting vote. Dissenting incidents are sorted by industry (Panel A), by year (Panel B) and by type of proposal (Panel C). Proposal types are classified into 12 categories by searching for keywords in the proposal description. The keywords for each category is reported in Appendix B. Dissents are most pronounced in the manufacturing, entertainment, and communication sectors. Dissents are fairly evenly distributed across years ranging from 0% to 2% of director votes. Dissents are most frequent on issues of internal governance, which include manager compensation, by-law amendment, and board structure. Next most frequent is dissents on investments. The percentages reported to the right of the panels represent the outcome of the dissents. If at least one director dissents on a proposal, it has a chance of getting rejected, deferred, or conditionally approved (i.e., modified). However, there also exist cases where proposal has dissenting votes but passes as-is despite the dissenting vote. About 73% of proposals conditional on at least one dissenting director is rejected, deferred, or conditionally approved. This is a stark contrast to 92% of proposals being approved despite at least one dissenting vote in China (Jiang et al. 2016). Because a dissenting vote has real impact on vote outcome, we believe that dissenting by Korean directors is not confined to individual director reputational or career concerns.

# 3. Board Diversity, Director Dissent, and Proposal Rejection

# 3.1. Board Diversity and Individual Director Dissent

The first question we address in this paper is whether heterogeneity among board of directors results in more director dissent by encouraging critical scrutiny of management proposal

during board meetings. Diverse perspectives and expertise from board heterogeneity can provide incentives for directors to voice out. Experimental studies have shown that diversity groups make better decisions because they are more receptive of dissenting opinions (Phillips and Loyd 2006) and also prompt members to prepare more anticipating greater disagreement (Loyd, Wang, Phillips, and Lount 2013). This is an important empirical question to test given that initiatives to increase board diversity generally rely on the argument that it would lead to diverse opinions and active discussion on the board.

In this section, we report vote-level regression results on the relation between measures of board diversity and individual directors' dissent. It is important to analyze individual-director level voting behavior to overcome endogeneity in board composition by focusing on within-director variation in board diversity. To identify the relation, we estimate the following specification:

## $Logit(Dissent_{ijkt}) = \alpha + \beta Board Diversity_{jkt} + \gamma Control + \varepsilon_{ijt}$

where *Dissentijkt* equals 1 if director *i* in firm *j* dissents on the proposal *k* at time *t*. *Board Diversity* is measured in various dimensions: age, tenure, industry experience, nationality, and gender. *Control* variables include basic firm characteristics such as size, leverage, and ROA and governance related variables such as board size, board independence, foreign ownership, and a Chaebol dummy. We also include director-specific control variables using dummy variables representing director characteristics and experience: professor, attorney, accountant, MBA, foreign, and gender. Firm fixed effects are included to account for any unobserved time-invariant firm characteristics that can potentially drives the results. Year fixed effects are included to difference away any common time trend affecting director's voting decision such as changes in governance regulations. Robust standard errors are clustered by director to capture time-series correlation in director voting behavior.

We acknowledge the potential endogeneity in having a diverse board and experiencing dissent on management proposals. However, as in Jiang et al. (2016), the endogenous director selection and proposal selection would likely bias our results to find no relation between board diversity and dissenting. In the director selection process, directors who are likely to dissent are more likely to be nominated and appointed by well governed firms. In addition, while board composition is not random it is difficult for a firm to precisely select a certain level of board diversity, especially since we examine multiple dimensions of it. For example, a firm may select an optimal level of board diversity is much harder. In the proposal selection process, managers who have appointed such directors are less likely to put forth proposals that will be voted against. Based on these arguments we believe our results are unlikely to be driven by endogeneity.

Furthermore, there is a potential concern that extensive pre-communication between management and board members prior to the board meeting can affect our results (Malenko 2014). This effect may be especially strong in Korea where management is aware that votes and vote outcomes need to be publicly disclosed. However, unobservable pre-communication effort is also likely to bias our results to find no relation between board diversity and dissenting. Thus, we believe our results provide conservative estimates for the relation between board diversity and director dissent.

Table 3 presents the test on the relationship between board diversity variables and individual directors' voting. Consistent with our hypothesis, higher diversity in age, tenure, industry experience, nationality, and gender among board members increases the likelihood of individual directors' dissent. The economic magnitude of the effect of board diversity is relatively high. For example, the marginal effect of a one unit increase in the *Diversity Index* translates into

about 0.76% increase in dissent. It is a 93% marginal increase in dissents compared to an average dissent probability of 0.81%. The results generally imply that board heterogeneity, along various dimensions, is an important component to induce dissenting.

In Table 4, we add director fixed effects to our estimation to control for any observed and unobserved director-specific characteristics. Our approach differs from Jiang et al. (2016) which includes proposal fixed effects to subsume heterogeneity at the proposal level and capture the effect of individual director characteristics on dissenting. We are interested in the effect of boardlevel diversity and thus estimate how changes in board diversity affects dissenting across proposals while controlling for director level characteristics. Because boards ultimately make decisions as a group, our research is designed to capture the relation between board-level heterogeneity and dissent while controlling for director-specific effects. While individual characteristics may have stand-alone effects on voting behavior, there is also evidence that directors that bring in diversity change the behavior of other directors (Adams and Ferreira 2009).

The coefficients on our board diversity measures are positive and significant, as in the estimation without director fixed effects, with the exception of *Tenure Dispersion* and *Nationality Dispersion*. Among other control variables, *Independence* shows positive relation with higher chance of individual director dissents. In untabulated analyses (Table A1), instead of director fixed effects, we include additional control variables representing individual director incentives: director age, whether it is the directors' first term, and the number of other directorships held. Overall, we find that the coefficients on board diversity measures remain significant and positive. Dissenting votes are not only placed by directors with distinctive characteristics (e.g., female, foreign, or younger directors) but by other directors on the board. Our results suggest that diversity changes the dynamics of the whole board.

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# 3.2. Board Diversity and Proposal Rejection

Next, we examine whether board diversity affects the probability of proposal rejection. Individual directors' dissenting decision does not necessarily lead to proposal rejection. Most firms follow the mandated voting rule requiring the affirmative vote of the majority of attending directors where a majority of the full board constitutes a quorum. Few firms require a majority or higher vote of the full board. Thus, on an average board with slightly majority independence, it would require most independent directors to dissent together to have real consequences on the proposal. It is important to confirm the proposal level outcome to examine whether the dissenting behavior can link to corporate level decision making.

In Table 5, we examine the effect of board diversity on proposal rejection probability. The results indicate that board diversity increases the probability of proposal rejection significantly. The effects from some dimensions of diversity including tenure and nationality become insignificant, as in the case in Table 4 with director fixed effects. However, the *Diversity Index* and other dimensions of diversity are positively associated with proposal rejection at 1-5% significance levels.

These results support an "active monitoring" role by the board of directors by dissenting against management proposals and making real change. Prior evidence of director activity in the boardroom was limited to dissenting as a means to signal problems (Jiang et al. 2016) or expressing disagreement but still voting with management (Schwartz-Ziv and Weisbach 2013). Our evidence suggests that diverse boards raise different opinions and also effectively make change in management proposals.

To further mitigate endogeneity concerns on the relation between board composition and director voting, we examine the variation in board diversity due to changes in the directors present at each board meeting. Specifically, we use attendance as an instrument and apply a two-stage IV probit estimation where the endogenous variable is the diversity of directors present at the meeting.<sup>7</sup> The assumption is that attendance is uncorrelated with their voting decisions: directors do not decide whether to attend a board meeting based on their opinions on the proposals. One concern in using absence as an instrument is that the number of votes required to pass a proposal is affected. If directors vote based on whether a proposal is likely to pass or not, absence would be correlated with director voting behavior. However, we find that directors dissent even in cases where the proposal is passed as-is.

In Table 6, we report the results of the instrumental variable approach. The first three columns report the first stage regression of the potentially endogenous variable (*Diversity Index*) on the instrumental variable (*Absence*). In this analysis, *Diversity Index* is measured at the board meeting level reflecting only the composition of directors present at the meeting. *Absence* is a dummy variable that equals one if an independent director is absent from the board meeting. We find that any absence leads to less diversity of directors present at the meeting (column 1). We also use the absence of the director with the least experience or the director with shortest tenure, which has unambiguous impact of decreasing diversity of directors present at the meeting, and find consistent results (columns 2 and 3). The last three columns report the second stage regression of proposal rejection on the instrumented *Diversity Index*. The instrumented variable captures only the variation in diversity due to attendance. The coefficients on *Diversity Index* is positive and

<sup>&</sup>lt;sup>7</sup> We also consider as an instrument the distance between firm headquarters and regions of diverse director supply, similar to Knyazeva, Knyazeva, and Masulis (2013) and Bernile, Bhagwat, and Yonker (2016). However, most firms are headquartered in Seoul, limiting the variation and travelling time between cities in Korea is short and not likely a significant barrier for director selection.

significant in all three columns, showing the board diversity positively affects proposal rejection. In sum, the instrumental variable approach shows results suggesting that board diversity increases the probability of proposal rejection.

In Table 7, we explore what type of proposals are more likely to be rejected in diverse boards. We have no a priori prediction on what type of proposals are more likely to be rejected by diverse boards. Thus, we examine the interaction between our *Diversity Index* and dummy variables representing the twelve proposal type classifications. The stand-alone *Diversity Index* is positive and significant as in prior analyses. The incremental effect on different types of proposals is significant in five cases. Diverse boards are more likely to reject financing, governance, and legal related proposals and less likely to reject investment related proposals. A reasonable explanation is that board heterogeneity has greater impact on the diversity of opinion regarding general business decisions (financing, governance, and legal) and lesser impact regarding decisions requiring firm-specific information (investment).

### 4. Firm-level Outcomes

#### 4.1. Dissenting and Director Turnover

In this section, we test whether director dissent is followed by more director turnover. This test is partly motivated by the argument that directors vote against proposals prior to departure (Ma and Khanna 2016) or departure is a manifestation of director dissent (Marshall 2010; Fahlenbrach et al. 2015). If independent directors leave the company due to boardroom disputes rather than modify management decisions through board meetings, director dissents would indicate poor governance. In contrast, independent directors expressing dissent and continuing to serve on the board would suggest that dissent leads to positive outcomes.

Using director-firm-year level data, we run logit regressions, reported in Table 8, with *Director Turnover* as the dependent variable, which equals one if there is director turnover in the following year. The variable of interest is *Director Dissent*, which equals one if there was dissenting votes in the board meeting held in the current year. As in previous tests, we include control variables for board and firm characteristics. The coefficient on *Director Dissent* is negative and significant, meaning that dissent is not punished with director departure but rather dissent is followed by less director turnover. This is particularly true if a firm has higher board diversity. With the inclusion of the interaction between board diversity and *Director Dissent*, the stand-alone variable of *Director Dissent* is positive and significant, while the interaction term is negative and significant, supporting our hypothesis that board diversity encourages the director dissents since directors are less likely to be punished after standing against management proposals.

Director turnover can be partially due to tenure limits introduced by the firms. Article 383 of the Commercial Act limits director terms to be less than three years at a time but there are no legal restrictions on reappointments or director tenure. However, the Financial Services Commission, the financial regulator, introduced guidelines recommending a five-year tenure limit to outside directors of financial firms, which many banks and securities firms adopted in their by-laws in 2010. Some firms outside the finance industry also voluntarily adopted tenure limits for independent directors. Thus we repeat the analyses discarding firms with director tenure limits and find no change in results.

This result also alleviates concerns of a particular type of reverse causality. If director turnover increases because independent directors depart as a result of voting against management or as an expression of dissent, board would appoint new directors, thereby increasing diversity in terms of age or director tenure. However, our evidence shows that dissenting reduces director turnover, despite the potential endogeneity attenuating the strength of our findings.

# 4.2. Proposal Rejection and Return Volatility

We investigate the relation between director voting and firm volatility based on the premise that a firm is riskier if management decisions are approved and implemented without board monitoring. Based on arguments in prior studies (Sah and Stiglitz 1985, 1991; Adams et al. 2005; Cheng 2008; Bernile et al. 2016), we predict firms that experience proposal rejection have lower stock return volatility. Independent directors, in their primary role as monitors of management, are more likely to vote against risky proposals rather than urge the CEO to take greater risk. In the Korean setting, directors also lack economic incentive to risk shift because most outside directors are not awarded equity nor encouraged to hold shares in the firm. Based on these arguments, we run the following firm-year level regressions.

# *Return Volatility*<sub>*jt*</sub> = $\alpha + \beta$ *Proposal Rejection*<sub>*jt*</sub> + $\gamma$ *Control* + $\varepsilon_{jt}$

where *Return Volatility* is measured as standard deviation of stock returns in year *t* multiplied by the squared root of 252 and *Proposal Rejection* is a dummy representing whether there was a rejected, deferred, or modified proposal in year *t*.

As reported in Table 9, we find that proposal rejection is related to lower return volatility. The coefficient estimate on *Proposal Rejection* is -0.034, which is a 7.5% decrease where return volatility in an average firm-year is 0.45. Our results are consistent with our prediction and also with prior studies (Adams et al. 2005; Cheng 2008; Bernile et al. 2016). An exception is Giannetti and Zhao (2016) which suggests that diverse opinions in the boardroom will increase firm volatility. However, we believe that preventing erratic proposals will reduce volatility rather than induce risk-taking.

We re-run the analysis by replacing *Proposal Reject* with *Director Dissent*, to see whether dissenting alone has an effect on firm-level outcomes. The coefficient estimates are negative, consistent with results using *Proposal Reject* but are not statistically significant. We interpret this result as director dissent having impact on firm-level outcomes mainly through proposal rejection rather than indirectly through "passive" monitoring.

# 4.3. Proposal Rejection and Firm Value

Lastly, to provide evidence between board diversity and firm value, we investigate the effect of proposal rejection on firm value. We focus on the firm-year level relationship between proposal rejection and firm value rather than examine stock price reactions to individual proposal outcomes for several reasons. First, it is difficult to isolate the market response to proposal outcomes because multiple proposals are voted on in a board meeting and it is unclear when investors become aware of voting results due to the delay in disclosure. Also, there is the possibility that director dissents on a specific proposal may lead to increased monitoring overall. Thus, we examine the relationship between proposal rejection and outcomes at the firm-year level.

Prior literature provides no clear prediction on the direction of the relationship between proposal rejection and firm value (Adams et al. 2005; Cheng 2008; Bernile et al. 2016). Thus, we focus more on cross-sectional differences based on the argument that the net effect of rejecting proposals can be beneficial or costly for firms depending on firm environments. We examine two such variations. First, when the firm is more complex, we believe there should be benefits to providing diverse input into decision-making. Second, when the industry is more competitive or dynamic, we believe costs to slower or more diligent decision-making dominate. To measure the complexity of the firm, we use the number of business segments collected from TS-2000 and transformed as the log of one plus the number. To capture the industry dynamism we use two measures: a proxy for matured industry from Maksimovic and Phillips (2008) and industry merger intensity, calculated as the number of asset purchases and sales within an industry.

In Table 10, we show that proposal rejection in itself has no significant relationship with industry adjusted ROA (column 1) or industry adjusted Tobin's Q (column 5). Next, we interact proposal rejection to measures of firm complexity and industry dynamism. The coefficient on the interaction between proposal rejection and *Log(Segments)* is positive for both dependent variables (in columns 2 and 6), implying that diversity of opinion and proposal rejection is beneficial in complex firms. When interacting proposal rejection with our proxy for matured industries, the coefficient is positive and significant (in column 3), suggesting that proposal rejection has positive performance implications. Consistent with this result, when examining industry merger intensity, the coefficient is negative (albeit insignificant when the dependent variable is ROA), suggesting that in dynamic industries it may be costly to prevent management decisions from being implemented.

# 5. Conclusion

In this study, we provide evidence on the link between board diversity and firm-level outcomes by directly observing directors' voting. We measure board diversity in dimensions of age, tenure, industry experience, nationality, and gender. We find that on boards with greater diversity, individual directors are more likely to dissent on management proposals and the board is more likely to reject, defer, or modify the proposals. Firms that experience such modifications to proposals exhibit lower stock return volatility, consistent with independent directors actively

preventing manager's risk projects. The firm value implications of director dissent and proposal rejection varies depending on firm complexity and industry dynamism.

We believe our results based on director voting data provide more direct evidence on the relationship between board composition and firm performance. Research linking board diversity to firm-level outcomes have not been able to explain clearly why board diversity matters. Our study shows that having directors with different characteristics on the board leads to voting against management and rejecting proposals. Diverse directors provide different opinions in board meetings, consistent with the arguments by advocates for more diverse boards.

In addition, our study emphasizes an active monitoring role by independent directors. We show that when directors dissent on management proposals, they are more likely than not to make a real change to the outcome of the proposal. Thus, directors' voting is not merely a signal of directors' reputational concern but gets reflected into firm policies and ultimately into stock prices. In the U.S., because of data availability, researchers have been able to observe director dissent only as a last resort when a director departs the board. In China, where director voting data is publicly available, director dissent reflects passive monitoring by signaling governance problems but has no real impact on the voted proposal. Our study demonstrates how, in boards with diverse directors, director dissent has real impact on voted proposals.

However, we note a limitation arising from the nature of the data. Directors and managers in Korea are aware that directors' votes become public information and thus may behave differently than in countries with no such disclosure requirements. For example, managers may be more likely to engage in pre-communication with outside directors and drop proposals prior to board meetings that are unlikely to pass unanimously. Malenko (2014) models communication among directors as an endogenous outcome determined by group dynamics and other external

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factors. Our discussions with several board members sitting on Korean public companies confirm that pre-communication occurs. Still, we find a proportion of proposals that are voted against, rejected, and reported as such in public filings, which suggests that dissenting votes represent, at the least, extreme differences in opinion.

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

Appendix A. Example of director voting and vote outcome disclosure

Translated from NAVER Corp. proxy statement (Mar 14, 2013).

Original filing in Korean available at http://dart.fss.or.kr/dsaf001/main.do?rcpNo=20130314000290

Voting Measures		
Director Dissent	:	equals one if the director votes against the proposal
Total Dissent	:	total number of dissent votes by an outside director during the
		sample period
Proposal Reject	:	equals one if the proposal is rejected, deferred, or modified; zero if
		the proposal is passed as-is
Diversity Measures		
Age Dispersion	:	the standard deviation of the ages of independent directors
Tenure Dispersion	:	the standard deviation of director within-firm tenure
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 a board;
Nationality Dispersion	:	equals one if the director is not Korean
Gender Dispersion	:	equals one if the director is female
Diversity Index	:	the sum of five dummy variables, where each dummy represents
		the five diversity measure above. Each dummy equals one if the
		diversity measure is greater than the sample median
Firm-level Variables		
		log of the total number of directors on the board
Log(Board Size)	:	log of the total number of directors on the board
Log(Board Size) Independence	:	ratio of independent directors on the board
Log(Board Size) Independence Return Volatility	:	ratio of independent directors on the board annualized standard deviation of daily stock returns
Log(Board Size) Independence Return Volatility Tobin's Q	::	ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by
Log(Board Size) Independence Return Volatility Tobin's Q	:	ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by total assets
Log(Board Size) Independence Return Volatility Tobin's Q Ind-adj. Tobin's Q	: : : :	ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by total assets Tobin's Q minus industry median Tobin's Q in a given year
Log(Board Size) Independence Return Volatility Tobin's Q Ind-adj. Tobin's Q Size	::	ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by total assets Tobin's Q minus industry median Tobin's Q in a given year log of total assets
Log(Board Size) Independence Return Volatility Tobin's Q Ind-adj. Tobin's Q Size Leverage	::	ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by total assets Tobin's Q minus industry median Tobin's Q in a given year log of total assets book value of total liabilities divided by total assets
Log(Board Size) Independence Return Volatility Tobin's Q Ind-adj. Tobin's Q Size Leverage ROA	: : : : :	ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by total assets Tobin's Q minus industry median Tobin's Q in a given year log of total assets book value of total liabilities divided by total assets net income divided by total assets
Log(Board Size) Independence Return Volatility Tobin's Q Ind-adj. Tobin's Q Size Leverage ROA Ind-adj. ROA	· · · · · · · · · · · · · · · · · · ·	ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by total assets Tobin's Q minus industry median Tobin's Q in a given year log of total assets book value of total liabilities divided by total assets net income divided by total assets ROA minus industry median ROA in a given year
Log(Board Size) Independence Return Volatility Tobin's Q Ind-adj. Tobin's Q Size Leverage ROA Ind-adj. ROA Industry Competition		ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by total assets Tobin's Q minus industry median Tobin's Q in a given year log of total assets book value of total liabilities divided by total assets net income divided by total assets ROA minus industry median ROA in a given year one minus the industry Herfindahl index based on sales
Log(Board Size) Independence Return Volatility Tobin's Q Ind-adj. Tobin's Q Size Leverage ROA Ind-adj. ROA Industry Competition Foreign Ownership		ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by total assets Tobin's Q minus industry median Tobin's Q in a given year log of total assets book value of total liabilities divided by total assets net income divided by total assets ROA minus industry median ROA in a given year one minus the industry Herfindahl index based on sales percentage ownership by foreign institutions
Log(Board Size) Independence Return Volatility Tobin's Q Ind-adj. Tobin's Q Size Leverage ROA Ind-adj. ROA Industry Competition Foreign Ownership Chaebol		ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by total assets Tobin's Q minus industry median Tobin's Q in a given year log of total assets book value of total liabilities divided by total assets net income divided by total assets ROA minus industry median ROA in a given year one minus the industry Herfindahl index based on sales percentage ownership by foreign institutions equals one if the firm is classified by the Fair Trade Commission
Log(Board Size) Independence Return Volatility Tobin's Q Ind-adj. Tobin's Q Size Leverage ROA Ind-adj. ROA Industry Competition Foreign Ownership Chaebol		ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by total assets Tobin's Q minus industry median Tobin's Q in a given year log of total assets book value of total liabilities divided by total assets net income divided by total assets ROA minus industry median ROA in a given year one minus the industry Herfindahl index based on sales percentage ownership by foreign institutions equals one if the firm is classified by the Fair Trade Commission as an affiliated of a business group
Log(Board Size) Independence Return Volatility Tobin's Q Ind-adj. Tobin's Q Size Leverage ROA Ind-adj. ROA Industry Competition Foreign Ownership Chaebol		ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by total assets Tobin's Q minus industry median Tobin's Q in a given year log of total assets book value of total liabilities divided by total assets net income divided by total assets ROA minus industry median ROA in a given year one minus the industry Herfindahl index based on sales percentage ownership by foreign institutions equals one if the firm is classified by the Fair Trade Commission as an affiliated of a business group log of one plus the number of business segments
Log(Board Size) Independence Return Volatility Tobin's Q Ind-adj. Tobin's Q Size Leverage ROA Ind-adj. ROA Industry Competition Foreign Ownership Chaebol Log(Segments) Matured Industry		ratio of independent directors on the board ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by total assets Tobin's Q minus industry median Tobin's Q in a given year log of total assets book value of total liabilities divided by total assets net income divided by total assets ROA minus industry median ROA in a given year one minus the industry Herfindahl index based on sales percentage ownership by foreign institutions equals one if the firm is classified by the Fair Trade Commission as an affiliated of a business group log of one plus the number of business segments equals one if the firm is in an industry with above median sales
Log(Board Size) Independence Return Volatility Tobin's Q Ind-adj. Tobin's Q Size Leverage ROA Ind-adj. ROA Ind-adj. ROA Industry Competition Foreign Ownership Chaebol Log(Segments) Matured Industry		ratio of independent directors on the board ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by total assets Tobin's Q minus industry median Tobin's Q in a given year log of total assets book value of total liabilities divided by total assets net income divided by total assets ROA minus industry median ROA in a given year one minus the industry Herfindahl index based on sales percentage ownership by foreign institutions equals one if the firm is classified by the Fair Trade Commission as an affiliated of a business group log of one plus the number of business segments equals one if the firm is in an industry with above median sales growth and below median change in the number of firms
Log(Board Size) Independence Return Volatility Tobin's Q Ind-adj. Tobin's Q Size Leverage ROA Ind-adj. ROA Industry Competition Foreign Ownership Chaebol Log(Segments) Matured Industry Ind. Merger Intensity		ratio of independent directors on the board annualized standard deviation of daily stock returns sum of market value of equity and book value of debt divided by total assets Tobin's Q minus industry median Tobin's Q in a given year log of total assets book value of total liabilities divided by total assets net income divided by total assets ROA minus industry median ROA in a given year one minus the industry Herfindahl index based on sales percentage ownership by foreign institutions equals one if the firm is classified by the Fair Trade Commission as an affiliated of a business group log of one plus the number of business segments equals one if the firm is in an industry with above median sales growth and below median change in the number of firms total number of M&A transactions divided by the total number of

# Appendix B. Variable definitions

# Director-level Variables

DirectorAge	:	irector age in multiples of 10 years						
FirstTerm	:	uals one if the director is in the first-term						
Busy	:	quals one if the director serves more than one independent irectorships in a certain year						
# Directorships	:	total number of directorships that a director serves as an						
		independent director in a certain year						
Foreign	:	equals one if the director is not Korean						
Professor	:	equals one if the director is a professor						
Attorney	:	equals one if the director is an attorney						
Accountant	:	equals one if the director is an accountant						
MBA	:	quals one if the director has an MBA degree						
Director Turnover	:	equals one if the director is replaced in a lead (next) year						

# Proposal Type Classification Keywords (examples)

Investments	:	invest, divest, spin-off, merger, acquire, new entity, asset sale
Financing	:	finance, offering, borrow, treasury stock, dividend, credit line
Personnel Appointment	:	appoint, nominate, dismiss, officer, promote
Internal Governance	:	compensation, bonus, by-laws, committee, ethics, authority
Financial Reporting	:	accounting estimate, write-off, revaluation, financial report
Legal	:	lawsuit, license, registration
Shareholder Meeting	:	annual meeting, shareholder list, meeting minutes
Budgeting	:	budget, revised supplementary budget
Strategy	:	alliance, management plan, operating plan, strategy
Related Party	:	related party transaction, self-dealing, guarantee
Contracting	:	contract, service agreement, cancel, extension
Other	:	donate, relocation, etc.

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# **Table 1: Summary Statistics**

This table presents summary statistics of director voting, board characteristics, director characteristics, and firm variables used in this paper for 182 major Korean listed companies (KOSPI 200 index companies excluding financials and utilities) from 2001-2014. All variable definitions are in Appendix B.

Panel A. Director	Mean	SD	10th	Median	90th	Ν				
Director Characteristics:										
Total Dissent	0.90	3.30	0.00	0.00	2.00	1,528				
Birthyear	1949	8.21	1939	1949	1960	1,528				
Female	0.02	0.12	0.00	0.00	0.00	1,528				
Foreign	0.02	0.13	0.00	0.00	0.00	1,528				
Professor	0.25	0.43	0.00	0.00	1.00	1,528				
Attorney	0.11	0.31	0.00	0.00	1.00	1,528				
Accountant	0.07	0.25	0.00	0.00	0.00	1,528				
MBA	0.08	0.25	0.00	0.00	0.00	1,528				
International	0.23	0.41	0.00	0.00	1.00	1,528				
Director-Year Characteristi	Director-Year Characteristics:									
DirectorAge	5.93	0.75	4.90	6.00	6.80	5,383				
Log(Age)	4.07	0.13	3.89	4.09	4.22	5,383				
Log(Tenure)	1.36	0.68	0.69	1.39	2.30	5,383				
FirstTerm	0.07	0.26	0.00	0.00	0.00	5,383				
Busy	0.09	0.29	0.00	0.00	0.00	5,383				
#Directorship	1.10	0.34	1.00	1.00	1.00	5,383				

Panel B. Board	Mean	SD	10th	Median	90th	N
Diversity Measures:						
Diversity Index	1.37	0.98	0.00	1.00	3.00	1,916
Age Dispersion	4.69	3.81	0.00	4.16	9.62	1,916
Tenure Dispersion	1.29	1.32	0.00	1.00	3.20	1,916
Experience Dispersion	0.20	0.24	0.00	0.00	0.56	1,916
Nationality Dispersion	0.02	0.08	0.00	0.00	0.08	1,916
Gender Dispersion	0.01	0.04	0.00	0.00	0.00	1,916
Board Characteristics:						
Board Size	7.92	1.34	5.00	8.00	11.00	1,916
Independence	0.53	0.20	0.22	0.56	0.80	1,916
# of Annual Meetings	12.42	8.35	5.00	10.00	22.00	1,916
# of Annual Proposals	23.23	15.88	8.00	20.00	41.00	1,916
# of Rejected Proposals	0.01	0.02	0.00	0.00	0.00	1,916
Attendance Rate	0.84	0.22	0.52	0.92	1.00	1,916

# Table 1: Summary Statistics (Continued)

Panel C. Firm	Mean	SD	10th	Median	90th	N
Return Volatility	0.45	0.17	0.29	0.42	0.64	1,916
Tobin's Q	1.31	0.88	0.70	1.08	2.12	1,916
Ind-adj. Tobin's Q	0.07	0.48	-0.34	0.00	0.48	1,916
Industry Q (median)	1.25	0.75	0.77	1.08	1.73	1,916
Size	14.21	1.45	12.35	14.12	16.22	1,916
Leverage	0.44	0.19	0.19	0.45	0.68	1,916
ROA	0.06	0.11	-0.01	0.05	0.13	1,916
Ind-adj. ROA	0.00	0.11	-0.05	0.00	0.06	1,916
Industry Competition	0.52	0.27	0.00	0.62	0.82	1,916
Foreign Ownership	0.20	0.17	0.01	0.17	0.45	1,916
Chaebol	0.52	0.50	0.00	1.00	1.00	1,916
Log(Segments)	0.52	0.49	0.00	0.69	1.10	1,916
Matured Industry	0.49	0.50	0.00	0.00	1.00	1,916
Industry Merger Intensity	0.08	0.08	0.00	0.06	0.17	1,916

# **Table 2: Descriptive Statistics on Dissented Proposals**

This table presents descriptive statistics of director dissents by industry, year and proposal type for 182 major Korean listed companies (KOSPI200 index companies excluding financial and utility companies) from 2001-2014. Percent Dissent is calculated based on number of dissents divided by the total number of votes. Pr(Reject | Dissent) is the percentage of proposal rejection conditional on at least one dissenting vote.

Industry	Distribution of	Number of	Percent	Total Number	Pr(Reject
Classification	Dissents	Dissents	Dissent	of Votes	Dissent)
<b>Business Service</b>	0.0%	0	0.0%	307	0.0%
Construction	4.8%	54	0.6%	8,797	76.2%
Entertainment	20.8%	232	7.8%	2,978	81.6%
High Tech	2.7%	30	0.2%	12,093	77.8%
Manufacturing	52.4%	584	0.7%	85,319	74.0%
Personal Service	2.1%	23	3.2%	716	81.8%
Publishing and Communication	12.3%	137	1.6%	8,493	62.9%
Retail and Whole	4.7%	52	0.4%	13,323	62.5%
Transportation	0.2%	2	0.1%	3,723	0.0%
Other	0.0%	0	0.0%	322	0.0%
Total	100.0%	1,114	0.8%	136,071	73.0%

Panel A. Dissents by Industry

# Panel B. Dissents by Year

Voor	Distribution of	Number of	Percent	Total Number	Pr(Reject
rear	Dissents	Dissents	Dissent	of Votes	Dissent)
2001	7.5%	83	1.7%	4,810	87.5%
2002	6.5%	72	1.0%	7,073	94.1%
2003	7.8%	87	1.1%	8,032	78.6%
2004	5.1%	57	0.6%	9,232	61.5%
2005	10.0%	111	1.2%	9,171	67.6%
2006	6.2%	69	0.7%	9,595	58.8%
2007	10.0%	111	1.1%	10,411	77.8%
2008	8.4%	94	0.8%	11,581	85.0%
2009	5.4%	60	0.5%	12,250	43.8%
2010	7.5%	84	0.7%	11,522	60.0%
2011	9.2%	103	0.8%	12,582	69.6%
2012	12.6%	140	1.0%	14,490	83.3%
2013	3.9%	43	0.3%	13,004	75.0%
2014	0.0%	0	0.0%	2,318	0.0%
Total	100.0%	1114	0.8%	136,071	73.0%

# Table 2: Descriptive Statistics on Dissented Proposals (Continued)

Proposal Type	Distribution of Dissents	Number of Dissents	Percent Dissent	Total Number of Votes	Pr(Reject   Dissent)
1. Investments	27.9%	311	2.3%	13,308	68.3%
2. Financing	9.3%	104	0.7%	15,291	70.4%
3. Personnel Appointment	3.5%	39	0.3%	14,193	62.5%
4. Internal Governance	33.5%	373	3.3%	11,432	85.3%
5. Financial Reporting	3.2%	36	0.4%	9,104	50.0%
6. Legal	0.8%	9	1.7%	521	66.7%
7. Shareholder Meeting	2.5%	28	0.4%	7,773	50.0%
8. Budgeting	1.3%	15	3.1%	482	75.0%
9. Strategy	2.4%	27	1.1%	2,570	85.7%
10. Related Party Transaction	4.9%	55	0.5%	10,284	72.2%
11. Contracting	2.1%	23	0.3%	7,886	55.6%
12. Other	8.4%	94	0.2%	43,227	82.4%
Total	100.0%	1114	0.8%	136,071	73.0%

# Panel C. Dissents by Proposal

# **Table 3: Board Heterogeneity and Director Dissent**

This table reports the logit regression results on the relation between board diversity measures and director dissent. Observations are at the proposal-director level. The sample consists of 1,528 independent directors in 182 major Korean listed companies included in the KOSPI200 index from 2001-2014. *Director Dissent* is a dummy variable that equals one if the director votes against the proposal. Variables on board diversity are defined in Appendix B. Director Controls include *Female, Foreign, Professor, Attorney, Accountant,* and *MBA*. Year and firm fixed effects are included. *t*-statistics (in parenthesis) are based on robust standard errors and are clustered by director. \*\*\*, \*\*, and \* indicate statistical significance at 1%, 5% and 10% level, respectively.

	Dep. variable = Director Dissent							
	(1)	(2)	(3)	(4)	(5)	(6)		
Diversity Index	0.428***							
	(5.24)							
Age Dispersion		0.0921**						
		(2.49)						
<b>Tenure Dispersion</b>			0.249***					
			(2.92)					
<b>Experience</b> Dispersion				1.706***				
				(4.01)				
Nationality Dispersion					4.236***			
					(3.38)			
Gender Dispersion						11.57**		
						(2.31)		
Log(Board Size)	0.0673	-0.0262	0.214	0.0902	-0.0161	0.223		
	(0.18)	(-0.07)	(0.54)	(0.22)	(-0.04)	(0.57)		
Independence	1.048*	0.373	1.010*	0.420	0.444	1.433*		
	(1.88)	(0.66)	(1.68)	(0.76)	(0.84)	(1.81)		
Size	0.773***	0.914***	0.686**	0.861***	1.026***	0.809***		
	(2.84)	(3.26)	(2.19)	(3.19)	(3.87)	(2.76)		
Leverage	-0.230	-0.708	-0.0904	-0.484	-0.351	-0.463		
	(-0.29)	(-0.86)	(-0.11)	(-0.61)	(-0.44)	(-0.61)		
ROA	-1.848**	-2.388***	-1.873**	-1.872**	-1.515*	-1.910**		
	(-2.15)	(-2.65)	(-2.05)	(-2.05)	(-1.72)	(-2.27)		
Foreign Ownership	-3.441***	-3.517***	-3.459***	-3.159***	-4.056***	-3.464***		
	(-5.38)	(-5.53)	(-4.77)	(-4.90)	(-5.74)	(-5.11)		
Chaebol	-0.279	-0.450	-0.0754	-0.396	-0.414	-0.210		
	(-0.35)	(-0.56)	(-0.08)	(-0.51)	(-0.50)	(-0.25)		
Director Controls	Yes	Yes	Yes	Yes	Yes	Yes		
Year FE	Yes	Yes	Yes	Yes	Yes	Yes		
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes		
Observations	52,481	52,481	52,481	52,481	52,481	52,481		
Pseudo R-squared	0.171	0.167	0.167	0.169	0.167	0.167		

## Table 4: Board Heterogeneity and Director Dissent with Director Fixed Effects

This table reports the logit regression results on the relation between board diversity measures and director dissent, including director fixed effects. Observations are at the proposal-director level. The sample consists of 1,528 independent directors in 182 major Korean listed companies included in the KOSPI200 index from 2001-2014. *Director Dissent* is a dummy variable that equals one if the director votes against the proposal. Variables on board diversity are defined in Appendix B. Director Controls include *Female, Foreign, Professor, Attorney, Accountant,* and *MBA*. Year, and director fixed effects are included. *t*-statistics (in parenthesis) are based on robust standard errors and are clustered by director. \*\*\*, \*\*, and \* indicate statistical significance at 1%, 5% and 10% level, respectively.

		De	p. variable =	Director Diss	ent	
	(1)	(2)	(3)	(4)	(5)	(6)
Diversity Index	0.417***					
	(4.26)					
Age Dispersion		0.0982**				
		(2.08)				
<b>Tenure Dispersion</b>			0.139			
			(1.64)			
Experience Dispersion				1.700***		
				(3.18)		
Nationality Dispersion					0.879	
					(0.77)	
Gender Dispersion						11.30***
						(3.05)
Log(Board Size)	-0.00473	0.210	0.146	0.235	0.183	0.392
	(-0.01)	(0.58)	(0.39)	(0.63)	(0.50)	(1.05)
Independence	1.501**	0.894	1.083	1.299*	0.995	1.338*
	(2.27)	(1.32)	(1.55)	(1.77)	(1.44)	(1.73)
Size	0.323**	0.341**	0.320**	0.305**	0.326**	0.306**
	(2.15)	(2.42)	(2.34)	(2.17)	(2.38)	(2.08)
Leverage	-1.488**	-1.635**	-1.300*	-1.297*	-1.401**	-1.461*
	(-2.11)	(-2.35)	(-1.76)	(-1.79)	(-1.97)	(-1.83)
ROA	-2.162*	-2.016	-1.706	-1.461	-1.609	-1.594
	(-1.72)	(-1.61)	(-1.39)	(-1.20)	(-1.35)	(-1.33)
Foreign Ownership	-0.556	-0.275	-0.282	-0.0208	-0.215	-0.403
	(-0.56)	(-0.29)	(-0.27)	(-0.02)	(-0.22)	(-0.37)
Chaebol	-0.719*	-0.742*	-0.895**	-0.953***	-0.811**	-0.708*
	(-1.92)	(-1.89)	(-2.11)	(-2.62)	(-2.00)	(-1.72)
Director Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Director FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	52,481	52,481	52,481	52,481	52,481	52,481
Pseudo R-squared	0.129	0.131	0.131	0.133	0.125	0.133

# **Table 5: Board Heterogeneity and Proposal Rejection**

This table reports the logit regression results on the relation between board diversity measures and proposal rejection. Observations are at the proposal level. The sample consists of 12,556 proposal in 182 major Korean listed companies included in the KOSPI200 index from 2001-2014. *Proposal Rejection* is a dummy variable that equals one if the proposal is rejected, deferred, or modified; zero if the proposal is passed asis. Variables on board diversity are defined in Appendix B. Director Controls include the average percentage of directors of *Female, Foreign, Professor, Attorney, Accountant,* and *MBA*. Year, and firm fixed effects are included. *t*-statistics (in parenthesis) are based on robust standard errors and are clustered by firm-year. \*\*\*, \*\*, and \* indicate statistical significance at 1%, 5% and 10% level, respectively.

		Dep. variable = Proposal Reject								
	(1)	(2)	(3)	(4)	(5)	(6)				
Diversity Index	0.388***									
	(3.20)									
Age Dispersion		0.0928**								
		(1.97)								
<b>Tenure Dispersion</b>			0.164							
			(1.51)							
Experience Dispersion				2.402***						
				(4.05)						
Nationality Dispersion					7.474***					
					(2.70)					
Gender Dispersion						7.070				
						(1.26)				
Log(Board Size)	0.609	0.520	0.681	0.593	0.533	0.639				
	(1.12)	(0.92)	(1.24)	(1.04)	(0.99)	(1.13)				
Independence	0.873	0.501	0.905	0.0989	0.231	0.960				
	(0.87)	(0.48)	(0.82)	(0.10)	(0.22)	(0.89)				
Size	-0.536	-0.332	-0.624	-0.274	-0.118	-0.584				
	(-1.14)	(-0.69)	(-1.13)	(-0.62)	(-0.25)	(-1.14)				
Leverage	-0.173	-0.695	0.0536	-0.752	0.0521	0.000848				
	(-0.14)	(-0.52)	(0.04)	(-0.60)	(0.04)	(0.00)				
ROA	-2.586*	-3.144**	-2.498*	-2.773*	-2.201	-2.582*				
	(-1.73)	(-2.11)	(-1.68)	(-1.72)	(-1.42)	(-1.76)				
Foreign Ownership	-1.829*	-1.906*	-1.356	-1.961*	-2.854**	-1.486				
	(-1.71)	(-1.78)	(-1.16)	(-1.86)	(-2.44)	(-1.30)				
Chaebol	1.057	1.090	1.133	0.893	1.191	1.086				
	(1.05)	(0.94)	(0.93)	(0.98)	(1.04)	(0.89)				
<b>Director Controls</b>	Yes	Yes	Yes	Yes	Yes	Yes				
Year & Firm FE	Yes	Yes	Yes	Yes	Yes	Yes				
Observations	12,786	12,786	12,786	12,786	12,786	12,786				
Pseudo R-squared	0.144	0.141	0.139	0.148	0.145	0.139				

# Table 6: Instrumental Variable Approach using Variation in Diversity due to Absence

This table reports two-stage IV probit regressions. Observations are at the proposal level. The sample consists of 12,556 proposal in 182 major Korean listed companies included in the KOSPI200 index from 2001-2014. *Proposal Rejection* is a dummy variable that equals one if the proposal is rejected, deferred, or modified; zero if the proposal is passed as-is. Variables on board diversity are defined in Appendix B. Director Controls include the average percentage of directors of *Female, Foreign, Professor, Attorney, Accountant,* and *MBA*. Year, and firm fixed effects are included. *t*-statistics (in parenthesis) are based on robust standard errors and are clustered by firm-year. \*\*\*, \*\*, and \* indicate statistical significance at 1%, 5% and 10% level, respectively.

	First Stage:	Dep. variable = Div	versity Index	Second Stage	: Dep. variable = Pr	oposal Reject
	(1) Any Absence	(2) Absence: Min Experience	(3) Absence: Min Tenure	(1) Any Absence	(2) Absence: Min Experience	(3) Absence: Min Tenure
IV: Absence	-0.060***	-0.162***	-0.173***		L · · · · ·	
	(-4.58)	(-10.80)	(-11.52)			
EV: Diversity Index				1.447***	1.058***	1.172***
				(8.20)	(3.60)	(5.18)
Log(Board Size)	0.546***	0.554***	0.560***	-0.714***	-0.484**	-0.559***
	(23.44)	(24.62)	(24.82)	(-4.80)	(-2.08)	(-2.87)
Independence	0.587***	0.604***	0.601***	-0.083	0.575	0.415
	(15.88)	(16.41)	(16.35)	(-0.20)	(1.32)	(1.07)
Size	0.139***	0.136***	0.134***	-0.175***	-0.104*	-0.122**
	(20.37)	(20.03)	(19.71)	(-3.88)	(-1.66)	(-2.26)
Leverage	0.248***	0.260***	0.273***	-0.584***	-0.645**	-0.654***
	(5.98)	(6.35)	(6.63)	(-3.16)	(-2.37)	(-2.58)
ROA	-0.410***	-0.407***	-0.402***	-0.049	-0.632	-0.528
	(-6.13)	(-6.26)	(-6.19)	(-0.10)	(-0.85)	(-0.77)
Foreign Ownership	0.556***	0.560***	0.564***	-0.868***	-0.699**	-0.757***
	(11.43)	(11.56)	(11.62)	(-4.89)	(-2.53)	(-3.08)
Chaebol	0.073***	0.073***	0.074***	-0.351***	-0.464***	-0.446***
	(5.70)	(5.71)	(5.79)	(-3.50)	(-5.40)	(-5.29)
Director Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	12,786	12,786	12,786	12,786	12,786	12,786

# Table 7: Board Heterogeneity and Proposal Rejection by Proposal Type

This table reports the logit regression results on the relation between board diversity measures and proposal rejection by proposal type. Observations are at the proposal level. The sample consists of 12,556 independent directors in 182 major Korean listed companies included in the KOSPI200 index from 2001-2014. The distribution of director dissents by proposal types are reported in Panel 3 of Table 2. *Proposal Rejection* is a dummy variable that equals one if the proposal is rejected, deferred, or modified; zero if the proposal is passed as-is. Variables on board diversity are defined in Appendix B. Director Controls include the average percentage of directors of *Female, Foreign, Professor, Attorney, Accountant,* and *MBA*. Firm Controls include *Log(Board Size), Independence, Size, Leverage, ROA., Foreign Ownership,* and *Chaebol.* Year, and firm fixed effects are included. *t*-statistics (in parenthesis) are based on robust standard errors and are clustered by director-level. \*\*\*, \*\*, and \* indicate statistical significance at 1%, 5% and 10% level, respectively.

	Dep. variable = Proposal Reject						
	(1)	(2)	(3)	(4)	(5)	(6)	
Diversity Index	0.441***	0.361***	0.397***	0.297***	0.378***	0.378***	
	(4.71)	(3.90)	(4.32)	(2.90)	(4.03)	(4.10)	
Diversity $\times$ Proposal_Invest	-0.273*						
	(-1.73)						
Proposal_Invest	1.501***						
	(4.69)						
Diversity $\times$ Proposal_Financing		0.499**					
		(2.44)					
Proposal_Financing		-1.194**					
		(-2.27)					
Diversity $\times$ Proposal_Appointment			-0.122				
			(-0.43)				
Proposal_Appointment			-0.920				
			(-1.42)				
Diversity $\times$ Proposal_Governance				0.412***			
				(2.71)			
Proposal_Governance				0.412			
				(1.19)			
Diversity $\times$ Proposal_Reporting					0.185		
					(0.68)		
Proposal_Reporting					-1.293**		
					(-2.06)		
Diversity $\times$ Proposal_Legal						0.704**	
						(2.15)	
Proposal_Legal						-0.865	
						(-0.93)	
Director Controls	Yes	Yes	Yes	Yes	Yes	Yes	
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes	
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	
Observations	12,786	12,786	12,786	12,786	12,786	12,786	
Pseudo R-squared	0.158	0.146	0.151	0.171	0.147	0.144	

		Dep	. variable =	Proposal R	eject	
	(7)	(8)	(9)	(10)	(11)	(12)
Diversity Index	0.396***	0.391***	0.395***	0.382***	0.398***	0.400***
	(4.27)	(4.23)	(4.27)	(4.07)	(4.30)	(4.30)
Diversity $\times$ Shareholder_Meeting	-0.336					
	(-1.08)					
Proposal Shareholder_Meeting	0.0269					
	(0.05)					
Diversity $\times$ Proposal_Budgeting		-0.202				
		(-0.38)				
Proposal_Budgeting		0.689				
		(0.65)				
Diversity $\times$ Proposal_Strategy			-0.183			
			(-0.54)			
Proposal_Strategy			0.522			
			(0.71)			
Diversity $\times$ Related_Transaction				0.0915		
				(0.35)		
Proposal_Related_Transaction				0.364		
				(0.71)		
Diversity $\times$ Proposal_Contracting					-0.318	
					(-1.01)	
Proposal_Contracting					0.693	
					(1.38)	
Diversity $\times$ Proposal_Others						-0.233
						(-0.89)
Proposal_Others						0.862
						(1.46)
Director Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	12,786	12,786	12,786	12,786	12,786	12,786
Pseudo R-squared	0.145	0.144	0.144	0.145	0.144	0.145

 Table 7: Board Heterogeneity and Proposal Rejection by Proposal Type (Continued)

### **Table 8: Director Dissents and Board Turnover**

This table reports the logit regression results on the relation between director dissent and board turnover. Observations are at the director-firm-year level. The sample consists of 1,576 independent directors in 182 major Korean listed companies included in the KOSPI200 index from 2001-2014. *Director Turnover* is a dummy variable that equals one if the director is replaced in the following year. *Director Dissent* is a dummy variable that equals one if the director votes against any proposal in a certain year. *Proposal Reject* is a dummy variable that equals one if the director votes against any proposal in a certain year and end up rejected. Variables on board diversity are defined in Appendix B. Unreported Director Controls include *Female, Foreign, Professor, Attorney, Accountant,* and *MBA.* Firm Controls include *Log(Board Size), Independence, Size, Leverage, ROA., Foreign Ownership,* and *Chaebol.* Year, and firm fixed effects are included. *t*-statistics (in parenthesis) are based on robust standard errors and are clustered by director. \*\*\*, \*\*\*, and \* indicate statistical significance at 1%, 5% and 10% level, respectively.

	D	ep. variable = D	Director Turnov	er
	(1)	(2)	(3)	(4)
Director Dissent	-0.722**	0.397		
	(-2.27)	(0.70)		
Diversity Index $\times$ Director Dissent		-0.595**		
		(-1.96)		
Proposal Reject			-0.703**	0.275
			(-2.09)	(0.45)
Diversity Index $\times$ Proposal Reject				-0.518*
				(-1.69)
Diversity Index		0.0407		0.0227
		(0.35)		(0.19)
DirectorAge	-0.401***	-0.409***	-0.405***	-0.413***
	(-2.83)	(-2.86)	(-2.85)	(-2.89)
FirstTerm	1.687***	1.726***	1.692***	1.727***
	(4.20)	(4.20)	(4.21)	(4.20)
#Directorship	0.180	0.182	0.177	0.179
	(0.74)	(0.73)	(0.72)	(0.72)
Log(Director Exp)	0.728***	0.745***	0.723***	0.740***
	(3.73)	(3.76)	(3.70)	(3.73)
Log(Director Tenure)	1.400***	1.404***	1.401***	1.404***
	(6.40)	(6.38)	(6.39)	(6.36)
Director Controls	Yes	Yes	Yes	Yes
Firm Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	4,412	4,412	4,412	4,412
Pseudo R-squared	0.174	0.177	0.174	0.176

# **Table 9: Proposal Rejection and Return Volatility**

This table reports on the relation between director dissents and stock return volatility. The sample consists of 182 major Korean listed companies included in KOSPI200 index from 2001-2014. The dependent variable is firm-level *Return Volatility*, annualized daily stock return volatility. *Proposal Reject* is a dummy variable that equals one if a firm has any rejected proposal in a certain year. *Director Dissent* is a dummy variable that equals one if a firm has any dissent vote in a certain year. Variables are defined in Appendix B. Year, and industry fixed effects are included. *t*-statistics (in parenthesis) are based on robust standard errors. \*\*\*, \*\*, and \* indicate statistical significance at 1%, 5% and 10% level, respectively.

	Return Volatility							
	(1)	(2)	(3)	(4)	(5)	(6)		
Proposal Reject	-0.034**	-0.030**	-0.032**					
	(-2.26)	(-2.04)	(-2.15)					
Director Dissent				-0.014	-0.014	-0.017		
				(-0.98)	(-1.06)	(-1.24)		
Size		-0.013***	-0.008**		-0.013***	-0.009**		
		(-3.96)	(-1.97)		(-4.04)	(-2.07)		
Leverage		0.263***	0.223***		0.263***	0.224***		
		(12.19)	(9.84)		(12.21)	(9.84)		
ROA		0.054*	0.054*		0.055*	0.055*		
		(1.77)	(1.78)		(1.80)	(1.81)		
Tobin's Q		0.016**	0.019***		0.016**	0.020***		
		(2.41)	(2.83)		(2.41)	(2.86)		
Industry Q		-0.022**	-0.022**		-0.022**	-0.022**		
		(-1.98)	(-2.00)		(-1.98)	(-2.00)		
Industry Competition		0.020	0.012		0.021	0.012		
		(0.38)	(0.23)		(0.39)	(0.24)		
Foreign Ownership			-0.027**			-0.027**		
			(-2.04)			(-2.09)		
Log(Board Size)			0.090***			0.089***		
			(4.50)			(4.46)		
Independence			-0.118***			-0.118***		
			(-4.41)			(-4.41)		
Chaebol			-0.011			-0.009		
			(-1.18)			(-1.02)		
Year FE	Yes	Yes	Yes	Yes	Yes	Yes		
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes		
Observations	1,916	1,916	1,916	1,916	1,916	1,916		
Adj. R-squared	0.340	0.395	0.408	0.339	0.394	0.407		

# **Table 10: Proposal Rejection and Firm Performance**

This table reports on the relation between proposal rejection and firm performance. The sample consists of 182 major Korean listed companies included in the KOSPI200 index from 2001-2014. The dependent variables are *Industry Adjusted ROA* and *Industry Adjusted Tobin's Q. Proposal Reject* is a dummy variable that equals one if a firm has any rejected proposal in a certain year. Director Controls include the average percentage of directors of *Female, Foreign, Professor, Attorney, Accountant,* and *MBA*. Firm Controls include *Log(Board Size), Independence, Size, Leverage, Foreign Ownership,* and *Chaebol.* Year, and industry fixed effects are included. *t*-statistics (in parenthesis) are based on robust standard errors. \*\*\*, \*\*\*, and \* indicate statistical significance at 1%, 5% and 10% level, respectively.

	Dep.	Dep. variable = Industry Adj. ROA				Dep. variable = Industry Adj. Tobin's Q		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Proposal Rejection	-0.006	-0.019*	-0.008	-0.005	-0.049	-0.144**	-0.045	0.034
	(-0.89)	(-1.91)	(-1.18)	(-0.53)	(-1.07)	(-2.47)	(-0.94)	(0.59)
Log(Segments) × Proposal Rejection		0.024*				0.185*		
		(1.93)				(1.76)		
Log(Segments)		-0.004				-0.004		
		(-1.14)				(-0.10)		
Matured Industry × Proposal Rejection			0.026***				-0.047	
			(2.61)				(-0.66)	
Matured Industry			-0.006				0.007	
			(-1.27)				(0.19)	
Ind. Merger Intensity $\times$ Proposal Rejection				-0.015			-0.047	-1.072**
				(-0.24)				(-2.36)
Industry Merger Intensity				0.000				0.247
				(0.01)				(1.38)
Director Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916
Adj. R-squared	0.064	0.064	0.065	0.064	0.076	0.077	0.076	0.077

#### Table A1: Board Heterogeneity and Director Dissent with Director Individual Incentives

This table reports the logit regression results on the relation between board diversity measures and director dissent, including variables for director individual incentives: director age, FirstTerm, #Directorship. Observations are at the proposal-director level. The sample consists of 1,528 independent directors in 182 major Korean listed companies included in the KOSPI200 index from 2001-2014. *Director Dissent* is a dummy variable that equals one if the director votes against the proposal. Variables on board diversity are defined in Appendix B. Director Controls include *Female, Foreign, Professor, Attorney, Accountant,* and *MBA*. Firm Controls include *Log(Board Size), Independence, Size, Leverage, Foreign Ownership,* and *Chaebol.* Year, and firm fixed effects are included. *t*-statistics (in parenthesis) are based on robust standard errors and are clustered by director. \*\*\*, \*\*, and \* indicate statistical significance at 1%, 5% and 10% level, respectively.

		Dep	b. variable $=$ l	Director Diss	ent	
	(1)	(2)	(3)	(4)	(5)	(6)
Diversity Index	0.430***					
	(5.28)					
Age Dispersion		0.0904**				
		(2.45)				
Tenure Dispersion			0.250***			
-			(2.93)			
Experience Dispersion				1.789***		
				(4.11)		
Country Dispersion					4.155***	
					(3.34)	
Gender Dispersion						11.68**
-						(2.32)
DirectorAge	-0.0322	-0.0116	-0.008	-0.090	0.001	-0.001
C C	(-0.49)	(-0.17)	(-0.11)	(-1.25)	(0.01)	(-0.02)
FirstTerm	-0.213	-0.112	-0.195	-0.234	-0.103	-0.0822
	(-0.86)	(-0.45)	(-0.80)	(-0.97)	(-0.41)	(-0.35)
#Directorship	0.0754	0.120	0.121	0.0608	0.123	0.157
•	(0.60)	(0.90)	(0.88)	(0.49)	(0.96)	(1.17)
Director Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	52,481	52,481	52,481	52,481	52,481	52,481
Pseudo R-squared	0.171	0.167	0.167	0.169	0.167	0.167