

Outside Director Tenure Length: Expertise-Enhancement versus Entrenchment

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Abstract

This study examines the effect of outside director tenure length on firms' market valuation and the voting behavior of outside directors. We make use of the new rule adopted by the Korean government in 2020 that prohibits outside directors from serving more than six (nine) years in a given firm (business group). We find evidence consistent with the hypothesis that longer tenure entrenches the outside directors than helping them acquire more experience. First, the stock market reacts positively to the announcement of the new rule in firms with outside directors subject to the new tenure limit rule – long-tenured outside directors (LTODs). The effect is greater in poorly-governed firms. Second, outside directors dissent more frequently against management after the rule change. This takes place through the removal LTODs that used to dissent less, the election of new outside directors that dissent more, and the increase in the dissent rates of second-term outside directors who can no longer be re-elected because of the rule change.

Keywords: outside director tenure, tenure limit rules, long-tenured outside directors, board entrenchment, board monitoring, director voting

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1. Introduction

To carry out the role of management oversight, it is essential that outside directors are independent of management. Ensuring their independence, however, is a daunting challenge, which is why many policy measures have been proposed and implemented. Limiting the tenure of outside directors is one of them.

However, the empirical findings of its effect on board independence are mixed. This is mainly due to the two conflicting effects that increase with tenure. On the one hand, an expertise enhancement helps longer-tenured directors better understand the firm's business and history, enabling them to better fulfill their monitoring and advising tasks. On the other hand, there is an entrenchment effect that makes longer-tenured outside directors indifferent to shareholder concerns and gives undue deference to management. In addition to this tradeoff, existing studies lack an exogenous policy shock that can be used to uncover the causal relationship between the length of outside director tenure and firm value.

In this study, we overcome this hurdle by using an exogenous rule change. In 2020, the Korean government adopted an outside director tenure limit prohibiting outside directors from serving more than six (nine) years in a given firm (business group). Using this policy shock, we find evidence consistent with the hypothesis that longer tenure entrenches the outside directors than helping them acquire more experience.

First, the stock market reacts positively to the announcement of the new rule in firms with outside directors subject to the new tenure limit rule – long-tenured outside directors (LTODs). The effect is greater in poorly-governed firms. The stock market also reacts positively to the actual removal of LTODs. The effect is stronger for LTODs that served on audit committees. This is

because the departure of LTODs serving on audit committees was not finalized at the time of the rule announcement. According to the Korean Commercial Act, they were allowed to remain on the board beyond their tenure limit if the firm failed to elect their successors.

Second, we find direct evidence that the monitoring role of outside directors strengthens after the rule change. They dissent against the management more frequently at board meetings. This takes place through three channels: (i) the removal LTODs that used to dissent less than other outside directors; (ii) the election of new outside directors who dissent more than the LTODs that they are replacing; (iii) and the increase in the dissent rates of second-term outside directors who can no longer be re-elected because of the rule change.

Our study contributes to the literature in three ways. First, it investigates the effectiveness of an outside director tenure limit rule that has yet to be documented. Korea is one of many countries that sets a maximum tenure for outside directors. However, we are unaware of any study investigating the effect of such tenure limit rules on the firm value or the voting behavior of outside directors.

Second, we document a causal relationship between the length of outside director tenure and firm value. This is enabled by a policy shock that exogenously mandated firms to limit the tenure of outside directors. Existing studies, however, lack such a shock. They either use instrumental variables or document correlations.

Third, we document how the outside director tenure limit rule increases the frequency of dissent votes by outside directors. This is made possible thanks to the Korean Commercial Act that mandates firms to disclose the detailed voting decisions of outside directors. Existing studies, lacking such data, investigate other outcomes.

The rest of this paper is organized as follows. Section 2 discusses the institutional background. Section 3 reviews the literature and develops the hypotheses. Section 4 discusses the data and Section 5 presents the results. Section 6 concludes.

2. Institutional Background

2.1. Outside director system in Korea

In 1998, the Korea Stock Exchange made it obligatory for listed companies to appoint at least one outside director. In 2000, the Securities and Exchange Act absorbed this listing rule but imposed a higher standard for large-sized listed companies (asset size above 2 trillion won), which had to appoint at least three outside directors and maintain an outside director ratio of 50 percent. Other firms had to appoint at least one outside director and maintain an outside director ratio of 25 percent. The Act also obligated large-sized listed companies to have audit committees (with an independent chair and an outside director ratio of 2/3) and outside director nomination committees (with an outside director ratio of 1/2).

This board structure reform aimed to fix one of the root causes of the 1997 economic crisis – failure of corporate governance – and restore international investors’ confidence in Korea. Prior research documents that the reform was greeted positively in the stock market (Black, Jang, and Kim, 2006; Black and Kim, 2012), moderated the negative effect of related-party transactions (Black, Kim, Jang, and Park, 2015), and improved disclosure practices (Black, Kim, and Nasev, 2021).

2.2. Outside director tenure limit in Korea

Despite such reform, however, Korea continued to score low in corporate governance ratings.

According to CG Watch, a survey undertaken every two years by the Asian Corporate Governance Association (ACGA) in collaboration with Credit Lyonnais Securities Asia (CLSA), Korea ranked only 9th out of 12 Asian countries surveyed in 2016. Incidents of tunneling also continued, the most salient example being the merger between Samsung C&T and Cheil Industries in 2015. Five years later, prosecutors indicted Samsung Electronics Vice Chairman Lee Jae-young and ten other executives for arbitrarily setting the merger ratio in favor of Cheil Industries, in which Lee held significant shares (Kim and Lim, 2020).

Against this backdrop, in September 2019, the Korean government announced a package of corporate governance reform measures, one being the outside director tenure limit. That is, prohibiting outside directors who served over six years in the same listed firm (or over nine years in total in listed firms of the same business group) from being re-elected for another term. This paper labels these outside directors as long-tenured outside directors (LTOD). With this reform, outside directors could no longer be elected for an indefinite number of terms (a maximum term being three years according to the Commercial Act), but only two terms in the case of outside directors with a three-year term. Also, note that Enforcement Decree does not qualify former outside directors to be eligible again after the passage of a certain cooling-off period. When counting the tenure length in a given business group, the years an outside director simultaneously held two outside director positions are not double counted. For example, if an outside director served six years (2014-2020) in one company and six years (2012-2018) in another company in the same business group, the total length of the tenure in this business group is not twelve years, but eight years (2012-2020).

2.3. The impact of outside director tenure limit

This outside director tenure limit required an amendment of the Commercial Act Enforcement Decree, the process of which is outlined in Table 1. Since it is a Presidential Decree, it only had to pass the State Council (presided by the President), which passed the bill on January 21, 2020. The amended Enforcement Decree was promulgated and took effect on January 29, 2020. This meant that the first removal of LTODs occurred in March 2020, when firms with the fiscal year ending in December typically hold their annual general shareholders' meetings (AGMs). Also, note that the Enforcement Decree targets non-financial companies. Financial companies have been subject to the same rule since August 2016 by a separate law named the Act on Corporate Governance of Financial Companies.

Panel A in Table 2 provides the number and the tenure length of LTODs on the boards of companies listed on the KOSPI or KOSDAQ market by the time of the 2020 AGM in March. It also provides how many of them were removed by then. Panel B limits the sample to LTODs who were audit committee members. To calculate the tenure length of LTODs in a given business group, one needs to identify the name of its member firms. Thanks to the Monopoly Regulation and Fair Trade Act, this information is readily available for groups with aggregate assets above 5 trillion won (approximately 3.5 billion USD). For others, such information is not available. Thus, for outside directors serving these smaller business groups, we do not consider the tenure at affiliated firms when calculating their tenure length.

The figures from Table 2 Panel A show that more than one-third of companies (excluding financial or utility firms) had LTODs (629 out of 1,838 firms), and almost one-quarter of outside directors were LTODs (782 out of 3,660). The tenure length is around four years for all outside directors and around nine years for LTODs. However, not all the LTODs were removed by the 2020 AGM in March (380 out of 782). This is because, for a large fraction of LOTDs, the outside

director terms did not expire at the time of the 2020 AGM in March. The new regulation does not require LTODs to step down from the board immediately after the passage of six years in the same firm (or nine years in the same business group). Instead, it prohibits them from being re-elected for another term in the same firm (or in the same business group).

There is another reason why some LOTDs were able to serve the board longer than their tenure limits. According to the Commercial Act, the directors whose term has expired can continue to serve the board without re-election if the company fails to elect the required number of directors prescribed by law or by articles of incorporation. These directors serve the board until their replacements are elected. Such incidents occasionally occurred for outside directors elected as audit committee members. This is because the Commercial Act regulates the number and composition of audit committee members and, at the same time, has a provision that restricts the voting rights of large shareholders, making it difficult for firms to meet the requirements. Specifically, the Commercial Act requires audit committees to be composed of at least three members, two-thirds of which must be outside directors. Also, the Commercial Act does not allow a shareholder, regardless of her shareholdings, to exercise more than 3 percent of total outstanding votes when electing audit committee members from outside directors. The purpose is to elect audit committee members independent of large shareholders. This, however, resulted in an unintended consequence of firms with large controlling shareholders failing to elect audit committee members. That is, failing to secure the required fraction of shareholder approval (at least one-quarter of total votes outstanding and more than half of votes attending the shareholders' meeting). In such incidents, the firm can meet the regulatory requirement by keeping the outside director who was initially scheduled to step down from the board and also be exempt from the KRX penalty provided that it made certain efforts prescribed by the listing rule to attract shareholder attendance (i.e.,

allowing electronic voting, soliciting proxies, and requesting institutional investors to vote).

2.4. Outside director tenure limit in other countries

According to the OECD Corporate Governance Factbook 2021, a non-trivial number of countries have set a maximum tenure for outside directors. However, most countries impose a soft cap. They allow outside directors to serve on the board beyond the limit on passing a special shareholder resolution (e.g., Hong Kong), on winning shareholder approval from a two-tier voting process, where large shareholders and smaller shareholders vote separately (e.g., Singapore and Malaysia), or on observing a certain cooling-off period (e.g., India and Israel) (CFA, 2021; OECD, 2021).

Korea and China, on the contrary, impose a hard cap. In the case of China, outside directors can serve at most six years (Jiang, Wan, and Zhao, 2016). Given that one term of directorship lasts for three years in most companies, this requirement effectively limits independent directors' tenure at one company to no more than two terms. In both countries, there is no special arrangement or a cooling-off period that allows outside directors that have served on the board beyond the limit to be nominated for re-election.

3. Literature review and hypothesis development

3.1. Literature review

Outside director tenure is an important determinant of board effectiveness. However, there are two conflicting views regarding its effect on board performance (Vafeas, 2003). The *expertise-enhancement hypothesis* suggests that longer-tenured directors better understand the firm's business and history, enabling them to better fulfill their monitoring and advising tasks. Conversely, the *entrenchment hypothesis* suggests that seasoned outside directors are more likely to be

indifferent to shareholder concerns and to give undue deference to management.

The empirical findings are also mixed because of this tradeoff between expertise and entrenchment. Vafeas (2003) is the first paper to find evidence supporting the entrenchment hypothesis. He examines the outside directors of Forbes firms in 1994 and finds that the compensation committees with senior directors (i.e., directors with twenty or more years of board service) pay CEOs a significantly higher salary than all others, especially in cases where the CEO is most powerful. Hillman, Shropshire, Certo, Dalton, and Dalton (2011) also support the entrenchment hypothesis. They examine over 2,000 Fortune 500 director nominees in 2005 and find that the tenure of director nominees is positively related to shareholder votes withheld.

On the other hand, Liu and Sun (2010) find evidence supporting the expertise hypothesis. Using firms from 1998 to 2005 in the U.S., they find that the proportion of long-tenured independent directors on the independent audit committee is negatively associated with earnings management. Dou, Sagal, and Zhang (2015) also find evidence supporting the expertise hypothesis. Using U.S. firms from 1998 to 2013, they show that independent directors with extended tenure exhibit a higher level of commitment as they attend more board meetings and take more committee memberships. They also find that firms with a higher proportion of long-tenured directors have lower CEO pay, higher CEO turnover-performance sensitivity, and a smaller likelihood of intentionally misreporting earnings. They also find that these firms are less likely to make acquisitions, while their acquisitions are of higher quality. Bonini, Deng, Ferrari, John, and Ross (2021) also find the merits of having long-tenured outside directors. Using 15 years of S&P1,500 firms and an instrument based on director age at the time of hire, they find that long-tenured outside directors add more value to firms that are complex or mature, have more CEOs during the long-tenured independent director's tenure, and have less entrenched management.

More recently, researchers are putting together the two opposing effects and show that outside director tenure has an inverted U-shaped relationship with board effectiveness. For example, Veltrop, Molleman, Hooghiemstra, and van Ees (2018) use survey responses from 154 directors from 30 Dutch housing corporations and show that outside director's task involvement (measured by peer ratings) is positively related to outside director tenure, but negatively related to its squared term. They also show that this relation is moderated by the strength of the outside director's identification with the firm. For strongly identified outside directors, they show that the negative effect of shorter tenure gets ameliorated, while the negative effect of longer tenure worsens. For weakly identified outside directors, they show that the negative effect of shorter tenure gets worse, while the negative effect of longer tenure gets ameliorated. Huang and Hilary (2018) use S&P 1500 firms for the 1998-2010 period and find that director tenure (i.e., the average tenure of all outside directors) exhibits an inverted U-shaped relation with firm value and accounting performance. They also show that corporate decisions, such as M&A, financial reporting quality, and CEO compensation, have a quadratic relationship with board tenure. They also show that the sudden death of outside directors that moves board tenure away from (toward) the empirically observed optimum level is associated with negative (positive) announcement returns.

There are other strands of research concerning the tenure of outside directors. One line of research investigates the voting behaviors of outside directors when facing a tenure limit. Jiang, Wan, and Zhao (2016) study the voting behaviors of outside directors in China, where a two-term limit is imposed. They find that the directors in their first term are less likely to dissent than those in their second term. They attribute this to first-term outside directors' incentive to please management, which increases their chance of reappointment, and second-term outside directors'

incentive to be recognized as a diligent monitor, which increases their chance of gaining board seats at other companies. Another line of research investigates tenure diversity. For example, Li and Wahid (2018) study U.S. firms from 2000 to 2012 and find that tenure-diverse boards exhibit significantly high CEO performance-turnover sensitivity and that firms with tenure-diverse audit committees are less likely to experience accounting restatements. They also find that tenure-diverse compensation committees also award less excess compensation and are less likely to overcompensate.

3.2. Hypotheses development

In this study, we investigate the consequences of limiting the tenure of outside directors. We do so by asking three related research questions. First, how did the stock market react when the new rule was announced? Second, did the new rule on outside director tenure limit strengthen the monitoring role of outside directors? Third, did the second-term outside directors become better monitors after the rule change, knowing they could no longer be re-elected?

3.2.1. Stock market reactions

We expect the stock market response to depend on the relative dominance of *entrenchment* versus *expertise-enhancement* effects. Suppose the effect of being more entrenched dominates the effect of acquiring more experience with longer tenure. In that case, the stock market should react positively to the announcement anticipating that entrenched long-timers will finally be removed from the board and replaced by less entrenched outsiders. If the opposite is true, the stock market should react negatively, anticipating that experienced senior outside directors will no longer be able to service the board and be replaced by inexperienced novices (**Hypothesis 1**).

Table 3 shows that poorly-governed firms tend to have outside directors with longer tenure. Firms with the KCGS Corporate Governance Index (CGI) rating of D have an average outside director tenure of 7.53 years and an average LTOD fraction of 0.50. In contrast, firms with a rating of A+ have an average tenure length of 3.17 years and an average LTOD fraction of 0.13. This positive association between governance and outside director tenure suggests that the effect of being more entrenched dominates the effect of acquiring more experience with longer tenure and that the stock market reaction would be positive.

We also expect the extent of stock market reactions to be moderated by the quality of corporate governance (**Hypothesis 2**). That is, the valuation effect is smaller in well-governed firms and larger in poorly-governed firms. This is because, in well-governed firms, the expertise-enhancement effect would dominate the entrenchment effect, whereas, in poorly-governed firms, the opposite would be true.

We expect the stock market to react not only to the announcement of the new rule but also to the voting outcomes at the 2020 AGM in March. This is because the departure of LTODs serving on audit committees was not finalized at the time of the rule announcement. As explained in the previous section, they were allowed to remain on the board beyond their tenure limit if the firm failed to elect their successors. Thus, investors had to wait until the 2020 AGM in March to see if they were actually removed or not. We expect the stock market to respond positively to the departure of LTODs serving on audit committees if their entrenchment effect dominates the expertise-enhancement effect (**Hypothesis 3**).

3.2.2. Voting decisions

Next, we ask whether the new rule on the outside director tenure limit strengthened the monitoring role of outside directors. We do this by examining their board meeting votes. That is, how much they voted against management or abstained from voting. Suppose the tenure limit strengthened the monitoring role of outside directors. In that case, the outside directors that were targeted for removal (i.e., LTODs) should show lower incidents of dissent or abstention than those that were not (hereafter, other outside directors) (**Hypothesis 4**). Also, the outside directors that were newly elected (hereafter, newly-elected outside directors (NEODs)) in place of LTODs should show higher incidents of dissent or abstention than the LTODs (**Hypothesis 5**).

We also ask whether second-term outside directors became better monitors after the rule change. We expect first-term outside directors, knowing they need to please the management for re-election, to exhibit low dissent or abstention rates. In contrast, second-term outside directors, knowing they can no longer be re-elected, have higher dissent or abstention rates (**Hypothesis 6**). This analysis confirms the findings of Jiang, Wan, and Zhao (2016).

4. Data

4.1. Sample construction

Of all KOSPI and KOSDAQ listed firms as of March 2020, we exclude financial or utility sector companies from our sample. As mentioned in Section 2, outside directors of financial firms were already subject to a separate tenure limit when the 2020 rule was introduced. Also, many of the utility companies are state-owned that can be subject to different governance rules. This leaves us with 1,837 firms with non-missing financial data. Of these, 629 firms had LTODs by the 2020 AGM in March. As mentioned in Section 2, not all LTODs stepped down from the board. Of these 629 firms, the resignation of LTODs took place in 327 firms, and the resignation of LTODs serving

on audit committees took place in 125 firms. We focus on these sets of firms when conducting our event study analyses for Hypothesis 1 (market reaction to rule change), Hypothesis 2 (moderation effect of governance), and Hypothesis 3 (market reaction to LTOD resignation).

Our voting decision analyses for Hypothesis 4 (LTODs versus other outside directors) use the votes cast by the LTODs and other outside directors on the boards of 629 firms during 2018-2019. The voting decision analyses for Hypothesis 5 (LTODs versus NEODs) use the votes cast by the LTODs on the boards of 629 firms during 2018-2019 and the votes cast by the NEODs on the boards of 291 firms during 2020-2021. Only 46 percent (291/629) of firms with LTODs elected new outside directors at the 2020 AGM in place LTODs. The voting decision analyses for Hypothesis 6 (first versus second-term outside directors) use the votes cast by the first- or second-term outside directors on the boards of 583 firms during 2018-2021. Of the 629 firms with LTODs, 46 neither had first- or second-term outside directors.

4.2. *Variable definitions*

The Appendix table at the paper end lists the variables (with their definitions) used in our study. Here, we highlight only the key variables. Among the variables capturing firm characteristics, *LTOD on Board* takes a value of 1 if at least one long-tenured outside director (LTOD) is on the board, and 0 otherwise. *# of LTOD* is the number of LTODs on the board. *Longest Tenure* is the tenure of the longest-serving outside director on the board. *LTOD Removal* takes a value of 1 if at least one LTOD is removed from the board, and 0 otherwise. *LTOD (Audit) Removal* takes a value of 1 if at least one LTOD that served on the audit committee is removed from the board, and 0 otherwise. CGI is the Corporate Governance Index (CGI) score provided by KCGS (Korea Corporate Governance Service). The scores range from 0 (D) to 5 (A+), with 5 being the highest

governance rating. Note that these are the key explanatory variables in our event study analyses.

Among the variables capturing director characteristics, *Long-Tenured Outside Director* (LTOD) takes a value of 1 if an outside director's tenure is expected to exceed six years at the firm or nine years at the business group by the 2020 annual general shareholders' meeting (AGM) in late March, and 0 otherwise. *Second Term* takes a value of 1 if an outside director is serving one's second term and 0 if serving the first term. It is not defined if serving more than two terms. Note that these are the two key explanatory variables in our voting decision analyses.

Dissent and *Dissent + Abstain* are the two outcome variables used in our voting decision analyses. *Dissent* takes a value of 1 if an outside director voted against a proposal, and 0 otherwise. *Dissent + Abstain* takes a value of 1 if an outside director voted against a proposal or abstained from voting, and 0 otherwise. Along with dissension, we regard vote abstention as an expression of opposition against management. Lastly, in our voting decision regressions, we include proposal-type fixed effects to account for the possibility that *Dissent* or *Dissent + Abstain* rates may differ across different proposal types. We use the classifications adopted by Kang, Kim, and Oh (2022).

4.3. Summary statistics

Table 4 provides the summary statistics of the variables used in this study. Here, we discuss some of the noteworthy statistics. At the time of the 2020 AGM, 34.24 percent of firms had LTODs. The number of LTODs ranged from 0 to 5. The outside director with the longest tenure served the same board for 22 years. 10.83 percent of firms had LTODs serving on their audit committees, and 17.96 percent experienced LOTD resignations. The number of LOTD resignations ranged from 0 to 5. During 2018-2020, the 629 firms with LTODs had a board size ranging from 2 to 26, with an average of 7.4. The fraction of outside directors in these firms ranged from 8.3 percent to 83.3

percent.

During 2018-2020, 38.1 percent of the outside directors were LTODs, and 59.37 percent of the outside directors were serving their second term on the board. During this period, the age of outside directors ranged from 31 to 89, with an average age of 61 and the outside director with the longest tenure served the same board for 23 years. 28.4 percent of outside directors were professors, and 10.16 percent were attorneys. Only 2.3 percent of outside directors were females.

Outside directors cast 79,610 votes during 2018-2020 (i.e., 2018 AGM – 2021 AGM). The average dissent rate was 0.11 percent. The average dissent plus abstain rate was 0.14 percent. Panel A of Table 5 shows a detailed breakdown of these votes by outside director types (long-tenured vs. others) and by year (2018, 2019, 2020, 2021). The number of votes cast by LTODs fell in later years because of their gradual removal from the board. Panel B of Table 5 breaks down the votes by proposal types. Legal and internal governance proposals show the highest dissent plus abstain rates among monitoring-related proposals. Budgeting, investments, and shareholder meeting proposals received the highest dissent plus abstain rates among advisory-related proposals.

4.4. Data sources

Since 2001, the Securities Transaction Act (and since 2009, the Commercial Act) has obligated Korean public firms to disclose the detailed activities of outside directors to the public. These activities include, but are not limited to, the voting decisions of each individual outside director on every board meeting proposal. We hand collect these data from each year's AGM Convocation Notices uploaded on the Data Analysis, Retrieval, and Transfer System (DART), which is an electronic filing system similar to the Electronic Data Gathering and Retrieval (EDGAR) system in the U.S. It should be noted that Korea is one of the very few countries, where individual director-

level voting data are available. We obtain corporate governance ratings from Korea Corporate Governance Service (KCGS) and financial data from TS-2000, a financial database provided by the Korea Listed Companies Association.

5. Results

5.1. Stock market reactions to limiting outside director tenure

Here, we conduct a series of event studies using three different event dates. The first event date (September 5, 2019; hereafter, ‘event date 1’) is when the government first announced its plan to impose an outside director tenure limit. The second event date (January 14, 2020; hereafter, ‘event date 2’) is when the Ministry of Justice published the final amendment bill. We regard this as a separate event date because before this, newspaper reports were speculating that the government might postpone the new rule’s effective date. Moreover, the second event date is cleaner than the first one, which is confounded by the announcement of other corporate governance reform measures in the same reform package. We test Hypotheses 1 and 2 using these two event dates.

The third group of event dates occurred when firms with LTODs held their 2020 AGMs (hereafter, ‘event date 3’). Before this date, it was not perfectly sure that LTODs serving on audit committees would step down from the board. As explained in Section 2, this comes from a feature of the Korean Commercial Act that allows the original board member to keep their board position, even beyond the tenure limit, if the successor fails to get elected. This uncertainty makes the 2020 AGM dates valid event dates. We test Hypotheses 3 using these event dates. See Table 1 for the key dates concerning the Commercial Act Enforcement Decree amendment.

For all of our event study analyses, we compute cumulative abnormal returns (CAR) from a market model that uses KOSPI return as the market return for firms listed on the KOSPI market

and KOSDAQ return for firms listed on the KOSDAQ market. We use an estimation period of [-250, -11]. We compute CAR not only for the treated firms (i.e., the firms with LTODs) but also for their matched firms. Each treated firm is matched with replacement to firms that do not have long-tenured outside directors but operate in the same industry (3-digit Korea SIC for manufacturing firms and 2-digit Korea SIC for others), are among the five nearest firms in terms of firm size ($\ln(\text{market capitalization})$ on the event date), and have firm size differences less than a caliper of 1-SD of pooled $\ln(\text{market capitalization})$.

5.1.1. Event date 1: government plan announcement date (September 5, 2019)

Table 6, Panel A reports the average CARs for firms with long-tenured outside directors (hereafter ‘treated firms’) and their matching firms around event date 1. We have CARs for 598 treated firms (CAR missing for 31 firms that lack a full estimation period) and 2,556 matching firms (5-NN caliper matching for each treated firm). Consistent with Hypothesis 1, the stock market reacts positively to the government announcement for treated firms. The mean values of $\text{CAR}[-1, +5]$ and $\text{CAR}[-1, +10]$ are 0.22% and 0.55%, respectively. However, they are not statistically significant. On the other hand, the stock market reactions to matching firms are all negative and statistically significant. The mean CARs of the two groups of firms are statistically different from each other.

We reconfirm this finding in multivariate regressions. Table 7 presents the estimation results of OLS regressions, where $\text{CAR} [-1, +5]$ around event date 1 are regressed on their determinants. In Columns (1)~(3), we include three LTOD-related variables (*LTOD on Board*, *# of LTOD*, and *Longest Tenure*) separately as determinants. In Columns (4)~(6), we interact them with the KCGS Corporate Governance Index (CGI) scores. The sample includes 3,154 treated and matched firm

observations (1,319 observations with CGI ratings). We control for industry-fixed effects and use standard errors clustered at the firm-year level (due to 5-NN matching with replacement, the same firms may appear multiple times in a given year).

Consistent with Hypothesis 1, the coefficients on LTOD-related variables are all positive and statistically significant at the 1% level (Columns (1)~(3)). Also, consistent with Hypothesis 2, the coefficients on the interaction term between CGI and LTOD-related variables are all negative and statistically significant (Columns (4)~(6)). For example, in Column (4), the coefficient on $LTOD\ on\ Board \times CGI$ is -1.43, whereas the coefficient on *LTOD on Board* is 3.45. This suggests that the stock price of poorly-governed firms ($CGI = 0$) with LTODs jumps by 3.45%, whereas the stock price of well-governed firms ($CGI = 5$) with LTODs drops by 3.70% ($= 3.45 - 1.43 \times 5$).

5.1.2. Event date 2: final bill announcement date (January 14, 2020)

We conduct the same set of tests using event date 2 and find evidence consistent with Hypotheses 1 and 2. First, consistent with Hypothesis 1, we find that the stock market reacts positively to the final bill announcement for treated firms and that the mean CARs of treated and matched firms are statistically different from each other (Table 6, Panel B reports). We reconfirm this finding in multivariate regressions. Table 8 Columns (1)~(3) show that the coefficients on LTOD-related variables are all positive and statistically significant.

Second, consistent with Hypothesis 2, we find that the coefficients on the interaction term between CGI and LTOD-related variables are all negative and statistically significant (Table 8 Columns (4)~(6)). For example, in Column (4), the coefficient on $LTOD\ on\ Board \times CGI$ is -1.54, whereas the coefficient on *LTOD on Board* is 3.79. This suggests that the stock price of poorly-governed firms ($CGI = 0$) with LTODs jumps by 3.79%, whereas the stock price of well-

governed firms ($CGI = 5$) with LTODs drops by 3.91% ($= 3.79 - 1.54 \times 5$).

5.1.3. Event date 3: annual general shareholders' meeting dates (March 2020)

Table 6, Panel C reports the average CARs of three groups of firms around event date 3. All three groups have LTODs but differ regarding LTOD's final removal and the LTOD's audit committee membership. Specifically, they are (i) the firms with LTODs who served on audit committees and were removed from the board at the 2020 AGM (hereafter 'Group A'), (ii) firms with LTODs who did not serve on audit committees and were removed from the board at AGM (hereafter 'Group B'), and (iii) firms with LTODs who were not removed from the board at the 2020 AGM (hereafter 'Group C').

Consistent with Hypothesis 3, the stock market reacts positively to removing LTODs who served on audit committees. The mean values of $CAR[-1, +5]$ and $CAR[-1, +10]$ are 4.47% and 2.08%, respectively. They are also statistically different from 0. In response to the failure of LTOD's removal, the stock market reacted negatively. The mean value of $CAR[-1, +10]$ is -3.44%, which is also statistically different from 0. Lastly, the mean CAR values of Group A and Group B firms are statistically different from each other.

We reconfirm this finding in multivariate regressions. Table 9 presents the estimation results of OLS regressions, where $CAR [-10, +10]$ around event date 3 are regressed on their determinants. The sample includes 3,199 treated plus matched firm observations. We control for industry-fixed effects and use standard errors clustered at the firm-year level (due to 5-NN matching with replacement, the same firms may appear multiple times in a given year).

Consistent with Hypothesis 3, the coefficients on *LTOD Removal*, *LTOD (Audit) Removal*, and *# of LTOD (Audit) Removal* are all positive and statistically significant. They are 2.3%, 3.67%,

and 1.59% respectively. However, the coefficient on LTOD (Non-Audit) Removals is not statistically significant. This is an expected result and also consistent with Hypothesis 3. At the time of the government's announcement of the final amendment bill, it was almost certain that the LTODs that were not audit committee members would be removed at the 2020 AGM in March. In the absence of voting rights restrictions applied to large shareholders, it was highly unlikely for the firms to fail in electing the LTOD successors. Thus, we do not expect the stock market to react to their removal around event date 3, which is what we find.

5.2. *Voting decisions of long-tenured outside directors*

5.2.1. *Voting decisions of long-tenured versus other outside directors*

To test Hypothesis 4, we first compare the mean *Dissent* rates (and the mean *Dissent* + *Abstain* rates) between the LTODs and other outside directors during the years before the tenure limit rule adoption. Figure 1 presents the results in bar graphs during 2018-2019 (i.e., 2019 AGM date – 2020 AGM date). All voting decisions come from the outside directors of 629 KOSPI or KOSDAQ-listed firms with at least one LTOD by the time of the 2020 AGM in March. Also note that we limit our analyses to the voting decisions of outside directors who were on the board immediately before the new rule adoption (i.e., 2019 AGM date – 2020 AGM date). The 782 LTODs made 12,237 (11,622) voting decisions in 2018 (2019) and 705 other outside directors made 7,014 (9,908) voting decisions in 2018 (2019).

The bar graphs show that LOTDs exhibit substantially lower mean *Dissent* and mean *Dissent* + *Abstain* rates than other outside directors. Their *Dissent* rates are, on average, 0.05%, which is 1/3 of other outside directors' *Dissent* rates. This result suggests that the tenure limit rule adopted in 2020 strengthened the monitoring role of outside directors by removing LTODs that were more

management-friendly than other outside directors in terms of board meeting votes.

In Table 10, we reconfirm this finding in multivariate regressions. It presents the estimation results of a linear probability regression model (LPM) that predicts the voting decisions of outside directors. We use *Dissent* and *Dissent + Abstain* as outcome variables. We control variables capturing director characteristics, board characteristics, firm characteristics, and proposal-type fixed effects. The sample consists of 40,151 director vote decisions from the outside directors we use in Figure 1. Since we have multiple voting decisions in a given firm year, we use standard errors clustered at the firm-year level.

Consistent with Hypothesis 4, we find that the coefficient on *LTOD* is negative and statistically significant. The coefficient of -0.00094 on *LTOD* when *Dissent + Abstain* is used as an outcome is also economically significant. Given that the mean *Dissent + Abstain* rate is 0.096% during 2018-2019 (i.e., 2019 AGM date – 2020 AGM date), the 0.094%p lower rate for *LTODs* can be considered a very large difference.

5.2.2. *Voting decisions of long-tenured versus newly-elected outside directors*

To test Hypothesis 5, we first compare the mean *Dissent* rates (and the mean *Dissent + Abstain* rates) between *LTODs* and *NEODs*. In Figure 2, we contrast the 2018 and 2019 (2018 AGM date – 2020 AGM date) votes cast by *LTODs* against the 2020 and 2021 (2020 AGM date – 2022 AGM date) votes cast by *NEODs*. The voting decisions come from outside directors of 291 KOSPI or KOSDAQ-listed firms with at least one *LTOD* by the time of the 2020 AGM in March and elected a new outside director at the 2020 AGM. From 2020 to 2021, 273 *LTODs* made 7,770 voting decisions from 2018 to 2019, and 372 *NEODs* made 10,189 voting decisions from 2020 to 2021.

The bar graphs show that *LTODs* exhibit substantially lower mean *Dissent* and mean *Dissent*

+ *Abstain* rates than NEODs. Their *Dissent* rates are, on average, 0.05%, which is 1/4 of NEODs' *Dissent* rates. This result suggests that the tenure limit rule adopted in 2020 strengthened the monitoring role of outside directors by replacing management-friendly LTODs with NEODs that are less so in board meeting votes.

In Table 11, we reconfirm this finding in multivariate regressions. It presents the estimation results of a linear probability regression model (LPM) that predicts the voting decisions of outside directors. We use *Dissent* and *Dissent + Abstain* as outcome variables. We control variables capturing director, board, firm characteristics, and proposal-type fixed effects. The sample consists of 17,932 director vote decisions from 291 KOSPI or KOSDAQ-listed firms with at least one LTOD by the time of the 2020 AGM in March and elected a new outside director at the 2020 AGM. Since we have multiple voting decisions in a given firm year, we use standard errors clustered at the firm-year level.

Consistent with Hypothesis 5, we find that the coefficient on *LTOD* is negative and statistically significant. The coefficient of -0.00097 on *LTOD* when *Dissent + Abstain* is used as an outcome is also economically significant. Given that the mean *Dissent + Abstain* rate is 0.143% during 2018-2021 (i.e., 2019 AGM date – 2021 AGM date), the 0.097%p lower rate for LTODs can be considered as a very large difference.

5.2.3. *Voting decisions of first- and second-term outside directors*

To test Hypothesis 6, we first compare the mean *Dissent* rates (and the mean *Dissent + Abstain* rates) of first and second-term outside directors year-by-year during the sample period of 2018 – 2021 (2018 AGM date – 2022 AGM date). The voting decisions come from outside directors of 583 KOSPI or KOSDAQ-listed firms that had at least one LTOD by the time of the 2020 AGM in

March and also that had first or second-term outside directors during 2018-2021.

The bar graphs in Figure 3 show that the mean *Dissent* and the mean *Dissent + Abstain* rates of first-term outside directors remain stable throughout the sample period. In contrast, those of second-term directors remain stable only up to 2020 and then exhibit a sudden jump in 2021. This result suggests that the tenure limit rule adopted in 2020 strengthened the monitoring role of second-term outside directors. It also confirms our conjecture that they would become less management-friendly as they learn they cannot be re-elected for the third term.

In Table 12, we reconfirm this finding in multivariate regressions with time-varying controls (director, board, and firm-level controls) and fixed effects (firm and proposal-type). It presents the estimation results of a dynamic difference-in-differences (DiD) model that captures the difference in the voting decisions of the first and second-term outside directors in 2018, 2020, and 2021, relative to the base year of 2019. The sample consists of 50,239 vote observations cast by the directors of 583 firms that had at least one LTOD by the time of the 2020 AGM in March and also that had first or second-term outside directors during 2018-2021. Since we have multiple voting decisions in a given firm-year, we use standard errors clustered at the firm-year level.

We find that the coefficients on *Second Term* \times *Year*²⁰¹⁸ are statistically insignificant. This result suggests that the two outcome variables (*Dissent* and *Dissent + Abstain*) moved in parallel for first and second-term outside directors during the pre-treatment period (2018-2019). We also find that the coefficients on *Second Term* \times *Year*²⁰²¹ are positive and statistically significant. This result suggests that the second-term outside directors, who used to vote like first-term outside directors, became less friendly to management in 2021, one year after the new tenure limit rule was adopted. The coefficients on *Second Term* \times *Year*²⁰²⁰, however, are all statistically insignificant, suggesting that it took a year for the new rule to change the voting

behaviors of second-term outside directors.

6. Conclusion

This study examines the effect of limiting the tenure of outside directors on firms' market valuation and the voting behavior of outside directors. We use the new rule adopted by the Korean government in 2020 that prohibits outside directors from serving more than six (nine) years in a given firm (business group).

We find evidence consistent with the hypothesis that longer tenure entrenches the outside directors than helping them acquire more experience. First, the stock market reacts positively to the announcement of the new rule in firms with outside directors subject to the new tenure limit rule – long-tenured outside directors (LTODs). The effect is greater in poorly-governed firms. Second, outside directors dissent more frequently against management after the rule change. This takes place through the removal LTODs that used to dissent less, the election of new outside directors that dissent more, and the increase in the dissent rates of second-term outside directors who can no longer be re-elected because of the rule change.

Our study contributes to the literature in three ways. First, it investigates the effectiveness of an outside director tenure limit rule that has not been documented before. Second, it documents a causal relationship between the length of outside director tenure and firm value, which has not been possible in existing studies that lack exogenous policy shocks. Third, it documents how the outside director tenure limit rule increases the frequency of dissent votes by outside directors, which has not been possible in other countries where the detailed voting decisions of outside directors are unavailable.

This study can be extended in several directions. For example, it is worth investigating

whether outside directors that served six years in a given firm take full advantage of the rule by serving three additional years in a member firm. Such outside directors are highly likely to be management-friendly. One can also investigate if outside directors who dissent against management in their second term are eventually rewarded with more outside directorships or penalized by managers who fear nominating them as outside directors.

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Appendix: Variable definitions

The following table defines the variables used in this study. The proposal type variables are adopted from Kang, Kim, and Oh (2022).

Variables	Definition
<i>Firm Characteristics</i>	
LTOD on Board	1 if at least one long-tenured outside director (LTOD) is on the board, and 0 otherwise.
# of LTOD	The number of LTODs on the board.
Longest Tenure	The tenure of the longest-serving outside director on the board
LTOD on Audit Comm.	1 if at least one LTOD is on the audit committee, and 0 otherwise.
LTOD Removal	1 if at least one (LTOD is removed from the board, and 0 otherwise.
LTOD (Audit) Removal	1 if at least one LTOD that served on the audit committee member is removed from the board, and 0 otherwise
LTOD (Non-Audit) Removal	1 if at least one LTOD that did not serve on the audit committee member is removed from the board, and 0 otherwise
# of LTOD Removal	The number of LTODs that are removed from the board.
# of LTOD (Audit) Removal	The number of LTODs that served on the audit committee and that are removed from the board.
Market Capitalization	The natural logarithm of a firm's market capitalization at the time of the event date.
Debt Ratio	Total debt divided by the total assets of a firm.
Firm Age	The natural logarithm of the number of years since the firm was founded.
CGI	Corporate Governance Index (CGI) scores provided by KCGS (Korea Corporate Governance Service). The scores range from 0 (D) to 5 (A+), with 5 being the highest governance rating.
Size	Natural logarithm of total assets of a firm.
Tobin's q	The sum of the market value of equity and the book value of debt divided by total assets, winsorized at the 1 st and 99 th percentile values.
ROA	Net income over total assets, winsorized at the 1 st and 99 th percentile values.
<i>Board characteristics</i>	
Board Size	Natural logarithm of the number of all board members.
Board Independence	The percentage of outside directors on the board.
Board Age Diversity	The standard deviation of the ages of outside directors on the same board.
Board Tenure Diversity	The standard deviation of the tenure of outside directors on the same board.
<i>Director Characteristics</i>	
LTOD	1 if an outside director's tenure is expected to exceed six years at the firm or nine years at the business group by the 2020 annual general shareholders' meeting (AGM) in late March, and 0 otherwise.

Second Term	1 if an outside director is serving one's second term, and 0 if serving the first term (not defined if serving more than two terms).
Age	Age of the outside director.
Tenure	Tenure of the outside director.
Professor	1 if an outside director is a professor, and 0 otherwise.
MBA	1 if an outside director has an MBA degree, and 0 otherwise.
Attorney	1 if an outside director is an attorney, and 0 otherwise.
Female	1 if an outside director is a female, and 0 otherwise.

Vote Decisions

Dissent	1 if an outside director voted against a proposal, and 0 otherwise.
Dissent + Abstain	1 if an outside director voted against a proposal or abstained from voting, and 0 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, bylaws, committee, ethics, and authority.
Investments	Investment, divestiture, spin-off, merger, acquisition, new entity, and asset sale.
Legal	Lawsuit, license, and registration.
Other	Donation, relocation, and others.
Personnel Appointment	Appointment, nomination, dismissal, and promotion.
Related Party Transaction	Related-part transaction, self-dealing, and guarantee.
Shareholder Meeting	Annual meeting, shareholder list, and meeting minutes.
Strategy	Alliance, management plan, operating plan, and strategy.

Figure 1. Voting decisions of long-tenured versus other outside directors

The following bar graphs present the mean *Dissent* (Figure 1-1) and the mean *Dissent + Abstain* (Figure 1-2) rates of long-tenured outside directors (LTODs) during the years before the tenure limit rule adoption. Outside directors are considered long-tenured if their tenure is expected to exceed six years at the firm (or nine years at the business group) by the 2020 annual general shareholders' meeting (AGM) date in late March. We contrast the bar graphs of LTODs against those of other outside directors during 2018-2019 (i.e., 2019 AGM date – 2020 AGM date). All voting decisions come from outside directors of 629 KOSPI or KOSDAQ-listed firms with at least one LTOD by the time of the 2020 AGM in March. Also note that we limit our analyses to the voting decisions of outside directors who were on the board during 2019 (i.e., 2019 AGM date – 2020 AGM date). We collect the voting decision data from firm proxy statements. The 782 LTODs made 12,237 (11,622) voting decisions in 2018 (2019) and 705 other outside directors made 7,014 (9,908) voting decisions in 2018 (2019).

Figure 1-1. Mean *Dissent* rates

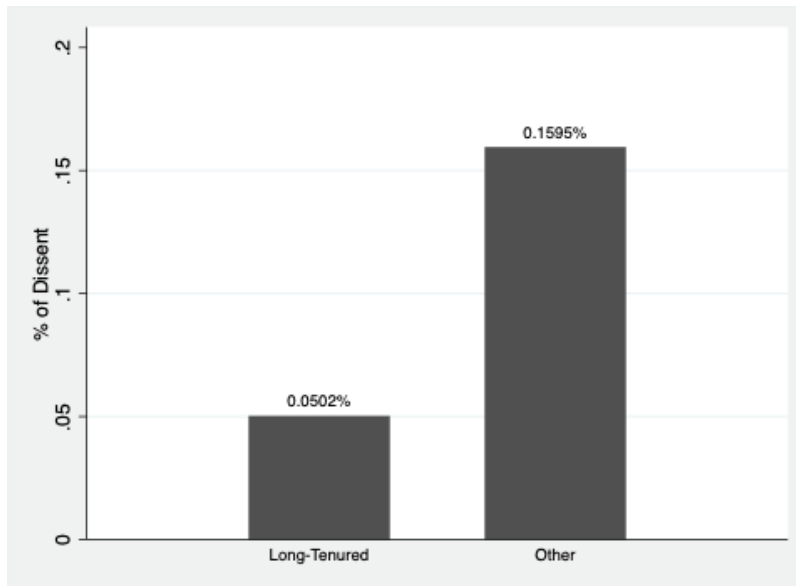


Figure 1-2. Mean *Dissent + Abstain* rates

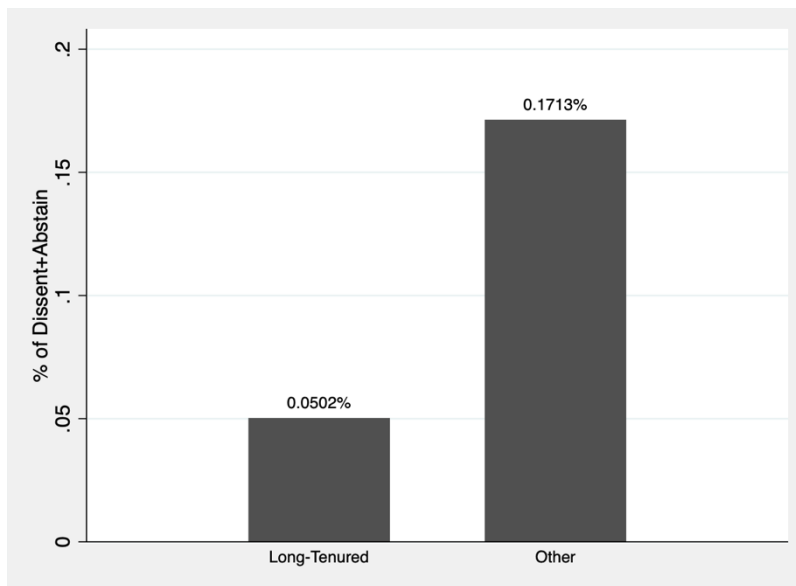


Figure 2. Voting decisions of long-tenured versus newly-elected outside directors

The following bar graphs present the mean *Dissent* (Figure 2-1) and the mean *Dissent + Abstain* (Figure 2-2) rates of LTODs and NEODs. We contrast the 2018 and 2019 (2018 AGM date – 2020 AGM date) votes cast by LTODs against the 2020 and 2021 (2020 AGM date – 2022 AGM date) votes cast by NEODs. All voting decisions come from outside directors of 291 KOSPI or KOSDAQ-listed firms with at least one LTOD by the time of the 2020 AGM in March and that newly elected an outside director at the 2020 AGM. We collect the voting decision data from firm proxy statements. 273 LTODs made 7,770 voting decisions from 2018 to 2019, and 372 NEODs made 10,189 voting decisions from 2020 to 2021.

Figure 2-1. Mean *Dissent* rates

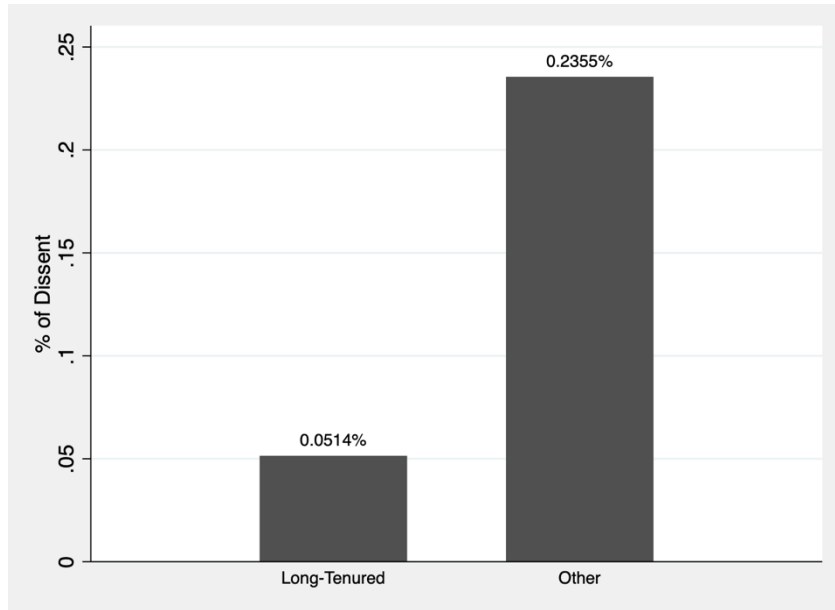


Figure 2-2. Mean *Dissent + Abstain* rates

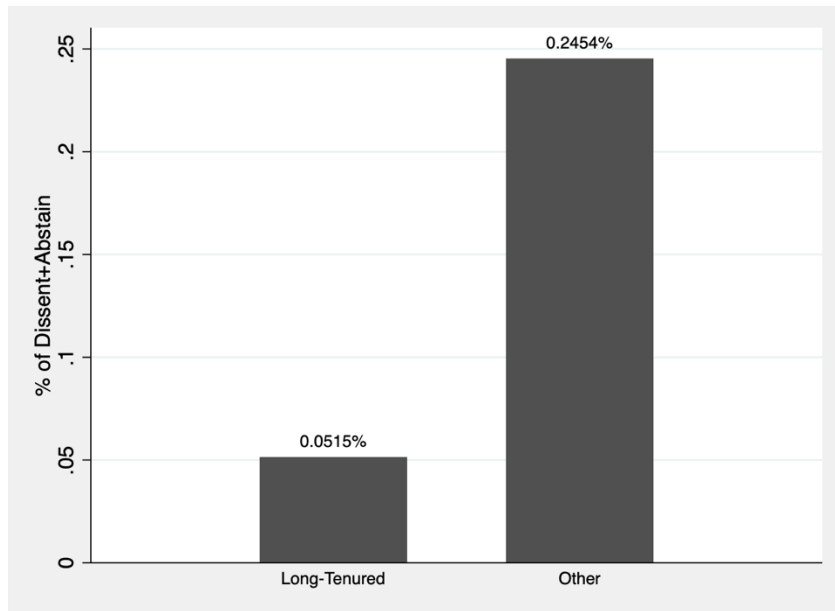


Figure 3. Voting decisions of the first and second-term outside directors (bar graph)

The following bar graphs present the mean *Dissent* (Figure 3-1) and the mean *Dissent + Abstain* (Figure 3-2) rates of the first and second-term outside directors from 2018 to 2021. The voting decisions come from outside directors of 583 KOSPI or KOSDAQ-listed firms that had at least one LTOD by the time of the 2020 AGM in March and also that had first or second-term outside directors during 2018-2021. We collect the voting decision data from firm proxy statements. First-term outside directors are 346, 515, 774, and 648, respectively, in 2018, 2019, 2020, and 2021. Second-term outside directors are 394, 248, 267, and 429, respectively, in 2018, 2019, 2020, and 2021.

Figure 3-1. Mean *Dissent* rates

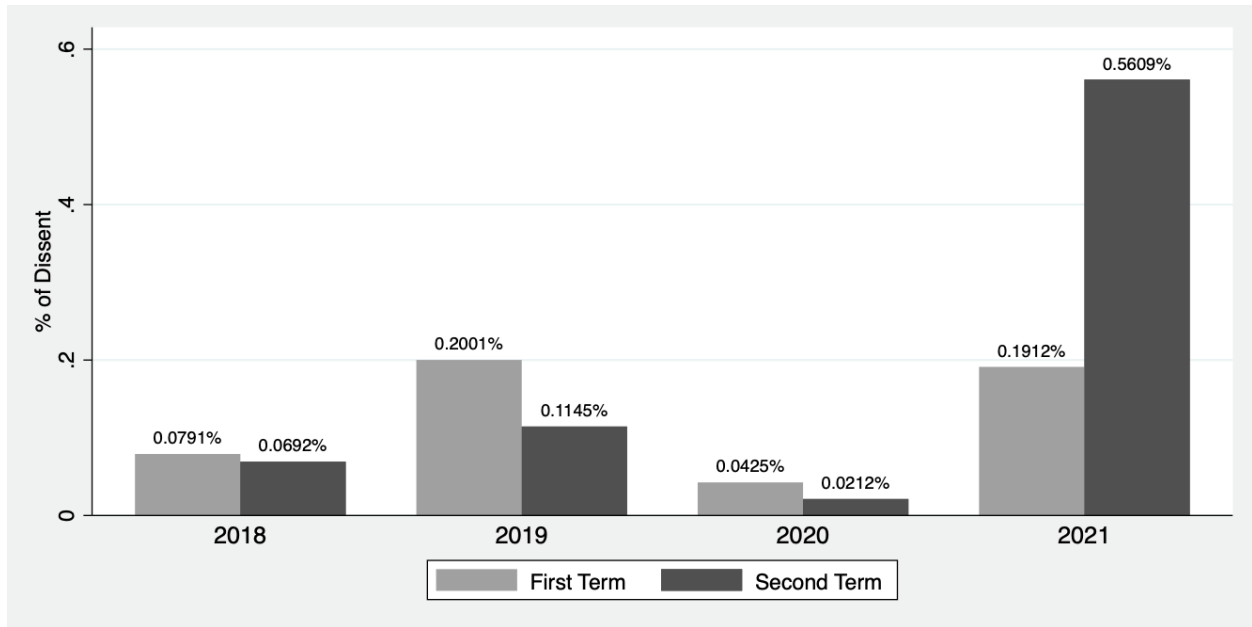


Figure 3-2. Mean *Dissent + Abstain* rates

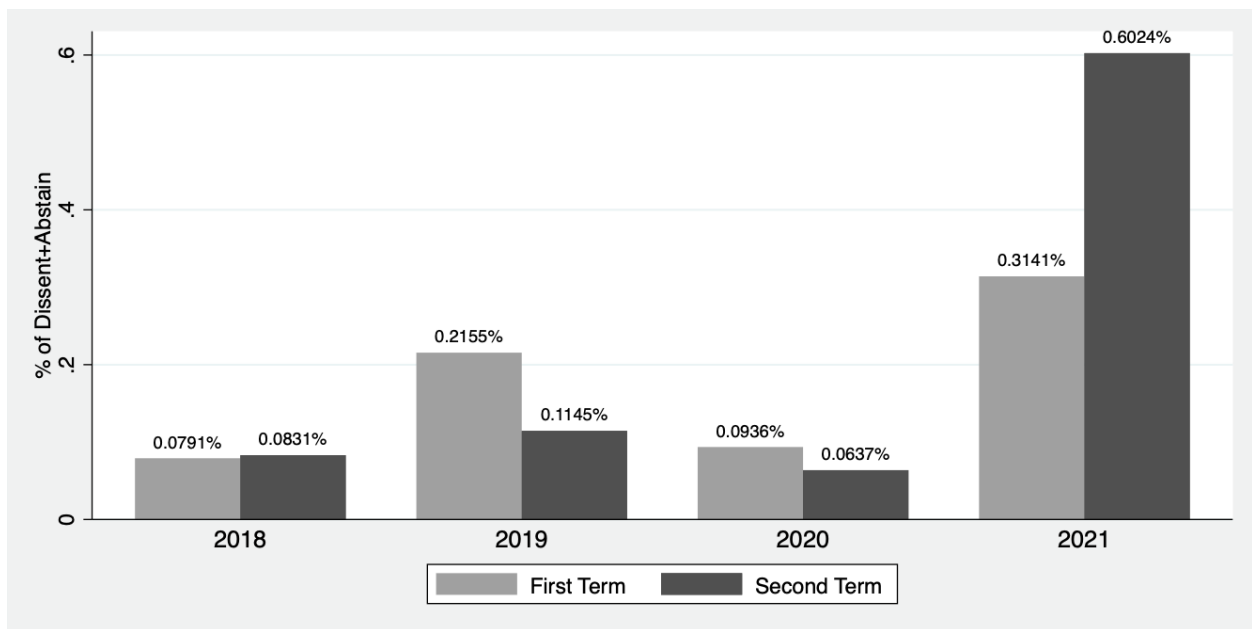


Figure 4. Voting decisions of the first and second-term outside directors (Dynamic DiD model)

The following plots present the results of a dynamic difference-in-differences (DiD) model, where the estimated coefficients capture the difference in mean *Dissent* (or *Dissent + Abstain*) rates of the first and second-term outside directors in 2018, 2020, and 2021, relatively to the base year of 2019. The vertical lines show the 95% confidence intervals for each estimated coefficient.

Figure 4-1. The difference in mean *Dissent* rates

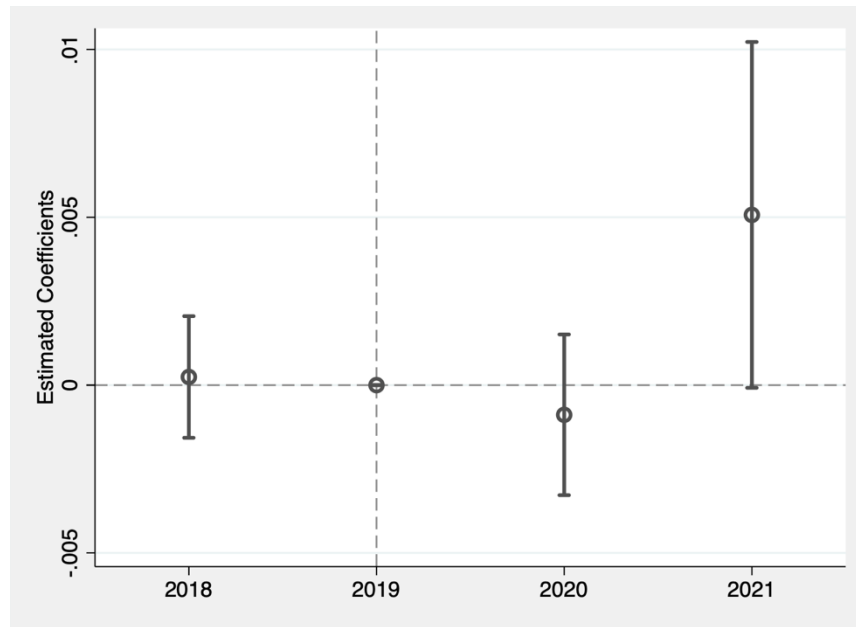


Figure 4-2. The difference in mean *Dissent + Abstain* rates

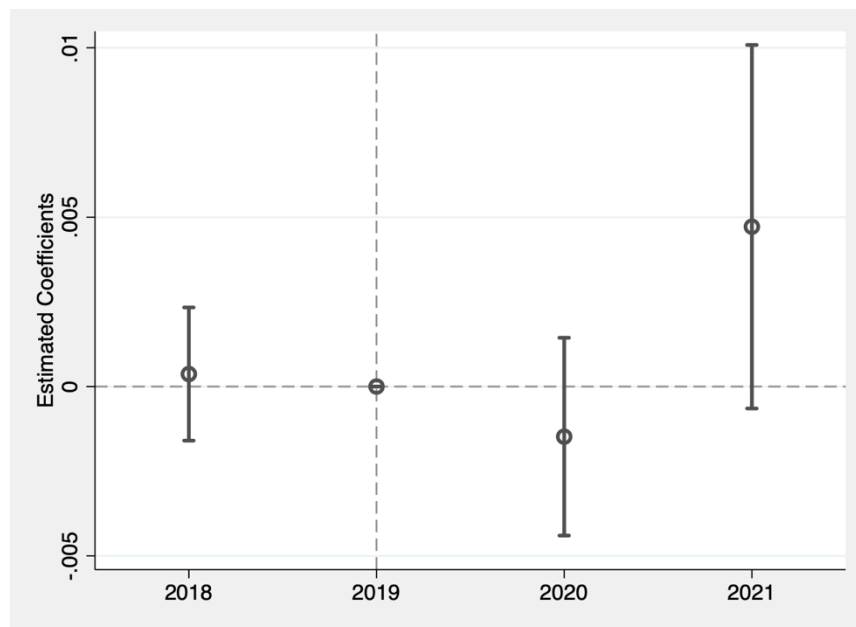


Table 1. Key dates concerning the Commercial Act Enforcement Decree amendment

Among the dates listed below, we conduct event studies on the following three dates: event date 1 (September 5, 2019), event date 2 (January 14, 2020), and event date 3 (2020 AGM dates of treated firms).

Dates	Events
September 5, 2019 (event date 1)	The government announced its plan to impose an outside director tenure limit. However, this was announced as part of a larger package of corporate governance reform measures.
September 24, 2019	Ministry of Justice published its initial amendment bill to amend the Commercial Act Enforcement Decree. The advance legislative notice period was set to last until November 4.
December 16, 2019	Major newspapers reported that government is likely to postpone the new rule's effective date so that it applies not from the 2020 AGM, but from the 2021 AGM.
January 14, 2020 (event date 2)	Ministry of Justice published the final amendment bill. The effective date of the tenure limit rule was set to be the date of promulgation, which is before the 2020 AGM.
January 21, 2020	The State Council passed the amendment bill.
January 29, 2020	The government promulgated the amended Commercial Act Enforcement Decree. The amendment took effect on this date of promulgation.
The 2020 AGM dates (event date 3)	Firms with long-tenured outside directors held their annual general shareholders' meeting (AGM).

Table 2. Number and tenure length of long-tenured outside directors and their removal

Panel A provides the number and the tenure length of long-tenured outside directors (LTODs) on the boards of companies listed on the KOSPI or KOSDAQ market by the time of the 2020 AGM in March. It also provides how many of them were removed by then. Panel B limits the sample to LTODs who are also audit committee members.

Panel A. Number of LTODs and their removal

		All outside directors	LTODs	Removed LTODs
No. of obs.	No. of firm obs.	1,838	629	300
	No. of outside director obs.	3,660	782	380
Tenure length (in years)	At the focal firm	3.94	9.46	9.01
	Including member firms	4.00	9.54	9.09

Panel B. Number of LTODs who were audit committee members and their removal

		All outside directors who were audit committee members	LTODs who were audit committee members	Removed LTODs who were audit committee members
No. of obs.	No. of firm obs.	503	199	126
	No. of outside director obs.	1,497	293	170
Tenure length (in years)	At the focal firm	3.77	8.72	8.45
	Including member firms	3.88	8.89	8.57

Table 3. Long-tenured outside directors by corporate governance ratings (as of March 31, 2020)

The following table reports the average tenure length of outside directors, the average tenure length of the longest-serving outside directors, and the average fraction of long-tenured outside directors of 801 firms where KCGS Corporate Governance Index (CGI) ratings are available as of the 2020 AGM.

CGI	No. of firm obs.	Tenure length of outside directors		Tenure length of the longest-serving outside director		Fraction of long-tenured outside directors
		At the focal firm	Including member firms	At the focal firm	Including member firms	
S	0	-	-	-	-	-
A+	7	3.17	3.17	5.43	5.43	0.13
A	43	2.69	2.86	4.02	4.30	0.06
B+	224	3.63	3.7	5.02	5.12	0.17
B	311	4.22	4.27	5.38	5.47	0.24
C	185	5.91	5.96	7.04	7.13	0.41
D	31	7.53	7.53	8.64	8.64	0.50
Total	801	4.48	4.54	5.72	5.82	0.26

Table 4. Summary Statistics

The following table presents the summary statistics of variables used in this study. We exclude firms operating in financial or utility industries.

	Obs.	Mean	SD	Min	25th	Median	75th	Max
<i>Firm Characteristics</i>								
<i>All firms at the time of the 2020 AGM</i>								
LTOD on Board	1,837	0.3424	0.4746	0.0000	0.0000	0.0000	1.0000	1.0000
# of LTOD	1,837	0.4268	0.6599	0.0000	0.0000	0.0000	1.0000	5.0000
Longest Tenure	1,837	5.2515	4.1123	0.4167	2.0833	4.0000	7.0000	22.0000
LTOD on Audit Comm.	1,837	0.1083	0.3109	0.0000	0.0000	0.0000	0.0000	1.0000
LTOD Resignation	1,837	0.1796	0.3840	0.0000	0.0000	0.0000	0.0000	1.0000
LTOD (Audit) Resignation	1,837	0.0686	0.2528	0.0000	0.0000	0.0000	0.0000	1.0000
LTOD (Non-Audit) Resignation	1,837	0.1111	0.3143	0.0000	0.0000	0.0000	0.0000	1.0000
# of LTOD Resignation	1,837	0.2123	0.4957	0.0000	0.0000	0.0000	0.0000	5.0000
# of LTOD (Audit) Resignation	1,837	0.0925	0.3765	0.0000	0.0000	0.0000	0.0000	4.0000
Market Capitalization	1,837	11.9712	1.2822	9.2073	11.0987	11.6917	12.5699	19.7303
Debt Ratio	1,837	0.3703	0.2069	0.0006	0.1957	0.3680	0.5175	0.9868
Firm Age	1,837	3.2378	0.7032	0.0000	2.9444	3.2581	3.7842	4.8122
<i>801 firms with the 2020 CGI ratings released in March 2020</i>								
CGI	801	2.1049	0.9742	0.0000	1.0000	2.0000	3.0000	5.0000
<i>629 firms with LTOD at the time of the 2020 AGM over a sample period of 2018 – 2021</i>								
Size	2,439	19.3497	1.3063	16.1757	18.4900	19.1405	19.9330	25.2777
Tobin's q	2,438	1.3964	1.1895	0.3867	0.7560	1.0170	1.5512	8.2087
ROA	2,436	0.0139	0.0886	-0.3897	-0.0050	0.0221	0.0557	0.2527
<i>Board Characteristics: 629 boards with LTOD at the time of the 2020 AGM over a sample period of 2018 – 2021</i>								
Board Size (in logarithm)	2,480	1.9103	0.3897	0.6931	1.6094	1.9459	2.1972	3.2581
Board Independence	2,480	0.3051	0.1159	0.0833	0.2222	0.2857	0.3750	0.8333
Board Age Diversity	2,480	3.9618	4.6634	0.0000	0.0000	2.4272	6.6025	27.3391
Board Tenure Diversity	2,480	2.1832	2.6892	0.0000	0.0000	1.3553	3.5355	16.2929

Director Characteristics: outside directors on the boards of 629 firms with LTOD at the time of the 2020 AGM over a sample period of 2018-2021

Long-Tenured Outside Directors	5,634	0.3814	0.4828	0.0000	0.0000	0.0000	1.0000	1.0000
Second Term	5,634	0.5937	0.4910	0.0000	0.0000	1.0000	1.0000	1.0000
Director Age	5,628	61.4515	8.9737	31.1567	55.1595	61.9651	67.2943	88.5790
Director Tenure	5,634	5.8908	4.6587	0.0000	2.0833	4.6667	8.7500	23.0000
Professor	5,634	0.2840	0.4501	0.0000	0.0000	0.0000	1.0000	1.0000
MBA	5,634	0.0340	0.1642	0.0000	0.0000	0.0000	0.0000	1.0000
Attorney	5,634	0.1016	0.2932	0.0000	0.0000	0.0000	0.0000	1.0000
Female	5,634	0.0230	0.1696	0.0000	0.0000	0.0000	0.0000	1.0000

Votes Decisions: votes cast by outside directors on the boards of 629 firms with LTOD at the time of the 2020 AGM over a sample period of 2018-2021

Dissent	79,610	0.0011	0.0334	0.0000	0.0000	0.0000	0.0000	1.0000
Dissent + Abstain	79,610	0.0014	0.0378	0.0000	0.0000	0.0000	0.0000	1.0000

Table 5. Dissenting (or dissenting + abstaining) votes

The following tables present the number and the percentage of dissenting (or dissenting + abstaining) votes. All voting decisions come from 629 KOSPI or KOSDAQ-listed firms with at least one long-tenured outside director at the time of the March AGM in 2020. Panel A reports them by year and by outside director types. Panel B reports them by proposal types.

Panel A: Number of dissent or abstention votes

Year	Outside director type	All voting decisions	<i>Dissent</i>	<i>Dissent + Abstain</i>
2018	All	21,413	12 (0.0560%)	13 (0.0607%)
	Long-tenured	12,237	4 (0.0327%)	4 (0.0369%)
	Other	9,176	8 (0.0872%)	9 (0.0988%)
2019	All	21,530	27 (0.1254%)	28 (0.1301%)
	Long-tenured	11,622	8 (0.0688%)	8 (0.0688%)
	Other	9,908	19 (0.1918%)	20 (0.2019%)
2020	All	22,375	6 (0.0268%)	18 (0.0804%)
	Long-tenured	5,479	0	3 (0.0548%)
	Other	16,896	6 (0.0355%)	15 (0.0888%)
2021	All	14,292	44 (0.3079%)	55 (0.3848%)
	Long-tenured	1,604	1 (0.0623%)	1 (0.0623%)
	Other	12,688	43 (0.3389%)	54 (0.4256%)
Total	All	79,610	89 (0.1118%)	114 (0.1432%)
	Long-tenured	30,942	13 (0.0420%)	16 (0.0517%)
	Other	48,668	76 (0.1562%)	98 (0.2014%)

Panel B: Dissent or abstention by proposal types

Proposal types	All voting decisions	<i>Dissent</i>	<i>Dissent + Abstain</i>
<i>Monitoring-related proposals</i>			
Personnel appointment	6,109	2 (0.0327%)	3 (0.0491%)
Internal governance	8,071	5 (0.0620%)	8 (0.0991%)
Financial reporting	6,921	1 (0.0144%)	2 (0.0289%)
Legal	747	1 (0.0144%)	1 (0.1339%)
Related-party transaction	5,100	2 (0.0392%)	5 (0.0980%)
<i>Advisory-related proposals</i>			
Investments	9,172	31 (0.3380%)	42 (0.4579%)
Financing	24,587	10 (0.0407%)	14 (0.0569%)
Shareholder meeting	5,546	17 (0.3065%)	17 (0.3065%)
Budgeting	184	1 (0.5435%)	1 (0.5435%)
Strategy	3,217	0 (0.0000%)	0 (0.0000%)
Contracting	8,534	11 (0.1289%)	11 (0.1289%)
Other	1,422	8 (0.5626%)	12 (0.8439%)
Total	79,610	89 (0.1118%)	114 (0.1432%)

Table 6. Stock market reactions to limiting outside director tenure

The following tables report the cumulative abnormal returns (CAR) of firms with LTODs (treated firms) and their matching firms around the three different event dates. We obtain CAR from a market model that uses KOSPI return as the market return for firms listed on the KOSPI market and KOSDAQ return for firms listed on the KOSDAQ market. Estimation period is [-250, -11]. Each treated firm is matched with replacement to firms that do not have long-tenured outside directors, but operate in the same industry, are among the five nearest firms in terms of firm size ($\ln(\text{market capitalization})$) on the event date), and have firm size differences less than a caliper of 1-SD of pooled $\ln(\text{market capitalization})$. The *t*-statistics are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: CAR around event date 1 (government plan announcement date, September 5, 2019)

	Firms with LTODs (A)	Matching firms without LTODs (B)	Difference-in-means (A) – (B)
CAR[-1, +5]	0.22% (0.79)	-0.67%*** (-5.05)	0.89%*** (2.90)
CAR[-1, +10]	0.55% (1.43)	-0.41%** (-2.07)	0.96%** (2.23)
No. of Firms	598	2,556	

Panel B: CAR around event date 2 (final bill announcement date, January 14, 2020)

	Firms with LTODs (A)	Matching firms without LTODs (B)	Difference-in-means (A) – (B)
CAR[-1, +5]	0.51%* (1.72)	-0.13 (0.97)	0.65%** (1.97)
CAR[-1, +10]	0.60% (1.22)	-0.38%* (-1.75)	0.98%* (1.83)
No. of Firms	591	2,625	

Panel C: CAR around event 3 (annual general shareholders' meeting dates in March 2020)

	Firms with the removal of LTODs		Firms with no removal of LTODs (C)	Difference-in-means	
	Audit Committee Member (A)	Non-Audit Committee Member (B)		(A) – (C)	(B) – (C)
CAR[-1, +5]	4.47%*** (3.41)	1.52% (1.21)	1.19% (1.24)	3.28%** (2.02)	0.33% (0.21)
CAR[-1, +10]	2.08%* (1.69)	-1.13% (-0.97)	-3.44%*** (-3.42)	5.52%*** (3.47)	2.31% (1.50)
No. of Firms	125	202	296		

Table 7. Determinants of CAR around the event date 1 (government plan announcement date)

The table below presents the estimation results of OLS regressions, where CAR[-1, +5] are regressed on their determinants. In Columns (1)~(3), we include three LTOD-related variables separately as determinants. In Columns (4)~(6), we interact them with the KCGS Corporate Governance Index (CGI) scores. The sample includes 3,154 (1,319) treated plus matched firm observations (with CGI ratings) around event date 1. Each treated firm is matched with replacement to firms that do not have long-tenured outside directors, but operate in the same industry, are among the five nearest firms in terms of firm size ($\ln(\text{market capitalization})$) on the event date), and have firm size differences less than a caliper of 1- SD of pooled $\ln(\text{market capitalization})$. Detailed descriptions of the variables used in the table are provided in the appendix section. The *t*-statistics reported in parentheses are based on standard errors clustered at the firm-year level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	CAR[-1, +5]					
	(1)	(2)	(3)	(4)	(5)	(6)
LTOD on Board	1.01*** (3.22)			3.45*** (2.91)		
× CGI				-1.43*** (-2.87)		
# of LTOD		0.72*** (3.40)			2.07** (2.60)	
× CGI					-0.81** (-2.62)	
Longest Tenure			0.13*** (2.98)			0.27* (1.97)
× CGI						-0.12* (-1.94)
CGI				0.53 (1.48)	0.43 (1.24)	0.75* (1.70)
Market Capitalization	-0.94*** (-4.11)	-0.95*** (-4.16)	-0.94*** (-4.13)	0.12 (0.72)	0.12 (0.70)	0.13 (0.75)
Debt Ratio	-1.89** (-2.09)	-1.90** (-2.10)	-1.80** (-2.01)	-0.32 (-0.24)	-0.38 (-0.27)	-0.4 (-0.28)
Firm Age	-0.21 (-0.68)	-0.21 (-0.68)	-0.23 (-0.72)	-0.40 (-1.56)	-0.43* (-1.67)	-0.43 (-1.66)
Constant	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,154	3,154	3,154	1,319	1,319	1,319
Adj. R-squared	0.087	0.087	0.088	0.19	0.187	0.184

Table 8. Determinants of CAR around event date 2 (final bill announcement date)

The table below presents the estimation results of OLS regressions, where CAR[-1, +5] are regressed on their determinants. In Columns (1)~(3), we include three LTOD-related variables separately as determinants. In Columns (4)~(6), we interact them with the KCGS Corporate Governance Index (CGI) scores. The sample consists of 3,216 (1,323) treated plus matched firm observations (with CGI ratings) around event date 2. Each treated firm is matched with replacement to firms that do not have long-tenured outside directors, but operate in the same industry, are among the five nearest firms in terms of firm size ($\ln(\text{market capitalization})$) on the event date), and have firm size differences less than a caliper of 1- SD of pooled $\ln(\text{market capitalization})$. Detailed descriptions of the variables used in the table are provided in the appendix section. The *t-statistics* reported in parentheses are based on standard errors clustered at the firm-year level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	CAR[-1, +5]					
	(1)	(2)	(3)	(4)	(5)	(6)
LTOD on Board	0.91*** (2.65)			3.79** (2.36)		
× CGI				-1.54** (-2.02)		
# of LTOD		0.54** (2.20)			2.42*** (3.13)	
× CGI					-0.96** (-2.61)	
Longest Tenure			0.09* (1.87)			0.25* (1.90)
× CGI						-0.10 (-1.21)
CGI				0.24 (0.51)	0.17 (0.39)	0.32 (0.56)
Market Capitalization	-0.74* (-1.97)	-0.74* (-1.99)	-0.74* (-1.99)	-0.20 (-0.55)	-0.21 (-0.56)	-0.21 (-0.58)
Debt Ratio	-2.07 (-1.23)	-2.09 (-1.25)	-2.03 (-1.21)	0.60 (0.26)	0.55 (0.24)	0.58 (0.25)
Firm Age	-0.81** (-2.26)	-0.79** (-2.21)	-0.79** (-2.22)	-0.96 (-1.49)	-0.99 (-1.53)	-1.03 (-1.60)
Constant	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,216	3,216	3,216	1,323	1,323	1,323
Adj. R-squared	0.039	0.038	0.039	0.081	0.080	0.076

Table 9. Determinants of CAR around event date 3 (removal date of long-tenured outside directors)

The table below presents the estimation results of OLS regressions, where CAR[-10, +10] are regressed on their determinants. The sample includes 3,199 treated plus matched firm observations around event date 3. Each treated firm is matched with replacement to firms that do not have long-tenured outside directors, but operate in the same industry, are among the five nearest firms in terms of firm size ($\ln(\text{market capitalization})$) on the event date), and have firm size differences less than a caliper of 1- SD of pooled $\ln(\text{market capitalization})$. Detailed descriptions of the variables used in the table are provided in the appendix section. Detailed descriptions of the variables used in the table are provided in the appendix section. The *t-statistics* reported in parentheses are based on standard errors clustered at the firm-year level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	CAR[-10, +10]			
	(1)	(2)	(3)	(4)
LTOD on Board	-1.40 (-1.07)	-1.01 (-0.79)	-1.40 (-1.07)	-0.61 (-0.57)
LTOD Removal	2.30** (2.00)			
# of LTOD Removal		1.33 (1.59)		
LTOD (Audit) Removal			3.67** (2.40)	
LTOD (Non-Audit) Removal			1.49 (1.20)	
# of LTOD (Audit) Removal				1.59* (1.77)
Market Capitalization	0.80 (1.18)	0.79 (1.17)	0.76 (1.11)	0.77 (1.13)
Debt Ratio	4.7 (1.30)	4.72 (1.30)	4.64 (1.28)	4.69 (1.29)
Firm Age	3.08*** (3.89)	3.08*** (3.90)	3.07*** (3.86)	3.07*** (3.88)
Constant	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Observations	3,199	3,199	3,199	3,199
Adj. R-squared	0.15	0.15	0.15	0.15

Table 10. Voting decisions of long-tenured versus other outside directors

The table below presents the estimation results of a linear probability regression model (LPM) that predicts the voting decisions of outside directors during 2018-2019 (i.e., 2018 AGM date – 2020 AGM date). We use *Dissent* and *Dissent + Abstain* as outcome variables. The sample consists of 40,151 director vote decisions cast by the outside directors of 629 KOSPI or KOSDAQ-listed firms that had at least one LTOD by the time of the 2020 AGM in March. Also note that we limit our analyses to the voting decisions of outside directors who were on the board during 2019 (i.e., 2019 AGM date – 2020 AGM date). Financial or utility firms are excluded from the sample. The data on director voting are from firm proxy statements. Detailed descriptions of the variables used in the table are provided in the Appendix. The *t*-statistics reported in parentheses are based on standard errors clustered at the firm-year level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	<i>Dissent</i>	<i>Dissent + Abstain</i>
LTOD	-0.00083** (-2.01)	-0.00094** (-2.24)
Age	-0.00000 (-0.48)	-0.00002 (-0.73)
Female	-0.00120*** (-2.70)	-0.00131*** (-2.84)
Professor	0.00025 (0.60)	0.000018 (0.41)
MBA	-0.00065 (-0.80)	-0.00073 (-0.88)
Attorney	0.00061 (0.95)	0.00083 (1.19)
Board Size	0.00101 (0.91)	0.00101 (0.92)
Board Independence	0.00610 (1.42)	0.00597 (1.39)
Board Age Diversity	-0.00003 (-0.52)	-0.00003 (-0.37)
Board Tenure Diversity	-0.00009 (-0.85)	-0.00010 (-0.86)
Firm Size	-0.00016 (-0.76)	-0.00018 (-0.82)
Tobin's q	0.00017 (0.75)	0.00018 (0.74)
ROA	-0.00156 (-0.30)	-0.00060 (0.11)
Proposal-Type FE	Yes	Yes
Observations	40,151	40,151
Adj. R-squared	0.0028	0.0028

Table 11. Voting decisions of long-tenured versus newly-elected outside directors

The table below presents the estimation results of a linear probability regression model (LPM) that predicts the voting decisions of outside directors during 2018-2021 (i.e., 2018 AGM date – 2021 AGM date). We use *Dissent* and *Dissent + Abstain* as outcome variables. The sample consists of 17,932 director vote decisions cast by the outside directors of 629 KOSPI or KOSDAQ-listed firms that had at least one LTOD by the time of the 2020 AGM in March. Financial or utility firms are excluded from the sample. The data on director voting are from firm proxy statements. Detailed descriptions of the variables used in the table are provided in the Appendix. The t-statistics reported in parentheses are based on standard errors clustered at the firm-year level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	<i>Dissent</i>	<i>Dissent + Abstain</i>
LTOD	-0.00085 (-1.57)	-0.00097* (-1.74)
Age	-0.00008** (-2.09)	-0.00008** (-2.08)
Female	0.00025 (0.11)	0.00017 (0.08)
Professor	0.00013 (0.14)	0.00011 (0.13)
MBA	-0.00041 (-0.19)	-0.00048 (-0.22)
Attorney	-0.00043 (-0.45)	-0.00049 (-0.52)
Board Size	-0.00076 (-0.56)	-0.00083 (-0.61)
Board Independence	0.00563 (0.63)	0.00696 (0.78)
Board Age Diversity	0.00017 (1.04)	0.00015 (0.88)
Board Tenure Diversity	-0.00034 (-1.61)	-0.00028 (-1.27)
Firm Size	0.00036 (0.49)	0.00029 (0.39)
Tobin's q	0.00011 (0.24)	0.00006 (0.12)
ROA	0.00819 (1.33)	0.00844 (1.36)
Proposal-Type FE	Yes	Yes
Observations	17,932	17,932
Adj. R-squared	0.0041	0.0037

Table 12. Voting behavior of first and second-term outside directors (Dynamic DiD model)

The table below presents the estimation results of a dynamic difference-in-differences (DiD) model that captures the difference in the voting decisions of the first and second-term outside directors in 2018, 2020, and 2021, relative to the base year of 2019. Of the 629 KOSPI or KOSDAQ listed firms with at least one long-tenured outside director (LTOD) at the time of the March AGM in 2020, 583 firms had first or second-term outside directors during 2018-2021. The sample consists of 50,239 vote observations cast by the directors of these 583 firms. Financial or utility firms are excluded from the sample. The data on director voting are from firm proxy statements. Detailed descriptions of the variables used in the table are provided in the Appendix. The *t-statistics* reported in parentheses are based on standard errors clustered at the firm-year level. ***, **, and indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	<i>Dissent</i>	<i>Dissent + Abstain</i>
Second Term \times Year ²⁰¹⁸	0.00024 (0.26)	0.00037 (0.37)
Second Term \times Year ²⁰²⁰	-0.00089 (-0.73)	-0.00148 (-0.99)
Second Term \times Year ²⁰²¹	0.00507** (1.93)	0.00472* (1.72)
Director-level Controls	Yes	Yes
Board-level Controls	Yes	Yes
Firm-level Controls	Yes	Yes
Firm FE	Yes	Yes
Proposal-Type FE	Yes	Yes
Observations	50,239	50,239
Adj. R-squared	0.0103	0.0102