Outside Director Tenure Limit:
Expertise-Enhancement versus Entrenchment

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Abstract

This study investigates the impact of limiting outside directors' tenure on firms' market valuation and the voting behavior of these directors. We analyze the new rule implemented by the Korean government in 2020, which bars the reappointment of outside directors who have served more than six years at a particular firm and nine years within a specific business group. Our findings support the hypothesis that longer tenures entrench outside directors rather than enhance their experience. Firstly, the stock market reacts favorably to the announcement of the new rule for firms with long-tenured outside directors (LTODs) who are influenced by the tenure restriction. The effect is more pronounced in poorly governed firms. Secondly, outside directors dissent more frequently against management after the rule change. This occurs through the removal of LTODs who previously dissented less, the election of new outside directors who dissent more, and an increase in dissent rates among second-term outside directors.

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, outside directors must be 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 on the impact of tenure on board independence present mixed results. This ambiguity primarily stems from two opposing effects that intensify with increasing tenure. Firstly, the expertise enhancement effect allows longer-tenured directors to gain a deeper understanding of the firm's business and history, thereby better equipping them to perform their monitoring and advisory roles. Conversely, the entrenchment effect may lead longer-tenured outside directors to become indifferent to shareholder concerns and exhibit excessive deference to management. Beyond this tradeoff, existing research lacks an exogenous policy shock that could help reveal the causal relationship between the duration of outside director tenure and firm value.

In this study, we address this challenge by utilizing an exogenous rule change as a natural experiment. In 2020, the Korean government introduced an outside director tenure limit, which prohibits the reelection of outside directors if they have served beyond six years at a specific firm or over nine years within a distinct business group. Leveraging this policy shock, we uncover evidence supporting the hypothesis that longer tenure leads to the entrenchment of outside directors rather than facilitating the acquisition of valuable experience.

First, the stock market exhibits a positive reaction to the announcement of the new rule in firms with long-tenured outside directors (LTODs) who are subject to the new tenure limit. This effect is more pronounced in firms with poor governance. The stock market also responds

favorably to the actual removal of LTODs, with a stronger impact for those serving on audit committees. This is because the departure of LTODs on audit committees was not finalized at the time of the rule announcement. According to the Korean Commercial Act, they could remain on the board beyond their tenure limit if the firm failed to elect their successors. In contrast, stock prices experience a significant decrease when an LTOD's term is extended for this reason.

Secondly, our research uncovers tangible evidence of the amplified monitoring role of outside directors following the rule change, demonstrated by a surge in dissent against management decisions during board meetings. This enhancement takes place through three channels: (i) the removal of LTODs, who were less prone to dissent compared to their counterparts; (ii) the induction of new outside directors, who exhibit a higher rate of dissent than the LTODs they succeed; and (iii) a noticeable increase in the dissent rates among second-term outside directors. Regarding the last point, the underlying reason behind the heightened dissent is not entirely clear. While it is possible that being aware of their ineligibility for re-election under the new rule motivates them to dissent more, it can't be the only explanation, as first-term outside directors' dissent rates have also escalated post-rule change.

Our study contributes to the literature in three ways. First, it explores the effectiveness of an outside director tenure limit rule, an area that remains largely undocumented. Korea is among several countries that have established maximum tenure limits for outside directors. However, to our knowledge, no study has yet investigated the impact of such tenure limit rules on firm value or the voting behavior of outside directors.

Second, we establish a causal relationship between the duration 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. In contrast, existing studies lack such a shock, as they either rely on instrumental variables or merely document correlations.

Third, we document how the outside director tenure limit rule leads to a higher frequency of dissent votes by outside directors. This analysis is enabled by the Korean Commercial Act, which mandates firms to disclose detailed voting decisions of outside directors. Existing studies, lacking access to such data, explore different outcomes instead.

The remainder of this paper is structured as follows. Section 2 delves into the institutional background. Section 3 reviews relevant literature and formulates hypotheses. Section 4 outlines the data, while Section 5 reports the findings. Finally, Section 6 offers a conclusion.

2. Institutional Background

2.1. Outside director system in Korea

In 1998, the Korea Stock Exchange mandated that listed companies appoint at least one outside director. In 2000, the Securities and Exchange Act absorbed this listing rule while imposing a higher standard for large-sized listed companies (with an asset size exceeding 2 trillion won). These companies were required 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. Additionally, the Act obliged large-sized listed companies to establish 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 address one of the root causes of the 1997 economic crisis – the failure of corporate governance – and restore international investors' confidence in Korea. Previous research indicates that the stock market responded positively to the reform (Black,

Jang, and Kim, 2006; Black and Kim, 2012), and that it mitigated the negative impact of related-party transactions (Black, Kim, Jang, and Park, 2015), and that it enhanced disclosure practices (Black, Kim, and Nasev, 2021).

2.2. Outside director tenure limit in Korea

Despite such reforms, Korea continued to receive low corporate governance ratings. According to CG Watch, a biennial survey conducted 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 persisted, with the most prominent example being the 2015 merger between Samsung C&T and Cheil Industries. 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 a substantial stake (Kim and Lim, 2020).

In light of these ongoing issues, in September 2019, the Korean government announced a package of corporate governance reform measures, including the introduction of an outside director tenure limit. This rule prohibits the reelection of outside directors who have served more than six years in the same listed firm (or over nine years in total in listed firms within the same business group). In this paper, we refer to these outside directors as long-tenured outside directors (LTODs). With this reform, outside directors could no longer be elected for an indefinite number of terms (with a maximum term of three years according to the Commercial Act), but only two terms in the case of outside directors with a three-year term.

A noteworthy aspect of this new rule is that it does not permit former outside directors to regain eligibility after a specified cooling-off period, a feature that sets it apart from rules in other

countries with outside director tenure limits. Moreover, in the context of a company that has undergone mergers or splits, the length of tenure from the preceding company is incorporated as part of the tenure at the present company. When tallying the length of tenure within a specific business group, it should be noted that the years a director holds two concurrent outside director positions are not counted twice. To illustrate, if an outside director served from 2012 to 2018 (six years) in one company and from 2014 to 2020 (six years) in another company within the same business group, the total tenure within this business group is calculated as eight years (2012-2020), not twelve.

2.3. The impact of outside director tenure limit

The implementation of the outside director tenure limit necessitated an amendment to the Commercial Act Enforcement Decree, the process for which is outlined in Table 1. As a Presidential Decree, it only needed to pass the State Council (presided over by the President), which approved the bill on January 21, 2020. The amended Enforcement Decree was promulgated and took effect on January 29, 2020. Consequently, the first removal of LTODs took place in March 2020, when firms with the fiscal year ending in December typically hold their annual general shareholders' meetings (AGMs). It is also important to 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 tenure length of LTODs serving on the boards of companies listed on the KOSPI or KOSDAQ market at the time of the 2020 AGM, along with the number of those who were removed by then. Panel B narrows the focus to LTODs who were members of audit committees. To calculate the tenure length of LTODs within a given business

group, we utilize the Monopoly Regulation and Fair-Trade Act, which provides the names of member firms for groups with aggregate assets above 5 trillion won (approximately 3.5 billion USD). However, for smaller business groups, such information is unavailable. Consequently, when calculating tenure length for outside directors serving these smaller business groups, tenure at affiliated firms is not considered.

Table 2 Panel A shows that more than one-third of companies, excluding financial or utility firms, had LTODs, totaling 637 out of 1,839 firms. Among the 3,669 outside directors, approximately one-quarter were LTODs, accounting for 803. The average tenure length for all outside directors was around four years, while the average tenure length for LTODs was approximately nine years. However, only 386 out of 803 LTODs stepped down during the 2020 AGM, as many of them had terms that had not yet expired. Under the new rule, LTODs whose terms have not expired are not required to step down from the board, even if their tenure in the same company (or business group) exceeds six years (or nine years) by the 2020 AGM. Instead, the rule prohibits their re-election for another term in the same company (or business group) once their current term ends.

In addition, there were instances where some LTODs remained on the board beyond their designated tenure limits, even after their term had expired during the 2020 AGM. We identified three cases. First, some companies utilized a provision within the Commercial Act, which allows audit committee members with expired terms to continue their board service without reelection if their successors weren't elected. This provision is intended to help companies adhere to the regulatory requirements specified by the Commercial Act, which mandate a minimum of three audit committee members and a composition that includes an independent chair and at least two-thirds outside directors. Second, some companies strategically extended the terms of directors from

two to three years by amending their articles of incorporation during the 2020 AGM. This extension allowed LTODs, who would otherwise have had to vacate the board upon the conclusion of their two-year term, to serve for an additional year, as their new three-year term had not yet expired. Third, some companies that had split from others incorrectly attributed the tenure at the predecessor company as separate from the tenure at the current company. This misinterpretation led to the re-election of their LTODs, even though this would contravene the new tenure limit rule.

2.4. Outside director tenure limit in other countries

As per the OECD Corporate Governance Factbook 2021, a number of countries have established maximum tenure limits for outside directors. However, these limits are often soft caps. They allow outside directors to extend their board service beyond the limit, provided certain conditions are met. For instance, in Hong Kong, a special shareholder resolution can grant this extension. In countries like Singapore and Malaysia, an extension requires winning shareholder approval via a two-tier voting process, in which large shareholders and smaller shareholders cast their votes separately. Meanwhile, countries like India and Israel permit tenure extension after a specified cooling-off period (CFA, 2021; OECD, 2021).

In contrast, Korea and China enforce a hard cap on outside directors' tenure. In China, the maximum tenure for outside directors is set at six years (Jiang, Wan, and Zhao, 2016). As the term of directorship typically lasts three years in most companies, this effectively limits the tenure of independent directors at one company to a maximum of two terms. Neither of these countries provides special arrangements or cooling-off periods that would permit outside directors, who have served beyond the stipulated limit, to be nominated for re-election.

3. Literature review and hypothesis development

3.1. Literature review

The length of outside director tenure is a critical factor influencing board effectiveness. However, its impact on board performance is a subject of debate with two contrasting perspectives (Vafeas, 2003). The expertise-enhancement hypothesis posits that directors with longer tenures gain a deeper understanding of the firm's business and history, which equips them to better execute their monitoring and advisory roles. On the other hand, the entrenchment hypothesis suggests that longer-tenured outside directors may become complacent or indifferent to shareholder interests, and may display undue deference to management.

The empirical results on this matter are similarly inconclusive due to the tradeoff between the benefits of expertise and the potential downsides of entrenchment. Vafeas (2003) was the first to present evidence in favor of the entrenchment hypothesis. In the study's examination of outside directors in Forbes-listed firms in 1994, it found that compensation committees comprising senior directors (i.e., directors with twenty or more years of board service) award significantly higher salaries to CEOs than their counterparts, particularly when the CEO holds substantial power. Further support for the entrenchment hypothesis comes from Hillman, Shropshire, Certo, Dalton, and Dalton (2011). In their analysis of over 2,000 Fortune 500 director nominees in 2005, they found a positive correlation between the tenure of director nominees and the proportion of shareholder votes withheld.

On the other hand, Liu and Sun (2010) provide evidence supporting the expertise-enhancement hypothesis. In their analysis of U.S. firms spanning from 1998 to 2005, they found that a greater proportion of long-tenured independent directors serving on the audit committee is

inversely related to earnings management. Dou, Sagal, and Zhang (2015) also found findings in favor of the expertise hypothesis. In their study of U.S. firms from 1998 to 2013, they demonstrated that independent directors with longer tenures exhibit greater commitment by attending more board meetings and accepting more committee memberships. They further observed that firms with a larger proportion of long-tenured directors have lower CEO pay, higher CEO turnover-performance sensitivity, and a smaller likelihood of intentional earnings misreporting. These firms were also found to be less likely to make acquisitions, but when they did, their acquisitions were of higher quality. Bonini, Deng, Ferrari, John, and Ross (2021) also recognized the benefits of having long-tenured outside directors. Utilizing data from 15 years of S&P 1500 firms and an instrument based on director age at the time of hire, they observed that long-tenured outside directors added more value to firms that were complex or mature, experienced more CEO turnovers during the long-tenured independent director's tenure, and had less entrenched management.

More recently, researchers have begun to integrate these two opposing effects, suggesting that outside director tenure has an inverted U-shaped relationship with board effectiveness. For instance, Veltrop, Molleman, Hooghiemstra, and van Ees (2018) utilized survey responses from 154 directors across 30 Dutch housing corporations. They discovered that an outside director's task involvement (measured by peer ratings) is positively correlated with outside director tenure, but negatively correlated with its squared term. They also demonstrated that this relationship is moderated by the degree of the outside director's identification with the firm. For outside directors who strongly identify with the firm, the negative effect of shorter tenure is mitigated, while the negative effect of longer tenure is exacerbated. Conversely, for weakly identified outside directors, the negative impact of shorter tenure worsens, while the negative impact of longer tenure is

softened. Similarly, Huang and Hilary (2018) found that director tenure (i.e., the average tenure of all outside directors) displays an inverted U-shaped relationship with firm value and accounting performance using S&P 1500 firms over the period from 1998 to 2010. They further demonstrated that corporate decisions, including M&A, financial reporting quality, and CEO compensation, exhibit a quadratic relationship with board tenure. Moreover, they found that the sudden death of outside directors that shifts board tenure away from (or towards) the empirically observed optimum level is associated with negative (or 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 confronted with a tenure limit. Jiang, Wan, and Zhao (2016) explored the voting behaviors of outside directors in China, where a two-term limit is enforced. Their findings suggest that directors serving their first term are less likely to dissent than those serving their second term. They attribute this trend to the motivation of first-term outside directors to please management, thus increasing their chances of reappointment, as well as the incentive for second-term outside directors to be recognized as diligent monitors, thereby enhancing their prospects of obtaining board seats at other companies. Another strand of research focuses on tenure diversity. For instance, Li and Wahid (2018) examined U.S. firms from 2000 to 2012 and found that boards with diverse tenures demonstrate significantly high CEO performance-turnover sensitivity. Moreover, firms with tenure-diverse audit committees are less likely to experience accounting restatements. They also discovered that tenure-diverse compensation committees tend to award less excess compensation.

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. Firstly, we aim to evaluate the stock market's reaction to the introduction of this new rule. Secondly, we aspire to determine whether the new regulation regarding the tenure limits of outside directors has amplified their monitoring role. Lastly, we investigate if second-term outside directors, understanding that re-election is off the table, have improved their monitoring effectiveness following the rule change.

3.2.1. Stock market reactions

We expect the stock market's response to be contingent on the prevailing influence of either entrenchment or expertise-enhancement effects. If the entrenchment effect, which often accompanies longer tenures, is predominant, we would expect the stock market to react positively to the announcement. This is under the assumption that entrenched long-serving directors will finally be replaced by less entrenched outsiders. Conversely, if the expertise-enhancement effect prevails, a negative reaction from the stock market may be expected. This could be due to the anticipation that experienced senior outside directors will be unable to continue serving the board, leading to their replacement by potentially inexperienced newcomers. (**Hypothesis 1a**).

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 negative 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 hypothesize that stock market reactions will be more pronounced in firms where the term of LTODs expires at the 2020 AGM compared to firms where it does not (**Hypothesis 1b**). This can be attributed to the fact that in firms where the LTODs' term does not expire at the 2020 AGM, the removal of these directors would be deferred by one or two years. Consequently, any associated improvement in firm performance would also be delayed accordingly.

We further hypothesize that the magnitude of stock market reactions will be influenced by the quality of corporate governance (**Hypothesis 2**). Specifically, we expect the valuation effect to be less significant in well-governed firms and more significant in poorly-governed firms. The rationale behind this prediction is that, in well-governed firms, the effect of enhancing expertise tends to outweigh the entrenchment effect. Conversely, in poorly-governed firms, the entrenchment effect is likely to predominate over the expertise-enhancement effect.

We posit that the stock market will respond to not only the announcement of the new rule but also the voting outcomes at the 2020 AGM in March. This prediction is based on the fact that the departure of LTODs serving on audit committees was not confirmed at the time of the rule announcement. As previously discussed, these directors were permitted to extend their tenure on the board if the firm was unable to elect successors. Consequently, investors were compelled to wait until the 2020 AGM in March to ascertain whether these directors were indeed replaced. We anticipate that the stock market will react favorably to the departure of LTODs from audit committees, especially if the entrenchment effect surpasses the expertise-enhancement effect (**Hypothesis 3a**). Conversely, we anticipate a negative reaction from the stock market to any extension of the terms of LTODs. As discussed in Section 2, such an extension might arise from a

variety of circumstances, including the inability to elect successors for LTODs serving on the audit committee, amendments to company articles extending director terms from two to three years, or improper attribution of tenure at a predecessor company as separate from the tenure at the current company following a company split (**Hypothesis 3b**).

3.2.2. Voting decisions

Next, to assess if the new rule on tenure limitations enhanced the monitoring role of outside directors, we examine their board meeting votes—specifically, the frequency with which they voted against management or abstained. If the tenure limit rule has indeed strengthened the oversight role of outside directors, we expect that the long-tenured outside directors (LTODs) targeted for removal would exhibit fewer instances of dissent or abstention compared to other outside directors not subject to the rule (**Hypothesis 4**). Moreover, the newly-elected outside directors (NEODs), who replace LTODs, should demonstrate a higher frequency of dissent or abstention compared to their LTOD counterparts (**Hypothesis 5**).

We further investigate whether the monitoring capacity of second-term outside directors improved following the rule change. First-term outside directors, aware of the necessity to align with management for potential re-election, may exhibit lower dissent or abstention rates. Conversely, second-term outside directors, understanding that they are no longer eligible for re-election, are likely to display higher dissent or abstention rates (**Hypothesis 6**). This line of inquiry echoes the findings of Jiang, Wan, and Zhao (2016).

4. Data

4.1. Sample construction

In our study, we consider all firms listed on the KOSPI and KOSDAQ as of March 2020 that had a fiscal year ending in December. However, we exclude companies in the financial or utility sectors from our sample. As noted in Section 2, outside directors of financial firms were already subject to a distinct tenure limit when the 2020 rule was implemented. Additionally, many utility companies are state-owned, which could subject them to different governance regulations. We also exclude companies undergoing rehabilitation procedures, as they do not hold AGMs in March, and companies with impaired capital, as such financial conditions can significantly affect stock prices.

This selection process leaves us with 1,839 firms with non-missing financial data. Among these, 637 firms had Long-Term Outside Directors (LTODs) by the time of the 2020 AGM in March. As outlined in Section 2, not all LTODs resigned from the board. Of these 637 firms, LTODs resigned in 326 companies, and LTODs serving on audit committees resigned in 128.

Our primary focus is on these specific subsets of firms with LTODs and their industry and size-matching firms. We utilize this sample for conducting our event study analyses of Hypothesis 1 (market reaction to rule change), Hypothesis 2 (moderating effect of governance), and Hypothesis 3 (market reaction to LTOD resignation)

For our voting decision analysis, we employ different datasets to test each hypothesis. To assess Hypothesis 4 (LTODs versus other outside directors), we utilize the votes cast by LTODs and other outside directors on the boards of 637 firms during 2018-2019. For Hypothesis 5 (LTODs versus NEODs), we compare the votes cast by LTODs from the same 637 firms between 2018-2019 and the votes cast by NEODs from 310 firms between 2020-2021. Notably, only 49 percent

(310/637) of firms with LTODs appointed new outside directors at the 2020 AGM as replacements for LTODs. For Hypothesis 6 (first versus second-term outside directors), our analysis is based on the votes cast by first or second-term outside directors on the boards of 583 firms from 2018 to 2021. Out of the 637 firms with LTODs, 54 had no first- or second-term outside directors during this period.

4.2. Variable definitions

In the appendix table at the end of the paper, we provide a list of variables and their definitions used in our study. Here, we only highlight the key variables. Among the variables capturing firm characteristics, *LTOD on Board* assumes a value of 1 if at least one long-tenured outside director (LTOD) is on the board and 0 otherwise. The *LTOD Ratio* refers to the proportion of LTODs among outside directors on the board. *Longest Tenure* signifies the tenure of the longest-serving outside director on the board. *Expire by AGM* assumes a value of 1 if at least one LTOD's term expires at the Annual General Meeting (AGM) in March 2020. Conversely, *Expire after AGM* assumes a value of 1 if none of the LTODs' terms expire at the AGM in March 2020, and 0 otherwise.

LTOD Removal assumes a value of 1 if at least one LTOD is removed from the board, and 0 otherwise. *LTOD (Audit) Removal* assumes a value of 1 if at least one LTOD who served on the audit committee is removed from the board, and 0 otherwise. *LTOD (Non-Audit) Removal* assumes a value of 1 if at least one LTOD is removed from the board and none of the removed LTODs served on the audit committee, and 0 otherwise. *LTOD Term Extension* assumes a value of 1 if at least one LTOD's term has been extended at the AGM in March 2020, and 0 otherwise. In our sample, there were no instances where both the resignation and term extension for LTODs occurred simultaneously in a company, meaning that the groups of companies with a value of 1 for *LTOD*

Removal and *LTOD Term Extension* are mutually exclusive. Finally, *CGI* is the Corporate Governance Index score provided by the Korea Corporate Governance Service (KCGS). The scores range from 0 (D) to 5 (A+), with 5 being the highest possible governance rating. 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.

The outcome variables for our voting decision analyses are *Dissent* and *Dissent + Abstain*. *Dissent* is given a value of 1 if an outside director voted against a proposal, and 0 otherwise. Similarly, *Dissent + Abstain* is assigned a value of 1 if an outside director either voted against a proposal or abstained from voting, and 0 otherwise. We consider abstention, along with dissent, as a form of resistance against management. Additionally, in our regression analyses, we include proposal-type fixed effects to control for potential differences in *Dissent* or *Dissent + Abstain* rates across various proposal types, using 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. In our sample used for event study analysis, 34.64 percent of firms had at least one LTOD on their board, with LTODs constituting, on average, 25 percent of outside directors. The longest-tenured outside director served on the same board for 22 years. By the time

of the 2020 AGM, 17.73% of firms had at least one LTOD whose term was due to expire, while 16.91% of firms had LTODs with non-expiring terms. However, not all LTODs with expiring terms at the 2020 AGM stepped down; in six firms, LTODs extended their terms for reasons discussed in Section 2. Conversely, LTODs in six firms resigned early, leading to a coincidental equality (17.73%) between firms experiencing LTOD resignations at the 2020 AGM and firms with LTODs having terms expiring at the same AGM. Additionally, 6.96% of firms experienced LTOD resignations from their audit committees during the 2020 AGM.

In our sample used for voting decision analysis (2018-2021), LTODs constituted 38.1% of the outside directors. During this period, the ages of the outside directors varied widely, from 31 to 89 years, with an average age of 61. The longest-serving outside director had been on the same board for 23 years. 26.4% of the outside directors were professors, 5.5% held MBA degrees, 10.75% were attorneys, and 5.7% were accountants. Only 3.3 percent of outside directors were females.

Outside directors cast 87,464 votes during 2018-2020 (i.e., 2018 AGM – 2021 AGM). The average dissent rate was 0.13 percent. The average dissent plus abstain rate was 0.18 percent. Table 5, Panel A, provides a detailed breakdown of these votes by the type of outside director (long-tenured vs. others) and year (2018, 2019, 2020, 2021). One can observe a substantial jump in the dissent rate in 2021, especially among other directors. The decreasing number of votes from LTODs in later years is due to their gradual removal from the board. Panel B of Table 5 presents a vote breakdown by proposal type. Personnel appointment proposals had the highest dissent plus abstain rates among monitoring-related proposals, while investments and shareholder meeting proposals had the highest rates among advisory-related proposal.

4.4. Data sources

Since 2003, Korea has mandated public companies to disclose detailed activities of outside directors, including individual voting decisions on all board meeting proposals. We collected these data from the Annual General Meeting (AGM) Convocation Notices uploaded on the Data Analysis, Retrieval, and Transfer System (DART), which is an electronic disclosure system akin to the U.S.'s Electronic Data Gathering and Retrieval (EDGAR) system. Notably, Korea is among the few countries where individual director-level voting data are accessible. We sourced corporate governance ratings from the Korea Corporate Governance Service (KCGS) and financial data from Dataguide (a financial database managed by Fnguide) and TS-2000 (a financial database provided by the Korea Listed Companies Association).

5. Results

5.1. Stock market reactions to limiting outside director tenure

In this section, we conduct a series of event studies based on three distinct event dates. The initial event date (September 5, 2019; hereinafter referred to as 'event date 1') marks the government's initial announcement of its intention to impose a tenure limit on outside directors. The second event date (January 14, 2020; hereinafter referred to as 'event date 2') represents the moment the Ministry of Justice publicized the final amendment bill. We distinguish this as a separate event date because prior to this, media outlets speculated that the government might delay the implementation of the new rule. Additionally, the second event date is less confounded than the first, as the initial date coincided with the announcement of other measures for corporate governance reform within the same package. **Hypotheses 1 and 2** are tested using these two event

dates.

The third set of event dates corresponds to when firms with LTODs conducted their 2020 AGMs (hereafter, 'event date 3'). Prior to these dates, it was uncertain whether LTODs serving on audit committees would resign from the board. As detailed in Section 2, this ambiguity arises from a provision in the Korean Commercial Act that permits existing board members to retain their positions beyond the tenure limit if a successor is not elected. This element of uncertainty validates the 2020 AGM dates as event dates. **Hypothesis 3** is tested using these dates. Refer to Table 1 for key dates related to the amendment of the Commercial Act Enforcement Decree.

For all our event study analyses, we calculate cumulative abnormal returns (CAR) using a market model that applies KOSPI return for firms listed on the KOSPI market, and KOSDAQ return for firms listed on the KOSDAQ market. The estimation period we use is [-250, -11]. We calculate CAR not only for the treated firms (those with LTODs) but also for their matched firms. Each treated firm is matched with a replacement to firms that don't have LTODs. However, these matched firms operate in the same industry (using a 3-digit Korea SIC for manufacturing firms and a 2-digit Korea SIC for others), are among the two closest firms in terms of firm size (as per *ln*(market capitalization) on the event date), and have firm size differences less than a caliper of 1-SD of pooled *ln*(market capitalization)..

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

Table 6, Panel A presents the average CARs for firms with LTODs (referred to as 'treated firms') and their matching firms surrounding event date 1. We have CAR data for 604 treated firms (missing CAR data for 33 firms due to an incomplete estimation period) and 1,126 matching firms (matched using a 2-NN caliper matching approach for each treated firm). Consistent with

Hypothesis 1a, the stock market positively reacts to the government's announcement for treated firms. The mean CAR values for the periods [-1, +5] and [-1, +10] are 0.30% and 0.61%, respectively. However, these results are not statistically significant. Conversely, the stock market reactions for the matching firms are all negative and statistically significant. The mean CARs of the two groups of firms exhibit a statistically significant difference.

To further validate this finding, we conducted multivariate regressions. Table 7 presents the results of Ordinary Least Squares (OLS) regressions where CAR [-1, +10] around event date 1 is regressed on various determinants. Columns (1) to (4) include three LTOD-related variables (*LTOD on Board*, *LTOD Ratio*, *Longest Tenure*, *Expire by AGM*, and *Expire after AGM*) individually as determinants. Columns (5) to (8) introduce interactions between these variables and the KCGS Corporate Governance Index (CGI) scores. The sample consists of 1,730 treated and matched firm observations, with 804 having CGI ratings. Industry-fixed effects are controlled, and standard errors are clustered at the industry level.

In Columns (1) to (3), in line with **Hypothesis 1a**, we observe that the coefficients on the LTOD-related variables are positive and statistically significant at the 5% level. However, contrary to Hypothesis 1b, our findings do not support the notion that stock market reactions are more pronounced in firms where the terms of LTODs expire at the 2020 AGM compared to firms where it does not. In Column (4) of our analysis, both the coefficients for *Expire by AGM* and *Expire after AGM* are positive, but only the latter coefficient is statistically significant. We deduce that this may be due to the fact that the specific details of the tenure limit policy were not disclosed on the announcement date. It is possible that the market interpreted the policy as necessitating the immediate retirement of outside directors who exceeded the tenure limit, regardless of the remaining years until their term expiration.

Additionally, in accordance with **Hypothesis 2**, the coefficients on the interaction terms between *CGI* and two of the LTOD-related variables (*LTOD on Board* and *LTOD Ratio*) are negative and statistically significant at the 10 percent level (Columns (5) to (7)). For instance, in Column (5), the coefficient on *LTOD on Board* × *CGI* is -2.50, whereas the coefficient on LTOD on Board alone is 7.35. This implies that the stock price of poorly-governed firms (*CGI* = 0) with LTODs experiences an increase of 7.35%, while the stock price of well-governed firms (*CGI* = 5) with LTODs declines by 5.15% (= 7.35 – 2.50 × 5).

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

We extend our analysis to event date 2 and find further support for Hypotheses 1 and 2. In line with **Hypothesis 1a**, we observe a positive stock market reaction to the final bill announcement for treated firms, and the mean CARs of treated and matched firms are statistically distinct from each other (Table 6, Panel B). The results from our multivariate regression further corroborate these findings. In Columns (1) and (3) of Table 8, we find that the coefficients for *LTOD on Board* and *Longest Tenure* are positive and statistically significant, albeit at the 10 percent level. The results are substantially reinforced when we add the interactions between *CGI* and LTOD-related variables. The coefficients for LTOD-related variables, which pick up the effect for firms with *CGI* = 0, are all positive and have statistical significance at 1 or 5 percent levels.

Furthermore, we find evidence in support of **Hypothesis 1b**. In Column (8) of Table 8, we find that the coefficients for *Expire by AGM* is statistically significant, whereas the coefficients for *Expire after AGM* is not. The disclosure of specific policy details in the final bill allowed investors to realize that LTODs whose terms do not expire by the 2020 AGM would not be immediately removed.

Finally, we obtain results that support **Hypothesis 2** in Columns (5) to (8). The coefficients for the interaction terms between *CGI* and LTOD-related variables are consistently negative and statistically significant. For example, in Column (5), the coefficient for the interaction *LTOD on Board* × *CGI* is -3.00, while the coefficient for *LTOD on Board* alone stands at 8.01. This implies that the stock price of poorly governed firms (where *CGI* = 0) that have LTODs on their board experiences a rise of 8.01%, whereas the stock price of well-governed firms (*CGI* = 5) with LTODs experiences a drop of 6.99% (= 8.01 – 3.00 × 5).

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

Table 6, Panel C presents the average CARs of four groups of firms around event date 3. All four groups have LTODs, but they differ based on LTODs' removal and their membership in the audit committee. Specifically, they are (i) firms where LTODs serving on audit committees are removed from the board (hereafter 'Group A'), (ii) firms where LTOD are removed from the board, but none of them served on audit committees (hereafter 'Group B'), (iii) firms where none of the LTODs is removed from the board (hereafter 'Group C'), and (iv) firms where LTODs extended their term (hereafter 'Group D').

Note that the event window for our analysis begins 5 or 10 business days prior to event date 3. This choice is guided by the regulation that companies must disclose their AGM agendas, including outside director candidates, two calendar weeks before the shareholders' meeting. By setting the event window to begin 5 or 10 business days prior to the AGM, we ensure that we capture any effect arising from prior notice.

Consistent with **Hypothesis 3**, our findings indicate a positive stock market reaction to the removal of LTODs who served on audit committees. The average CAR values of Group A,

representing firms where such removal occurred, are 4.74% for CAR[-5, +5] and 2.21% for CAR[-10, +10]. These values are statistically significant and differ from 0, supporting our hypothesis. In contrast, we find no statistically significant stock market reaction for firms where LTODs are removed from the board but none of them served on audit committees (Group B). Additionally, firms where none of the LTODs are removed (Group C) experience negative stock market reactions, with mean CAR values differing significantly from Group A. Furthermore, extending the term of LTODs (Group D) is perceived negatively in the market, as indicated by significantly negative mean CAR values of -10.61% for CAR[-5, +5] and -18.04% for CAR[-10, +10], although the sample size is small to establish statistical significance.

We conducted multivariate regressions to reconfirm our findings, and the results are presented in Table 9. The regressions estimate the relationship between CAR [-10, +10] around event date 3 and their determinants. The sample consists of 1,747 treated plus matched firm observations. Industry-fixed effects are controlled for, and standard errors are clustered at the industry level.

First, consistent with **Hypothesis 3a**, the coefficients on *LTOD Removal* and *LTOD (Audit) Removal* are positive and statistically significant in the regression analysis. Specifically, the coefficient for *LTOD Removal* is estimated at 1.80%, while the coefficient for *LTOD (Audit) Removal* stands at 3.16%. However, the *LTOD (Non-Audit) Removal* coefficient is not statistically significant, which aligns with our expectations. Given that investors were already aware at the time of event 2 that LTODs who were not members of the audit committee would be removed at the 2020 AGM, it is likely that the stock price had already fully responded to this information by then. Consequently, we do not observe a significant stock market reaction to the removal of these LTODs around event date 3.

Second, in line with **Hypothesis 2a**, we find that the coefficient on the interaction term between *CGI* and *LTOD (Audit) Removal* is negative and statistically significant in Column (4) of Table 9. Specifically, the coefficient for *LTOD (Audit) Removal* × *CGI* is -3.43, while the coefficient for *LTOD (Audit) Removal* is 10.99. These findings indicate that poorly-governed firms (*CGI* = 0) with LTODs who served on audit committees experience a substantial increase in the stock price of 10.99% when one of these directors resigns. On the other hand, well-governed firms (*CGI* = 5) with LTODs who served on audit committees face a significant decrease in the stock price of 6.16% (calculated as 10.99 - 3.43 × 5) upon the resignation of these directors.

Lastly, in accordance with **Hypothesis 3b**, we observe that the coefficients on *LTOD Term Extension* are negative and statistically significant. The magnitude of these coefficients is approximately -12%, indicating that extending the term of LTODs is perceived quite negatively in the market. This finding supports the notion that longer tenure may lead to entrenchment of outside directors rather than enhancing their experience, as suggested by **Hypothesis 1a**.

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 examined the average *Dissent* and *Dissent* + *Abstain* rates for LTODs versus other outside directors before the tenure limit rule was adopted. Figure 1 presents these results graphically for the years 2018-2019 (i.e., 2018 AGM date – 2020 AGM date). Our sample consisted of voting decisions made by outside directors of 637 KOSPI or KOSDAQ-listed firms, each with at least one LTOD as of the 2020 AGM. We restricted our analysis to the voting decisions of directors who served continuously on the board until 2019. In total, 803 LTODs cast 11,506 and 10,948 votes in 2018 and 2019, respectively, while 841 other outside directors made

8,915 and 9,696 voting decisions in 2018 and 2019, respectively.

The bar graphs indicate that LTODs demonstrate notably lower average *Dissent* and average *Dissent* + *Abstain* rates than other outside directors. The average Dissent rates among LTODs are approximately 0.067%, which is less than half of that observed among other outside directors. This finding suggests that the tenure limit rule adopted in 2020 enhanced the oversight function of outside directors by removing LTODs, who tended to be more sympathetic towards management in terms of board meeting votes than other outside directors.

In Table 10, we reconfirm this finding with multivariate regressions, presenting the results of a linear probability regression model (LPM) that predicts the voting decisions of outside directors. The outcome variables used are *Dissent* and *Dissent* + *Abstain*. Control variables are added, capturing characteristics of the director, the board, and the firm, along with proposal-type fixed effects. The sample is composed of 39,435 vote decisions made by outside directors used in Figure 1. We cluster standard errors at the proposal-type level, recognizing that residuals within the same proposal type may not be independent.

In accordance with **Hypothesis 4**, we find that the coefficient on *LTOD* is negative and statistically significant. The coefficient of -0.00074 for LTOD when *Dissent* + *Abstain* is used as an outcome is also economically significant. Considering that the mean *Dissent* + *Abstain* rate is 0.11% during 2018-2019 (i.e., 2018 AGM date – 2020 AGM date), the 0.074%p lower rate for LTODs represents a sizable difference.

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

In testing **Hypothesis 5**, we initially contrast the average Dissent rates and Dissent + Abstain rates between LTODs and NEODs. Figure 2 presents a comparison of votes cast by LTODs in 2018 and

2019 (i.e., 2018 AGM date – 2020 AGM date) against votes cast by NEODs in 2020 and 2021 (i.e., 2020 AGM date – 2022 AGM date). The voting decisions come from outside directors of 310 KOSPI or KOSDAQ-listed firms, each having at least one LTOD by the 2020 AGM and having elected a new outside director during the same AGM. Between 2020 and 2021, 372 NEODs cast 7,963 votes, while 273 LTODs cast 18,611 votes between 2018 and 2019.

The bar graphs demonstrate that LTODs have substantially lower average *Dissent* and *Dissent + Abstain* rates compared to NEODs. LTODs' *Dissent* rates average at around 0.054%, which is less than one third of the *Dissent* rates observed among NEODs. This outcome supports the notion that the tenure limit rule adopted in 2020 strengthened the monitoring role of outside directors by substituting management-compliant LTODs with NEODs who displayed higher rates of dissent in board meeting votes.

Table 11 reaffirms our findings using multivariate regressions. We present results from a linear probability regression model (LPM) predicting outside directors' voting decisions, using *Dissent* and *Dissent + Abstain* as outcome variables. Control variables account for director, board, and firm characteristics, along with proposal-type fixed effects. The sample comprises 25,421 voting decisions made by directors from 310 KOSPI or KOSDAQ-listed firms that had at least one LTOD by the 2020 AGM and elected a new outside director during the same meeting. We cluster standard errors at the proposal-type level, recognizing that residuals within the same proposal type may not be independent.

Our findings are consistent with **Hypothesis 5**, showing that the coefficient on LTOD is negative and statistically significant. The coefficient of -0.00116 for LTOD when *Dissent + Abstain* is used as an outcome is also economically significant. Considering that the mean Dissent + Abstain rate during 2018-2021 (i.e., from the 2018 AGM date to the 2022 AGM date) is 0.182%,

the 0.116 percentage point lower rate for LTODs represents a substantial difference.

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

To test **Hypothesis 6**, we first analyze the average *Dissent* and *Dissent* + *Abstain* rates of first-term and second-term outside directors for each year during the sample period from 2018 to 2021 (i.e., 2018 AGM date - 2022 AGM date). The voting decisions we consider are from the outside directors of 583 KOSPI or KOSDAQ-listed firms. These firms all had at least one LTOD by the time of the 2020 AGM in March, and had directors in their first or second terms during the period from 2018 to 2021.

The bar graphs depicted in Figure 3 reveal a notable trend: the average *Dissent* and *Dissent* + *Abstain* rates of second-term outside directors, which were relatively stable pre-2021, saw a significant jump in that year. The *Dissent* rate for these directors, which previously ranged from 0 to 0.12 percent between 2018-2020, leaped to 0.32 percent in 2021. Similarly, the *Dissent* + *Abstain* rate, which hovered between 0.03 to 0.12 percent in the 2018-2020 period, spiked to 0.56 percent in 2021. These findings correspond with our expectation that second-term outside directors, aware of their ineligibility for a third term, would exhibit greater opposition post-rule change. However, it is yet unclear why this heightened opposition did not manifest immediately in 2020 but was instead delayed until 2021.

Another interesting finding is the increased *Dissent* and *Dissent* + *Abstain* rates among first-term outside directors in 2021 as well. Specifically, the *Dissent* rate for these directors, which ranged from 0.04 to 0.21 percent between 2018-2020, rose sharply to 0.26 percent in 2021. Likewise, their *Dissent* + *Abstain* rate, previously fluctuating between 0.08 and 0.22 percent during the 2018-2020 period, soared to 0.42 percent in 2021. This observation leads to speculation

that the observed increase in opposition by second-term outside directors might not be solely attributable to the new rule prohibiting their re-election.

To further investigate this, we implemented a dynamic difference-in-differences (DiD) model to quantify the difference in voting decisions between first and second-term outside directors in 2018, 2020, and 2021, using 2019 as the base year. The sample used for this model includes 60,224 voting decisions made by directors from 583 firms. These firms all had at least one LTOD present by the 2020 AGM and also had first or second-term outside directors serving during the 2018-2021 period. The model accounts for director, board, and firm characteristics, as well as proposal-type fixed effects. Recognizing that residuals within the same proposal type may not be independent, we have clustered standard errors at the proposal-type level.

Table 12 provides the results, while Figure 4 plots the estimated coefficients of the interaction terms. We find that the coefficients for $Second\ Term \times Year^{2020}$ and $Second\ Term \times Year^{2021}$ are statistically insignificant, suggesting that second-term outside directors do not necessarily oppose more than first-term outside directors after the rule change. One potential explanation for this insignificance could be that second-term outside directors in a business group might have leaned towards management in their voting decisions with an anticipation of being nominated as an outside director candidate in an affiliated firm.

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, which stipulates that outside directors cannot be re-elected if their tenure exceeds six years in a specific company, or nine years within a business group.

We find evidence consistent with the hypothesis that longer tenure entrenches the outside directors than helping them acquire more experience. Following the introduction of a new tenure limitation rule, stock market reactions were positive, particularly in firms that swiftly replaced LTODs or had subpar governance structures. Conversely, stock prices responded negatively when LTODs had their terms extended. Post-rule implementation, dissent rates among outside directors against management increased. This was largely attributable to the removal of LTODs who traditionally exhibited less dissent, the induction of new outside directors more prone to dissent, and a surge in dissent rates among second-term outside directors who were no longer eligible for re-election under the new rule.

Our research contributes uniquely to existing literature in three significant ways. Firstly, we explore the impact of an outside director tenure limit rule, an area previously undocumented. Secondly, we establish a causal link between the duration of outside director tenure and firm value, a relationship yet to be fully explicated in past studies due to the absence of exogenous policy shocks. Lastly, we delineate how the tenure limit rule enhances the frequency of dissent votes by outside directors, a phenomenon that has remained uninvestigated in other country settings due to the unavailability of detailed voting decisions from outside directors.

Indeed, our study could be expanded in numerous ways. For instance, it could be interesting to probe whether outside directors dissenting against management in their second term are consequently rewarded with more outside directorships, or are they penalized by managers apprehensive of their nomination. Further, it would be worthwhile to explore whether outside directors, having completed six years in a particular firm, take full advantage of the rule by serving an additional three years in an affiliate firm. Such directors might likely be more amenable to management. Both these potential extensions could provide deeper insights into the dynamics and

consequences of the outside director tenure limit.

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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
Firm Characteristics	
LTOD on Board	1 if at least one long-tenured outside director (LTOD) is on the board, 0 otherwise.
LTOD Ratio	The proportion of LTODs among outside directors.
Longest Tenure	Tenure of longest-serving outside director.
Expire by AGM	1 if at least one LTOD's term expires by the 2020 AGM, 0 otherwise.
Expire after AGM	1 if none of LTODs' term expires by the 2020 AGM, 0 otherwise.
LTOD Removal	1 if LTODs are removed from the board, and 0 otherwise.
LTOD (Audit) Removal	1 if LTODs serving on audit committees are removed from the board, 0 otherwise.
LTOD (Non-Audit) Removal	1 if LTODs are removed from the board, but none of them served on audit committees, 0 otherwise
LTOD Term Extension	1 if LTODs extended their tern at the AGM, 0 otherwise.
Market Capitalization	Natural log of the firm's market capitalization at the event date.
Debt Ratio	The ratio of total debt to total assets.
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 log of the firm's total assets.
Tobin's q	The ratio of the sum of market equity value and book debt value to total assets (winsorized at the 1st and 99th percentile values).
ROA	The ratio of net income to total assets (winsorized at the 1st and 99th percentile values).
Board characteristics	
Board Size	Natural log 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.
Board with Family	1 if a family member of the controlling shareholders is on the same board, 0 otherwise.
Director Characteristics	
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 AGM, 0 otherwise.
Second Term	1 if an outside director serves 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, 0 otherwise.
MBA	1 if an outside director has an MBA degree, 0 otherwise.
Attorney	1 if an outside director is an attorney, 0 otherwise.
Accountant	1 if an outside director is an accountant, 0 otherwise.
Female	1 if an outside director is a female, 0 otherwise.

Variables	Definition
LTOD (Dissent)	1 if an LTOD has ever voted against a proposal before the 2020 AGM, and 0 otherwise
LTOD (Dissent + Abstain)	1 if an LTOD has ever voted against a proposal or abstained from voting before the 2020 AGM, and 0 otherwise
Migrate	1 if an LTOD has been elected as an outside director of a different firm after the 2020 AGM, 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-party 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 contrast the average *Dissent* (Figure 1-1) and *Dissent + Abstain* (Figure 1-2) rates among long-tenured outside directors (LTODs) and other outside directors from 2018 to 2019 (i.e., 2018 AGM date – 2020 AGM date). LTODs are defined as directors whose tenure was projected to exceed six years at the company or nine years at the business group by the 2020 annual general shareholders' meeting (AGM). This analysis incorporates voting decisions of outside directors from 637 firms listed on KOSPI or KOSDAQ, each with at least one LTOD by the 2020 AGM. We limit our analyses to the voting decisions of outside directors who served on the board continuously until 2019. The data, sourced from corporate proxy statements, reveal that in 2018 and 2019, 803 LTODs made 11,506 and 10,948 voting decisions respectively, while 841 other outside directors made 8,915 and 9,696 decisions in the corresponding years.

Figure 1-1. Average *Dissent* rates

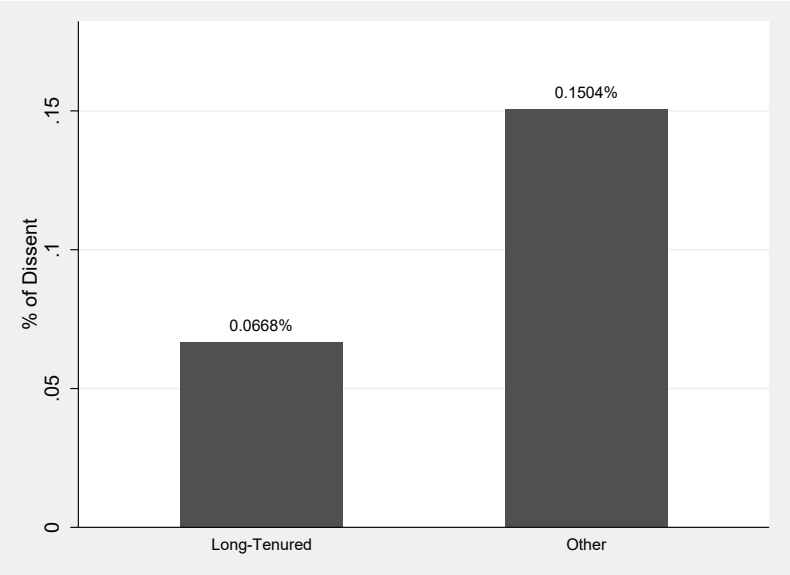

Figure 1-2. Average *Dissent + Abstain* rates

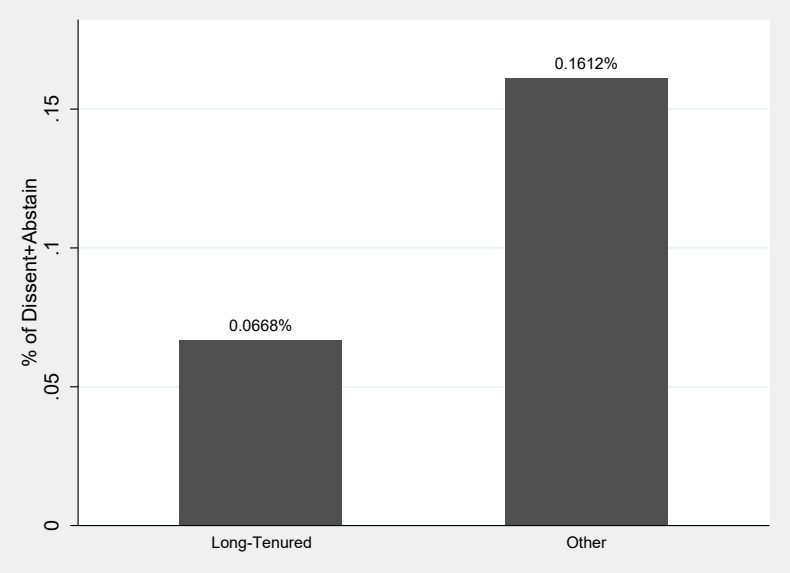

Figure 2. Voting decisions of long-tenured versus newly-elected outside directors

The following bar graphs showcase the average *Dissent* (Figure 2-1) and *Dissent + Abstain* (Figure 2-2) rates for LTODs and newly elected outside directors (NEODs). This analysis juxtaposes the voting patterns of LTODs from 2018 to 2019 (2018 AGM date – 2020 AGM date) against those of NEODs from 2020 to 2021 (2020 AGM date – 2022 AGM date). The dataset encompasses voting decisions from outside directors of 310 firms listed on KOSPI or KOSDAQ, which had at least one LTOD by the 2020 AGM and newly elected an outside director at that same meeting. Voting decision data are gathered from corporate proxy statements, revealing that 273 LTODs made 18,611 voting decisions from 2018 to 2019, and 372 NEODs made 7,963 voting decisions from 2020 to 2021.

Figure 2-1. Average *Dissent* rates

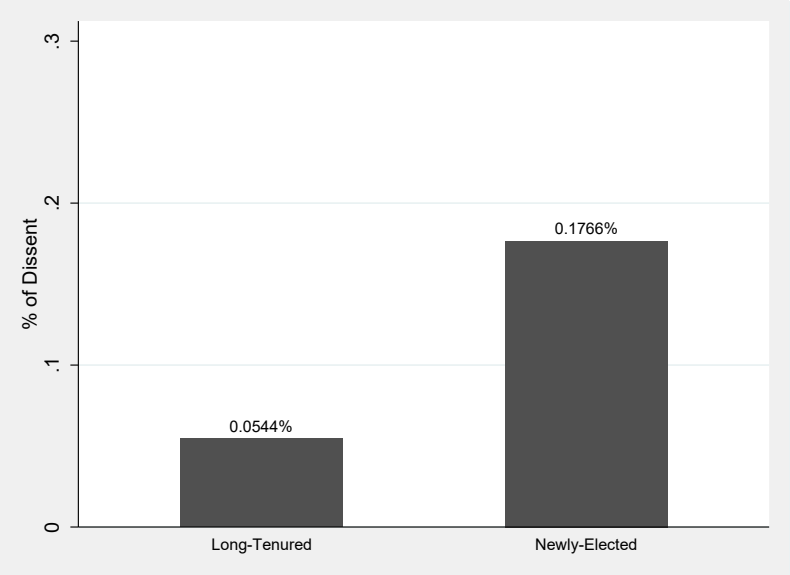

Figure 2-2. Average *Dissent + Abstain* rates

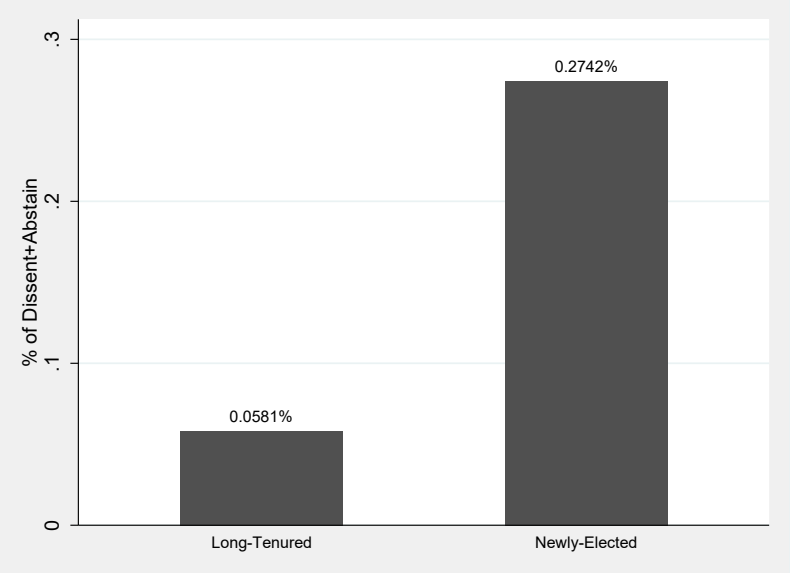

Figure 3. Voting decisions of the first and second-term outside directors (bar graphs)

The following bar graphs depict the average *Dissent* (Figure 3-1) and *Dissent* + *Abstain* (Figure 3-2) rates of first and second-term outside directors spanning from 2018 to 2021. This analysis is based on voting decisions of outside directors from 583 firms listed on KOSPI or KOSDAQ, all of which had at least one long-tenured outside director (LTOD) by the 2020 AGM in March and had directors in their first or second term during 2018-2021. Voting decision data are gathered from corporate proxy statements. The numbers of first-term outside directors in 2018, 2019, 2020, and 2021 are 440, 563, 896, and 1,176 respectively. Similarly, the numbers of second-term outside directors in 2018, 2019, 2020, and 2021 are 398, 308, 203, and 222, respectively.

Figure 3-1. Average *Dissent* rates

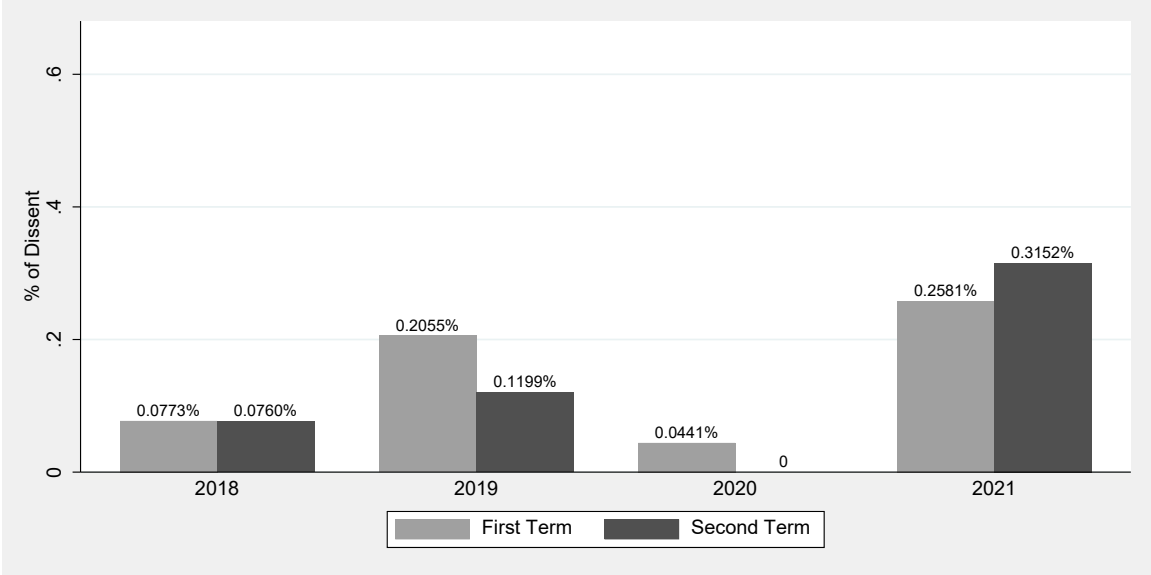

Figure 3-2. Average *Dissent* + *Abstain* rates

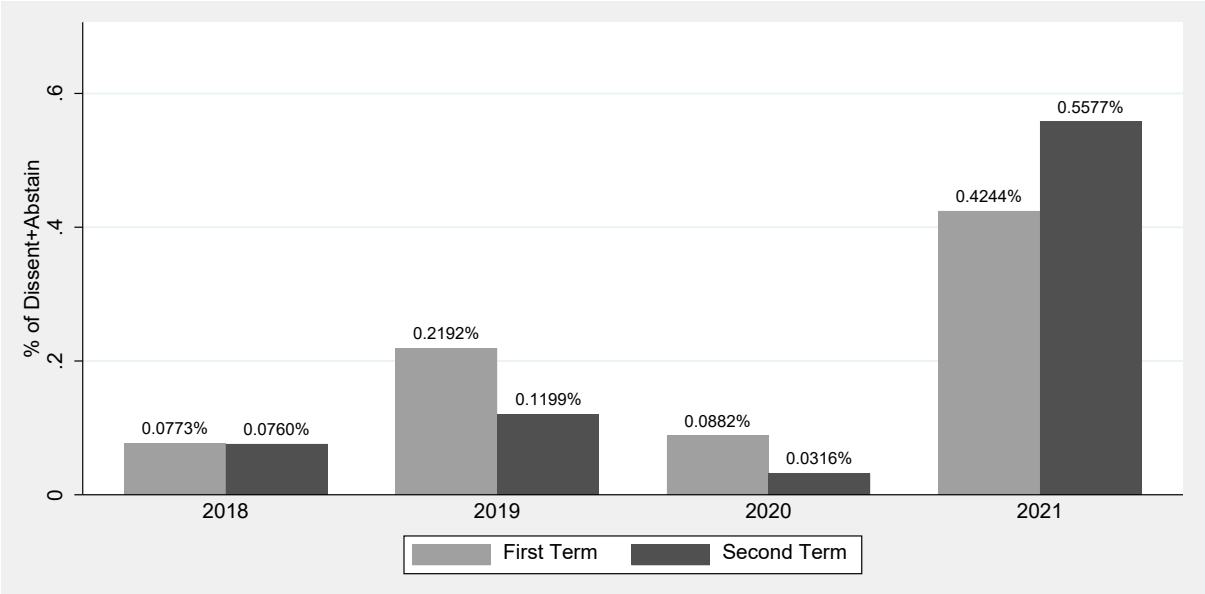

Figure 4. Voting decisions of the first and second-term outside directors (Dynamic DiD model)

The following plots display the outcomes of a dynamic difference-in-differences (DiD) model. This model estimates the variations in mean Dissent (or Dissent + Abstain) rates among first and second-term outside directors for 2018, 2020, and 2021, compared to the baseline year of 2019. The vertical lines represent the 95% confidence intervals for each estimated coefficient.

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

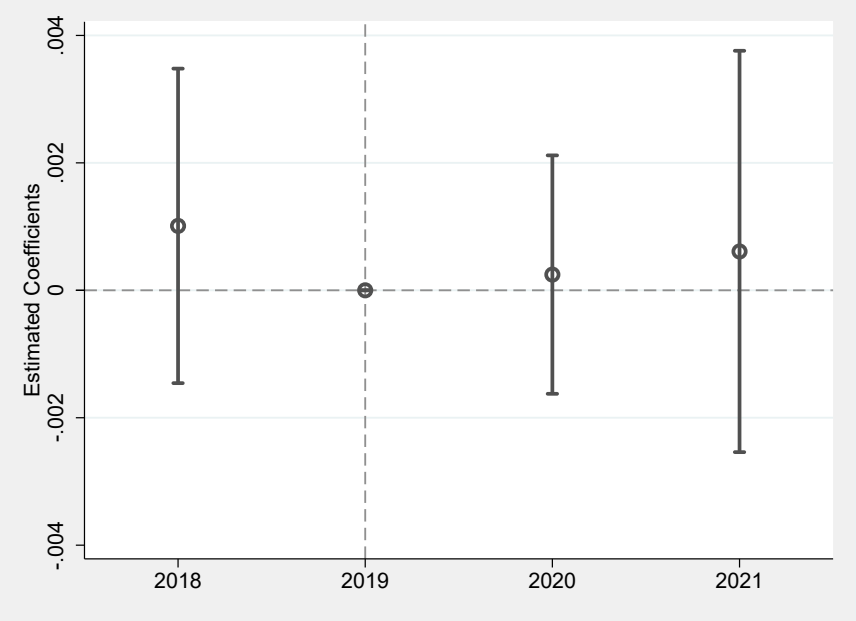

Figure 4-2. The difference in mean *Dissent + Abstain* rates

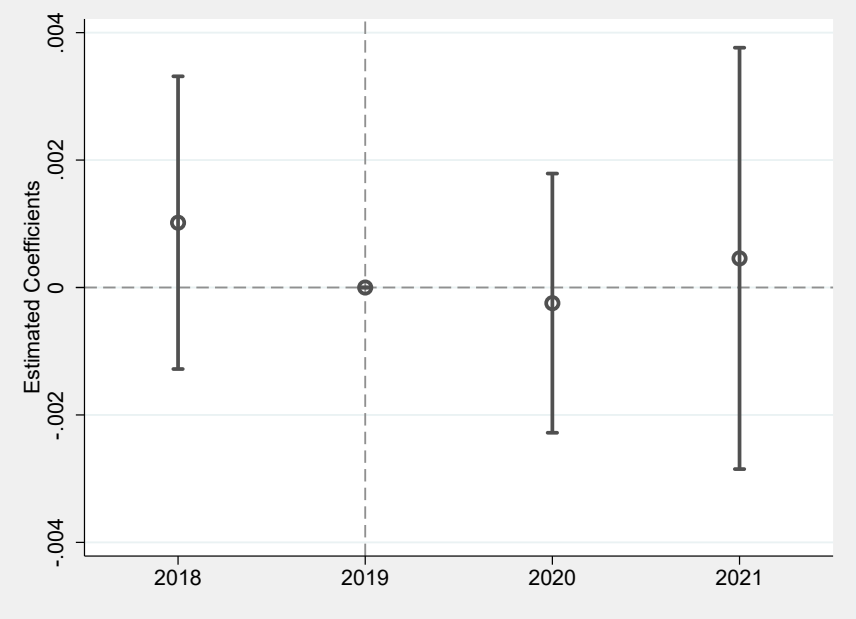

Table 1. Key dates concerning the Commercial Act Enforcement Decree amendment

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 declared its intention to enforce a tenure limit for outside directors. It should be noted, though, that this announcement was part of a broader package of corporate governance reform measures.
September 24, 2019	The Ministry of Justice released its initial amendment bill to modify the Commercial Act Enforcement Decree. The advance legislative notice period was scheduled to continue until November 4.
December 16, 2019	Prominent newspapers reported that the government was likely to delay the effective date of the new rule, implying it would be applicable not from the 2020 Annual General Meeting (AGM), but rather from the 2021 AGM.
January 14, 2020 (event date 2)	The Ministry of Justice published the final amendment bill, establishing the effective date of the tenure limit rule to be the date of promulgation, which falls 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, which took effect on the date of its promulgation.
The 2020 AGM dates (event date 3)	Firms that have long-tenured outside directors held their AGMs.

Table 2. Long-Tenured Outside Directors (LTODs) and Their Removal

Panel A displays the number of LTODs and their tenure length on the boards of companies listed on the KOSPI or KOSDAQ market as of the 2020 AGM in March. The panel also shows the number of LTODs who were removed by that time. Panel B focuses on LTODs who also serve as audit committee members.

Panel A. Number of LTODs and their removal

		All outside directors	LTODs	Removed LTODs
No. of obs.	No. of firm obs.	1,839	637	326
	No. of outside director obs.	3,669	803	386
Tenure length (in years)	At the focal firm	4.06	9.54	9.04
	Including member firms	4.09	9.61	9.11

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.	506	207	128
	No. of outside director obs.	1,505	308	173
Tenure length (in years)	At the focal firm	3.92	8.81	8.45
	Including member firms	3.99	8.98	8.56

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

This table presents data on 801 firms with available KCGS Corporate Governance Index (CGI) ratings as of the 2020 AGM. For each firm, the 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..

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	3.32	3.32	5.51	5.51	0.13
A	43	2.86	3.01	4.18	4.43	0.08
B+	223	3.60	3.63	5,19	5.23	0.17
B	311	4.17	4.22	5.50	5.57	0.24
C	186	5.69	5.79	7.19	7.30	0.41
D	31	6.38	6.38	8.73	8.73	0.50
Total	801	4.17	4.22	5.86	5.94	0.26

Table 4. Summary Statistics

The table below presents the summary statistics for the variables used in this study. Firms operating in the financial or utility sectors, companies undergoing rehabilitation procedures, and companies with impaired capital have been excluded from our sample.

	Obs.	Mean	SD	Min	25th	Median	75th	Max
Firm Characteristics								
All firms at the time of the 2020 AGM								
LTOD on Board	1,839	0.3464	0.4759	0.0000	0.0000	0.0000	1.0000	1.0000
LTOD Ratio	1,839	0.2499	0.3841	0.0000	0.0000	0.0000	0.5000	1.0000
Longest Tenure	1,839	5.3085	4.1074	0.5000	2.1660	4.0830	7.0830	22.0830
Expire by AGM	1,839	0.1773	0.3820	0.0000	0.0000	0.0000	0.0000	1.0000
Expire after AGM	1,839	0.1691	0.3750	0.0000	0.0000	0.0000	0.0000	1.0000
LTOD Removal	1,839	0.1773	0.3820	0.0000	0.0000	0.0000	0.0000	1.0000
LTOD (Audit) Removal	1,839	0.0696	0.2545	0.0000	0.0000	0.0000	0.0000	1.0000
LTOD (Non-Audit) Removal	1,839	0.1077	0.3100	0.0000	0.0000	0.0000	0.0000	1.0000
LTOD Term Extension	1,839	0.0044	0.0658	0.0000	0.0000	0.0000	0.0000	1.0000
Board Size	1,839	1.6154	0.3270	1.0986	1.3863	1.6094	1.9459	2.7081
Board Independence	1,839	0.3619	0.1234	0.1000	0.2500	0.3333	0.4286	0.8571
Market Capitalization (event date 1)	1,835	11.9325	1.2729	9.1379	11.0643	11.6594	12.5331	19.4243
Market Capitalization (event date 2)	1,839	11.9833	1.2709	9.1654	11.1302	11.7070	12.5738	19.6966
Market Capitalization (event date 3)	1,826	11.8715	1.2774	8.8967	11.0153	11.5996	12.4765	19.6096
Debt Ratio	1,839	0.9076	1.3945	0.0006	0.2430	0.5760	1.0653	20.9230
Tobin's q	1,839	1.4521	1.0550	0.4125	0.8399	1.1322	1.6643	6.7721
ROA	1,839	-0.0208	0.1855	-3.2692	-0.0301	0.0160	0.0475	0.3340
801 firms with the 2020 CGI ratings released in March 2020								
CGI	801	2.1024	0.9744	0.0000	1.0000	2.0000	3.0000	5.0000
637 firms with LTOD at the time of the 2020 AGM over a sample period of 2018 – 2021								
Size	2,495	19.3943	1.3514	16.2523	18.5129	19.1571	19.9731	25.1656
Tobin's q	2,486	1.3807	1.1167	0.3744	0.7628	1.0256	1.5532	7.2442
ROA	2,486	0.160	0.0849	-0.3525	-0.0028	0.0231	0.0560	0.2400
Controlling Shareholder Ownership	2,486	38.9061	16.6637	1.6300	26.6500	38.6400	50.3400	78.000
Foreign Ownership	2,485	9.4948	13.5076	0.2500	1.6200	3.5600	10.6400	63.6000

	Obs.	Mean	SD	Min	25th	Median	75th	Max
Leverage	2,495	0.3569	0.1961	0.0006	0.1959	0.3550	0.4969	1.0708
Board Characteristics*: *637 boards with LTOD at the time of the 2020 AGM over a sample period of 2018 – 2021								
Board Size (in logarithm)	2,528	1.8461	0.4029	0.0000	1.6094	1.7918	2.1972	2.9444
Board Independence	2,528	0.3106	0.1085	0.0000	0.2000	0.2857	0.3571	0.8333
Board Age Diversity	2,528	3.2140	3.6652	0.0000	0.0000	2.0824	5.3071	19.9656
Board Tenure Diversity	2,528	1.6687	2.0198	0.0000	0.0000	0.9875	2.6944	14.1421
Director Characteristics*: *outside directors on the boards of 637 firms with LTOD at the time of the 2020 AGM over a sample period of 2018-2021								
Long-Tenured Outside Directors	6,017	0.3651	0.4815	0.0000	0.0000	0.0000	1.0000	1.0000
Director Age	6,017	61.2154	8.9247	31.1567	55.0417	61.5462	67.0806	88.5806
Director Tenure	6,017	4.6802	4.5523	0.0000	1.0083	3.0111	7.0389	23.000
Professor	6,017	0.2641	0.4408	0.0000	0.0000	0.0000	1.0000	1.0000
MBA	6,017	0.0553	0.2285	0.0000	0.0000	0.0000	0.0000	1.0000
Attorney	6,017	0.1075	0.3098	0.0000	0.0000	0.0000	0.0000	1.0000
Accountant	6,017	0.0566	0.2311	0.0000	0.0000	0.0000	0.0000	1.0000
Female	6,017	0.0332	0.1793	0.0000	0.0000	0.0000	0.0000	1.0000
Votes Decisions*: *votes cast by outside directors on the boards of 637 firms with LTOD at the time of the 2020 AGM over a sample period of 2018-2021								
Dissent	87,464	0.0013	0.0354	0.0000	0.0000	0.0000	0.0000	1.0000
Dissent + Abstain	87,464	0.0018	0.0426	0.0000	0.0000	0.0000	0.0000	1.0000

Table 5. Dissenting (or dissenting + abstaining) votes

The following tables display both the count and the percentage of dissenting (or dissenting + abstaining) votes. These votes are derived from 637 firms listed on KOSPI or KOSDAQ, each of which had at least one LTOD by the time of the 2020 AGM. Panel A breaks down these figures annually and by types of outside directors, while Panel B categorizes them according to types of proposals.

Panel A: Number of dissent or abstention votes

Year	Outside director type	All voting decisions	*Dissent*	*Dissent + Abstain*
2018	All	20,421	14 (0.0686%)	15 (0.0735%)
	Long-tenured	11,506	5 (0.0435%)	5 (0.0435%)
	Other	8,915	9 (0.1010%)	10 (0.1122%)
2019	All	20,644	29 (0.1405%)	30 (0.1502%)
	Long-tenured	10,948	10 (0.0913%)	10 (0.0913%)
	Other	9,696	19 (0.1960%)	20 (0.2063%)
2020	All	21,850	6 (0.0275%)	14 (0.0641%)
	Long-tenured	5,097	0	1 (0.0196%)
	Other	16,753	6 (0.0358%)	13 (0.0776%)
2021	All	24,549	61 (0.3079%)	100 (0.4073%)
	Long-tenured	2,866	1 (0.0349%)	1 (0.0349%)
	Other	21,683	60 (0.2767%)	99 (0.4566%)
Total	All	87,464	110 (0.1258%)	159 (00.1818%)
	Long-tenured	30,417	16 (0.0526%)	17 (0.0006%)
	Other	57,047	94 (0.1648%)	142 (0.2489%)

Panel B: Dissent or abstention by proposal types

Proposal types	All voting decisions	*Dissent*	*Dissent + Abstain*
Monitoring-related proposals			
Personnel appointment	8,578	15 (0.1749%)	28 (0.3264%)
Internal governance	9,726	6 (0.0617%)	9 (0.0925%)
Financial reporting	8,703	1 (0.0115%)	3 (0.0345%)
Legal	628	1 (0.1592%)	1 (0.1592%)
Related-party transaction	5,116	3 (0.0586%)	6 (0.1173%)
Advisory-related proposals			
Investments	9,692	29 (0.2992%)	39 (0.4024%)
Financing	24,403	9 (0.0369%)	20 (0.0820%)
Shareholder meeting	7,268	22 (0.3027%)	24 (0.3302%)
Budgeting	235	0 (0.0000%)	0 (0.0000%)
Strategy	3,409	2 (0.0587%)	2 (0.0587%)
Contracting	8,242	14 (0.1699%)	14 (0.1699%)
Other	1,464	8 (0.5464%)	13 (0.8880%)
Total	87,464	110 (0.1258%)	157 (0.1795%)

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 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. The estimation period is [-250, -11]. Each treated firm is matched with replacement to firms that do not have LTODs, but operate in the same industry, are among the two nearest firms in terms of firm size (*ln*(market capitalization) on the event date), and have firm size differences less than a caliper of 1-*SD* of pooled *ln*(market capitalization). The *t*-statistics are reported in parentheses. Statistical significance levels are denoted by ***, **, and *, indicating significance at the 1%, 5%, and 10%, 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]	0.30%	-0.90%***	1.20%***
	(1.11)	(-4.77)	(3.61)
CAR[-1, +10]	0.61%	-0.86%***	1.47%***
	(1.61)	(-2.96)	(3.08)
No. of Firms	604	1,126	

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%*	-0.25	0.76%**
	(1.73)	(-1.13)	(2.06)
CAR[-1, +10]	0.61%	-0.76%**	1.36%**
	(1.27)	(-2.30)	(2.34)
No. of Firms	598	1,146	

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)	Firms with LTODs extending the tenure (D)	Difference-in-means	
	Audit Committee Member (A)	Non-Audit Committee Member (B)			(A) – (C)	(B) – (C)
CAR[-5, +5]	4.74%***	1.77%	1.24%	-10.61%	3.49%**	0.52%
	(3.61)	(1.37)	(1.34)	(-1.46)	(2.17)	(0.33)
CAR[-10, +10]	2.21%*	-0.91%	-3.02%***	-18.04%	5.24%***	2.11%
	(1.83)	(-0.77)	(-3.16)	(-1.70)	(3.39)	(1.38)
No. of Firms	127	197	303	8		

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

The table presents the results of OLS regressions estimating CAR[-1, +10] based on various determinants. In Columns (1) to (4), the sample consists of 1,730 treated plus matched firm observations available around event 3. In Columns (5) to (8), we limit the sample to 804 treated plus matched firm observations, where KCGS Corporate Governance Index (CGI) scores are available. Each treated firm is matched with replacement to firms that do not have LTODs, but operate in the same industry, are among the two nearest firms in terms of firm size (*ln*(market capitalization) on the event date), and have firm size differences less than a caliper of 1-SD of pooled *ln*(market capitalization). The variables used in the table are described in detail in the appendix. The reported *t*-statistics, shown in parentheses, are based on standard errors clustered at the industry-year level. Statistical significance levels are denoted by ***, **, and *, indicating significance at the 1%, 5%, and 10%, respectively.

	CAR[-1, +10]							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
LTOD on Board	1.43**				7.35**			
	[1.99]				[2.12]			
× CGI					-2.50*			
					[-1.88]			
LTOD Ratio		1.74**				8.32**		
		[2.07]				[2.27]		
× CGI						-3.04*		
						[-1.74]		
Longest Tenure			0.19**				0.57**	
			[2.16]				[2.18]	
× CGI							-0.17	
							[-1.46]	
Expire by AGM				1.40				6.21*
				[1.62]				[1.75]
× CGI								-2.04
								[-1.46]
Expire after AGM				1.46*				8.91**
				[1.96]				[2.35]
× CGI								-3.21**
								[-2.28]
CGI					2.24	1.95	2.25	2.24
					[1.31]	[1.23]	[1.31]	[1.31]
Board Size	-0.54	-0.27	-0.55	-0.54	-1.62	-1.08	-1.71	-1.59
	[-0.33]	[-0.17]	[-0.34]	[-0.33]	[-0.93]	[-0.65]	[-0.93]	[-0.93]
Board Independence	0.57	1.36	0.52	0.58	-3.3	-2.12	-2.94	-3.39
	[0.14]	[0.34]	[0.13]	[0.14]	[-0.54]	[-0.36]	[-0.47]	[-0.55]
Market Capitalization	-1.88***	-1.88***	-1.86***	-1.88***	-0.2	-0.24	-0.18	-0.21
	[-4.10]	[-4.13]	[-4.05]	[-4.09]	[-0.53]	[-0.64]	[-0.48]	[-0.54]
Debt Ratio	-0.34	-0.35	-0.34	-0.34	-0.13	-0.16	-0.17	-0.13
	[-1.50]	[-1.55]	[-1.51]	[-1.50]	[-0.42]	[-0.50]	[-0.53]	[-0.41]
Tobin's q	0.3	0.29	0.28	0.3	0.64	0.6	0.57	0.62
	[0.79]	[0.75]	[0.74]	[0.79]	[0.92]	[0.85]	[0.81]	[0.87]
ROA	2.19	2.3	2.05	2.19	5.24**	5.71**	5.26**	5.25**
	[1.27]	[1.31]	[1.23]	[1.27]	[2.21]	[2.41]	[2.19]	[2.21]
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,730	1,730	1,730	1,730	804	804	804	804
Adj. R-squared	0.0790	0.0788	0.0802	0.0784	0.1309	0.1251	0.1213	0.1305

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

The table presents the results of OLS regressions estimating CAR[-1, +10] based on various determinants. In Columns (1) to (4), the sample consists of 1,744 treated plus matched firm observations available around event 1. In Columns (5) to (8), we limit the sample to 811 treated plus matched firm observations, where KCGS Corporate Governance Index (CGI) scores are available. Each treated firm is matched with replacement to firms that do not have LTODs, but operate in the same industry, are among the two nearest firms in terms of firm size (*ln*(market capitalization) on the event date), and have firm size differences less than a caliper of 1-*SD* of pooled *ln*(market capitalization). The variables used in the table are described in detail in the appendix. The reported *t*-statistics, shown in parentheses, are based on standard errors clustered at the industry-year level. Statistical significance levels are denoted by ***, **, and *, indicating significance at the 1%, 5%, and 10%, respectively.

	CAR[-1, +10]							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
LTOD on Board	1.23*				8.01***			
	[1.71]				[2.73]			
× CGI					-3.00**			
					[-2.35]			
LTOD Ratio		1.43				10.88***		
		[1.53]				[2.67]		
× CGI						-4.91**		
						[-2.27]		
Longest Tenure			0.15*				0.52**	
			[1.83]				[2.50]	
× CGI							-0.21*	
							[-1.79]	
Expire by AGM				1.46				8.79***
				[1.53]				[3.26]
× CGI								-3.07***
								[-3.26]
Expire after AGM				0.99				7.43
				[1.33]				[1.41]
× CGI								-3.20
								[-1.21]
CGI					0.67	0.58	0.60	0.69
					[0.85]	[0.75]	[0.69]	[0.86]
Board Size	-1.72	-1.49	-1.75	-1.74	-1.70	-1.20	-1.57	-1.83
	[-1.43]	[-1.25]	[-1.44]	[-1.44]	[-0.74]	[-0.52]	[-0.67]	[-0.78]
Board Independence	0.42	1.00	0.30	0.40	2.60	3.88	3.52	2.77
	[0.15]	[0.34]	[0.11]	[0.14]	[0.71]	[1.15]	[0.94]	[0.75]
Market Capitalization	-0.50	-0.49	-0.48	-0.51	0.60	0.51	0.57	0.58
	[-0.79]	[-0.78]	[-0.76]	[-0.79]	[1.09]	[0.93]	[1.00]	[1.05]
Debt Ratio	0.06	0.05	0.06	0.05	-0.55	-0.59	-0.58	-0.58
	[0.13]	[0.12]	[0.13]	[0.12]	[-1.05]	[-1.11]	[-1.11]	[-1.11]
Tobin's q	-0.59	-0.60	-0.61	-0.58	-1.01	-1.02	-1.04	-0.96
	[-1.06]	[-1.07]	[-1.08]	[-1.06]	[-1.15]	[-1.14]	[-1.12]	[-1.13]
ROA	2.44	2.53	2.35	2.41	-15.75	-14.98	-14.74	-15.83
	[0.61]	[0.63]	[0.59]	[0.60]	[-1.11]	[-1.08]	[-1.04]	[-1.12]
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,744	1,744	1,744	1,744	811	811	811	811
Adj. R-squared	0.0710	0.0706	0.0711	0.0706	0.1226	0.1272	0.1078	0.1222

Table 9. Determinants of CAR around event date 3 (removal date of LTODs)

The table presents the results of OLS regressions estimating CAR[-10, +10] based on various determinants. In Columns (1) to (2), the sample consists of 1,747 treated plus matched firm observations available around event 3. In Columns (3) to (4), we limit the sample to 806 treated plus matched firm observations, where KCGS Corporate Governance Index (CGI) scores are available. Each treated firm is matched with replacement to firms that do not have LTODs, but operate in the same industry, are among the two nearest firms in terms of firm size (*ln*(market capitalization) on the event date), and have firm size differences less than a caliper of 1-*SD* of pooled *ln*(market capitalization). The variables used in the table are described in detail in the appendix. The reported *t*-statistics, shown in parentheses, are based on standard errors clustered at the industry-year level. Statistical significance levels are denoted by ***, **, and *, indicating significance at the 1%, 5%, and 10%, respectively.

	CAR[-10, +10]			
	(1)	(2)	(3)	(4)
LTOD Removal	1.80**		5.65*	
	[2.02]		[1.93]	
× CGI			-1.49	
			[-1.15]	
LTOD (Audit) Removal		3.16**		10.99***
		[2.25]		[3.13]
× CGI				-3.43**
				[-2.51]
LTOD (Non-Audit) Removal		0.51		2.49
		[0.49]		[0.63]
× CGI				-0.40
				[-0.16]
LTOD Term Extension	-11.94**	-11.90**		
	[-2.08]	[-2.09]		
CGI			1.16*	1.24*
			[1.77]	[1.80]
Board Size	0.58	0.31	-0.54	-0.68
	[0.41]	[0.22]	[-0.17]	[-0.21]
Board Independence	-2.70	-3.72	0.22	-0.84
	[-0.53]	[-0.70]	[0.03]	[-0.10]
Market Capitalization	1.22**	1.19**	-0.03	-0.01
	[2.34]	[2.29]	[-0.04]	[-0.02]
Debt Ratio	0.01	0.00	-1.82*	-1.86*
	[0.02]	[0.01]	[-1.85]	[-1.92]
Tobin's q	-1.11**	-1.09**	0.25	0.30
	[-2.08]	[-2.05]	[0.38]	[0.46]
ROA	-16.55**	-16.49**	-3.69	-3.67
	[-2.22]	[-2.21]	[-0.21]	[-0.21]
Constant	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Observations	1,747	1,747	806	806
Adj. R-squared	0.1538	0.1536	0.2255	0.2251

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

The table below presents the findings from a linear probability regression model (LPM), utilized to predict the voting decisions of outside directors during 2018-2019 (i.e., 2018 AGM date – 2020 AGM date). Outcome variables in this model are *Dissent* and *Dissent + Abstain*. The sample comprises 39,435 voting decisions made by outside directors from 637 KOSPI or KOSDAQ-listed firms, each having at least one long-tenured outside director (LTOD) by the 2020 AGM. Financial or utility firms are excluded from the sample. Voting data is obtained from firm proxy statements. Detailed definitions of the variables are available in the Appendix. The *t*-statistics, shown in parentheses, are based on standard errors clustered at the proposal-type level. Statistical significance at the 1%, 5%, and 10% levels is indicated by ***, **, and *, respectively.

	Dissent	*Dissent + Abstain*
LTOD	-0.00066*	-0.00074**
	(-1.97)	(-2.41)
Age	-0.00003	-0.00004
	(-1.24)	(-1.40)
Female	-0.00153**	-0.00165**
	(-2.45)	(-2.48)
Professor	0.00014	0.00008
	(0.26)	(0.14)
MBA	-0.0014	-0.00019
	(-0.24)	(-0.34)
Attorney	-0.00041	-0.00028
	(-0.59)	(-0.35)
Accountant	-0.00082	-0.00091
	(-1.68)	(-1.86)
Board Size	0.00085	0.00089
	(1.15)	(1.18)
Board Independence	0.00373	0.00360
	(0.67)	(0.67)
Board Age Diversity	-0.00000	0.00001
	(-0.03)	(0.21)
Board Tenure Diversity	0.00000	0.00000
	(0.11)	(0.05)
Controlling Ownership	-0.00003	-0.00003
	(-0.80)	(-0.89)
Foreign Ownership	-0.00001	-0.00002
	(-0.72)	(-0.98)
Firm Size	-0.00010	-0.00011
	(-0.74)	(-0.79)
Tobin's q	0.00017	0.00018
	(0.32)	(0.32)
ROA	-0.00054	0.00084
	(-0.10)	(0.17)
Leverage	-0.00026	-0.00008
	(-0.19)	(-0.05)
Proposal-Type FE	Yes	Yes
Observations	39,435	39,435
Adj. R-squared	0.0020	0.0021

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

The table below presents the findings from a linear probability regression model (LPM), utilized to predict the voting decisions of outside directors during 2018-2021 (i.e., 2018 AGM date – 2022 AGM date). Outcome variables in this model are *Dissent* and *Dissent + Abstain*. The sample comprises 25,421 vote decisions made by LTODs during 2018-2019 and NEODs during 2020-2021. These directors served on the boards of 310 KOSPI or KOSDAQ-listed firms that had at least one LTOD by the 2020 AGM and elected a new outside director during the same meeting. Financial or utility firms are excluded from the sample. Voting data is obtained from firm proxy statements. Detailed definitions of the variables are available in the Appendix. The *t*-statistics, shown in parentheses, are based on standard errors clustered at the proposal-type level. Statistical significance at the 1%, 5%, and 10% levels is indicated by ***, **, and *, respectively.

	Dissent	*Dissent + Abstain*
LTOD	-0.00115**	-0.00116**
	(-2.50)	(-2.33)
Age	-0.00005*	-0.00005*
	(-1.81)	(-2.07)
Female	-0.00186**	-0.00216**
	(-2.61)	(-2.67)
Professor	0.00017	0.00021
	(0.37)	(0.43)
MBA	0.00023	0.00082
	(0.21)	(0.73)
Attorney	-0.00053	-0.00030
	(-0.73)	(-0.39)
Accountant	-0.00130**	-0.00149**
	(-2.28)	(-2.34)
Board Size	0.00130	0.00142*
	(1.86)	(1.93)
Board Independence	0.00008	0.00093
	(0.03)	(0.28)
Board Age Diversity	0.00000	0.00000
	(0.06)	(0.04)
Board Tenure Diversity	-0.00008	-0.00004
	(-1.28)	(-0.31)
Controlling Ownership	-0.00004	-0.00004
	(-1.11)	(-1.22)
Foreign Ownership	-0.00002	-0.00003
	(-0.85)	(-1.19)
Firm Size	-0.00002	-0.00018
	(-0.74)	(-1.02)
Tobin's q	0.00026	0.00021
	(0.42)	(0.34)
ROA	0.00716	0.00916
	(1.65)	(1.91)
Leverage	0.00104	0.00116
	(0.55)	(0.59)
Proposal-Type FE	Yes	Yes
Observations	25,421	25,421
Adj. R-squared	0.0022	0.0022

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

The following table exhibits the outcomes of a dynamic difference-in-differences (DiD) model. This model identifies differences in voting decisions made by first and second-term outside directors in 2018, 2020, and 2021, compared to the reference year of 2019. From the 637 KOSPI or KOSDAQ listed firms, each with at least one LTOD at the 2020 AGM, 583 firms also had first or second-term outside directors during 2018-2021. The sample includes 60,560 voting decisions made by directors of these 583 firms. Financial or utility firms are excluded from the sample. Voting data is obtained from firm proxy statements. Detailed definitions of the variables are available in the Appendix. The *t*-statistics, shown in parentheses, are based on standard errors clustered at the proposal-type level. Statistical significance at the 1%, 5%, and 10% levels is indicated by ***, **, and *, respectively.

	Dissent	*Dissent + Abstain*
Second Term $\times Year^{2018}$	0.00092	0.00102
	(0.90)	(0.98)
Second Term $\times Year^{2020}$	0.00025	-0.00025
	(0.29)	(-0.27)
Second Term $\times Year^{2021}$	0.00061	0.00046
	(0.43)	(0.30)
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	60,560	60,560
Adj. R-squared	0.0102	0.0177