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Audit Committee Characteristics and Low-balling of Audit Fees

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ABSTRACT

Audit Committee Characteristics and Low-balling of Audit Fees

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This paper aims to investigate whether audit committees with certain characteristics effectively avoid initial year audit fee discounts or so called 'low-balling.' Effective audit committees may not be attracted with auditor's fee cutting in the initial engagement year to maintain high quality of audit. We classify audit committee based on four aspects that signify the quality of the committee: independence, financial expertise, meeting frequency, and tenure. Consistent with prior research, we find low-balling of audit fees exist in Korean audit market and audit committee independence and meeting frequency are positively associated with audit fees. In particular, audit committees with frequent meetings prevent audit fee discounts in the first engagement year, suggesting that diligent audit committee plays an important role to maintain high audit quality. Finally, we find that the audit committees which satisfy at least one of good governance criteria are effective in preventing initial year audit fee discounts. Sensitivity analyses also reveal that audit committee expertise is also weakly related to higher audit fees.

Key words : audit committee, audit fees, low-balling, audit quality

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I. Introduction

This paper investigates how the audit committee characteristics measured by independence, financial expertise, meeting frequency (i.e., activity) and average tenure of audit committee members, impact the magnitude of auditors' initial engagement year audit fee discounts or low-balling of audit fees. Experiencing high-profile financial fraud cases such as Enron, regulators and publics have had increased concerns about corporate governance and the quality of financial reporting (National Association of Corporate Directors, NACD 2000; DeFond et al. 2005; Prawitt et al. 2012). Among many mechanisms in a company that are established to reduce agency problems, boards of directors assume an important role in corporate governance. Boards exist to protect the interests of the shareholders (Fama 1980; Fama and Jensen 1983). To achieve its objective, board of directors performs an oversight role that involves monitoring top executives including the CEO, approving the company's strategies, and maintaining the control system (DeZoort et al. 2002). Due to its diverse responsibilities, the board of directors delegates some of its oversight to the audit committee and other committees of the board. The audit committee mainly oversees the processes which relate to the company's financial risks, that is, the oversight of financial reporting, internal controls to address key risks, and audit-related activities (DeZoort et al. 2002).

As one way to achieve its roles and responsibilities, the audit committee selects and changes an external auditor. In fact, the Blue Ribbon Committee's (BRC, 1999) report, *Improving the Effectiveness of Corporate Audit Committees*, clearly states the role and responsibility of the audit committee on selection, evaluation and replacement of an external auditor.[1] As audit committee members value their reputation and financial

[1] The BRC recommendation was extended by Sarbanes-Oxley Act of 2002 (SOX) which assigns direct responsibility for determining the external auditor's compensation to the audit committee (Beck and Mauldin 2014).

statements-related risks rely heavily on the audit committee's overseeing ability, it is critical for the audit committee to select and change an external auditor who provides high quality of audit services (Reinstein et al. 1984). DeAngelo (1981) defines the quality of audit services as the market assessed joint probability that a given external auditor will both (1) discover a breach in the company's accounting system, and (2) report the breach. The former and the latter depend upon audit procedures and the auditor's independence from a company, respectively. With respect to the former factor, the ability of the auditor to uncover failures in the client's accounting system will depend on the auditor being free to determine appropriate audit techniques and the extent of their application (DeAngelo 1981). These suggest that the audit work should not be constrained by the size of audit fees but rather should be based on the judgment on what is necessary to arrive at an adequate audit opinion (Collier and Gregory 1996). However, in practice, if audit fee is too low, it is possible that auditor do not exert enough audit effort to save audit costs, thereby lowering audit quality.

In regards to low-balling of audit fees at initial audit engagement stage, DeAngelo (1981) argues that certain aspects of an audit environment such as significant transactions costs of changing an external auditor enable the incumbent auditor to have relatively strong bargaining power and in turn earn quasi-rents on future audits of a given client, and thus auditors try to attract clients to extract quasi-rents by cutting audit fees below total costs in the initial year. In fact, many prior studies show that the existence of initial year audit fee discounts in many different countries (e.g., Simon and Francis 1988; Ghosh and Lustgarten 2006; Shin et al. 2007).

Due to this importance of auditor selection by the audit committee, prior literature examines the link between audit committees, audit fees, and audit quality. For example, Collier and Gregory (1996) document the positive effect of the audit committee on audit fees, which suggests that the audit committee plays an important role in preventing audit fees from reducing to levels where audit quality may be compromised. Moreover, Abbott

et al. (2003) find audit fees are positively related to audit committee independence and financial expertise.

However, higher audit fees do not always represent higher audit quality. Higher the audit fees, higher the possibility of the economic bonding between the auditor and the client (Choi et al. 2010).[1] It is possible that the client pays high audit fees in return for the compromised auditor independence. Auditors may acquiesce to client pressure while receiving lucrative fees. Consistent with this prediction, both Choi et al. (2010) and Hoitash et al. (2007) find a negative association between abnormal audit fees and audit quality, supporting for the arguments that the economic bonding significantly influence auditor behavior.

Thus, it is not clear from prior literature whether high or low fees are detrimental to the audit quality. Given the importance of auditor selection by the audit committee and the existence of low-balling practice in the audit market, we empirically test our hypotheses on the association between audit committee characteristics and low-balling of audit fees using a sample of 1,429 firm-year observations for the 2000-2012 periods in Korea. We expect that high quality audit committee plays a role in mitigating auditor low-balling. Although prior Korean studies examine the existence of low-balling (e.g., Shin et al. 2007; Park and Lee 2008; Park and Shim 2009; Park et al. 2010; Lee et al. 2011) or the audit fee effect of audit committees (e.g., Park and Shim 2009), none of the studies examine the issue combined together.

The empirical findings of this study are summarized as follows. First, initial year audit fee discounting exists and audit fees are positively associated with audit committee independence and meeting frequency, consistent with Abbott et al. (2003) and Chung (2005). Second, diligent audit committees that meet frequently have less initial year audit fee discounts, suggesting that active audit committees restrict auditor low-balling to

[1] Specifically, Choi et al. (2010) find positive abnormal audit fees are negatively associated with audit quality while negative abnormal audit fees are not significantly associated with audit quality.

maintain high audit quality. Third, the audit committees which have at least one of good governance criteria (out of four characteristics mentioned previously) are effective in avoiding low-balling of audit fees, compared with the other firms without meeting any of good governance criteria. Finally, sensitivity analyses reveal weak evidence that audit committee expertise is also related to the reduced magnitude of low-balling.

Our study makes several contributions to academics, practitioners, and regulators. First, we contribute to the literature on the audit fee negotiation process by providing further empirical support for the existence of initial year audit fee discounts and subsequent audit fee increases, and investigating the effect of audit committee characteristics on the low-balling of audit fees. Second, we add the literature on audit committee effectiveness by using a sample of firms with audit committees over a longer period of time and examining the role of audit committee characteristics in auditor remuneration. Thus, this study contributes to the audit-related academic literature. Third, the findings in this study provide interesting and valuable implications to practitioners and regulators by providing the condition that poor audit quality can be observed. Finally, given the long-standing concerns of regulators about corporate governance and the recent regulation on independent directors in Korean financial firms[1], our results should be of interest to policy-makers to reveal the effect of good governance mechanism.

The rest of this study proceeds as follows. In Sections II and III, we review the related literature and develop our hypotheses, respectively. Section IV presents the research design and Section V describes the data and sample characteristics. In Section VI, we discuss our empirical results. Finally, Section VII concludes.

[1] On November 20, 2014, Financial Services Commission released the Corporate Governance Code for financial companies whose asset size over 2 trillion won. According to the Code, the financial companies should secure the diversity of outside directors' expertise and tenure of outside directors in banks and bank holding companies is restricted to one year.

II. Literature Review

2.1 Theoretical Arguments on Low-balling of Audit Fees

Theoretical models that describe the auditor-client environment offer conflicting inferences about initial audit pricing and audit quality. First, DeAngelo (1981) argues that the existence of client specified quasi-rents to incumbent auditors leads to initial year low-balling and lowers the optimal amount of auditor independence. Specifically, certain aspects of the audit environment such as significant transactions costs of changing auditors and technological advantages to incumbent auditors enable incumbent auditors to earn quasi-rents on future audits of a given client and these expected future quasi-rents drive fees below total costs in the initial period. If the auditor market is competitive, loss from initial year low-balling and quasi-rents from subsequent audit years are same so that the excess profit for the auditor is zero. Chan (1999) also demonstrates that auditors' start-up costs and clients' switching costs induce the practice of initial year audit fee discounting and that such practice is a natural result from competition among audit firms. But he argues that low-balling occurs only where audit firms compete fiercely.

However, contrary to DeAngelo (1981), Dye (1991) posits that the client possesses more bargaining power than the incumbent auditor. In auditor-client relationship, both are sole seller and sole buyer so that bargaining power rules which party will get the quasi-rents from the engagement. If the client has all bargaining power, the incumbent auditor would not have incentive to offer a price cut in the initial year, especially lower than its cost. But even when the client is free to choose any auditor in the market, the auditor has more bargaining power (Kanodia and Mukherji 1994). Specifically, when the client wants to keep its incumbent auditor, for example, when the auditor agrees to attest on the client's financial information more optimistic than real, the auditor would offer initial year audit fee discounting to be incumbent. However, if outside stakeholders observe the existence of

quasi-rents, they would perceive that the financial statements are less reliable.[1] Therefore, low-balling only occurs if the auditor's quasi-rents from future engagements are unobservable to outsiders (Dye 1991).

In any case, the low-balling of audit fees could lead to impaired auditor independence because auditors need to keep the client for a long time to recover initial loss. Thus, auditors are more likely to acquiesce to client pressure not to lose the existing clients, leading to impaired independence.

2.2 Empirical Studies on Low-balling of Audit Fees

Simon and Francis (1988) show initial year audit fee cutting practices using survey data. In addition, Ettredge and Greenberg (1990) and Ghosh and Lustgarten (2006) reconfirm the existence of initial engagement fee cutting with more recent data[2] and argue that these fee cutting practices are derived from the difference between new auditors and incumbent auditors regarding fee-relevant dimensions such as auditors' class, industry expertise, technological efficiency, and the number of auditors' bidding which differs across engagements. Gregory and Collier (1996) also find while involuntary auditor changes are related to insignificantly positive increases in fees, voluntary changes are related to significantly negative fee reductions, confirming the existence of low-balling. These findings suggest that the fee reductions are ascribed to not economies of scale or audit scope changes but low-balling to attract new clients. Meanwhile, Craswell and Francis (1999) test Dye's (1991) theory by investigating low-balling in Australia where audit fee information has been available since 1970s. They find that initial engagement fee discount does not occur in Australia, confirming the Dye's (1991) argument that the low-balling

[1] Schatzberg and Sevcik (1994) show that auditors deviate from truthful reporting, that is impair their independence only when additional future profits exceed the additional cost of misreporting.

[2] Specifically, Ghosh and Lustgarten (2006) find that low-balling occurs more frequently among non-Big 4 auditors than Big 4 auditors. This finding suggests that Big 4 auditors try to maintain high-quality audit and thus are less likely to compete with other in fees than quality.

disappears if the audit fees are publicly disclosed.

Korean empirical studies also show that initial year audit fee discounts exist in Korea (Shin et al. 2007; Park and Lee 2008; Park and Shim 2009; Park et al. 2010; Lee et al. 2011; Park and Park 2011). It is noteworthy that, unlike the prediction of Dye (1991), the initial fee discount prevails even after audit fee information was started to be disclosed publicly in Korea. This finding suggests that Korean auditors in general care less for auditor reputation or quality than those in other developed countries.

2.3 Empirical Studies on Audit Fees and Audit Quality

In general, audit quality is increasing function of audit fee which is the sum of actual audit cost and expected legal liability cost (Choi et al. 2008). The audit fee is determined by audit hour multiplied by audit fee per hour. Since more audit hour means more efforts to perform the audit, higher audit fee usually represents higher audit quality. In fact, Huang et al. (2014) find that when there are auditor changes and initial engagement year audit fee discount, sanctions against auditors and greater discretionary accruals are more likely. In addition, Shin et al. (2007) find that audit quality is generally lower when auditor is in the first year of audit engagement relative to the continuing audit, and that the audit quality is even lower for firms giving the initial fee discount.[1]

However, Hoitash et al. (2007) document a negative association between audit fees and audit quality, which are consistent with economic bonding story rather than auditor reputation concerns. In addition, Choi et al. (2010) find that audit quality is negatively associated with positive abnormal audit fees while it is not significantly associated with negative abnormal audit fees. These indicate that too high audit fee leads to impaired audit quality due to the economic bonding between the auditor and the client. Thus, in summary,

[1] On the contrary, Deis and Giroux (1996) (Dopuch and King (1996)) show that initial year audit fee discounts increased (did not reduce) audit quality. In addition, Gul et al. (2009) and Park and Park (2011) show that the audit quality is not related to low-balling.

it is not clear from the findings in prior studies how the audit fees and audit quality is related.

2.4 Empirical Studies on Audit Committee Influence

Collier and Gregory (1996) posit that audit committees would be expected to exert a following two-way countervailing pressures on total audit fees. First, audit committees would be expected to increase audit fees to the extent that they should improve audit quality partly by ensuring audit hour is not reduced. Second, since audit committees would be a proxy for the strength of internal controls, firms with audit committees (strong internal controls) would pay lower audit fees because it takes less time for auditors to audit clients with good internal control system, compared to those without audit committees (weak internal controls), ceteris paribus. Empirically, they find that the former force dominates the latter, which supports for the argument that at least audit committees are partially effective in preventing audit fee reductions to levels where the audit quality may be compromised.

Abbott et al. (2003) examine the association between audit committee characteristics such as audit committee independence, expertise, and activity and audit fees. They demonstrate that both audit committee independence and financial expertise are positively associated with audit fees. Assuming that higher audit fee is related to higher audit quality, the result indicates that an independent and expert audit committee requires higher audit quality and wants external auditor to put more audit efforts. Meanwhile, they find that audit committee meeting frequency is not associated with audit fees. In sum, effective audit committees could affect the negotiations of audit fees as well as audit scope. In addition, audit committees could simultaneously strengthen auditors' relative bargaining position by reducing the overall threat of auditor dismissal during the audit fee negotiations, leading to higher audit fees even in the absence of increased audit scope. Chung (2005) also investigates the association between audit committee characteristics and audit fees using Korean data and finds that audit committee independence and activities are

positively associated with audit fees. Moreover, Park and Shim (2009) show that audit fees are negatively associated with the existence of an audit committees and audit committees that are more independent, have greater financial and accounting expertise, and meet more frequently.[1]

Prior literature also examines the effectiveness of an audit committee on improving financial reporting quality. For example, Klein (2002) investigates whether board and audit committee characteristics are associated with earnings management by the firm and finds that abnormal accruals are negatively associated with board or audit committee independence. These results indicate that audit committee composition affects a firm's ability to monitor its financial accounting processes. Similarly, Dhaliwal et al. (2010) show that audit committee accounting experts who hold fewer directorships, have a lower tenure, and are independent have a positive effect on accruals quality. Furthermore, they show that the most positive effect on accruals quality is achieved when companies have a mix of accounting and finance experts in their audit committees.

III. Hypotheses Development

As discussed up to now, even though initial year audit fee discounting is a natural consequence of competing auditors and there are several arguments that this practice does not impair the audit quality or auditor independence, too much competence leading to lower audit fees could impair the audit quality (Shin et al. 2007). At the same time, too much of audit fee is also a woe to the audit market and regulators since abnormal high audit fees would be derived from the economic bonding between the auditor and the client (Choi et al. 2010). In reality, switching auditors is costly and the audit market is not perfectly competitive. Therefore, rational audit clients engaging with low-balling initial fee

[1] They classify sample firms as having audit fee discounts when the ratio of the difference between the estimated normal audit fee and actual audit fees over the estimates exceeds 30%.

anticipate that higher audit fees will be charged in subsequent years and low-balling may result in a higher average audit fee across total audit engagement years than the normal level.

In particular, in Korea, audit engagements of listed companies should be continued at least for three consecutive years to secure auditors' independence according to the Act on the External Audit of Stock Corporation. This requirement is called '3-year mandatory auditor retention.' Hence, auditor incumbency could be a huge advantage at fee negotiation. Taken together, since low-balling is the result of future quasi-rents that sellers expect, auditors who offer low-balling is likely to increase subsequent year audit fees to recover first year loss or small profit.

If audit committees expect the initial year audit fee discount will be reversed after the initial year because of auditors' rent extraction behaviors, they would not be tempted with discounted audit fees when selecting a new auditor. In addition, they will not accept too high audit fees since they anticipate the creation of economic bonding between the auditor and the client due to the high level of fees. Thus, we posit that the firms with an effective audit committee have smaller or no initial year audit fee discount than those with a less effective audit committee.

There are several aspects that could distinguish effective and ineffective audit committees. Following prior literature (e.g., Abbott et al. 2003; Chung 2005), we focus on the audit committee's independence, expertise, and activities. First, if audit committees are independent, they would have less pressure to choose the auditor with fee discounting (less pressure in expense) than management and make better judgment on engaging a competent auditor (Abbott et al. 2003). In addition, since audit committees that are composed entirely of independent directors care more about their reputation and responsibility to protect stakeholders' wealth (Fama and Jensen 1983), they are less likely to engage the auditors who offer fee discounting.

Second, audit committees with finance and accounting expertise would monitor the company's financial related processes and controls better and require the auditor to put

more audit efforts (e.g., Abbott et al. 2003; Chung 2005).[1] In addition, audit committee members with finance and accounting expertise can anticipate that initial year audit fee discounting will be reversed in subsequent years and that the auditor would not input sufficient audit efforts in the initial year due to discounted audit fees, which results in impaired audit quality. Thus, audit committees with expertise are less likely to expect initial year audit fee discounting. However, given that large Korean firms are all required to have audit committee members with at least one member with accounting or finance expertise,[2] empirically, it is not clear whether the mandatory appointment of audit committee member plays an effective role.

Third, the level of audit committee activity is usually measured by the meeting frequency of committee. Audit committees more active are more likely to monitor the company closely and actively (Abbott et al. 2003). With stronger monitoring, the audit committees would require more audit hours and efforts to improve financial reporting quality and to mitigate auditing risks.[3]

Finally, we add one more audit committee characteristics, average tenure of audit committee members, to investigate audit committee effectiveness. There are two countervailing arguments on the effect of audit committee tenure. In Korea, average audit committee members' tenure is less than three years.[4] Considering that audit committee meetings are generally held four times a year to review and approve quarterly and annual

[1] DeZoort and Salterio (2001) posit that the members of an audit committee with more experience are more likely to understand the risks the auditor faces.

[2] Korean firms with total assets over 2 trillion won must have at least one audit committee member with financial expertise by the Securities and Exchange Law revised in 2003.

[3] In contrast, there is also a possibility that a frequent audit committee meeting means the company is under financial constraints or has internal control issues. Thus, it is not clear how the audit committee meeting frequency is related to initial audit fee discounts.

[4] Table 2 shows the mean and median values of average tenure of audit committee members are 2.84 years and 2.33 years, respectively.

financial statements,[1] we question whether three-year directorship is enough to understand the company's financial risks and internal controls on financial reporting and to decide the reasonable extent of audit. In fact, prior literature suggests that audit committee members with longer tenure would be more informed about the company's financial reporting and internal controls (Hong and Jung 2012; Sharma and Iselin 2012). Therefore, they can make better decisions, which can be shown as more stable audit fees over years. In contrast, audit committee members with short tenure may not being aware of initial fee discount and subsequent fee increase due to limited experience. Otherwise, independent audit committee members with longer tenure may build cozy relationship with management leading to impaired independence (Sharma and Iselin 2012). Thus, longer audit committee member tenure may result in impaired audit quality. Thus, the effect of audit committee tenure is not clear.

In sum, we expect firms with effective audit committees will have less initial year audit fee discounting and hypothesize:

H1-1: Audit committees that are composed entirely of independent directors have less initial year audit fee discounting.

H1-2: Audit committees that have at least one financial expert have less initial year audit fee discounting than those without financial experts.

H1-3: Audit committees that are active have less initial year audit fee discounting.

H1-4: Audit committees on which members have longer average tenure have less initial year audit fee discounting.

[1] In Table 2, the mean and median of audit committee meeting frequency are 5.31 times a year and 4.00 times a year, respectively.

However, the above predictions only hold when Korean audit committee members plays its intended monitoring role. If auditor committee members play a ceremonial role only, as argued by many critics or media in Korea, it is possible that the characteristics of the committee and their interactions with the first year audit indicator variable are not significantly related to the audit fees. Thus, it is an empirical question to investigate the issue.

IV. Research Design

As in prior literature (Simon and Francis 1988; Craswell et al. 1995; Craswell and Francis 1999; Ghosh and Lustgarten 2006), we employ the following regression model to examine the effect of audit committee characteristics on audit fees and initial fee discounts:

$$\begin{aligned} LNAUDFEE_{it} = {} & \beta_0 + \beta_1 LNTotal\ Assets_{it} + \beta_2 Current\ Ratio_{it} + \beta_3 Current\ to\ Total\ Assets_{it} \\ & + \beta_4 Inventory\ Ratio_{it} + \beta_5 Leverage_{it} + \beta_6 ROA_{it} + \beta_7 Loss_{it} + \beta_8 SQSegments_{it} \\ & + \beta_9 Foreign\ Ownership_{it} + \beta_{10} Big4_{it} + \beta_{11} Non\text{-}Audit\ Fee_{it} + \beta_{12} IFRS_{it} \\ & + \beta_{13} First_{it} + \beta_{14} Audit\ Committee\ Characteristics_{it} \\ & + \beta_{15} First_{it} * Audit\ Committee\ Characteristics_{it} + \beta_{16} Year\ Dummies \\ & + \beta_{17} Industry\ Dummies + \varepsilon_{it} \qquad (1) \end{aligned}$$

where, for client *i* and in year *t* :

LNAUDFEE	= natural log of audit fees in thousand won;
LNTotal Assets	= natural log of total assets in thousand won;
Current Ratio	= ratio of current assets to current liabilities;
Current to Total Assets	= ratio of current assets to total assets;
Inventory Ratio	= ratio of inventory to total assets;
Leverage	= ratio of total liabilities to total assets;

ROA	= ratio of net income to total assets;
Loss	= 1 if a client has negative net income in year *t* or year *t-1*, 0 otherwise;
SQSegments	= square root of the number of business segments;
Foreign Ownership	= proportion of outstanding shares held by foreign investors;
Big4	= 1 if an auditor is one of the Big 4, 0 otherwise;
Non-Audit Fee	= 1 if an auditor provides non-audit services to a client, 0 otherwise;
IFRS	= 1 if financial statements are prepared by using International Financial Reporting Standards (IFRS), 0 otherwise;
First	= 1 if there exists an auditor turnover in year *t*, 0 otherwise.

Our independent variable of interest is an interaction variable between *First* and *Audit Committee Characteristics*, which include *Independence*, *Expertise*, *SQActivity*, and *SQTenure*. First, *Independence* equals 1 when all of audit committee members are independent directors and 0 otherwise. Second, *Expertise* equals 1 when the audit committee has at least one financial expert and 0 otherwise.[1] Financial experts are classified as audit committee members having work experience as certified public accountants, certified tax accountants, chief financial officers, financial controllers, chief executive officers from financial institutes, accounting and finance professors, any other major accounting position, or any other financial management role. Third, *SQActivity* is the square root of the number of audit committee meetings held during the fiscal year. Finally, *SQTenure* is the square root of the average number of years the audit committee members have served as directors of client *i* during the fiscal year.

In equation (1), if effective audit committee characteristics restrict auditor's low-balling

[1] In US, the audit committee of public companies should include at least one member with financial expertise or disclose reasons why it does not adopt this requirement (Dhaliwal et al. 2010).

behavior, we expect that the interaction terms between first year audit indicator variable (*First*) and audit committee characteristics (*Characteristics*) have positive coefficients.

In regards to control variables, following Ghosh and Lustgarten (2006), we include the natural log of total assets in thousand won (*LNTotal Assets*) to control for client size. *Current Ratio*, *Current to Total Assets*, *Inventory Ratio*, *ROA*, *Leverage*, *LOSS*, and *SQSegments* are used to control for audit risk and complexity. We also add *Foreign ownership* as a control variable since foreign owners are more likely to ask companies to have effective corporate governance and to improve financial reporting quality (e.g., Park et al. 2004; Kim and Bae 2007; Hong and Jung 2012). In addition, we include *Big4* to control for the effect of differentiation of audit quality on audit fees (Choi et al. 2010). Finally, we control for the existence of non-audit service fees (*Non-Audit Fee*) which can affect fees for audit services (Palmrose 1986; Park et al. 2003), and the IFRS adoption (*IFRS*) which increases audit hour and audit fees (Lee et al. 2012).

In this model, we expect the coefficient on *First* is negative but the coefficient on the interaction term between *First* and *Audit Committee Characteristics* is positive, suggesting effective audit committees have less initial year audit fee discounts.

V. Sample Construction and Descriptive Statistics

5.1 Sample Construction

In Korea, public companies whose asset size over 2 trillion won have been required to establish an audit committee since 2000.[1] In addition, audit fees in the last 3 fiscal years have been disclosed in the annual report since 1999. Thus, our sample consists of December fiscal year-end non-financial Korean listed companies in the Korea Composite

[1] The audit committee must be composed of at least 3 directors. At least two third of them must be independent by the Securities and Exchange Law revised in 2000.

Stock Price Index (KOSPI) market which have the audit committee during 2000 to 2012.[1] Thus, the firms without audit committee are removed from the sample.

We hand collect audit committee data from the company's annual reports and obtain financial data from the Korea Investors Service-Value (KIS-VALUE). Audit fees, business segment, and foreign ownership data are taken from the TS2000 database. Then, we exclude delisted firm-year observations and those with qualified audit opinion. We winsorize audit committee activity and tenure variables at the 1st and 99th percentile to alleviate the potential effect of outliers. These result in 1,429 firm-year observations for the fee discounting model and 1,040 firm-year observations for the fee change model.

<Table 1> Descriptive Statistics (N=1,429)

Variables	Mean	Median	Standard Deviation	25th Percentile	75th Percentile
LNAUDFEE	12.246	12.278	0.887	11.513	12.835
LNTotal Assets	21.365	21.651	1.569	20.130	22.465
Current Ratio	1.529	1.100	3.575	0.766	1.583
Current to Total Assets	0.358	0.347	0.174	0.239	0.474
Inventory Ratio	0.083	0.069	0.073	0.028	0.115
Leverage	0.500	0.533	0.198	0.348	0.638
ROA	0.037	0.038	0.120	0.010	0.073
LOSS	0.248	0.000	0.432	0.000	0.000
SQSegments	1.571	1.414	0.584	1.000	2.000
Foreign Ownership	0.187	0.144	0.171	0.040	0.292
Big4	0.872	1.000	0.334	1.000	1.000
Non-Audit Fee	0.540	1.000	0.499	0.000	1.000
IFRS	0.280	0.000	0.449	0.000	1.000
First	0.155	0.000	0.362	0.000	0.000
Independence	0.801	1.000	0.399	1.000	1.000

[1] Our sample which spans the period from 2000 to 2012 would provide more supporting evidence for the effect of audit committee characteristics on audit fees than prior studies which cover a shorter period given that such fee discounts existed during 2007 to 2010 (Desir et al. 2014) but not during 2005-2006 in US (Huang et al. 2009).

Expertise	0.540	1.000	0.499	0.000	1.000
Activity	5.312	4.000	4.619	3.000	6.000
SQActivity	2.147	2.000	0.839	1.732	2.449
Tenure	2.836	2.333	1.596	1.667	3.667
SQTenure	1.621	1.528	0.457	1.291	1.915

The variable definitions are as follows:

LNAUDFEE	= natural log of audit fees in thousand won;
LNTotal Assets	= natural log of total assets in thousand won;
Current Ratio	= ratio of current assets to current liabilities;
Current to Total Assets	= ratio of current assets to total assets;
Inventory Ratio	= ratio of inventory to total assets;
Leverage	= ratio of total liabilities to total assets;
ROA	= ratio of net income to total assets;
Loss	= 1 if a client has negative net income in year *t* or year *t-1*, 0 otherwise;
SQSegments	= square root of the number of business segments;
Foreign Ownership	= proportion of outstanding shares held by foreign investors;
Big4	= 1 if an auditor is one of the Big 4, 0 otherwise;
Non-Audit Fee	= 1 if an auditor provides non-audit services to a client, 0 otherwise;
IFRS	= 1 if financial statements are prepared by using International Financial Reporting Standards(IFRS), 0 otherwise;
First	= 1 if there exists an auditor turnover in year *t*, 0 otherwise;
Independence	= 1 if all of audit committee members are independent directors , 0 otherwise;
Expertise	= 1 if an audit committee has at least one financial expert, 0 otherwise;
SQActivity	= square root of the number of audit committee meetings held during the fiscal year;
SQTenure	= square root of the average number of years the audit committee members have served as directors of client *i* during the fiscal year.

<Table 2> Correlation Matrix (N=1,429)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
(1) *LNAUDFEE*	1.00																
(2) *LNTotal Assets*	**0.87**	1.00															
(3) *Current Ratio*	**-0.12**	**-0.13**	1.00														
(4) *Current to Total Assets*	**-0.18**	**-0.26**	**0.08**	1.00													
(5) *Inventory Ratio*	**-0.21**	**-0.23**	-0.01	**0.48**	1.00												
(6) *Leverage*	**0.16**	**0.22**	**-0.28**	**0.08**	**0.05**	1.00											
(7) *ROA*	**0.07**	**0.08**	0.02	**0.07**	0.04	**-0.23**	1.00										
(8) *Loss*	-0.03	-0.03	**-0.06**	**-0.10**	**-0.07**	**0.30**	**-0.38**	1.00									
(9) *SQSegments*	**0.20**	**0.19**	**-0.10**	**-0.10**	**-0.05**	**0.21**	**-0.07**	**0.07**	1.00								
(10) Foreign Ownership	0.51	0.50	-0.01	-0.03	0.01	-0.18	0.24	-0.21	-0.03	1.00							
(11) *Big4*	**0.35**	**0.31**	0.01	**-0.08**	**-0.13**	-0.04	**0.05**	-0.02	-0.03	**0.22**	1.00						
(12) *Non-Audit Fee*	**0.36**	**0.32**	**-0.07**	-0.03	**-0.10**	**0.09**	**0.06**	-0.04	**0.18**	**0.24**	**0.13**	1.00					
(13) *IFRS*	0.01	-0.03	**0.09**	**0.08**	0.01	**-0.10**	-0.02	**0.09**	**-0.26**	**-0.08**	**0.07**	**-0.14**	1.00				
(14) *First*	**-0.07**	-0.02	-0.01	-0.02	0.01	0.04	0.01	0.01	0.02	**-0.05**	0.04	**-0.09**	**-0.14**	1.00			
(15) *Independence*	**0.41**	**0.39**	**-0.12**	**-0.18**	**-0.19**	**0.08**	0.02	-0.03	**0.13**	**0.19**	**0.22**	**0.19**	0.04	-0.03	1.00		
(16) Expertise	**0.16**	**0.11**	0.00	0.03	0.03	-0.01	**0.05**	0.03	0.01	**0.15**	**0.10**	**0.07**	-0.01	0.01	**0.16**	1.00	
(17) *SQActivity*	**0.05**	0.03	0.02	-0.00	**0.06**	-0.02	0.02	0.00	0.02	0.03	-0.04	**-0.08**	-0.03	0.02	**-0.08**	**0.05**	1.00
(18) *SQTenure*	**0.15**	**0.09**	-0.02	**-0.05**	0.01	-0.02	**-0.06**	**-0.05**	-0.01	**0.09**	0.02	0.04	**0.05**	-0.04	**0.08**	-0.00	-0.04

This table shows the Pearson correlation coefficients which in bold indicate significance at $p \leq 0.10$. See <Table 1> for variable definitions.

5.2 Descriptive Statistics

Table 1 shows descriptive statistics for our final sample (N=1,429). The natural logarithm of audit fees in thousand won (*LNAUDFEE*) has a mean (median) value of 12.246 (12.278) and a standard deviation of 0.887. The mean (median) value of audit fees is 317.16 (215.00) million won and, on average, 15.5% of our samples changed an auditor. In regards to audit committee characteristics, on average, 80.1% of our samples have an independent audit committee (*Independence*) and 54.0% of them had at least one financial expert on the audit committee (*Expertise*). The mean and median values of audit committee meeting frequency (*Activity*) are 5.31 times per year and 4.00 times per year, respectively. The mean (median) value of average tenure of audit committee members (*Tenure*) is 2.84 (2.33) years. We omit the explanations for other variables because they are self-evident. In Table 1, we fail to find any unusual distributions.

Table 2 presents the Pearson correlations between our variables, which offer preliminary evidence that there exists initial year audit fee discounts and that effective audit committees lead to higher audit fees. *LNAUDFEE* is significantly and negatively correlated with *First* (correlation = -0.07), but significantly and positively correlated with *Audit Committee Characteristics*: *Independence* (correlation = 0.41), *Expertise* (correlation = 0.16), *SQActivity* (correlation = 0.05), and *SQTenure* (correlation = 0.15). We fail to find any unusual correlation in Table 2 and thus omit discussion for other variables.

VI. Empirical Results

6.1 Main Regression Results

Table 3 reports the results from estimating Equation (1). Model (1) of Table 3 presents

the results including all of *Audit Committee Characteristics*: *Independence*, *Expertise*, *SQActivity*, and *SQTenure*, while Models (1-1) through (1-4) show the results including only one of the *Audit Committee Characteristics* individually. We find that the explanatory powers (R^2) of the model, as reported in the bottom row of Table 3, are very high, reaching 0.80. It implies that our models explain the determinants of audit fees reasonably well.

As in prior literature (e.g., Shin et al. 2007; Park and Lee 2008), all of the Models report that the coefficient on *First* is significantly negative, suggesting initial year audit fee discounting exists in Korea. For example, in Model 1, the coefficient on *First* is -0.288 and significant at 5% level (t-value = -2.25).

In addition, consistent with Chung (2005), the coefficients on *Independence* and *SQActivity* are significantly positive while the coefficient on *Expertise* is positive but insignificant, indicating an independent and diligent audit committee requires increased audit coverage from an external auditor, reflected in higher audit fees (Abbott et al. 2003). The coefficient on *SQTenure* is also positive but insignificant. These findings generally support the findings in prior literature that audit committee with good governance characteristics require more thorough audit.

The coefficients on the interaction terms between *First* and the *Audit Committee Characteristics* are generally positive but all insignificant. In sum, these findings generally do not support the predictions of H1.

The coefficients on a number of our control variables are generally significant and consistent with the findings in prior literature. Specifically, firms with large size, higher ratio of current assets to total assets, lower profitability, more business segments, higher foreign ownership, and that have Big 4 auditor are associated with higher audit fees. Moreover, firms to whom non-audit services are provided by external auditors and whose financial statements are prepared by using IFRS tend to pay higher audit fees.

<Table 3>

The Effect of Audit Committee Characteristics on Initial Year Audit Fee Discount

Variables	Model 1		Model 1-1		Model 1-2		Model 1-3		Model 1-4	
	Coeff. (t-stat.)		Coeff. (t-stat.)		Coeff. (t-stat.)		Coeff. (t-stat.)		Coeff. (t-stat.)	
Intercept	1.348	***	1.389	***	1.353	***	1.343	***	1.340	***
	(5.1)		(5.29)		(5.16)		(5.11)		(5.09)	
First	-0.288	**	-0.108	*	-0.126	***	-0.217	***	-0.165	*
	(-2.25)		(-1.87)		(-3.09)		(-2.95)		(-1.80)	
Independence	0.052	*	0.053	*						
	(1.67)		(1.70)							
*First * Independence*	0.014		-0.001							
	(0.21)		(-0.02)							
Expertise	0.028				0.031					
	(1.23)				(1.41)					
*First * Expertise*	0.026				0.028					
	(0.47)				(0.52)					
SQActivity	0.026	*					0.024	*		
	(1.95)						(1.80)			
*First * SQActivity*	0.049						0.049			
	(1.55)						(1.57)			
SQTenure	0.026								0.018	
	(1.04)								(0.70)	
*First * SQTenure*	0.031								0.035	
	(0.57)								(0.64)	
LNTotal Assets	0.445	***	0.450	***	0.453	***	0.450	***	0.453	***
	(46.10)		(46.92)		(48.36)		(47.79)		(48.25)	
Current Ratio	-0.004		-0.004		-0.005	*	-0.005	*	-0.005	*
	(-1.53)		(-1.51)		(-1.70)		(-1.73)		(-1.67)	
Current to Total Assets	0.249	***	0.237	***	0.233	***	0.226	***	0.237	***
	(3.21)		(3.05)		(3.01)		(2.93)		(3.05)	
Inventory Ratio	-0.371	**	-0.299	*	-0.347	**	-0.387	**	-0.353	**
	(-2.09)		(-1.69)		(-1.97)		(-2.20)		(-2.00)	
Leverage	-0.061		-0.059		-0.054		-0.052		-0.058	
	(-0.92)		(-0.90)		(-0.81)		(-0.79)		(-0.87)	
ROA	-0.206	**	-0.210	**	-0.219	**	-0.212	**	-0.205	**
	(-2.27)		(-2.33)		(-2.43)		(-2.36)		(-2.25)	
Loss	0.026		0.026		0.021		0.023		0.025	
	(0.96)		(0.99)		(0.78)		(0.84)		(0.94)	
SQSegments	0.097	***	0.094	***	0.096	***	0.099	***	0.096	***
	(5.16)		(5.01)		(5.13)		(5.28)		(5.13)	
Foreign Ownership	0.339	***	0.346	***	0.334	***	0.353	***	0.339	***
	(4.32)		(4.42)		(4.25)		(4.52)		(4.32)	
Big4	0.166	***	0.161	***	0.164	***	0.171	***	0.169	***
	(5.13)		(4.97)		(5.09)		(5.34)		(5.26)	
Non-Audit Fee	0.104	***	0.099	***	0.102	***	0.106	***	0.102	***

	(4.82)		(4.60)		(4.72)		(4.93)		(4.74)	
IFRS	0.371	***	0.383	***	0.373	***	0.381	***	0.381	***
	(4.32)		(4.46)		(4.34)		(4.45)		(4.44)	
Industry Dummies	Included		Included		Included		Included		Included	
Year Dummies	Included		Included		Included		Included		Included	
N	1,429		1,429		1,429		1,429		1,429	
Adjusted R^2	0.831		0.830		0.830		0.831		0.830	

1) *, **, and *** denote significance at 0.10, 0.05, and 0.01, respectively, in two-tailed tests.

2) See <Table 1> for variable definitions.

3) Equation (1) used for the regression analyses is:

$$\begin{aligned} LNAUDFEE_{it} = {} & \beta_0 + \beta_1 LNTotal\ Assets_{it} + \beta_2 Current\ Ratio_{it} + \beta_3 Current\ to\ Total\ Assets_{it} \\ & + \beta_4 Inventory\ Ratio_{it} + \beta_5 Leverage_{it} + \beta_6 ROA_{it} + \beta_7 Loss_{it} + \beta_8 SQSegments_{it} \\ & + \beta_9 Foreign\ Ownership_{it} + \beta_{10} Big4_{it} + \beta_{11} Non\text{-}Audit\ Fee_{it} + \beta_{12} IFRS_{it} + \beta_{13} First_{it} \\ & + \beta_{14} Audit\ Committee\ Characteristics_{it} \\ & + \beta_{15} First_{it} * Audit\ Committee\ Characteristics_{it} \\ & + \beta_{16} Year\ Dummies + \beta_{17} Industry\ Dummies + \varepsilon_{it} \end{aligned} \quad (1)$$

To further examine the combined effects of audit committee characteristics on initial year audit fee discounting, we create several composite measure of audit committee characteristic: *Audit CommitteeN*. : *Audit Committee1*, *Audit Committee2*, *Audit Committee3*, and *Audit Committee4*. The *Audit Committee1* variable has a value of 1 if one of the values of the four criteria for *Audit Committee Characteristics* (i.e., *Independence*, *Expertise*, *Activity*, and *Tenure*) is 1 (*Independence* and *Expertise*) or above median value (*Activity* and *Tenure*), and 0 otherwise. Similarly, *Audit Committee2* variable has a value of 1 if any two of the values of the four criteria for *Audit Committee Characteristics* (i.e., *Independence*, *Expertise*, *Activity*, and *Tenure*) is 1 (*Independence* and *Expertise*) or above median value (*Activity* and *Tenure*), and 0 otherwise. The *Audit Committee3* (*Audit Committee4*) variable has a value of 1 if three (four) of the values of the four criteria for *Audit Committee Characteristics* (i.e., *Independence*, *Expertise*, *Activity*, and *Tenure*) is 1 (*Independence* and *Expertise*) or above median value (*Activity* and *Tenure*), and 0 otherwise. Thus, *Audit Committee1*, *Audit Committee2*, and *Audit Committee3* equal 1 when an audit committee has any of one, two, and three good audit committee

characteristics, and 0 otherwise, respectively. Alternatively, *Audit Committee4* equals 1 when an audit committee satisfies all four good governance criteria, *Independence*, *Expertise*, *Activity*, and *Tenure*.

Table 4 shows the criteria for *Audit Committee Characteristics* used in creating *Audit Committee* variables. Specifically, we classify the final sample into four groups, reflected in *Audit Committee* variables, with the median value of each *Audit Committee Characteristics* variable. Based on the variable definitions, we select observations that meet the criteria. For example, as reported in Table 4, we identify 188 observations that meet any one of four governance criteria (*Audit Committee1* = 1). Among 1,429 total number of observations, we find that 1,389 (= 188 + 402 + 514 + 285) observations are equipped with at least one of the four good governance criteria. Thus, the remaining 40 (= 1,429 – 1,389) observations do not have audit committee that meet any one of the four criteria.

<Table 4>

The Criteria for Audit Committee Characteristics and the Definition of *Audit Committee* Variables

Variables	*Independence*	*Expertise*	*Activity*	*Tenure*
Criteria	1	1	4 or more meeting	2.3 year or longer
	0	0	Less than 4 meeting	Shorter than 2.3 year

	Number of observations
Audit Committee1 = 1 if an audit committee has any of one good audit committee characteristics, 0 otherwise;	188
Audit Committee2 = 1 if an audit committee has any of two good audit committee characteristics, 0 otherwise;	402
Audit Committee3 = 1 if an audit committee has any of three good audit committee characteristics, 0 otherwise;	514

Audit Committee4 = 1 if an audit committee satisfies all the good audit committee characteristics, 0 otherwise.		285

This upper part of table presents the criteria for *Audit Committee Characteristics*: *Independence, Expertise, Activity,* and *Tenure* used in creating *Audit CommitteeN* (i.e., *Audit Committee1, Audit Committee2, Audit Committee3, and Audit Committee*) variables. The lower part of the table presents the sample size (number of observations) that having value of 1 for each *Audi CommitteeN* variable.

Then, we include them in Equation (1) instead of *Audit Committee Characteristics* and repeat our tests. We perform this analysis because these four characteristics are potentially correlated each other (although the correlations are not too high as reported in Table 2) and the correlation may result in the bias in our estimated results. In addition, it is not clear whether the effect of audit committee characteristics prevail when only some of the four criteria are met, or whether all of the criteria are met.

Table 5 reports the results from estimating Equation (1) using *Audit CommitteeN* variables instead of *Audit Committee Characteristics*. As our expectations, the coefficient on *First* is significantly negative and the coefficients on *Audit CommitteeN* variables are positive. In particular, the coefficient on *Audit Committee4* (0.136) is significant. These findings generally support the findings tabulate in Table 3 that audit fee low-balling exists in Korea and firms with good governance characteristics pay higher audit fees.

In addition, we find that the four interaction terms between *First* and *Audit CommitteeN* are all positive and significant. For example, the coefficient on *First* Audit Committee1* is 0.586 which is significant at 1% level (t-value = 3.07). Interestingly, we note that the coefficients on *First* Audit Committee1*, *First* Audit Committee2*, *First* Audit Committee3*, and *First* Audit Committee4* are all similar in magnitude and significant. The findings suggest that meeting different number of good governance criteria is not matter. As long as firms meet any one of the criteria, the effect of the governance is very similar. Thus, it suggest that four governance aspects play similar roles in helping auditors to expand audit scope and thus limit the audit fee low-balling. Put differently, these results

suggest that the audit committees which have at least one of good governance criteria are effective in preventing low-balling of audit fees and that the degree of satisfying good audit committee characteristics is not crucial to the effectiveness of audit committees in avoiding initial year audit fee discounting.[1]

<Table 5>

The Combined Effect of Audit Committee Characteristics on Initial Year Audit Fee Discounts

Variables	Coeff.	t-stat.
Intercept	1.374***	5.16
First	-0.751***	-4.22
Audit Committee1	0.077	1.12
*First * Audit Committee1*	0.586***	3.07
Audit Committee2	0.053	0.80
*First * Audit Committee2*	0.685***	3.70
Audit Committee3	0.098	1.46
*First * Audit Committee3*	0.715***	3.90
Audit Committee4	0.136*	1.95
*First *Audit Committee4*	0.558***	2.94

[1] Specifically, we report the test results on the comparisons of the magnitude of coefficients as follows:

Audit Committee1 = Audit Committee2 (p-value = 0.518)
Audit Committee1 = Audit Committee3 (p-value = 0.573)
Audit Committee1 = Audit Committee4 (p-value = 0.152)
Audit Committee2 = Audit Committee3 (p-value = 0.110)
Audit Committee2 = Audit Committee4 (p-value = 0.012)
Audit Committee3 = Audit Committee4 (p-value = 0.193)

*First * Audit Committee1 = First * Audit Committee2* (p-value = 0.238)
*First * Audit Committee1 = First * Audit Committee3* (p-value = 0.113)
*First * Audit Committee1 = First * Audit Committee4* (p-value = 0.768)
*First * Audit Committee2 = First * Audit Committee3* (p-value = 0.653)
*First * Audit Committee2 = First * Audit Committee4* (p-value = 0.123)
*First * Audit Committee3 = First * Audit Committee4* (p-value = 0.049)

These findings reveal that magnitudes of the coefficients are not different in most cases.

LNTotal Assets	0.447***	47.11
Current Ratio	-0.005	-1.61
Current to Total Assets	0.256***	3.31
Inventory Ratio	-0.357**	-2.04
Leverage	-0.048	-0.73
ROA	-0.208**	-2.32
Loss	0.021	0.79
SQSegments	0.101***	5.39
Foreign Ownership	0.345***	4.43
Big4	0.167***	5.22
Non-Audit Fee	0.102***	4.78
IFRS	0.368***	4.30
Industry Dummies	Included	
Year Dummies	Included	
N	1,429	
Adjusted R^2	0.832	

1) *, **, and *** denote significance at 0.10, 0.05, and 0.01, respectively, in two-tailed tests.

2) See <Table 1> for variable definitions and <Table 4> for the definitions of *Audit CommitteeN* variables.

3) Equation (1) used for the regression analyses is:

$$LNAUDFEE_{it} = \beta_0 + \beta_1 LNTotal\ Assets_{it} + \beta_2 Current\ Ratio_{it} + \beta_3 Current\ to\ Total\ Assets_{it} + \beta_4 Inventory\ Ratio_{it} + \beta_5 Leverage_{it} + \beta_6 ROA_{it} + \beta_7 Loss_{it} + \beta_8 SQSegments_{it} + \beta_9 Foreign\ Ownership_{it} + \beta_{10} Big4_{it} + \beta_{11} Non\text{-}Audit\ Fee_{it} + \beta_{12} IFRS_{it} + \beta_{13} First_{it} + \beta_{14} Audit\ CommitteeN_{it} + \beta_{15} First_{it} * Audit\ CommitteeN_{it} + \beta_{16} Year\ Dummies + \beta_{17} Industry\ Dummies + \varepsilon_{it} \quad (1)$$

6.2 Sensitivity Analyses

We conduct several sensitivity analyses to make sure the robustness of our findings as follows. First, we investigate an alternative measure of *Expertise*. Specifically, we create *Expertise Ratio*, the ratio of the number of audit committee members with financial expertise to the number of directors on the audit committee. Table 6 shows the results using *Expertise Ratio*. The results are similar to primary results in which there exists low-balling of audit fees in Korea and an independent and diligent audit committee is effective in negotiating audit fees. In particular, diligent audit committees do not have a significant audit fee increase in subsequent engagement years. We omit the results for control variable

for simplicity purpose. They are not qualitatively different from those tabulate previously. Thus, we fail to find the evidence that our insignificant results for the variable is due to any measurement errors.[1]

<Table 6> An alternative measure of *Expertise*

Variables	Model 1 Coeff. (t-stat.)	Model 1-2 Coeff. (t-stat.)	Model 2 Coeff. (t-stat.)	Model 2-2 Coeff. (t-stat.)
Intercept	1.329 **	1.333 ***	-0.223	-0.233
	(5.02) *	(5.08)	(-1.46)	(-1.60)
First	-0.290 **	-0.120 ***	0.209 **	0.060 **
	(-2.25)	(-3.16)	(2.24)	(2.20)
Independence	0.056 *		0.026	
	(1.80)		(1.17)	
*First * Independence*	0.018		0.026	
	(0.27)		(0.53)	
Expertise Ratio	0.076 *	0.075 *	-0.055 *	-0.048
	(1.76)	(1.73)	(-1.65)	(-1.45)
*First * Expertise Ratio*	0.051	0.047	0.168 **	0.159 **
	(0.46)	(0.42)	(2.11)	(1.99)
SQActivity	0.026 *		0.005	
	(1.95)		(0.48)	
*First * SQActivity*	0.050		-0.049 **	
	(1.59)		(-2.15)	
SQTenure	0.029		-0.040 *	
	(1.12)		(-1.90)	
*First * SQTenure*	0.032		-0.045	
	(0.58)		(-1.11)	
N	1,429	1,429	1,040	1,040
Adjusted R^2	0.831	0.830	0.222	0.213

1) *, **, and *** denote significance at 0.10, 0.05, and 0.01, respectively, in two-tailed tests.

[1] Because most of the firms have only 1 member of expert, it is possible that the ratio does not adequately measure the differing level of the expertise. In case that there is only 1 expert member in the committee, the ratio is decided by the number of audit committee members.

2) *Expertise Ratio* refers to the ratio of the number of audit committee members with financial expertise to the number of directors on the audit committee. See <Table 1> for the other variable definitions.

3) Equation (1) used for the regression analyses in Model 1 is:

$$\begin{aligned} LNAUDFEE_{it} = {} & \beta_0 + \beta_1 LNTotal\ Assets_{it} + \beta_2 Current\ Ratio_{it} + \beta_3 Current\ to\ Total\ Assets_{it} \\ & + \beta_4 Inventory\ Ratio_{it} + \beta_5 Leverage_{it} + \beta_6 ROA_{it} + \beta_7 Loss_{it} + \beta_8 SQSegments_{it} \\ & + \beta_9 Foreign\ Ownership_{it} + \beta_{10} Big4_{it} + \beta_{11} Non\text{-}Audit\ Fee_{it} + \beta_{12} IFRS_{it} + \beta_{13} First_{it} \\ & + \beta_{14} Audit\ Committee\ Characteristics_{it} \\ & + \beta_{15} First_{it} * Audit\ Committee\ Characteristics_{it} \\ & + \beta_{16} Year\ Dummies + \beta_{17} Industry\ Dummies + \varepsilon_{it} \qquad (1) \end{aligned}$$

4) To conserve space, we report the coefficients and significances for the variables of interests only.

Second, since Korean firms with total assets over 2 trillion won must have at least one audit committee member with financial expertise by the Securities and Exchange Law revised in 2003, we restrict the final sample to those with total assets amounted to less than 2 trillion won and repeat the tests. These are the firms that are not mandated to have audit committee with at least one expertise. Although they are untabulated, the empirical results are qualitatively similar to those tabulated previously.

Third, four *SQActivity* and *SQTenure* variable, we use an indicator variable based on the median values (1 if the value is greater than median and 0 otherwise) instead of a previously used continuous variables. The results are qualitatively similar to those previously tabulated.

VII. Summary and Conclusions

We investigate the effect of audit committee characteristics on low-balling of audit fees using 1,429 firm-year observations during the 2000-2012 in Korea. Given that the audit committee is crucial to corporate governance (e.g., BRC 1999) and that audit fees are one of the mechanism to ensure high audit quality, examining the effect of audit committee characteristics on audit fees is important. Our empirical results suggest that low-balling of

audit fees exist in Korean audit market and audit committee independence and meeting frequency are positively associated with audit fees. In particular, audit committees with frequent meetings prevent audit fee discounts in the first engagement year, suggesting that diligent audit committee plays an important role to maintain high audit quality. Finally, we find that the audit committees which satisfy at least one of good governance criteria are effective in preventing initial year audit fee discounts.

Our empirical findings are subject to some limitations. Specifically, we only focus on the observations of Korean firms listed in the KOSPI Market, and thus the findings could not be generalizable to all Korean firms with audit committees and other countries. However, our findings should be of significant interest to policy-makers, regulators, academicians, managers, investors, and the other interested parties. Given that no prior studies examine the association between four audit committee characteristics and initial year audit fee discounts, this study provides valuable insights. In addition, given the recent regulation on independent directors in financial firms, this study should be of interest to policy-makers even though our samples are composed of non-financial firms.

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국문 초록

본 연구의 목적은 특정한 특성을 갖고 있는 감사위원회가 초도감사 보수 할인 현상을 효과적으로 기피할 수 있는지 조사하는 것이다. 효과적인 감사위원회는 높은 품질의 감사를 위하여 감사 초년도 감사인의 감사보수 할인 제의를 받아들이지 않을 것으로 예상된다. 본 연구는 감사위원회가 갖고 있는 특성 중 감사위원회의 질에 영향을 미칠 것으로 여겨지는 특성을 감사위원회의 독립성, 감사위원회내의 재무전문가 포함 여부, 감사위원회 개최 횟수, 감사위원회 위원의 평균 재임 기간 등 네 가지로 하여 각각의 특성이 초도감사보수 할인에 미치는 영향을 살펴보았다. 선행연구와 마찬가지로 본 연구에서는 한국 감사 시장에서 초도감사보수 할인이 이루어지고 있음을 재 확인하였으며 감사위원회의 독립성과 활동성은 감사 보수와 양의 관계를 가지고 있는 것으로 나타났다. 특히, 잦은 감사위원회 회의 개최가 초도감사보수 할인을 억제하는 것으로 보아 활동적인 감사위원회는 감사품질 유지에 중요한 역할을 하는 것으로 보인다. 마지막으로, 위 네 가지 감사위원회 특성 중 적어도 한 가지 감사위원회 특성을 만족하는 감사위원회는 초도감사보수 할인을 효과적으로 회피하는 것으로 나타났다. 주요 회귀분석에 대한 민감도 분석을 실시한 결과 감사위원회의 활동성은 감사보수와 양의 관계를 갖고 있음을 확인할 수 있었다.

주 요 어 : 감사위원회, 감사보수, 초도감사할인, 감사품질

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