산업연구 Journal of Industrial Studies(J.I.S) 産業硏究 46권 3호 ISSN
https://doi.org/10.22915/rifi.2022.46.3.002 1738-9216

The Effect of Auditor's Materiality Judgment on Audit Quality*

Hyunwoo Cho**· Hyunjeong Bae***· Hyunmin Oh****

Abstract

This study analyzed the effect of auditor's materiality judgment on audit quality. In particular, the hypothesis that the auditor's opinion would be more relevant to the audit quality considering materiality compared to the existing discretionary accrual amount and the hypothesis that the audit quality would be higher in large accounting firms than small accounting firms in consideration of materiality were verified through empirical analysis.

The sample companies required to verify the hypothesis of this study are those that have been listed on the exchange for the past five years from 2017 to 2021. The materiality amount was measured through the general materiality measurement method, and the research hypothesis was verified using discretionary accruals. As a result of the analysis, the proxy value of audit quality considering materiality was more relevant to the unqualified opinion than in the case of discretionary accrual. confirmed that there is.

According to the analysis results of this study, comparing audit quality only with discretionary accruals does not take into account the materiality amount, which is the criterion for judgment in the auditor's decision-making process, so there is a risk of underestimating the audit quality. Therefore, it suggests that audit quality should be determined in consideration of the materiality amount, which is the breaking point of decision-making or the breaking point of usefulness of information.

Key word : accounting standards, audit quality, materiality, discretionary accruals.

* This paper was supported by(in part) Sunchon National University Research Fund in 2020(Grant number: 2020-0000).
** Corresponding author, Professor, Sunchon National University, E-mail: hwcho2001@scnu.ac.kr.
*** Professor, Sunchon National University, E-mail: bhj0827@scnu.ac.kr.
**** Associate Professor, Sunchon National University, E-mail: ohm1212@scnu.ac.kr.
<논문 투고일> 2022.8.10 <논문 수정일> 2022.9.18 <게재 확정일> 2022.10.04

Ⅰ. Introduction

The purpose of auditing financial statements is to enable the auditor to express an opinion on whether the financial statements have been prepared appropriately from the point of view of materiality in accordance with K-IFRS. In the auditor's expression of opinion, the phrase 'It is indicated appropriately from the point of view of materiality' is used. The purpose of auditing these financial statements requires caution in interpretation. First, 'appropriately indicated from the point of view of materiality' means that the audit is not perfect, but whether important matters that may affect decision-making violate the accounting standards. Second, non-material matters do not affect the audit opinion, and audit risk means the possibility of material misstatement in the financial statements. That is, not all misstatements affect audit risk, but only material ones.

Materiality in auditing is considered material when misstatements, such as omissions in financial statements, can be reasonably expected to affect users' economic decisions based on the financial statements individually or collectively. The judgment of materiality is made in the light of the surrounding circumstances, and is affected by the size or nature of the misstatement or a combination of both. Therefore, auditors should consider materiality and the relationship between materiality and audit risk in conducting an audit. Auditors should consider materiality when determining the nature, timing and scope of audit procedures and when assessing the impact of misstatement.

Meanwhile, the measurement of audit quality has been measured using various proxies. Auditor size(DeAngelo 1981), audit fee(Choi and Paek 1998), market share and industry expertise(Jung and Lee 1996), and

profit adjustment amount(Park et al. 1999) have been used as proxy for audit quality. In particular, discretionary accrual has been used as a measure of earnings management, and it has been interpreted that the higher the discretionary accrual, the lower the audit quality. However, if the amount of discretionary accrual itself indicates fraud or error, if the audit quality is compared based on this, it is a measure that does not take into account the materiality amount. The study using discretionary accrual as a proxy for audit quality ignores the fundamental limitation that an audit applies the testamentary method and expresses an opinion on whether the financial statements are in violation of accounting standards in terms of materiality.

In this study, considering the hypothesis that the proxy of audit quality considering the materiality amount is more relevant to the formation of an audit opinion than the case where discretionary accrual amount is used as a proxy for audit quality, considering the importance. We hypothesized that audit quality would be higher than that of corporations and conducted empirical analysis. The sample period was for companies listed on the exchange for the past five years from 2017 to 2021.

The materiality amount is calculated by applying the materiality setting guidelines of the Korean Institute of Certified Public Accountants and the materiality setting criteria customarily used by each accounting firm. The auditing standards do not mention the specific method of calculating the materiality amount. However, both quantitative and qualitative factors are to be considered in the setting of materiality. In the meantime, the formula for materiality amount has been subjectively set and used for each certified public accountant and each accounting firm.

As a result of the analysis, the proxy value of audit quality considering materiality was more relevant to the unqualified opinion

than in the case of discretionary accrual. confirmed that there is. According to the analysis results of this study, if audit quality is defined as the probability that the auditor will detect fraud or error and the probability of reporting it as it is discovered,

The auditor will not reflect the discretionary accrual itself in the audit opinion, but rather based on professional judgment. It suggests that negation or error should be reflected in consideration of its importance. There is a risk of underestimating the audit quality because comparing the audit quality using only the discretionary accrual does not take into account the materiality amount, which is the criterion for judgment in the auditor's decision-making process. Therefore, it suggests that audit quality should be determined in consideration of the materiality amount, which is the breaking point of decision-making or the breaking point of usefulness of information.

The structure of this study is as follows. Chapter II confirms the research topic through a review of previous studies, and chapter III discusses variable measurement, research methods, and sample selection procedures. Chapter IV discusses the results of the empirical analysis, and finally, Chapter V mentions the conclusions and limitations.

Ⅱ. Prior Research and Research Hypothesis

1. Prior Research

Previous studies were mainly reviewed as studies on discretionary accrual and audit quality, and studies on the importance of auditing. Many previous studies used discretionary accrual as a proxy for earnings management. The discretionary accrual was used to verify

whether earnings management occurred in relation to management compensation(Healy 1985), debt contracts(DeFond and Jiambalvo 1994), and avoidance of income easing measures(Jones 1991). In a situation where there is a problem in the measurement of discretionary accrual, but a proxy for other measures has not been developed, discretionary accrual is used as a proxy for earnings management, and in auditing, it is used as a proxy for audit quality(Elgers et al. 2003).

Looking at the studies analyzing the proxy of audit quality as discretionary accrual, first, as a result of comparing audit quality between large and small accounting firms, the audit quality of large accounting firms was high(Becker et al. 1998). In particular, as the discretionary accrual of firms audited by small accounting firms was higher than that of firms audited by large accounting firms, the hypothesis was tested that the lower the audit quality, the higher the reporting profit.

In addition, in a study comparing discretionary accruals in a sample in which the going concern assumption is not valid and in a sample in which the going concern assumption is valid, the auditor reduces discretionary accruals by choosing a conservative accounting method when the going concern assumption is not valid. It has been found that the discretionary accrual of the sample in which the auditor's opinion that the going concern assumption is not valid was significantly lower than the discretionary accrual of the non-performing entity. This is a result that shows that audits with conservative accounting treatment can have the effect of lowering the amount of discretionary accruals.

Regarding the auditor retention system, the difference in audit quality between large and small accounting firms was found to be higher in the discretionary accrual of firms that maintained audits of small firms than

those that maintained audits of large firms (Jeong and Jeon 2001). That is, the companies that maintained the audits of large accounting firms had higher audit quality than those that maintained the audits of small firms. This is the result of empirically analyzing whether the auditor retention system contributed to the improvement of the independence of external auditors.

It was reported that the discretionary accrual amount of audited companies was significantly larger than that of small accounting firms(Park et al. 1999). This is a study to verify the difference in audit quality by dividing the types of auditors into large accounting firms affiliated with foreign accounting firms, professional auditors by industry, and auditors with large asset size, sales and net income. And it is the result of analyzing the difference in discretionary accrual between small accounting firms using the modified Jones model(1995) and the Jones model(1991). This analysis result is contrary to previous studies in foreign countries, and shows that the audit quality of large accounting firms and local accounting firms is lower than that of small accounting firms.

On the other hand, if the omission or misstatement of information in the financial statements affects the economic decision-making of users of financial statements based on the financial statements, such information would be material. Materiality is determined by the size of the relevant item or error determined in a specific situation where there is omission or misstatement of such information. Since assessing what is important here is a matter of professional judgment, materiality provides a criterion for the usefulness of information, which is determined by the auditor's professional judgment.

And, in the auditing standards, the quantitative materiality standard

that can be applied when forming an audit opinion, that is, the quantitative model of the materiality standard, was defined as an internal rule. According to the results of analysis of 303 companies that received a limited opinion for violating the accounting standards that affected the audited profit and loss by 10 domestic accounting firms, there is a significant difference between the quantitative models of the materiality standards of each accounting firm(Shin et al. 1998). This implies that there is a difference between the models for judging materiality, and at the same time, it shows that the size of the materiality amount is set differently for each accounting firm.

Combining the preceding studies, there have been many studies using discretionary accrual as a proxy for audit quality, and while in foreign countries, the discretionary accrual of large accounting firms was lower than that of small accounting firms, but consistent results were not shown in Korea. Since this may be the result of using discretionary accrual as a direct substitute for audit quality without considering materiality, this study will perform a detailed analysis on audit quality and auditor opinion formation using audit quality considering materiality.

2 Research Hypothesis

In many studies so far, discretionary accrual has been used as a proxy for audit quality. If discretionary accrual is used as a proxy for audit quality, the concept of materiality stipulated in the purpose of auditing may be omitted and result in judging audit quality. The auditor expresses an audit opinion by judging whether any violations of corporate accounting standards or fraud or errors in financial information exceed materiality standards.

Since the purpose of an audit is to enable the auditor to express an opinion on whether the financial statements are adequately prepared from the point of view of materiality in accordance with the accounting standards, insignificant amounts are not taken into account when judging the quality of the audit. it is reasonable if the audit quality is simply judged by the amount of discretionary accruals without considering such materiality, this means that the audit should be conducted by the method of transmission rather than the method of suggestion. This is to judge audit quality beyond the limits of fundamental audit. The auditor shall apply the method of suggestion and express an audit opinion with important matters affecting decision-making.

And the discretionary accrual is the amount that causes the distortion of accounting information, and whether this degree of distortion affects decision-making is determined by the materiality amount determined by the auditor's professional judgment. If the process of reflecting discretionary accrual in the auditor's opinion depends on the auditor's independence, it can be said that it is related to the auditor's competence because materiality is determined by the auditor's professional judgment. Therefore, the proxy for audit quality by deducting discretionary accruals from the materiality amount can be viewed as a proxy that can consider the independence and competence of the auditor at the same time.

When expressing an audit opinion, the auditor expresses his opinion from the point of view of materiality. Therefore, if the amount is less than the material amount, even if there is a discretionary accrual, the auditor's opinion will be affected unless it causes material errors in the financial statements or violates generally accepted accounting

standards(Nelson et al. 2002).

Combining the above logic, it is expected that the proxy of audit quality considering the materiality amount is more relevant to the formation of an audit opinion than the case where discretionary accrual is used as a proxy for audit quality. In other words, if an unqualified opinion is expressed in a situation where the discretionary accrual is high, this is a case where the materiality amount is not taken into account. In addition, if the auditor considers the materiality amount when forming an audit opinion, the amount obtained by deducting the discretionary accrual from the materiality amount becomes smaller. Therefore, the following research hypothesis 1 was established to verify whether the audit opinion has been formed by reflecting this materiality amount so far.

[Hypothesis 1] : The proxy for audit quality obtained by deducting discretionary accrual from materiality amount would be more relevant to the unqualified opinion than if the proxy for audit quality was discretionary accrual.

On the other hand, as mentioned above, previous studies have shown consistent results that audit quality is generally higher in large accounting firms than small accounting firms(Becker et al. 1998; DeAngelo 1981). However, domestic previous studies using discretionary accrual as a proxy for audit quality do not show consistent results. This may be the result of not taking into account the materiality amount. The amount of materiality may differ according to the size of the company and the auditors, and this may be a criterion for discrepancies in auditor opinions. If the auditor considers the materiality amount when

forming an audit opinion, the amount obtained by deducting the discretionary accrual from the materiality amount becomes smaller. If the audit opinion is formed by reflecting this material amount, and if the large accounting firm has superior auditing ability in terms of compensation for damages or partnership with a foreign accounting firm, then the audit quality of the large accounting firm is lower than that of the small accounting firm. It can be expected to be high. Based on the above logic, the following research hypothesis 2 was established.

[Hypothesis 2] : Considering the audit quality minus the discretionary accrual from the materiality amount, the audit quality of a large accounting firm (Big 4) will be higher than that of a small accounting firm (NonBig 4).

Ⅲ. Variable Measurement, Research Method and Sample Selection

1 Variable Measurement

1) Measurement of discretionary accruals

The amount that violates the accounting standards and the amount of fraud or error are matters that affect the formation of an audit opinion. In general, the earnings management amount measured as discretionary accruals is divided into earnings management, which controls profits within the scope permitted by the corporate accounting standards, and earnings manipulation, which violates corporate accounting standards. However, since the measurement of discretionary accrual is an estimate

itself, it is impossible to distinguish between earnings management and earnings manipulation. Therefore, it is assumed that the discretionary accrual is an absolute amount that affects the reliability of accounting information and the formation of the auditor's opinion(Choi 1998).

Discretionary accrual is measured by industry-year cross-sectional analysis through the ROA control model(Bartov and Mohanram 2004) and the performance-matching model(Kothari et al. 2005) based on the modified Jones(1995) model. The estimate of the expected value of non-discretionary accrual can be estimated from Equation (1-1), and the regression coefficient estimated from Equation (1-1) is applied to Equation (1-2) for the applied company to total accrual. Discretionary accrual(DAt) is calculated for each company by separating discretionary accrual(DA1t) and non-discretionary accrual (NDAt) from (TAt).[1)]

Where, the performance-matched discretionary accrual (DA2t) is calculated by subtracting the median of the discretionary accrual (DA1tmedian) for the same year and industry from the discretionary accrual for each individual company (DA1t) as shown in Equation (1-3).[2)] The reason for using the ROA control model and the performance-corresponding model other than the modified Jones (1995)

1) The sample used to estimate the model formula of equation (1-1) by industry was only for industries in which there were at least 10 companies by year, and industries with fewer than 10 companies were separately estimated by composing other groups.

2) Performance-matched discretionary accrual (DA2t) is calculated by dividing the discretionary accrual of individual companies by industry-year into 5 divisions by industry-year based on the sample company's t-year management performance (ROA) from the discretionary accrual of each industry-yearly. It is measured as the difference from the median. In this study, the median of discretionary accruals by industry and year was viewed as a phenomenon that reflected the manager's private information, and discretionary accruals outside this range were viewed as a phenomenon that appeared as a result of opportunistic earnings management.

model is that it can alleviate the measurement error problem of the existing modified Jones (1995) model to some extent(Kothari et al. 2005).

$$TA_t/A_{t-1} = a_0 (1/A_{t-1}) + a_1 (\triangle REV_t/A_{t-1}) + a_2 (PPE_t/A_{t-1}) + a_3 (ROA_{t-1}) + e_t \quad (1-1)$$

$$DA_{1t} = (TA_t/A_{t-1}) - [a_0^* (1/A_{t-1}) + a_1^* [(\triangle REV_t - \triangle AR_t)/A_{t-1}] + a_2^* (PPE_t/A_{t-1} + a_3^* (ROA_{t-1})] \quad (1-2)$$

$$DA_{2t} = DA_{1t} - DA_{1t}^{median} \quad (1-3)$$

Where, TA_t is total accrual in year t (net income - cash flow from operating activities),
ΔREV_t is the change in sales in year t,
ΔAR_t is the change in account receivable in year t,
PPE_t is facility assets in year t (excluding land and assets under construction),
ROA_{t-1} is the total return on assets (net income/total assets) in year t-1,
A_{t-1} is the total assets in year t-1.

Non-discretionary accrual(NDAt) in this study was analyzed by industry-year cross-sectional analysis through the regression formula of equation (1-1) for all listed companies excluding sample companies during the verification period (2017-2021). It was estimated. The parameters estimated by industry and year were applied to the sample companies through equation (1-2), and the discretionary accrual (DAjt) for each individual company was measured.

2) Measurement of materiality determination amount and audit quality

Materiality in auditing is considered material when misstatements, such as omissions in financial statements, can be reasonably expected to affect users' economic decision-making based on the financial

statements individually or collectively. The judgment of materiality is made in the light of the surrounding circumstances, and is affected by the size or nature of the misstatement or a combination of both.

The concept of materiality is used when an auditor plans and performs an audit, assesses the impact of an identified misstatement on the audit and, in the presence of an unresolved misstatement, the impact on the financial statements, and when forming an opinion to be expressed in the audit report. Accordingly, the auditor should consider materiality and the relationship between materiality and audit risk in performing the audit.

Auditors should consider materiality when determining the nature, timing and scope of audit procedures and when assessing the impact of misstatement. However, the auditing standards do not mention the specific method of calculating the materiality amount. However, both quantitative and qualitative factors are to be considered in the setting of materiality. In the meantime, the formula for the materiality amount was arbitrarily set and used for each certified public accountant and each accounting firm.

Since there is no specific materiality setting guideline in the current auditing standards, the reality is that the materiality setting guidelines of the Korean Institute of Certified Public Accountants and the materiality setting standards customarily used by each accounting firm are still being applied in practice. Therefore, the materiality amount is calculated based on the general materiality criterion applied in practice.[3)]

3) Looking at the typical cases of applying benchmarks when establishing materiality (ISA 320.6, 14.A3, A7), the materiality of the entire financial statements is first, 5 to 10% of pre-tax profit and loss, 0.5 to 3 of net assets, etc. % is applied and second, 0.08~2% of total sales and 0.5~2% of total assets are applied as the total amount.

In this study, the following materiality judgment model was established in consideration of the commonly used materiality judgment method. This is a model that sets the materiality judgment amount by combining total assets, sales, and continuing business profit before tax.

$$MA_t = [Min(TA_t, SA_t) \times 0.5\% + EBT_t \times 5\%]/A_{t-1} \quad (1-4)$$

Where, MA_t is the materiality amount in year t,
TA_t is the total assets in year t,
SA_t is sales in year t,
EBT_t is the continuing business profit before corporate tax in year t.

In the above model, the sum of 0.5% of the lesser of total assets and sales and 5% of net profit before income tax (in absolute case of net loss) is measured as materiality determination amount. If the discretionary accrual amount is lower than the materiality amount, it is not a significant amount from the auditor's point of view, so there will be no problem with the audit quality.

However, if the discretionary accrual is higher than the materiality amount, it becomes a significant amount from the auditor's point of view, which may cause a problem in the audit quality. That is, when the discretionary accrual is low based on the materiality amount, it is classified as a case of good audit quality, and when the discretionary accrual amount is high based on the materiality amount, it is classified as a case of low audit quality. As such, audit quality(AQjt) is defined as materiality amount(MAt) minus discretionary accrual(DAjt).

$$AQ_{jt} = MA_t - DA_{jt} \quad (1-5)$$

Where, AQ_{jt} is the audit quality defined by the amount in year t (j=1,2),

DA_{1t} is the discretionary accrual measured by industry and year with the ROA control model in year t [the model in which management performance (ROA_{t-1}) is controlled in the modified Jones (1995) model]);

DA_{2t} is discretionary accrual(DA_{1t}-DA_{1t}^{median}) that is matched by industry and year based on business performance (ROA) in year t.

If the materiality amount is greater than the discretionary accrual, the auditor is likely to present an appropriate opinion even if there is a discretionary accrual amount. If the materiality amount is greater than the discretionary accrual, the auditor's opinion is highly likely to present an unqualified opinion even if there is a discretionary accrual.

Therefore, if the audit quality is good, the audit quality(AQjt) will appear as a positive (+) value. However, when the audit quality is low, that is, when the materiality amount is smaller than the discretionary accrual, it is the case that the discretionary accrual is judged to be more important in the decision-making process. Under normal circumstances, the auditor will be more likely to present an audit opinion that is not an unqualified opinion. In this case, audit quality(AQjt) considering materiality will appear as a negative(-) value.

2. Research Method

In Research Hypothesis 1, it was expected that the audit quality measured by subtracting the discretionary accrual from the materiality amount would be more relevant to the unqualified opinion than if the proxy for audit quality was discretionary accrual. To verify this, the

following logistic regression model was established. If the discretionary accrual is lower, the likelihood of receiving an unqualified opinion is higher. The likelihood of receiving a unqualified opinion will increase.

Therefore, it is predicted that the regression coefficient β1 of discretionary accrual will show a negative(-) value , and the regression coefficient β2 of audit quality considering the materiality amount is expected to show a positive(+) value. In addition, if the audit quality measured by subtracting the discretionary accrual from the materiality amount is more relevant than the regression coefficient β1 of the discretionary accrual, the importance of the regression coefficient β1 of the discretionary accrual is considered. The regression coefficient β2 of audit quality is expected to be larger. Therefore, the following logistic regression model is established to test the research hypothesis 1.

$$AUO_t = \beta_0 + \beta_1 DA_{jt} + \beta_2 AQ_{jt} + \beta_3 TA_{t-1} + \beta_4 CFO_t + \beta_5 LEV_t + \beta_6 SIZE_t + \sum_s \beta_7 IND_{st} + \varepsilon_t \quad (2\text{-}3)$$

Where, AUOt is 1 if the audit opinion in year t is an unqualified opinion, 0 otherwise,

DA_{1t} is the discretionary accrual measured by industry and year with the ROA control model in year t [the model in which management performance (ROA_{t-1}) is controlled in the modified Jones (1995) model]);

DA_{2t} is discretionary accrual(DA_{1t}-DA_{1t}^{median}) that is matched by industry and year based on business performance (ROA) in year t.

AQ_{jt} is the absolute value of audit quality (j=1,2) defined as the amount in year t,

TA_{t-1} is total accrual in year t-1 / total assets in year t-1,

CFO_t is operating cash flow in year t / total assets in year t-1,

LEV_t is the debt ratio in year t (total debt in year t / total assets in year t-1),

$SIZE_t$ is log(total assets),

IND_{st} is a dummy variable that is 1 if company-year t belongs to industry s, and 0 otherwise (s=industry code),

ε_t is the error term

In Research Hypothesis 2, it was predicted that the audit quality of a large accounting firm (BIGt) would be higher than that of a small accounting firm (NonBIGt). If the audit quality considering the materiality amount considered in this study has a positive(+) value, it means that the audit quality is high, whereas if it has a negative(-) value, it can be judged that the audit quality is low. In addition, since the amount of materiality may differ by company size and auditor, this is also a criterion for generating differences in auditor opinions.

If the auditing ability of a large accounting firm is excellent in the ability to compensate for damages, the size of the auditor, and alliance with a foreign accounting firm, the intersection of discretionary accrual and large accounting firm(BIGt) in equation (2-4) In the case of the regression coefficient β2 of the term (DAjt×BIGt), it is predicted to show a negative(-) value. In addition, if an auditor's opinion is formed in consideration of the materiality amount, it is expected that the amount obtained by deducting the discretionary accrual from the materiality amount will be smaller as the auditor expresses not an unqualified opinion.

Therefore, in the case of the regression coefficient β4 of the cross term (AQjt×BIGt) of audit quality (AQjt) and large accounting firm (BIGt) measured in amounts in equation (2-4), it can be predicted to show a positive(+) value. Therefore, the following logistic regression model is established to test the research hypothesis 2.

$$AUO_t = \beta_0 + \beta_1 DA_{jt} + \beta_2 DA_{jt} \times BIG_t + \beta_3 AQ_t + \beta_4 AQ_{jt} \times BIG_t + \beta_5 TA_{t-1} + \beta_6 CFO + \beta_7 LEV_t + \beta_8 SIZE_t + \sum_s \beta_9 IND_{st} + \varepsilon_t \quad (2\text{-}4)$$

Where, BIG_t is 1 if audited by large(BIG4) accounting firm, 0 otherwise, For the rest of the variables, refer to Equation (2-3).

Total accrual(TAt-1) input as a control variable in Equation (2-4) is used to control the time series correlation of accruals because accounting accruals have the dual property of occurrence and extinction(Na and Choi 2003). In addition, representative control variables of company characteristics were included in the model. Operating cash flow(CFOt) was measured by dividing operating cash flow in year t by total assets in year t-1, and debt ratio (LEVt) was measured by dividing total debt in year t by total assets in year t-1.

Finally, the company size (SIZEt) was measured by taking the natural logarithm of total assets in year t. This is because it can be a surrogate variable for omitted variables(Becker et al. 1998). In addition, the industry dummy variable(INDst) is also used for the purpose of controlling the effect of the audit quality of a specific industry on the audit opinion.

3. Sample Selection

The financial data necessary for this study were collected from the database (DG) of FnGuide Co., Ltd. and Data Analysis, Retrieval and Transfer System (DART) of the Financial Supervisory Service, and the sample period is for the last 5 years (2017-2021), It targets companies listed on the exchange with the December settlement of accounts, but the following restrictions are imposed.

(1) It must not have been incorporated as an item subject to management,
(2) All financial data necessary for empirical analysis shall be available,
(3) The main explanatory variables included in the regression formula must not deviate from the mean value ± (3 × standard deviation).

[Table 1] Sample Selection Procedure

	Sample
December closing listed firm-year excluding the financial industry	3,908
(-) Firm-year that do not have financial data necessary for empirical analysis	(552)
(-) Firm-year that deviate from the extreme value [mean ± (3 × standard deviation)]	(111)
(=) Final sample (firm-year expressing audit opinion other than an unqualified opinion)	3,245(47)

The financial industry was excluded from the sample because its business characteristics and the characteristics of financial statement account items were different from those of other industries, and only corporations with a December settlement of accounts were targeted for comparability. In addition, most of the cases of suspension of trading for a certain period of time and items subject to management that may have problems with data continuity were excluded from the sample.

According to [Table 1], there were 3,908 firm-years with December settlement excluding financial businesses listed on the exchange during the sample period, but 552 firm-years for which financial data were missing. For this reason, the final sample consists of 3,245 firm-years, except for 111 firm-years in which the main explanatory variables included in the research model are outside the range of mean ± (3 × standard deviation). Among them, the number of companies in which the external auditor's review opinion on the financial statements was not an unqualified was 47.

Ⅳ. Empirical Result

1. Descriptive Statistics

[Table 2] is descriptive statistics for the main variables used in this study. First, the mean (median) of the absolute value of the discretionary accrual measured by the ROA control model and the absolute value of the absolute value of the discretionary accrual(DA1t) matched by industry and year based on current business performance were 0.052 (0.032) and 0.063 (0.042), respectively.

In the case of the absolute value of audit quality(AQt1) measured by subtracting the discretionary accrual(DA1t) measured by the ROA control model from the materiality amount (MAt), the mean(median) was 0.052 (0.032), so the mean was slightly lower than the median. The mean(median) was 0.063 (0.043) for the absolute value of discretionary accrual(DA2t), which was large and matched by industry and year based on current operating performance(ROAt).

And if the audit opinion is an unqualified company, the mean(median) of the dummy variable(AUOt) assigned a value of 1 is 0.986(1.000), meaning that 98.6% of the sampled companies are on average. This is a result showing that, in the case of companies listed on the domestic exchange market, there are very few companies with not an qualified opinion, and most of them are appropriate companies. In the case of the dummy variable(BIGt), which is classified according to whether the auditor is a large accounting firm, the mean(median) is 0.156(0.000), indicating that on average 15.6% of the sample companies are being audited by a large accounting firm. This suggests that the profit structure of large accounting firms is changing from auditing to management and tax consulting.

The mean(median) of total accruals(TAt-1) at the beginning of the year was -0.052(-0.029), indicating a negative(-) value. In general, since net income is smaller than operating cash flow, the calculation structure of total accruals(net income-operating cash flow) has a negative(-) value on average. In addition, the mean(median) of operating cash flow(CFOt) and the mean(median) of debt ratio(LEVt) were 0.048(0.048) and 0.495(0.490), respectively. It can be seen that the debt-to-equity ratio is 49.5% of total assets on average. Finally, the mean (median) of the company size (SIZEt) measured as the natural logarithm of total assets is 20.316 (20,000).

[Table 2] Descriptive Statistics

Variable (N=3,245)	Mean	Standard Deviation	1%	Median	99%
DA_{1t}	0.052	0.066	0.001	0.032	0.335
DA_{2t}	0.063	0.072	0.000	0.042	0.342
AQ_{1t}	0.052	0.065	0.001	0.032	0.334
AQ_{2t}	0.063	0.071	0.000	0.043	0.337
AUO_t	0.986	0.119	0.000	1.000	1.000
BIG_t	0.156	0.363	0.000	0.000	1.000
TA_{t-1}	-0.052	0.326	-0.587	-0.029	0.205
CFO_t	0.048	0.087	-0.171	0.048	0.241
LEV_t	0.495	0.268	0.068	0.490	1.132
$SIZE_t$	20.316	1.546	18,000	20,000	25,000

Variable definition:

DA_{1t} is the discretionary accrual measured by industry and year with the ROA control model in year t [the model in which management performance (ROA_{t-1}) is controlled in the modified Jones (1995) model]);

DA_{2t} is discretionary accrual(DA_{1t}-DA_{1t}^{median}) that is matched by industry and year based on business performance (ROA) in year t.

AQ_{jt} is the absolute value of audit quality (j=1,2) defined as the amount in year t,

AUO_t is 1 if the audit opinion in year t is an unqualified opinion, 0 otherwise,

BIG_t is 1 if audited by large(BIG4) accounting firm, 0 otherwise,

TA_{t-1} is total accrual in year t-1 / total assets in year t-1,

CFO_t is operating cash flow in year t / total assets in year t-1,

LEV_t is the debt ratio in year t (total debt in year t / total assets in year t-1),

$SIZE_t$ is log(total assets),

2. Analysis of differences between groups of main variables

[Table 3] shows the results of analysis of differences between groups of the major variables considered in this study. Panel A is the result of analyzing the auditor's financial statements for companies with unqualified and not an unqualified audit opinions. This is a difference analysis result. The difference between the two groups was analyzed by the t-test, which is a parametric test, and the Wilcoxon rank sum test, which is a non-parametric test.

As shown in panel A, the absolute values of the two discretionary accruals(DAjt) considered in this study are numerically larger than those of companies with an unqualified opinion, but there is no statistical difference(t =-1.51/t=-1.45). And in the case of audit quality(AQjt), which is the materiality amount minus the discretionary accrual, there is no average difference between the two groups(t=-1.38/t=-1.53). This result indirectly suggests that the discretionary accrual may not affect the auditor's opinion formation.

Looking at panel B analyzed according to the type of auditor, the absolute value of discretionary accrual(DA1t) and performance-matched discretionary accrual(DA2t) measured by the ROA control model were, on average, larger in large accounting firms than in small accounting firms. is shown(t=1.73/1.98). Also, in the case of audit quality(AQjt), which deducted discretionary accrual from materiality, it can be seen that large accounting firms are larger on average than small accounting firms(t=1.87/t=2.10). This suggests that the size of audit quality obtained by deducting discretionary accrual from discretionary accrual and materiality may be relatively larger than that of small accounting firms in large accounting firms.

[Table 3] Analysis of differences between groups of main variables

panel A : Analysis of the difference in key variables between companies with an unqualified opinion and a company with an qualified, adverse and Disclaimer opinion

Variable (N=3,245)	Unqualified opinion (N=3,198)		Qualified, Adverse and Disclaimer opinion (N=47)		Differences	
	Mean	Median	Mean	Median	*(t-value)*[a]	*(z-value)*[a]
DA_{1t}	0.051	0.032	0.064	0.052	(-1.51)	(-2.19)*
DA_{2t}	0.062	0.042	0.078	0.056	(-1.45)	(-1.50)
AQ_{1t}	0.051	0.032	0.062	0.051	(-1.38)	(-2.08)*
AQ_{2t}	0.062	0.042	0.079	0.057	(-1.53)	(-1.67)*

panel B : Difference analysis of main variables between large accounting firms (BIG) and small accounting firms (NonBIG)

Variable (N=3,245)	Large accounting firm (N=507)		Small accounting firm (N=2,738)		Differences	
	Mean	Median	Mean	Median	*(t-value)*[a]	*(z-value)*[a]
DA_{1t}	0.058	0.031	0.051	0.033	(1.73)*	(-0.04)
DA_{2t}	0.069	0.043	0.061	0.041	(1.98)*	(1.29)
AQ_{1t}	0.058	0.032	0.050	0.033	(1.87)*	(-0.27)
AQ_{2t}	0.070	0.045	0.061	0.042	(2.10)*	(1.51)

[a] *,**,*** : In a two-taled test on whether the mean and median between the two groups were significantly different from 0, they were significant at the 10%, 5%, and 1% levels, respectively.

Variable definition:

DA_{1t} is the discretionary accrual measured by industry and year with the ROA control model in year t [the model in which management performance (ROA_{t-1}) is controlled in the modified Jones (1995) model]);

DA_{2t} is discretionary accrual(DA_{1t}-DA_{1t}^{median}) that is matched by industry and year based on business performance (ROA) in year t.

AQ_{jt} is the absolute value of audit quality (j=1,2) obtained by subtracting discretionary accrual (DA) in year t from materiality amount (MA) in year t.

3. Correlation between main variables

[Table 4] shows the correlation between the main variables used in this study. First, the discretionary accrual(DA1t) and performance-matched discretionary accrual(DA2t) measured by the ROA control model, and the audit quality(AQjt) obtained by subtracting the discretionary accrual from the materiality amount, showed a significant positive(+) correlation in both the structure of the accrual and the calculation structure.

In addition, although the dummy variable(AUOt) and the two discretionary accruals(DAjt), which indicate companies with an appropriate audit opinion, both show negative(-) correlation coefficients, they do not seem to have statistical significance. This is a result that indirectly shows that an audit opinion is not formed by the discretionary accrual alone. Large accounting firm(BIGt) and discretionary accrual(DAjt) show a statistically significant positive(+) correlation. This suggests that firms audited by large accounting firms may have relatively large discretionary accruals. And discretionary accrual(DAjt) and total accrual(TAt-1) show a statistically significant negative(-) correlation due to the characteristics of accrual, and do not show statistical significance with operating cash flow(CFOt).

On the other hand, there was no statistical relationship between the dummy variables representing companies with an unqualified audit opinion on the financial statements, and the audit quality(AQjt), auditor size(BIGt), and total accrual(TAt-1). This implies that even if operating cash flow is low, the possibility of an unqualified opinion on the financial statements may be high if the debt ratio is low or the company size is large.[4] Lastly, auditor size (BIGt) shows a significant positive correlation

4) Since correlation analysis is the result of analysis on a univariate, a comprehensive analysis will be performed later to test the hypothesis of this study.

with operating cash flow(CFOt) and company size(SIZEt). This means that the higher the operating cash flow and the larger the company, the higher the tendency to be audited by a large accounting firm.

[Table 4] Correlation

Variable (N=3,245)	DA_{1t} (p-value	DA_{2t} (p-value)	AQ_{1t} (p-value)	AQ_{2t} (p-value)	AUO_t (p-value	BIG_t ((p-value)	TA_{t-1} (p-value)	CFO_t (p-value)	LEV_t (p-value)
DA_{2t}	0.816 (0.000)								
AQ_{1t}	0.998 (0.000)	0.816 (0.000)							
AQ_{2t}	0.812 (0.000)	0.998 (0.000)	0.814 (0.000)						
AUO_t	-0.022 (0.207)	-0.026 (0.132)	-0.019 (0.269)	-0.028 (0.111)					
BIG_t	0.038 (0.029)	0.041 (0.019)	0.042 (0.017)	0.044 (0.012)	0.017 (0.343)				
TA_{t-1}	-0.245 (0.000)	-0.181 (0.000)	-0.248 (0.000)	-0.182 (0.000)	0.010 (0.568)	-0.018 (0.317)			
CFO_t	-0.010 (0.584)	0.064 (0.000)	0.007 (0.700)	0.092 (0.000)	-0.088 (0.000)	0.054 (0.002)	-0.010 (0.583)		
LEV_t	0.087 (0.000)	0.109 (0.000)	0.087 (0.000)	0.106 (0.000)	-0.108 (0.000)	0.006 (0.713)	-0.036 (0.038)	-0.018 (0.317)	
$SIZE_t$	0.016 (0.365)	0.037 (0.034)	0.021 (0.238)	0.047 (0.007)	0.095 (0.000)	0.151 (0.000)	-0.078 (0.000)	0.157 (0.000)	0.195 (0.000)

Variable definition:

DA_{1t} is the discretionary accrual measured by industry and year with the ROA control model in year t [the model in which management performance (ROA_{t-1}) is controlled in the modified Jones (1995) model]);

DA_{2t} is discretionary accrual(DA_{1t}-DA_{1t}^{median}) that is matched by industry and year based on business performance (ROA) in year t.

AQ_{jt} is the absolute value of audit quality (j=1,2) defined as the amount in year t,

AUO_t is 1 if the audit opinion in year t is an unqualified opinion, 0 otherwise,

BIG_t is 1 if audited by large(BIG4) accounting firm, 0 otherwise,

TA_{t-1} is total accrual in year t-1 / total assets in year t-1,

CFO_t is operating cash flow in year t / total assets in year t-1,

LEV_t is the debt ratio in year t (total debt in year t / total assets in year t-1),

$SIZE_t$ is log(total assets),

4. Audit quality and auditor's opinion formation in consideration of materiality judgment amount

[Table 5] is the result of regression analysis on audit quality and auditor opinion formation considering the materiality judgment amount. <Model 1-1> and <Model 1-2> are classified by type of discretionary accrual. In [Hypothesis 1], it was predicted that the proxy for audit quality considering materiality would be more relevant to the unqualified opinion than the case where the proxy for audit quality was discretionary accrual.

The main variables of interest in [Model 1-1, 1-2] are discretionary accrual(DAjt) and audit quality(AQjt) considering materiality. In this study, a negative(-) value was predicted for the regression coefficient β1 of discretionary accrual(DAjt), and a positive(+) value was predicted for the regression coefficient β2 of the audit quality(AQjt) considering materiality.

In addition, if the audit quality considering materiality(AQjt) is more relevant to the unqualified opinion than the discretionary accrual(DAjt), the regression coefficient β2 of the audit quality considering materiality(AQjt) is higher than the regression coefficient β1 of the discretionary accrual(DAjt). expected to be large. In the case of <Model 1-1> in <Table 5>, it is the analysis result of the discretionary accrual measured by the ROA control model.

As shown in <Model 1-1>, the regression coefficient of discretionary accrual(DA1t) was -55.205, indicating a statistically significant negative(-) value, and the regression coefficient of audit quality(AQ1t) considering materiality was 55.628. appeared and showed a statistically significant positive(+) value(Wald=4.58/Wald=4.32). In addition, as a result of performing an F-test on whether the regression coefficients of discretion

accrual(DA1t) and materiality considered audit quality(AQ1t) differ, the proxy of audit quality(AQ1t) considering materiality is more appropriate than in the case of discretionary accrual(DA1t). It was found to be more relevant to audit opinions(F=4.46).

And the regression coefficient of operating cash flow(CFOt) showed a statistically significant negative(-) value, and the regression coefficient of debt ratio(LEVt) and company size(SIZEt) showed statistically significant negative(-) and positive(+) regression coefficients. These results show that even if the operating cash flow is low, the debt ratio is low and the larger the company, the higher the possibility of a unqualified opinion. In the case of <Model 1-2> in <Table 5>, it is the analysis result of the performance-related discretionary accrual. As shown in <Model 1-2>, neither of the regression coefficients of discretion accrual(DA2t) and audit quality(AQ2t) considering materiality showed statistical significance (Wald=0.06/Wald=0.03).

In addition, no statistical significance was found in the F-test result on whether the regression coefficients of discretion accrual(DA2t) and audit quality(AQ2t) considering materiality were different(F=0.04). The results of the remaining control variables show the same results as the analysis results of <Model 1-1>. As can be seen from the above analysis results, although limited, it was confirmed that the proxy for audit quality considering materiality was more relevant to the unqualified opinion than in the case of discretionary accrual, similar to the hypothesis predicted.

[Table 5] Audit quality and auditor opinion formation considering materiality amount

[Model 1] $AUO_t = \beta_0 + \beta_1 DA_{jt} + \beta_2 AQ_{jt} + \beta_3 TA_{t-1} + \beta_4 CFO_t + \beta_5 LEV_t + \beta_6 SIZE_t + \sum_s \beta_7 IND_{st} + \varepsilon_t$

Variable[a] (N=3,245)	<Model 1-1> Coefficient(Wald)[b]	<Model 1-2> Coefficient(Wald)[b]
DA_{jt}	-55.205 (4.58)**	-7.4241 (0.06)
AQ_{jt}	55.628 (4.32)**	5.4315 (0.03)
TA_{t-1}	0.314 (1.91)	0.3055 (1.89)
CFO_t	-3.652 (7.91)***	-3.0600 (4.87)**
LEV_t	-1.605 (16.96)***	-1.5960 (16.87)***
$SIZE_t$	0.835 (26.15)***	0.8429 (26.92)***
Likelihood Ratio	115.28	111.69

[a] For convenience, the intercept and regression coefficients of dummy variables by industry are omitted.

[b] *,**,*** : In a two-taled test on whether the estimated coefficient is significantly different from 0, it is significant at the 10%, 5%, and 1% levels, respectively.

Variable definition:

AUO_t is 1 if the audit opinion in year t is an unqualified opinion, 0 otherwise,

DA_{1t} is the discretionary accrual measured by industry and year with the ROA control model in year t [the model in which management performance (ROA_{t-1}) is controlled in the modified Jones (1995) model]);

DA_{2t} is discretionary accrual(DA_{1t}-DA_{1t}^{median}) that is matched by industry and year based on business performance (ROA) in year t.

AQ_{jt} is the absolute value of audit quality (j=1,2) defined as the amount in year t,

TA_{t-1} is total accrual in year t-1 / total assets in year t-1,

CFO_t is operating cash flow in year t / total assets in year t-1,

LEV_t is the debt ratio in year t (total debt in year t / total assets in year t-1),

$SIZE_t$ is log(total assets),

5. The effect of audit quality considering the type of auditor and the amount of materiality on the auditor's opinion formation

[Table 6] shows the results of logistic regression analysis on the effect of audit quality on auditor opinion formation considering the type of auditor and the amount of materiality. In [Hypothesis 2], the audit quality of the large accounting firm is predicted to be higher than that of the small accounting firm, considering the audit quality obtained by subtracting the discretionary accrual from the materiality amount.

If the auditing ability of a large accounting firm is excellent in its ability to compensate for damages, the size of its auditors, and alliances with foreign accounting firms, In the case of the regression coefficient β 2, it will show a negative(-) value. The regression coefficient β4 of the interaction variable(AQjt×BIGt) between audit quality(AQjt) considering materiality and large accounting firm(BIGt) is likely to show a positive(+) value.

<Model 2-1> and <Model 2-2> are the results of analysis by dividing by type of discretionary accrual, which is the dependent variable. The main variables of interest in [Model 2-1, 2-2] are the interaction variable(DAjt×BIGt) between discretionary accrual(DAjt) and large accounting firm(BIGt), and the interaction variable(AQjt×BIGt) between audit quality(AQjt) and large accounting firm(BIGt).

As shown in <Model 2-1> in [Table 6], the regression coefficient of the interaction variable(DAjt×BIGt) between discretionary accrual(DAjt) and large accounting firm(BIGt) is a statistically significant negative(-) value(Wald=5.17). Also, the regression coefficient of the interaction variable(AQjt×BIGt) of audit quality(AQjt) considering materiality and large accounting firm(BIGt) showed a statistically significant negative(-)

value(Wald=4.89).

[Table 6] The effect of audit quality considering the type of auditor and the amount of materiality on the auditor's opinion formation

[Model 2] $AUO_t = \beta_0 + \beta_1 DA_{jt} + \beta_2 DA_{jt} \times BIG_t + \beta_3 AQ_t + \beta_4 AQ_{jt} \times BIG_t + \beta_5 TA_{t-1} + \beta_6 CFO_t + \beta_7 LEV_t + \beta_8 SIZE_t + \sum_s \beta_9 IND_{st} + \varepsilon_t$

Variable[a] (N=3,245)	<Model 2-1>	<Model 2-2>
	Coefficient(Wald)[b]	Coefficient(Wald)[b]
DA_{jt}	17.179 (0.27)	-50.840 (3.49)*
$DA_{jt} \times BIG_t$	-159,100 (5.17)**	-49.241 (0.31)
AQ_{jt}	-19.292 (0.33)	50.997 (3.24)*
$AQ_{jt} \times BIG_t$	158,500 (4.89)**	50.275 (0.30)
TA_{t-1}	0.323 (2.09)	0.310 (1.83)
CFO_t	-2.603 (3.11)*	-3.576 (7.41)***
LEV_t	-1.716 (16.12)***	-1.611 (16.61)***
$SIZE_t$	0.871 (26.99)***	0.839 (25.73)***
Likelihood Ratio	116.77	115.58

[a] For convenience, the intercept and regression coefficients of dummy variables by industry are omitted.

[b] *,**,*** : In a two-taled test on whether the estimated coefficient is significantly different from 0, it is significant at the 10%, 5%, and 1% levels, respectively.

Variable definition:

AUO_t is 1 if the audit opinion in year t is an unqualified opinion, 0 otherwise,

DA_{1t} is the discretionary accrual measured by industry and year with the ROA control model in year t [the model in which management performance (ROA_{t-1}) is controlled in the modified Jones (1995) model]);

DA_{2t} is discretionary accrual($DA_{1t}-DA_{1t}^{median}$) that is matched by industry and year based on business performance (ROA) in year t.

AQ_{jt} is the absolute value of audit quality (j=1,2) defined as the amount in year t,

BIG_t is 1 if audited by large(BIG4) accounting firm, 0 otherwise,

TA_{t-1} is total accrual in year t-1 / total assets in year t-1,

CFO_t is operating cash flow in year t / total assets in year t-1,

LEV_t is the debt ratio in year t (total debt in year t / total assets in year t-1),

$SIZE_t$ is log(total assets),

This result means that the audit quality of the large accounting firm is higher than the audit quality of the small accounting firm when the audit quality obtained by deducting the discretionary accrual from the materiality amount is taken into account as predicted by the hypothesis. It was confirmed that the remaining control variables appeared similar to the analysis results in [Table 5].

In summary, in this study, discretionary accrual and performance-matched discretionary accrual based on the ROA control model were used for empirical analysis. Among them, significant results were found in the results analyzed using discretionary accruals based on the ROA control model. That is, as predicted in [Hypothesis 1], the proxy value of audit quality considering materiality was more relevant to the unqualified opinion than in the case of discretionary accrual. Considering the audit quality, it was confirmed that the audit quality of the large accounting firm is higher than that of the small accounting firm.

Ⅴ. Conclusion and Implications

1. Conclusion and Implications

Audit quality is determined by the competence and independence of auditors. If the discretionary accrual calculated in the same way is viewed as a proxy for the overall audit quality or as a proxy for the independence constituting a part of audit quality, this means that it cannot be a perfect proxy for audit quality. The discretionary accrual used in previous domestic studies shows this problem. When the discretionary accrual is viewed as a proxy for independence, the audit

quality is judged ignoring eligibility.

If audit quality is defined as the probability that the auditor detects fraud or error and reports it as it is discovered, the auditor does not reflect the discretionary accrual itself in the audit opinion, but considers the importance based on professional judgment. Comparing the audit quality using only the discretionary accrual is an underestimation of the audit quality because it does not take into account the materiality amount as a criterion for judgment in the auditor's decision-making process. Therefore, the audit quality should be determined in consideration of the materiality amount, which is the breaking point of decision making or the breaking point of usefulness of information.

In this regard, in this study, it was verified through empirical analysis that the proxy of audit quality considering the materiality amount is more relevant to the formation of audit opinions. Considering the audit quality based on materiality, it was confirmed that the audit quality of large accounting firms was higher than that of small accounting firms. However, it has the following limitations.

First, the discretionary accrual and performance-matched discretionary accrual measured through the ROA control model were used for the discretionary accrual used in this study, excluding the modified Jones model(1995), which raised the problem of measurement error. Of these, only the discretionary accrual measured through the ROA control model could obtain a meaningful result. Although the discretionary accrual model was used except for the modified Jones model(1995), it is difficult to exclude the problem of measurement error of discretionary accrual.

Second, due to the nature of listed companies, there are very few companies with an audit opinion that is not an unqualified opinion, so it

is impossible to secure a large number of samples. It is required to secure sufficient data in the future, and it seems that a detailed analysis should be carried out based on a more in-depth research design.

2. Implications for the future society

This study suggests that the auditor should not reflect the discretionary accrual itself in the audit opinion, but should reflect irregularities or errors in consideration of the importance based on professional judgment. It also suggests that audit quality should be determined in consideration of the amount of materiality, which is a breaking point in decision-making or usefulness of information in audit practice.

REPERENCE

Bartov, E. and P. Mohanram, "Private Information, earnings manipulations, and executive stock-option exercises", *The Accounting Review* 79, 2004: 889-920.

Becker, Defond, Jiambalvo and Subramanyam, 1998. The Effect of Audit Quality and Earnings Management, *Comtemporary Accounting Research* 15: 1-24.

DeAngelo, 1981, Auditor Size and Audit Quality, *Journal of Accounting and Economics* 3(December) : 183-199

DeFond and Jiambalvo, 1994, Debt covenant violation and manipulation of accruals, *Journal of Accounting and Economics* 17: 145-176.

Elgers, Pfeiffer and Porter, 2003, Anticipatory income smoothing: a re-examination, *Journal of Accounting and Economics* 35: 405-422.

Healy, 1985, The effect of bonus schemes on accounting decisions, *Journal of Accounting and Economics* 7: 85-107.

Hyeyoung Jeong and Seongil Jeon, 2001, A Study on the Effectiveness of Auditor Retention System and Auditor Independence, *Accounting and Auditing Study* (No. 37): 159-185.

Jeongsik Shin, Myeong-Gon Lee and Bong-Hak Lee, 1998, A Study on the Quantitative Model of Materiality Criteria - Quantitative Criteria in the Stage of Forming Audit Opinion, *Accounting Study* (Vol. 23, No. 2): 27-47.

Jones, 1991, Earnings management during import relief investigation, *Journal of Accounting Research* 29: 193-228.

Jongseo Choi, 1998, Effect of discretionary accrual adjustment

on information effect of profit component, *Accounting Research* (Vol. 23 No. 4): 81-115.

Kothari, S. P., A. J. Leone, and C. E. Wasley, "Performance matched discretionary accrual measures", *Journal of Accounting and Economics* 39 (January), 2005: 163-197.

Kwan Choi and Wonsun Paek, 1998, Types of Auditors and Audit Quality: Focusing on Audit Fees and Audit Hours, *Accounting Studies* (Vol. 23 No. 2): 49-75.

, 1998, An Empirical Study on Profit Manipulation of Supervisory Enterprises, *Accounting Study* (Vol. 28, No. 2): 133-161.

Moonjong Jeong and Jaemaeng Lee, 1996, Quality substitutes for auditing and professional auditors by industry-Focused on the current status of our auditing market, *Journal of Accounting* (Vol. 5, No. 2): 239-274.

Nelson, M., J. Elliott and R. Tarpley, "Evidence from auditors about managers' and aditors' earnings management decisions", *The Accounting Review* 77 (Supplement), 2002: 175-202.

Jongil Park, Myeonggon Lee, Jeongyeon Won, 1999, Audit Quality Analysis of Auditors Using Discretionary Accruals, *Accounting and Auditing Research* No. 35: 289-319.

Schipper, K, "Commentary on earnings management", *Accounting Horizons* 3 (December), 1989: 91-102.

산업연구 Journal of Industrial Studies(J.I.S) 産業硏究 46권 3호 ISSN
https://doi.org/10.22915/rifi.2022.46.3.002 1738-9216

감사인의 중요성 판단이 감사품질에 미치는 영향*

조현우**·배현정***·오현민****

요 약

본 연구는 감사인의 중요성 판단이 감사품질에 미치는 영향에 대하여 분석하였다. 특히 감사의견이 기존의 재량발생액에 비해 중요성을 고려한 감사품질과 더 관련성이 높을 것이라는 가설과 중요성을 고려하면 대형회계법인이 소형회계법인에 비해 감사품질이 높을 것이라는 가설을 실증분석을 통해 검증하였다.

본 연구의 가설검증에 필요한 표본기업은 2017년부터 2021년까지 최근 5개년 동안 거래소에 상장되어 있는 기업이다. 일반적으로 사용되는 중요성 측정방법을 통해 중요성금액을 측정하였고 재량발생액 등을 이용하여 연구가설을 검증하였다. 분석결과, 재량발생액의 경우보다 중요성을 고려한 감사품질의 대용치가 적정의견과 더 관련성이 높게 나타났고, 중요성에 기초한 감사품질을 고려하면 대형회계법인의 감사품질은 소형회계법인의 감사품질보다 높게 나타나고 있음을 확인하였다.

본 연구의 분석결과에 의하면 재량발생액만을 가지고 감사품질을 비교하는 것은 감사인의 의사결정과정에서 판단기준이 되는 중요성금액을 고려하지 않은 것이므로 감사품질을 과소평가할 위험이 있음을 알 수 있다. 따라서 감사품질은 의사결정의 분기점 또는 정보의 유용성의 구분점이 되는 중요성금액을 고려하여 결정되어야 함을 시사해준다.

핵심 주제어 : 감사품질, 재량발생액, 중요성, 회계기준.

* 이 논문은 2020년 순천대학교 학술연구비(과제번호 : 2020-0000) 공모과제로 연구되었음.
** 교신저자, 순천대학교 교수, E-mail: hwcho2001@scnu.ac.kr.
*** 순천대학교 교수, E-mail: bhj0827@scnu.ac.kr.
**** 순천대학교 부교수, E-mail: ohm1212@scnu.ac.kr.